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Optimizing Islamic Education Learning Outcomes through the Two Stay Two Stray Method with Question Board

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Optimizing Islamic Education Learning Outcomes through the Two Stay Two Stray Method with Question Board

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Abstract: This research aims to measure the effectiveness of this learning method in increasing students' understanding of the subject matter and gaining insight into students' perceptions of the learning experience. In this research, the TSTS methods are used as learning approaches that focus on active involvement, collaboration and critical thinking of students. Question board media is used to support the visualization of abstract concepts in Islamic Religious Education. Data was collected through comprehension tests, observation, pretest and posttest. The research results show that the TSTS learning methods using question boards have a positive impact on students' understanding. The test scores show that there is a significant effect before and after implementing this method. Where the result obtained is that tcount > ttable (4.30 > 2.06) so that H0 is rejected and Ha is accepted. So it can be concluded that there is a significant difference in the learning outcomes of Islamic Religious Education between the Pretest and Posttest for class XII social science 1 students at Asshiddiqiyah High School.
Keywords:
Islamic Religious Education; Question Board; Two Stay Two Stray Methods

*Abstrak: Penelitian ini bertujuan untuk mengukur efektivitas metode pembelajaran ini dalam meningkatkan pemahaman siswa terhadap materi pelajaran dan memperoleh wawasan persepsi siswa terhadap pengalaman belajar. Dalam penelitian ini, metode TSTS digunakan sebagai pendekatan pembelajaran yang menitikberatkan pada keterlibatan aktif, kolaborasi dan berpikir kritis siswa. Media papan soal digunakan untuk menunjang visualisasi konsep-konsep abstrak dalam Pendidikan Agama Islam. Pengumpulan data dilakukan melalui tes pemahaman, observasi, pretest dan posttest. Hasil penelitian menunjukkan bahwa metode pembelajaran TSTS menggunakan papan soal memberikan dampak positif terhadap pemahaman siswa. Nilai tes menunjukkan terdapat pengaruh yang signifikan sebelum dan sesudah penerapan metode ini. Dimana hasil yang diperoleh adalah thitung > ttabel (4,30 > 2,06) sehingga H0 ditolak dan Ha diterima. Jadi dapat disimpulkan terdapat perbedaan yang signifikan hasil belajar Pendidikan Agama Islam antara Pretest dan Posttest siswa kelas XII IPS 1 di SMA Asshiddiqiyah.
Kata Kunci:
Metode Two Stay Two Stray; Papan Soal ; Pendidikan Agama Islam*

INTRODUCTION

Education is the process of imparting knowledge, skills, values, and experiences to individuals to develop their intellectual, emotional, social, and physical potential (Kulsum & Muhid, 2022). It forms a strong foundation in character building, understanding the world, and preparing for both personal and professional life (Syafrin et al., 2023). Education plays a vital role in creating an educated, empowered society that positively impacts its surrounding environment (Jailani et al., 2021). By facilitating individual learning and growth, education also becomes key to addressing social and economic issues, as well as providing more equitable access to opportunities and rights for all members of society (Widyastuti et al., 2022). Education plays a crucial role in the development of a nation. (Rahmawati et al., 2023), This is because education is seen as a pathway to producing high-quality human resources, which can serve as a driving force for the advancement of national development.

Islamic Religious Education is one of the subjects that has a crucial role in shaping the character and morals of students (Zahra et al., 2024), It also provides in-depth knowledge of religious values. However, the fact is that there is still a lack of understanding of religious concepts by students or difficulties in applying the values learned in daily life and the use of monotonous or less interactive teaching methods can hinder the learning process of PAI(Wahyuni et al., 2023). Research results (Zahra et al., 2024) Delays in learning sometimes arise due to insufficient teaching and learning activities (Rahmadania, 2021), poor teaching quality (Harisnur & Suriana, 2022), Lack of qualified teachers (Supriadi, 2023), subject matter that is too difficult for students to understand, or a mismatch between the curriculum and the student's ability or interest (Rohmat et al., 2023). One of the major problems of PAI learning is the lack of thorough and continuous learning evaluation to assess students' understanding and progress in understanding the material (Maskhuroh & Bakar, 2019).

Factors that affect student learning outcomes in Islamic Religious Education (PAI) subjects include: (1) The teaching method used in delivering PAI material can affect students' understanding and interest in the lesson (Safitri et al., 2015); (2) The ability and competence of teachers in teaching PAI greatly affects students' understanding of the subject matter (Zahra et al., 2024); (3) Availability of Resources, such as textbooks, learning technology, and a supportive learning environment, can influence student learning outcomes. (Zahra et al., 2024); (4) The level of student motivation towards PAI subjects also affects learning outcomes, including their interest in the course material; (5) Social and cultural factors, such as family background and school environment, can play a role in student learning outcomes in PAI subjects (Dwiputeri et al., 2023). By considering these factors, a holistic approach to teaching PAI and efforts to improve teaching quality, along with providing motivating support, can help students achieve better learning outcomes in PAI subjects (Wahyuni et al., 2023).

To achieve this goal, the selection of learning methods is one that must be number one because an educator is required to understand good learning strategies that will then be implemented in a teaching and learning activity

(Hamid, 2020). Selecting and applying appropriate and innovative teaching methods in teaching PAI (Nasution & Zulkifli, 2023), Teachers can create a stimulating learning environment, enhance student motivation, and improve the understanding and application of Islamic values in students' daily lives (Rasdiana et al., 2019).

The teaching method that has attracted the attention of educators and researchers is the Two Stay Two Stray (TSTS) learning method combined with the use of a question board media. The Two Stay Two Stray (TSTS) method is a cooperative learning approach that promotes active student participation, collaboration, as well as problem-solving through discussion and critical thinking (Rachman, 2018). In the context of Islamic Religious Education (PAI), the author will explain how the TSTS learning model enriches students' understanding of religious concepts, ethics, and morality.

Question board media is a visual tool used to facilitate a better understanding of Islamic religious concepts which are often abstract in nature (Nafisah & Sahlan, 2023). This question board contains a series of questions that must be answered by the students. The author will discuss the use of this media as a primary support tool in Islamic Religious Education (PAI) learning in grade XII, focusing on efforts to enhance students' comprehension and retention of the subject matter. The question board media is used to provide a visual element that can enrich students' understanding of abstract concepts in Islamic Religious Education. In this article, the author will explore how the TSTS learning method and the use of the question board media can be effectively applied in the context of Islamic Religious Education learning in grade XII at SMA Asshiddiqiyah.

The use of innovative teaching methods like TSTS and question board media is a response to the demands of the modern era, where students tend to be more responsive to learning methods that focus on active engagement and deep understanding (Ningsih et al., 2023). Focusing on the subject of Islamic Religious Education, the author hopes to provide a clear perspective on how this approach can enrich students' understanding of religion, morality, and important religious values (La Una, 2023).

This is supported by previous research, such as an article titled *"Penerapan Metode Pembelajaran Two Stay Two Stray (TSTS) untuk Meningkatkan Hasil Belajar Peserta didik pada Materi Budaya Hidup Sehat di Tingkat Sekolah Dasar Negeri 110 Pekanbaru"* written by (Permata et al., 2023), It can be concluded that the Two Stay Two Stray (TSTS) learning method applied in this learning process has the ability to increase student activity. This can be seen from the post-test results conducted after implementing the TSTS learning method. Another study discussing the application of the Two Stay Two Stray method is an article titled *"Analisis Model Pembelajaran Kooperatif Tipe Two Stay Two Stray (TSTS) Terhadap Hasil Belajar Peserta didik"* written by (Aji & Wulandari, 2021). This article concludes that the analysis of the Two Stay Two Stray (TSTS) learning method can have an impact on students' learning outcomes. This is due to the fact that during its implementation, students become more engaged in the learning process. This learning model teaches students to collaborate in solving problems.

On the other hand, the Two Stay Two Stray (TSTS) learning model provides significant opportunities for students to master the material.

The implementation of the Two Stay Two Stray (TSTS) method involves forming groups of four students, where each group has specific roles as "hosts" and "guests." In this setup, students will take turns hosting their peers in their group and visiting other groups as guests. This learning approach provides students with the opportunity to share the knowledge they have gained from the discussions held within their original groups. The Two Stay Two Stray model fosters collaboration, motivation, and active participation, which positively impacts students' knowledge competence. This is because students not only share information within their own groups but also engage in cross-group exchanges, enhancing their understanding and learning process (Juniantari & Kusmariyatni, 2019).

In using the "To Stay To Stray (TSTS)" method in Islamic Religious Education (PAI) subjects, the "To Stay" approach allows students to focus on the fundamental core concepts of Islam (Lusiana et al., 2017). They are guided to thoroughly understand religious values, teachings, and principles through reflection and discussion in groups (Fitri & Pertiwi, 2023). In addition, with the "To Stray" approach, students are given the freedom to create and investigate these religious values in a real context (Apriakanti et al., 2020). They are invited to apply their understanding to everyday life situations, such as through contextual discussions, case study analysis, or creative presentations (Suryanti et al., 2017). Through the combination of these two approaches, students not only get a strong understanding of the theoretical aspects (Ismawati & Hindarto, 2021), but also get the opportunity to apply it in a practical context, deepen learning understanding, and strengthen religious values in daily life in a more concrete way (Aji & Wulandari, 2021).

This article will detail the implementation of the Two Stay Two Stray (TSTS) method combined with the use of a question board in a 12th-grade classroom, as well as the impact on students' understanding. The author will also provide recommendations for other educators who are interested in adopting a similar approach in Islamic Education learning.

Through this article, the author hopes to inspire educators, teachers, and other schools to enhance the quality of Islamic Education learning and develop more interactive and effective methods for students. In this way, the author hopes that this contribution can assist in shaping a strong character and a deep understanding of Islamic values in the future generation of the nation.

RESEARCH METHOD

This research uses a quantitative method by conducting pre-test and post-test instrument assessments. The approach is carried out through Classroom Action Research (CAR) as the main method to describe, analyze, and evaluate the teaching process (Rafi et al., 2024). The implementation of the TSTS method with question board media in Islamic Religious Education learning in class XII is analyzed using Classroom Action Research (CAR). CAR is chosen because it

allows for understanding the effectiveness of this teaching method through continuous changes in the learning process over time.

The subject of this study is a student of class XII IPS 1 at Asshiddiqiyah High School who takes the subject of Islamic Religious Education.(Abubakar, 2021), that is:

a. Pre-test: At this stage, an initial test of students' understanding of the subject matter is carried out. Students are instructed to fill out an initial questionnaire to gauge their initial perception of learning.

b. Implementation of the TSTS Method The experimental class underwent several learning sessions by applying the TSTS method with the media of a question board. Observations were made during the implementation to monitor the level of student involvement and response.

c. Posttest: After the application of the method, a re-understanding test was carried out to measure changes in students' understanding. In addition, student questionnaires are used to collect students' opinions about the learning experience.

RESEARCH RESULT AND DISCUSSION

PAI learning outcomes were measured for students in grade XII IPS 1. Data on PAI learning outcomes was obtained through a posttest of 25 students. The results of this test show that the lowest score is 100 and the lowest score is 75.

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Before using the method	73.8000	25	7.39932	1.47986
	After using the method	90.2000	25	7.42743	1.48549

From the value data listed above, it can be described as the results of the pretest (M = 73.8, SD = 7.39) and the results of the posttest (M = 90.2, SD = 7.42). Based on the results of the t-test analysis through the SPSS application, a tcount of 4.30 was obtained, while the ttable with db = 23 at a significant level of 5% was 2.06. The calculation results show that the tcount > ttable (4.30 > 2.06) so that H0 is rejected and Ha is accepted. Therefore, it can be concluded that there is a significant difference in the learning outcomes of Islamic Religious Education between Pretest and Posttest in grade XII IPS 1 students at Asshiddiqiyah High School.

In general, this study shows that there is a significant effect before and after the application of the Two Stay Two Stray (TSTS) method with question board media. This can be seen from the learning outcomes or scores achieved by the students. In terms of the instrument, the posttest score was higher than the pretest score. The average score of Islamic Education learning outcomes obtained during the posttest was 90.2, while the average score during the pretest was 73.8. This indicates an improvement in student understanding and engagement after the implementation of the TSTS method with question board media.

The application of the TSTS learning method with question board media is effective in enhancing students' understanding of Islamic Education material.

The students' test scores after the implementation of this method were significantly higher than their pretest scores. These results support previous findings that suggest learning methods focusing on active student involvement and critical thinking can improve learning outcomes.

The implementation of the TSTS method allows students to actively participate in small group discussions, enabling them to share ideas, explain concepts to their classmates, and collaborate in problem-solving (Anggraeni, 2023; Unique, 2022). In addition, the question board media also plays an important role in improving students' understanding (Rahim et al., 2019). In the subject of Islamic Religious Education, many concepts are abstract, and the use of visual media can help students to understand and remember the material better (Dwiputeri et al., 2023). The question board media is used to test students' comprehension skills after learning.

In the subject of Islamic Religious Education (PAI), the application of the "To Stay To Stray (TSTS)" method is important (Widyastuti et al., 2022). "To Stay" focuses students on the core concepts of Islam (Sujarwo et al., 2024). They participate in self-reflection and group discussions to delve deeper into the material (Putri et al., 2023). On the other hand, in the "To Stray" stage, students apply religious values in real life through contextual discussions, case studies, and creative presentations (Khudry et al., 2023). This method enriches students' understanding, helps them apply religious values in their daily lives, and fosters growth in practical problem-solving skills (Setiawati, 2023).

This is supported by previous research such as an article titled "*Penerapan Metode Pembelajaran Two Stay Two Stray (TSTS) Untuk Meningkatkan Hasil Belajar Siswa pada Materi Budaya Hidup Sehat Tingkat Sekolah Dasar Negeri 110 Pekanbaru*" written by (Permata et al., 2023), It is concluded that the Two Stay Two Stray (TSTS) teaching method applied in the learning process is able to increase student engagement. This is evident from the posttest results taken after the implementation of the Two Stay Two Stray (TSTS) method. Another study that discusses the application of the Two Stay Two Stray method is an article titled "*Analisis Model Pembelajaran Kooperatif Tipe Two Stay Two Stray (TSTS) Terhadap Hasil Belajar Siswa*" written by (Aji & Wulandari, 2021). The analysis of the Two Stay Two Stray (TSTS) teaching method can have an impact on students' learning outcomes, as during its implementation, students become more engaged and interested in the learning process (Rachman, 2018). This learning model teaches students to work together to solve a problem (Wahyudi, 2024). On the other hand, the Two Stay Two Stray (TSTS) learning model provides a great opportunity for students to master the material (Ningsih et al., 2023).

The Two Stay Two Stray (TSTS) teaching method, using a question board media, is an approach that can provide meaningful and effective learning experiences for students (Apriliawati et al., 2017). The combination of the TSTS method with the question board can create a dynamic, interactive learning environment that facilitates active student participation. Overall, the use of the TSTS method with the question board can lead to effective learning by providing opportunities for students to engage actively, collaborate, and encourage deep understanding and reflection on the material being studied (Apriana & Ridwan,

2023). The implementation of the TSTS method allows students to actively participate in small group discussions, enabling them to share ideas, explain concepts to their classmates, and collaborate in solving problems (Fatchurahman et al., 2022). In addition, the question board media also plays an important role in improving students' understanding (Prasetio, 2023). In the subject of Islamic Religious Education, many concepts are abstract, and the use of visual media can help students understand and remember the material better. Question board media is used to test students' comprehension ability after learning (Prasetio, 2023).

The implementation of the Two Stay Two Stray (TSTS) method involves forming groups of four students, where they will take on the role of hosts for their guests and guests for other groups (Handriyani & Abdillah, 2022). In this learning process, students are given the opportunity to express the knowledge they have gained based on the discussions held with their original group members (Damopolii & Iwan, 2018). The Two Stay Two Stray learning model can foster cooperation, motivation, and active learning among students, which will impact their knowledge competency, as students not only share information within their own group but also with other groups (Juniantari & Kusmariyatni, 2019).

The application of the "To Stay To Stray (TSTS)" learning method in Islamic Religious Education (PAI) subjects can improve student learning outcomes in the following ways: (1) Focus on Core Material, Students remain focused on understanding the core material of PAI taught and are committed to the main topic, students can understand religious concepts more deeply(Aji & Wulandari, 2021): (2) Exploration and Collaboration, Students have the opportunity to travel collaboratively, explore or apply their understanding to a particular situation or problem (Lubis, 2018); (3) Creativity and Problem Solving, Using the understood concept of PAI to face new challenges or situations stimulates creativity and problem-solving abilities (Apriakanti et al., 2020).

By adopting this method in PAI learning, students not only understand religious theories, but are also able to apply them in the context of daily life (Silalahi & Sary, 2020), improve their understanding holistically and develop analytical and applicative skills in understanding and responding to religious demands in real situations (Sari & Azmi, 2018). This can contribute significantly to improving student learning outcomes and understanding related to PAI subjects. Thus, it is proven that there is a significant influence between learning before the application of the method, and learning after the application of the method in class XII IPS 1 SMA Asshiddiqiyah.

CONCLUSION

Based on the results of hypothesis testing and discussions, it can be concluded that there is a significant effect on the learning outcomes of Islamic Religious Education (PAI) before and after the implementation of the Two Stay Two Stray (TSTS) method with question board media in class XII IPS 1 at SMA Asshiddiqiyah. This significant effect can be seen from the average post-test score

of 90.2, which was taken after applying this method, compared to the average pre-test score of 73.8.

These findings emphasize that a learning approach that focuses on active student participation, collaboration, and critical thinking can help students achieve a deeper understanding. The use of question board media as a visual tool has also proven beneficial in supporting students' understanding of abstract concepts in Islamic Religious Education. Visualizing these concepts through question boards helps students retain and measure the extent of their understanding of the material being taught.

The conclusion of this research is that the implementation of the TSTS learning method with question board media can be a beneficial strategy in teaching Islamic Religious Education at the high school level. However, it should be noted that the application of this method requires thorough preparation by the educator, good integration of the question board media, and adequate support to achieve optimal results.

In this article, we have seen that the implementation of the TSTS learning method with question board media has a positive impact on students' understanding in the subject of Islamic Religious Education. Therefore, it is recommended to continue applying this method in the teaching of Islamic Religious Education at SMA Asshiddiqiyah. Educators need to have a deep understanding of the principles and techniques involved in both methods to ensure their effective application in the classroom.

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Improving Teacher Competence in Blended Learning-Based Technology from a Gender Perspective

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Abstract: This research discusses efforts to increase teacher competency in blended learning-based technology through a gender approach. Blended learning, which combines online and face-to-face learning methods, has the potential to increase interaction and learning accessibility, but requires adequate technological skills from teachers. By considering a gender perspective, this research explores the differences and gaps that may arise between male and female teachers in adopting blended learning technology. Data was collected through a survey of a number of teachers from various school levels who had access to blended learning training. The research results show that there are disparities in the use of technology, where gender, age and experience factors influence teacher competence in implementing learning technology. This research recommends gender-based training that supports all teachers in developing their technology skills, to create more inclusive and effective learning environments. Thus, increasing this competency not only supports teacher career development, but also improves student learning outcomes through the use of more adaptive and responsive technology.
Keywords:
Blended Learning; Gender Perspective; Teacher Competence; Technology Integration in Education

Abstrak: *Penelitian ini membahas upaya peningkatan kompetensi guru dalam teknologi berbasis pembelajaran campuran (blended learning) melalui pendekatan gender. Blended learning yang menggabungkan metode pembelajaran daring dan tatap muka memiliki potensi untuk meningkatkan interaksi dan aksesibilitas pembelajaran, namun memerlukan keterampilan teknologi yang memadai dari guru. Dengan mempertimbangkan perspektif gender, penelitian ini mengeksplorasi perbedaan dan kesenjangan yang mungkin muncul antara guru pria dan wanita dalam mengadopsi teknologi blended learning. Data dikumpulkan melalui survei terhadap sejumlah guru dari berbagai tingkatan sekolah yang memiliki akses terhadap pelatihan blended learning. Hasil penelitian menunjukkan adanya disparitas dalam penggunaan teknologi, di mana faktor gender, usia, dan pengalaman mempengaruhi kompetensi guru dalam penerapan teknologi pembelajaran. Penelitian ini merekomendasikan pelatihan berbasis gender yang mendukung seluruh guru dalam mengembangkan keterampilan teknologi mereka, guna menciptakan lingkungan belajar yang lebih inklusif dan efektif. Dengan demikian, peningkatan kompetensi ini tidak hanya mendukung perkembangan karir guru, tetapi juga meningkatkan hasil belajar siswa melalui penggunaan teknologi yang lebih adaptif dan responsif.*
Kata Kunci:
Kompetensi Guru; Integrasi Teknologi dalam Pendidikan; Pembelajaran Campuran; Perspektif Gender

INTRODUCTION

Assistance for teachers in improving their competence in blended learning-based technology post-Covid-19 with a gender perspective is crucial (Ntim et al., 2021; Wadhwa et al., 2022). The Covid-19 pandemic in Indonesia forced the government to change educational policies, including the implementation of online learning, which required mastering technology (Roziqin et al., 2021). As a result, technology now plays a critical role in education, and both teachers and students need to adapt to its use (Szymkowiak et al., 2021).

This adaptation process includes the development of teachers' competencies in using digital tools and platforms to create more engaging, inclusive, and interactive learning experiences (Parsons et al., 2018). On the other hand, students are required to develop digital literacy skills to effectively use technology as a learning aid. The implementation of technology in education is not merely about digitizing learning materials, but also about creating a learning ecosystem that fosters collaboration, creativity, and active involvement from all parties (Bygstad et al., 2022; Crittenden et al., 2019).

Moreover, the adaptation of technology in education must consider various aspects, such as accessibility, infrastructure readiness, and gender equality. Teachers, as learning facilitators, play a strategic role in ensuring that technology is used to support the holistic needs of students, including character development and the enhancement of their academic potential (Salam et al., 2019). With an inclusive approach, technology can serve as a bridge to address educational gaps, enabling every student to have a meaningful learning experience, regardless of their social, economic, or gender background.

According to Lestari Moerdijat, around 60% of teachers faced significant challenges in using information technology for teaching during the Covid-19 pandemic (Gusmawan, Dendy Maulana, 2022). The limited mastery of information and communication technology by teachers hindered the learning process and had no significant impact on educational achievements in Indonesia (Spangenberg & Freitas, 2019). This challenge urges education providers to develop innovations in teaching to align educational infrastructure with the technological needs of the current era.

Research related to teacher technology competency focuses on three main aspects: (1) technology facilities provided by schools for teachers (Foulger et al., 2017) (2) teacher technology competencies in the learning process (Meral et al., 2012), and (3) technology-based teaching as an alternative method during and after the pandemic (Rieley, 2020). This shows that technological competence plays an important role in increasing the effectiveness of the teaching and learning process.

Digital education has now become a functional and effective method in ed
ucational activities, reducing the risk of academic interruptions due to school closures during the pandemic. However, some studies reveal that digital learning triggers various reactions from students, such as anxiety, disappointment about graduation processes, and a different learning experience compared to face-to-face education (Unger & Meiran, 2020). To prevent lasting

negative impacts and maintain students' mental health, educational institutions have now adopted blended learning.

Blended learning has significant potential in education if it is designed according to the cognitive and affective needs and characteristics of learners. Blended learning, designed with attention to these needs and characteristics, not only increases student engagement but also allows them to develop critical thinking, collaboration, and problem-solving skills (Boelens et al., 2018). In this context, the use of technology should support the learning process by providing various interactive and engaging learning resources. For example, teachers can use digital platforms to deliver varied learning materials, such as educational videos, online quizzes, or interactive simulations. Furthermore, integrating face-to-face activities with online learning can create a deeper learning experience, where students have the opportunity to discuss, clarify their understanding, and apply concepts in real-world situations. Schools also need to implement blended learning-friendly policies by adjusting classroom layouts, curricula, and developing a balanced learning environment between online and offline education (Paudel, 2021).

The success of blended learning also depends on the readiness of educational institutions to provide adequate infrastructure and training for teachers. Schools must develop supportive policies, such as ensuring the availability of internet access, technology devices, and technical training for teachers and staff. Additionally, the curriculum needs to be redesigned to reflect a harmonious integration between online and offline learning (Shi1 et al., 2023). The learning environment must also be made inclusive, ensuring that all students, regardless of socio-economic or gender backgrounds, have equal opportunities to participate. With this comprehensive approach, blended learning can serve as a catalyst in creating more adaptive education that is relevant to the needs of the modern world.

One of the challenges in implementing technology-based learning is ensuring equal access for all parties, regardless of socio-economic or gender background. Although technology has become an effective tool to improve the quality of education, the reality on the ground shows significant barriers, particularly in terms of gender equality. This gap reflects disparities in opportunities and accessibility, which may hinder efforts to create an inclusive and equitable learning environment.

However, there is a gender gap in access to and use of technology for technology-based learning, with women having lower access compared to men, especially due to educational and employment factors that are less supportive (Hilbert, 2011; Mariscal et al., 2019; Rashid, 2016; Sorgner et al., 2017). Women, especially in developing regions or those from marginalized backgrounds, often face barriers such as limited access to technology, lower levels of digital literacy, and fewer opportunities for professional development in technology-related fields. These challenges are compounded by socio-cultural factors, such as gender stereotypes, which may discourage women from pursuing careers in STEM (Science, Technology, Engineering, and Mathematics) fields, further hindering their ability to fully engage with technology in educational settings. As

a result, the gender gap in technology access and use creates unequal opportunities for both male and female educators and students, limiting the potential for achieving equitable, high-quality learning experiences through digital platforms. This gap not only affects the overall effectiveness of technology-based learning but also reinforces existing gender inequalities in education and the workforce.

Overall, the Covid-19 pandemic has pushed online learning as an alternative, although challenges still exist due to the low technological proficiency among teachers. Therefore, innovations through blended learning need to be accompanied by enhancing teachers' technological competence, so that technology mastery can be evenly distributed between male and female teachers, creating a more effective and balanced learning environment.

Several previous studies have shown the importance of teacher training in integrating technology so that learning becomes more effective and relevant to student needs. Benefits and Challenges of Implementing Cloud-Based Technologies in Education, Including Blended Learning(Al-samarraie & Saeed, 2018). Next, there is research to identify best practices in the implementation of blended learning, including training and support for teachers. This is relevant to understand the strategies that can be used in gender-based technology training(Graham et al., 2013). The digital and teacher support variables showed a significant impact on learning performance. Digital support showed negative impact, while teacher support showed a positive impact. Gender showed a significant moderating effect on the relationship between digital, teacher support and learning performance (Al-Awlaqi et al., 2022). Findings reveal that supportive factors, attitude, learning mode, satisfaction, course management, and ease of use positively predict the perception of learners and academic staffs' to adopt BL. Similarly, findings suggest that the perception of management towards BL adoption is positively determined by the strategy, structure, and support factors. Moreover, findings reveal that the impact of BL on learners' effectiveness is positively predicted by achievement, engagement, involvement, retention, and cognitive outcome. Additionally, findings suggest that the impact BL on academic staffs' effectiveness is significantly influence by delivery, performance, evaluation, motivation. Theoretical implications from this study contribute to enhance teaching quality by enriching course management, improving learning content, and facilitate management policies towards effective BL adoption (Jr et al., 2019).

The novelty of this research lies in the use of a gender approach as a framework to enhance teachers' competence in technology-based learning, specifically in blended learning models. Previous studies have tended to focus on technical and pedagogical aspects without explicitly considering how a gender perspective may affect the effectiveness of training and technology implementation in education. By integrating a gender perspective, this study offers new insights into how gender differences can be accommodated in the design of training and the implementation of blended learning, creating a more inclusive, responsive, and relevant learning environment that meets the needs of both students and educators in the digital age.

The aim of this study is to analyze efforts to improve teachers' competence in implementing technology-based blended learning through a gender approach, focusing on identifying strategies, challenges, and the impact of this approach in supporting a more inclusive and effective learning process.

RESEARCH METHOD

This research approach prioritizes a quantitative approach through surveys to obtain a more objective view of teachers' competence in integrating technology into blended learning (Nyanchoka et al., 2019). Additionally, this study also adopts a qualitative approach with in-depth interviews to enrich the understanding of the challenges, experiences, and strategies used by teachers in implementing technology from a gender perspective.

Data collection is carried out through a quantitative survey distributed to teachers involved in technology-based learning. This survey is designed to measure teachers' competence in using technology for blended learning, including their confidence in using digital tools.

This research method aims to provide a holistic picture of how gender influences teachers' competence in technology-based learning. Through survey and interview data analysis, this study will provide deeper insights into the challenges and opportunities faced by teachers in enhancing their technological competence and how this affects teaching in blended learning Environment (Rasmitadila et al., 2020).

RESEARCH RESULT AND DISCUSSION

This research focuses on improving teachers' competence in utilizing blended learning technology through an approach that considers gender factors. Blended learning, which combines online and face-to-face learning methods, shows great potential in creating a more interactive learning experience. However, it requires teachers to have a sufficient mastery of technology. Based on a survey conducted with 150 teachers from various educational levels who had participated in blended learning training, a significant difference in technology competence between male and female teachers was found. The data showed that 64% of male teachers reported high confidence in using digital devices, compared to only 42% of female teachers. Male teachers were also reported to have greater access to technology training, particularly in urban areas, while female teachers living in rural areas faced challenges in accessing training. A total of 58% of female teachers surveyed mentioned time and resource limitations as the main barriers to developing technological skills, most of which were attributed to additional responsibilities at home and school, reducing their time to participate in training.

The survey data also shows that male teachers tend to be more skilled in several aspects of technology, such as the use of hardware (53% of male teachers feel highly skilled, compared to 37% of female teachers) and digital-based learning apps (45% of male teachers report high competence, while only 31% of female teachers report the same). In addition to gender, age and experience also affect the level of teacher technology competence. Younger teachers, with an average age of 30-35 years, tend to be more comfortable using digital devices,

where 73% of these young teachers feel very ready to take advantage of blended learning. In contrast, only 28% of teachers over the age of 50 reported similar convenience in utilizing technology, with most feeling it needed more time to learn and adapt.

This research reveals a significant need to provide gender-based training that addresses the specific challenges faced by female teachers, especially those in rural areas with limited access to technology training. By offering more flexible training opportunities, such as online courses that can be accessed at any time, female teachers would have a greater chance to enhance their technological skills. This approach would help them reach a level of competence comparable to their male counterparts, thereby reducing the gender gap in technology proficiency. Ultimately, this would improve the effectiveness of technology-based teaching across all educational levels.

The data also indicates that the availability of resources and support networks plays a critical role in bridging the gender gap in technology proficiency. In urban areas, male teachers reported higher access to technological tools and professional development opportunities, which further contributed to their higher confidence and skill levels. On the other hand, female teachers, particularly in rural areas, face challenges such as limited access to technology and inadequate infrastructure, which hinder their ability to fully integrate blended learning in their classrooms.

Additionally, the survey revealed that 72% of male teachers felt confident in using digital tools for teaching, while only 48% of female teachers reported the same level of confidence. This disparity is even more pronounced when considering the differences in access to training programs. Urban-based male teachers had more frequent opportunities to attend workshops, seminars, and conferences focused on technology integration, whereas rural female teachers often lacked such opportunities due to logistical constraints, financial limitations, and gendered expectations regarding domestic responsibilities.

Moreover, the survey identified that female teachers often encounter greater time constraints. Many female teachers are primarily responsible for household duties, which limits their availability for professional development. In contrast, male teachers, particularly in urban settings, reported having fewer familial obligations that interfered with their professional growth. This finding underscores the importance of developing training programs that are both accessible and adaptable to the specific needs of female teachers, ensuring they are provided with the resources and support needed to overcome these barriers.

Ultimately, the findings suggest that addressing the gender disparities in access to technology training and support could have a profound impact on the overall effectiveness of blended learning, making it a more inclusive and equitable educational approach.

DISCUSSION

This finding underscores the importance of a more inclusive approach to technology training, especially for female teachers who are often hindered by limitations in access, time, and additional responsibilities. The gap in

technological proficiency suggests that technology-based education will remain uneven without gender-responsive policies addressing these challenges. With gender-sensitive training, all teachers would have equal opportunities to develop their technological skills, ultimately supporting the successful implementation of blended learning in schools.

In this regard, policies that consider gender factors are crucial for creating an inclusive environment where every teacher, regardless of gender, has equal access to the technology and training they need (Orser et al., 2019). Gender-responsive training can be achieved by offering more flexible schedules, using online training modules that can be accessed at any time, and providing support networks where female teachers can exchange experiences and knowledge about using technology (Rarieya et al., 2024). By doing so, the technology competence gap between male and female teachers can be reduced, which not only supports their professional development but also creates a learning environment that is more responsive to the needs of students.

Blended learning, a combination of face-to-face and online learning modalities, has been widely acknowledged as a transformative approach in modern education. Garrison and Vaughan (2008) defined blended learning as the integration of classroom teaching with online activities, which enhances flexibility, accessibility, and engagement in the learning process (Hrastinski, 2019). This approach allows for a more personalized learning experience, as students can learn at their own pace while also participating in collaborative activities during in-person sessions. Despite its potential, successful implementation depends significantly on teachers' ability to design and execute blended learning strategies effectively. This demands a shift in teaching methods and the development of digital competencies that enable educators to integrate technological tools into their pedagogical practices seamlessly.

The impact of increasing technological competence among teachers is very significant for the quality of learning received by students. Teachers who are competent in using blended learning have the ability to create learning experiences that are interactive, adaptive, and in accordance with the learning styles of their respective students. In the application of blended learning, students can learn at a pace and time that suits their needs, which has an impact on improving material understanding. Teachers who master technology can use various digital media such as videos, animations, and simulations to enrich the student learning experience. Technology also allows students to learn collaboratively through online discussions or joint projects conducted virtually. With more active involvement in the learning process, students can develop critical thinking skills and collaborative abilities that are relevant to their future needs.

Teacher competence in blended learning encompasses a set of skills, including technological proficiency, instructional design, and classroom management in a hybrid setting (Pulham & Graham, 2018).The Technological Pedagogical Content Knowledge (TPACK) framework highlights the interplay of technology, pedagogy, and content knowledge as critical for effective teaching in a blended learning environment. Educators must not only be familiar with digital

tools but also understand how to integrate these tools to support specific learning objectives. Research by (Graham et al., 2013)suggests that teachers' attitudes towards technology, training opportunities, and institutional support play pivotal roles in their ability to adopt blended learning practices successfully.

Furthermore, students taught by teachers who are competent in technology tend to have higher motivation levels, as interactive and varied teaching methods engage them more in the learning process. Technology-based learning also allows students to access learning materials anytime and from anywhere, offering flexibility that was previously absent in traditional learning models. For instance, in an effective blended learning model, students can revisit difficult material, access additional learning resources, or take online assessments that help them better understand their strengths and weaknesses in mastering the content. This, in turn, improves learning success and helps students achieve better learning outcomes.

In the context of education, gender considerations play a crucial role in creating a fair and inclusive learning environment. Gender-sensitive education focuses on providing equal opportunities for all parties, both for learners and educators. In this regard, gender does not only relate to how students receive and process learning material but also to how teachers manage the learning process, including the implementation of technology and teaching methodologies.Gender considerations in education emphasize the need for equitable opportunities and inclusive practices that address the diverse needs of learners and educators (Unterhalter, 2017). In the context of blended learning, gender dynamics may influence teachers' access to technology and professional development opportunities. Women educators, particularly in underrepresented regions, may face challenges related to cultural expectations, resource constraints, and unequal access to training. Addressing these barriers through gender-sensitive policies and capacity-building initiatives is essential to ensure that all educators can fully participate in and contribute to blended learning environments.

A gender-sensitive approach in improving teacher competence involves recognizing and addressing the unique challenges faced by educators based on gender-related factors. Strategies such as providing flexible training schedules, mentorship programs, and technology grants have shown promise in empowering women educators in blended learning settings (Cagang et al., 2023). By creating inclusive professional development opportunities, education systems can ensure that both male and female teachers are equally equipped to navigate the complexities of blended learning. This inclusive approach not only enhances teacher efficacy but also contributes to the broader goal of creating equitable and effective educational environments for diverse learner populations.

Implementing blended learning presents several challenges, including technological infrastructure, pedagogical adaptation, and equity issues. From a gender perspective, research by Aikman and Rao (2012) highlights that societal norms and gender roles can impact the extent to which teachers, particularly women, can engage in professional development programs for blended learning. Additionally, access to digital devices and internet connectivity remains uneven,

particularly in rural and low-income areas. These challenges necessitate targeted interventions that provide teachers with not only the technical tools but also the support structures to overcome systemic barriers and enhance their blended learning competencies.

CONCLUSION

The guidance for teachers in developing technological competencies. The conclusion from these findings shows that improving teachers' technological competence through inclusive and gender-based training has a broad impact that not only supports their professional development but also enhances student learning outcomes. By empowering teachers to master technology, the education system not only creates educators who are better prepared to face the changing times but also a generation of students with skills and knowledge that align with the demands of the increasingly complex digital world. Therefore, this gender-based and inclusive training is a long-term investment in shaping an educational environment that is more adaptive, innovative, and responsive to the needs of every individual within it.

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Integration of Multicultural Education in the ISMUBA Curriculum and Its Implementation in Learning

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Abstract: *This study aims to explore the Multicultural education content in the ISMUBA curriculum and its implementation in learning at SMA Muhammadiyah 4 Bandung City. Using a qualitative descriptive method, the research describes conditions in curriculum documents and field observations related to learning. Data were collected through observation, interviews, and documentation, and analyzed using data triangulation by reducing, presenting, and concluding the data. The findings reveal that the ISMUBA curriculum, which is unique to educational institutions under Muhammadiyah, is an integrative-holistic modern Islamic education system developed to meet community needs. Based on decree 98/KEP/I.4/F/2017, the curriculum focuses on instilling faith, piety, and strong Islamic values, rooted in the Qur'an and Hadith. Multicultural education is embedded in the curriculum's structure, process, teachers, and assessments. Implementation at SMA Muhammadiyah 4 involves face-to-face learning, habituation, structured and unstructured independent activities, fostering Islamic character, honesty, care, politeness, and responsibility.*

Keywords:
ISMUBA Curriculum; Learning; Multicultural

Abstrak: Penelitian ini bertujuan untuk mengkaji pendidikan multikultural dalam kurikulum ISMUBA serta penerapannya dalam pembelajaran di SMA Muhammadiyah 4 Kota Bandung. Penelitian ini Menggunakan metode deskriptif kualitatif, penelitian ini menggambarkan kondisi dalam dokumen kurikulum dan hasil observasi di lapangan terkait pembelajaran. Data dikumpulkan melalui observasi, wawancara, dan dokumentasi, serta dianalisis menggunakan triangulasi data dengan mereduksi, menyajikan, dan menarik kesimpulan. Temuan menunjukkan bahwa kurikulum ISMUBA, yang merupakan kekhasan lembaga pendidikan di bawah naungan Muhammadiyah, adalah sistem pendidikan Islam modern yang integratif-holistik yang dikembangkan untuk memenuhi kebutuhan masyarakat. Berdasarkan SK 98/KEP/I.4/F/2017, kurikulum ini berfokus pada penanaman keimanan, ketakwaan, dan nilai-nilai Islam yang kuat, yang berakar pada Al-Qur'an dan Hadits. Pendidikan multikultural tercermin dalam struktur, proses, tenaga pengajar, dan penilaian dalam kurikulum tersebut. Penerapan di SMA Muhammadiyah 4 mencakup pembelajaran tatap muka, pembiasaan, tugas terstruktur, dan aktivitas mandiri yang tidak terstruktur, yang bertujuan membentuk karakter Islam, kejujuran, kepedulian, kesantunan, dan tanggung jawab.

Kata kunci:
Kurikulum ISMUBA; Multikultural; Pembelajaran

INTRODUCTION

A serious issue facing Indonesia today is the challenge of multiculturalism and pluralism. Indonesia is a vast, diverse country rich in ethnic groups, cultures, races, religions, and languages (Raihani, 2018). Socio-culturally and geographically, Indonesia spans a wide area, encompassing approximately 17,667 islands of various sizes (Alamsyah et al., 2023). The Indonesian population, as recorded by the Central Statistics Agency (BPS) from the 2022 Census, stands at approximately 275 million (BPS, 2023). Given such a large population, it is natural that Indonesia is one of the world's multicultural nations. The multicultural reality in Indonesia is an undeniable fact, with a rich mix of ethnicities, cultures, languages, religions, genders, races, and social classes. As a country with a substantial population, Indonesia has the potential for significant social strength and a beautiful diversity, provided mutual understanding is upheld (Fatmawati, 2021). However, if not properly maintained and managed, this diversity could also become a trigger for division and conflict (Naim & Sauqi, 2008). To sustain and nurture Indonesia's multiculturalism, multicultural education serves as an effective approach.

According to Banks, multicultural education is an idea, movement, educational reform, and educational process with the primary goal of transforming the structure of educational institutions. This aims to ensure that all students—male and female, students with special needs, and students from diverse racial, ethnic, and cultural groups—have equal opportunities to achieve academic success in school. The main objective of multicultural education is to shift the approach to teaching and learning towards providing equal opportunities for every Child (Arsal, 2019).

Currently, multicultural education plays a crucial role for the Indonesian nation. In addition to strengthening unity and cohesion, multicultural education serves as a medium for instilling attitudes of tolerance, fairness, and respect in students. It is hoped that through multicultural education, Indonesia's diverse and multicultural society can be maintained, reducing conflicts, discriminatory actions, and all forms of hostility (Dewantara et al., 2024).

The implementation of multicultural education within educational institutions can be achieved through curriculum reinforcement (Suri & Chandra, 2021). The curriculum is expected to strengthen students' understanding of the importance of mutual respect among individuals. This respect may be reflected in an appreciation of cultural, ethnic, religious, tribal, racial diversity, as well as differences in economic status, educational background, and socio-cultural contexts (MacPherson, 2018). By instilling multicultural awareness, education strengthens the character and personality of students, enabling them to coexist harmoniously with diverse social groups. The curriculum is a crucial component in the educational process, serving as a reflection of societal ideals, aspirations, demands, and specific needs (Mpuangnan & Ntombela, 2024). By embedding multicultural values, the curriculum fosters an inclusive learning environment that promotes a sense of unity amid diversity, encouraging students to develop as empathetic, tolerant individuals who appreciate and engage constructively with the variety of perspectives they encounter in society. Through this

approach, the curriculum plays a significant role in preparing students to become citizens who contribute positively to a multicultural nation (Barton & Ho, 2020).

Muhammadiyah 4 Senior High School in Bandung City is a formal educational institution under the Muhammadiyah organization that implements the Al-Islam, Kemuhammadiyahan, and Arabic Language (ISMUBA) curriculum. The ISMUBA curriculum is a distinctive feature and strength of educational institutions under the Muhammadiyah association, reflecting the organization's dedication to integrating Islamic values, Muhammadiyah principles, and Arabic language skills. This curriculum sets Muhammadiyah schools apart by emphasizing religious and moral education alongside general academic subjects, aiming to foster a well-rounded development in students that aligns with Muhammadiyah's vision and mission.

The Muhammadiyah organization, one of the oldest Islamic organizations in Indonesia, was founded by K.H. Ahmad Dahlan in 1911 CE. Muhammadiyah envisions progressive change and has initiated three reform movements, one of which is in the field of education. This article will examine and analyze one aspect of this reform, specifically the curriculum renewal. The curriculum in focus here is the Al-Islam, Kemuhammadiyahan, and Arabic Language curriculum, commonly referred to as ISMUBA. The ISMUBA education curriculum encompasses essential concepts and principles of learning, educational assessment, graduate competency standards, content standards, curriculum structure, and study load. Additionally, in its development, the ISMUBA curriculum takes into account the principles of national unity, national values, and the socio-cultural conditions of local communities (Putra et al., 2023).

Research on the ISMUBA curriculum has been conducted by (Mufti, 2020), who noted that the ISMUBA curriculum implementation has been successful in planning, process, and evaluation. However, a significant obstacle remains: a low teacher work ethic, indicating a lack of motivation or commitment among teachers, which presents a challenge in optimizing the curriculum's effectiveness. Another study by (Mufti & Widodo, 2021) highlighted that the ISMUBA curriculum at SD Muhammadiyah Banguntapan integrates the curricula of the Ministry of Education and Culture, the Ministry of Religious Affairs, and the PP Muhammadiyah Dikdasmen Council, creating a comprehensive and inclusive educational framework.

Based on the background of the issue, the researcher will explore whether the ISMUBA curriculum incorporates elements of multicultural education and how its implementation in the learning process can foster inclusive and tolerant attitudes among students of SMA Muhammadiyah 4 Bandung.

RESEARCH METHOD

The approach used in this study is qualitative with a descriptive method, which involves describing and presenting various conditions found in both curriculum documents and observations in the field regarding matters related to the learning process at SMA Muhammadiyah 4 (Peterson, 2019). Two sources of data are used in this study, namely primary and secondary data. Primary data is obtained by the researcher using three data collection techniques: observation, interviews,

and documentation. Meanwhile, secondary data is gathered through literature review, by collecting references related to the research topic. The data analysis technique employed by the researcher is data triangulation, involving data reduction, data presentation, and drawing conclusions (Richards & Hemphill, 2018).

RESEARCH RESULTS AND DISCUSSION
Multicultural Education Content in the Al-Islam, Muhammadiyah and Arabic Language Curriculum (ISMUBA)

The ISMUBA Curriculum (Al-Islam, Kemuhammadiyahan, and Arabic) is a distinctive feature and advantage for educational institutions under the Muhammadiyah organization. The ISMUBA curriculum is established and implemented by the Muhammadiyah Elementary Education Council through Decree Number 98/KEP/I.4/F/2017 (Hidayat et al., 2022). This curriculum is designed to address societal needs by creating a modern, integrative-holistic Islamic education system, where public schools incorporate Islamic religious sciences, and madrasas integrate general sciences. The following are elements of multicultural education present in the ISMUBA curriculum:

Principles of Preparation and Management

The ISMUBA curriculum is structured around the following principles: 1) Strengthening faith, piety, and noble character; 2) Future competency needs; 3) Enhancing potential, intelligence, and interests aligned with students' developmental stages and abilities; 4) Diversity of regional and environmental potential and characteristics; 5) Regional and national development demands; 6) Workforce requirements; 7) Advancements in science, technology, and the arts; 8) Religion; 9) Global development dynamics; 10) National unity and values; 11) Local socio-cultural conditions; 12) Gender equality; and 13) Characteristics of the educational institution.

In its management aspect, the Al-Islam, Kemuhammadiyahan, and Arabic Language (ISMUBA) Curriculum is developed based on the Content Standards and Graduate Competency Standards, as well as the curriculum guidelines set by BSNP and the Guidelines of the Primary and Secondary Education Council of Muhammadiyah's Central Leadership. This curriculum development aligns with curriculum development principles for each subject area, which include: 1) Centering on the potential, development, needs, and interests of students and their environment; 2) Diversity and integration; 3) Responsiveness to the advancement of science, technology, and the arts; 4) Relevance to life's needs; 5) Comprehensive and continuous learning; lifelong learning; and 6) A balance between national and regional interests.

From the perspective of its design and management principles, the ISMUBA curriculum is crafted to cultivate a generation with a faithful and devout character, upholding mutual respect and openness toward all groups without distinction of religion, race, ethnicity, or religious beliefs. This inclusive approach aims to strengthen unity, cohesion, and national integrity among students.

ISMUBA Graduate Competency Standards

In terms of Graduate Competency Standards, the ISMUBA curriculum has three main dimensions, namely the dimensions of attitude, knowledge, and skills.

Attitude Dimension

The ISMUBA curriculum aims to instill behaviors that reflect key values, such as: 1) faith and devotion to Allah, with a committed and consistent adherence to Islamic beliefs, guided by the Qur'an and Hadith as life references, and dedicated to sharing these values; 2) noble character, showing honesty, empathy, and respect in daily interactions; 3) responsibility, steadfastness, and a forward-thinking mindset; 4) being a lifelong learner, critically reflective in gaining lessons from life; 5) physical and mental health aligned with the developmental needs of students within family, school, community, and the surrounding environment, including national, regional, and international contexts.

Knowledge Dimension
1. Possesses factual, conceptual, procedural, metacognitive, and suprarational knowledge at a technical, specific, detailed, and complex level, covering: science, technology, arts, culture, humanities, Islamic studies, Muhammadiyah studies, and Arabic language.
   a. Factual Knowledge: In-depth, technical, and specific knowledge related to science, technology, arts, culture, humanities, Islamic studies, Muhammadiyah studies, and Arabic language in the context of society, the natural environment, the nation, state, regional, and international arenas.
   b. Conceptual Knowledge: Understanding of terms, classifications, categories, principles, generalizations, theories, models, and structures used within the specialized, detailed knowledge of science, technology, arts, culture, humanities, Islamic studies, Muhammadiyah studies, and Arabic language in relation to society, the natural environment, the nation, state, regional, and international contexts.
   c. Procedural Knowledge: Knowledge of how to carry out specific activities, including algorithms, methods, and criteria for selecting appropriate procedures in science, technology, arts, culture, humanities, Islamic studies, Muhammadiyah studies, and Arabic language as they relate to society, the natural environment, the nation, state, regional, and international settings.
   d. Metacognitive Knowledge: Awareness of personal strengths and weaknesses, and applying this self-awareness in learning complex, detailed, and context-specific knowledge in science, technology, arts, culture, humanities, Islamic studies, Muhammadiyah studies, and Arabic language within societal, national, regional, and international contexts.
   e. Suprarational Knowledge: Understanding of faith-based knowledge concerning the unseen, applying it in the study of Islamic sciences.
2. Able to connect the knowledge outlined above within personal, family, school, community, natural environment, national, regional, and international contexts.

Skill Dimensions

In this dimension students have the skills to think and act: creative, productive, critical, independent, collaborative, and communicative through diverse approaches; normative, scientific, and other approaches as development from those studied in educational units and other sources independently.

ISMUBA content standards

The content standard serves as a criterion for the scope of material and competency levels required to achieve graduate competencies at specific levels and types of education. The ISMUBA curriculum's content standard is aligned with the substance of national educational goals in the domains of spiritual and social attitudes, knowledge, and skills. Therefore, the characteristics, relevance, sufficiency, breadth, and depth of the material are determined based on the nature of each competency and the process for acquiring it. Each of the three competencies has a distinct acquisition process: Attitude Competency: Formed through activities such as accepting, practicing, appreciating, internalizing, and applying values. Knowledge Competency: Acquired through activities such as knowing, understanding, applying, analyzing, evaluating, and creating. Skills Competency: Developed through activities such as observing, questioning, experimenting, reasoning, presenting, and creating. These structured activities ensure that each competency is acquired comprehensively and appropriately, in line with national education standards.

ISMUBA Process Standards

In the integrative-holistic education system, the existence of ISMUBA is a stand-alone subject, but in the educational process it is integrated into other subjects, and even the entire school or madrasah program. Likewise, general science is also a subject that is inseparable from the values of Islam and Muhammadiyah. In detail, the concept of integrative-holistic ISMUBA education can be formulated in the following aspects:

First: Curriculum content integrates the general knowledge education curriculum with ISMUBA education. Between general knowledge education and ISMUBA education, there is a balanced portion, and each strengthens and complements each other. General knowledge education is based on and enriched with the perspective of Islam and Muhammadiyah contained in ISMUBA education. Similarly, ISMUBA education is enriched with knowledge contained in general subjects. By integrating the entire curriculum in a network of teaching and learning activities, it is hoped that students can understand the essence of knowledge with Islam, and understand and practice the teachings of Islam with a broad foundation of knowledge.

Second: The learning process develops all student potentials; covering intellectual, emotional, social and spiritual intelligence and integrating the entire realm of learning outcomes, namely the cognitive, affective and psychomotor realms in all ISMUBA learning activities. In the learning process, various approaches and methods are used that can develop all the potential of students to produce a comprehensive and

complete ability to form a complete personality, namely students who are faithful and devout and obedient to worship.

Third: Knowledge and deeds, namely developing Islamic religious knowledge through ISMUBA education subjects to be practiced in daily life which is carried out with a learning process that prioritizes the existence of good role models (uswah hasanah) for all school residents.

Fourth: Cooperation between schools, parents and the community in the form of shared responsibility in education. Schools/madrasas empower parents and the community to cooperate with schools/madrasas and actively provide encouragement and assistance to their children in learning, while the community participates as a rich and real learning resource and facilitator in learning.

Fifth: School culture, namely the social environment, relationships, behavior patterns, good habits and all school/madrasah regulations are realized within the framework of Islamic teachings and values that underlie all aspects of behavior and regulations that reflect the morals of karimah. The physical environment and environmental arrangement patterns are emphasized on the arrangement of cleanliness, order, effectiveness, convenience, health, logic, harmony, and balance and beauty in the framework of education.

ISMUBA Teacher Standards

A teacher is a professional educator with a Muhammadiyah personality whose main duties include educating, teaching, guiding, directing, training, assessing, and evaluating students. The ISMUBA Teacher Standard aims to establish the quality standards for ISMUBA teachers across schools in Indonesia, covering educational qualifications, competencies, licensing or certification, and commitment to Muhammadiyah. There are several requirements that must be met by an ISMUBA teacher, namely: they must have academic qualifications, competencies, a teaching certificate, be in good physical and mental health, and be capable of achieving Muhammadiyah's educational goals. The minimum academic qualification for an ISMUBA teacher is a bachelor's degree (S1) obtained from an accredited university. The required license for ISMUBA teachers is a teaching certificate, which is acquired through ISMUBA competency training.

Assessment Standards

Assessment standards in the ISMUBA curriculum are set with the aim of educators and educational units in planning and implementing assessments of student learning outcomes in accordance with the competencies to be achieved, both in terms of attitude, knowledge, and skills; The processing of assessment results is carried out objectively, accountably, and informatively.

The assessment of the ISMUBA curriculum is carried out by teachers and by the education council. Assessments carried out by teachers are carried out in an effort to collect information on learning outcomes in aspects of attitudes, knowledge, and skills that are carried out in a planned and systematic manner, to monitor the process, learning progress, and improvement of learning outcomes through assignments and evaluation of learning outcomes.

Meanwhile, the assessment by the education council is carried out at the end of the semester or the end of the year and during school exams.

Implementation of ISMUBA Curriculum in Learning at SMA Muhammadiyah 4 Bandung City

SMA Muhammadiyah 4 Bandung City is one of the educational institutions under the auspices of the Muhammadiyah organization. For educational institutions under its auspices, it is mandatory to implement the ISMUBA curriculum in learning taught by teachers who already have special certificates.

The following is the content of the ISMUBA curriculum at Muhammadiyah 4 Senior High School Bandung City as follows:

No	Subject	Classes, Semesters, and Time Allocation					
		X		XI		XII	
		1	2	1	2	1	2
1	Qur'an Hadith Education	3	3	3	3	3	3
2	Moral Education	2	2	2	2	2	2
3	Fiqh Education	3	3	3	3	3	3
4	tarikh Education	1	1	1	1	1	1
5	Muhammadiyah Education	1	1	1	1	1	1
6	Arabic Language Education	2	2	2	2	2	2
	Number of Hours	12	12	12	12	12	12

The learning system in the ISMUBA Curriculum is held using a package system. The package system is a binding implementation system, that is, all students are required to follow all learning programs and learning loads that have been set for each class in accordance with the curriculum structure that has been set.

There are several learning systems implemented at SMA Muhammadiyah 4 Kota Bandung to implement the ISMUBA curriculum, namely face-to-face learning, habituation, structured assignments, and unstructured independent activities. Face-to-face learning refers to classroom-based learning activities. The learning load for ISMUBA subjects at SMA Muhammadiyah 4 Kota Bandung is 12 hours per week for classes X, XI, and XII. The duration for each lesson is 45 minutes, with a total of 12 hours per week for both face-to-face learning and habituation activities. Structured assignment learning involves deepening the learning material by students that is designed by the teacher to achieve the competency standards. The completion time for structured assignments is determined by the teacher. Meanwhile, unstructured independent learning activities are those in which students deepen the learning material, designed by the teacher to meet competency standards, but the time for completion is determined by the students themselves.

The ISMUBA curriculum, which stands for Al-Islam, Muhammadiyah, and Arabic Language, is a distinctive curriculum implemented in educational institutions under the Muhammadiyah Organization (Mundofi et al., 2024). This

curriculum aims to integrate religious education with general academic subjects to produce graduates who are not only academically proficient but also possess strong Islamic character, high moral standards, and a commitment to the values of Muhammadiyah. This literature review explores various studies and theories that examine the components, development, and implementation of the ISMUBA curriculum, as well as its impact on students' academic performance and character Development (Wibowo, 2023).

The theoretical framework behind the ISMUBA curriculum is rooted in the philosophy of education, particularly in the Islamic educational perspective, which emphasizes both spiritual and intellectual development. According to Tyler's (1949) model of curriculum development, a curriculum should be designed to meet the educational needs of students while ensuring alignment with national educational goals and societal needs (Syomwene, 2020). ISMUBA's approach is centered on fostering students' spiritual values, as well as developing critical thinking, creativity, and social responsibility.

Furthermore, the ISMUBA curriculum is influenced by the theory of integrated learning, which advocates for the blending of different fields of knowledge into a cohesive whole, rather than treating them as separate and isolated entities (Widodo et al., 2024). This is particularly relevant in the ISMUBA curriculum's integration of Islamic studies, Muhammadiyah teachings, and the Arabic language into the broader academic framework. According to Dewey's (1938) concept of experiential learning, knowledge should not only be learned but also actively applied in real-life contexts (Seaman, 2019). The ISMUBA curriculum emphasizes this approach by involving students in both theoretical learning and practical activities, such as community service and religious observance, to foster holistic development.

The ISMUBA curriculum is structured to integrate various components of Islamic education with general academic subjects. A key feature of the curriculum is its inclusion of Islamic teachings, Muhammadiyah values, and the Arabic language as core subjects alongside other subjects like science, mathematics, and social studies. This integration reflects a holistic approach to education, which is in line with the concept of "integrative education" discussed by Noddings (1992), who advocates for an educational framework that develops both the intellectual and moral capacities of students (Vakhovskyi, 2023).

The curriculum's core subjects aim to instill a deep understanding of Islamic principles, the teachings of Muhammadiyah, and proficiency in Arabic, which is essential for understanding Islamic texts. The inclusion of these subjects supports the development of students' spiritual and moral values, which are central to the educational philosophy of Muhammadiyah. Moreover, the emphasis on Arabic is not only for linguistic proficiency but also to connect students with classical Islamic texts such as the Qur'an and Hadith.

CONCLUSION

Based on the explanations above, the ISMUBA curriculum is heavily enriched with multicultural educational content. This is evident in various aspects. From the principles of its design and management, the ISMUBA curriculum is

structured to develop a generation with a personality grounded in faith and devotion, fostering mutual respect and openness to all groups, regardless of religious, racial, ethnic, or doctrinal backgrounds, thereby strengthening national unity and cohesion.

In terms of graduate competencies, processes, teachers, and assessment, the ISMUBA curriculum emphasizes competencies in attitude, knowledge, and skills that prioritize faith and piety to Allah SWT. It fosters a steadfast adherence to Islamic creed, using the Qur'an and Hadith as life guides, promoting virtuous character, honesty, care, respect in daily interactions, responsibility, consistency, and progressiveness. At SMA Muhammadiyah 4 Kota Bandung, the implementation of the Al-Islam, Kemuhammadiyahan, and Arabic Language curriculum is conducted through face-to-face instruction, habitual practices, structured assignments, and independent, unstructured activities. Face-to-face learning is scheduled for 12 hours per week across all grades, with each session lasting 45 minutes. The structured assignments have completion times set by the teachers, while the independent, unstructured learning activities, often involving deeper exploration of material, are managed by the students themselves.

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Islamic Religious Education in Public Universities: Responding to Contemporary Challenges

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Abstract: This research aims to explore the management of Islamic Religious Education (PAI) in public universities, particularly at Advanced Indonesia University (UIMA), and to identify efforts to enhance its effectiveness in instilling moral and religious values relevant to current developments. The research adopts a qualitative approach with a descriptive method to provide a systematic overview of the factors influencing the success of PAI, including both teaching aspects and supporting infrastructure. The study identified several challenges, including variations in religious education models, the need to integrate the inclusive spirit of Islamic teachings, educator professionalism, and the limitations in religious infrastructure. Proposed solutions include strengthening the curriculum based on the fundamental values of the Qur'an and Sunnah, alongside a holistic approach that not only focuses on academics but also on character and ethics formation. Additionally, the development of facilities, such as mosques, is expected to support increased religious activities. The conclusion of this research is that the management of PAI at public universities, like UIMA, requires an integrated approach that blends academic knowledge with support from various stakeholders to foster a competitive and character-building Islamic education.

Keywords:
Challenges; Education; Higher Education

Abstrak: Penelitian ini bertujuan untuk mengeksplorasi tantangan dalam pengelolaan Pendidikan Agama Islam (PAI) di perguruan tinggi umum, khususnya di Universitas Indonesia Maju (UIMA), serta upaya untuk meningkatkan efektivitasnya dalam menanamkan nilai-nilai moral dan agama yang relevan dengan perkembangan zaman. Penelitian ini menggunakan metode kualitatif dengan pendekatan deskriptif untuk menyusun gambaran sistematis mengenai faktor-faktor yang memengaruhi keberhasilan PAI, baik dari aspek pengajaran maupun infrastruktur pendukung. Hasil penelitian mengidentifikasi berbagai tantangan, termasuk model pengembangan pendidikan agama yang berbeda, pentingnya integrasi semangat inklusivitas ajaran Islam, profesionalisme pendidik, dan keterbatasan sarana prasarana keagamaan. Solusi yang diusulkan mencakup penguatan kurikulum dengan dasar nilai-nilai fundamental Al-Qur'an dan as-Sunnah, serta adopsi pendekatan holistik yang tidak hanya mencakup aspek akademis tetapi juga pembentukan karakter dan etika mahasiswa. Selain itu, pengembangan sarana seperti masjid diharapkan dapat mendukung peningkatan aktivitas keagamaan. Kesimpulan dari penelitian ini adalah bahwa pengelolaan PAI di perguruan tinggi umum, seperti UIMA, tidak hanya membutuhkan pendekatan yang terintegrasi dengan ilmu pengetahuan umum, tetapi juga dukungan dari berbagai pihak untuk mencapai pendidikan Islam yang berdaya saing dan berorientasi pada pembentukan karakter Islami.

Kata Kunci:
Pendidikan, Perguruan Tinggi, Tantangan

INTRODUCTION

Islamic Religious Education (PAI) as part of the school curriculum plays a vital role in shaping students' character, both in terms of morality and aspects of science and Technology (Kurniati & El-Yunusi, 2023). Nevertheless, PAI education in schools is currently attracting attention from education experts, as it is perceived as less effective in instilling moral and religious values in students. This phenomenon is reflected in the rise of social issues among youth, such as drug abuse, street crimes, promiscuity, brawls, and various other social problems (Lenggogeni & Mudjiran, 2024).

Religious education, including Islamic Religious Education (PAI), plays a crucial role in shaping the character and morals of students from elementary school to higher education levels. In the context of universities, PAI is a mandatory course that Muslim students must take as part of their personal development and to cultivate a religious attitude within academic and social Life (Zulkifli & Setiawan, 2020). PAI falls under the category of General Basic Courses (MKDU) or Compulsory Courses (MKW) offered in nearly all academic programs, aiming to provide a deep understanding of Islamic values and their application in daily life.

On the other hand, the importance of integrating PAI with other courses to develop a more holistic curriculum has also become a topic requiring greater attention (Nasir et al., 2021). A more interdisciplinary approach between PAI and general sciences is expected to create a synergy that not only enhances students' academic competencies but also enriches their understanding of religion and morality within a broader context (Nuryana & Fauzi, 2020). In this regard, PAI in universities is not merely seen as a standalone course but as an integral part of shaping individuals with a profound religious understanding who are capable of applying it across various aspects of life (Ilham, 2020).

Therefore, developing a more innovative PAI (Islamic Religious Education) teaching model that uses interactive methods relevant to contemporary challenges is essential. Incorporating technology into teaching, creating more applicable learning materials, and supporting students' character development are crucial factors to consider in managing PAI in higher education institutions (Djazilan & Hariani, 2022).

Additionally, the current approach to PAI education is often seen as insufficiently responsive to the demands of the Fourth Industrial Revolution, a challenge that holds particular significance in general universities. The implementation of Islamic Religious Education in general universities has experienced fluctuations (Ucan & Wright, 2019). In the early 1960s, religious education was considered a non-mandatory general course (Enstedt, 2022). However, during the New Order era, religious education's status was strengthened, becoming a mandatory course for all students and managed alongside other core courses, such as Pancasila Education, Entrepreneurship Education, Citizenship Education, and Indonesian Language Education, by a dedicated bureau (Astomo, 2021; Sukmayadi & Yahya, 2020).

Previous research relevant to the topic of the importance of Islamic religious education (PAI) as a moral foundation for students in public and Islamic

universities has highlighted various aspects related to the role of religion as a social institution, its influence on character formation, and the significance of PAI in the higher education curriculum.

One study examines how religion plays a role in shaping the character of students at Islamic universities. This research emphasizes that religious education functions not only as a formal subject but also as a means of cultivating moral values and positive attitudes that benefit students' social lives. The study's findings indicate that students who receive religious education tend to have stronger moral values compared to those less exposed to religious principles. Additionally, the study reveals that the internalization of religious values has the potential to prevent students from engaging in actions that conflict with moral and ethical standards (Ubaidillah et al., 2023).

Another study explores the impact of Islamic Religious Education (PAI) on understanding religious values within the context of public universities. The findings reveal that PAI significantly enhances students' spiritual awareness and social responsibility. This study highlights the importance of interactive teaching methods and the relevance of PAI content to contemporary issues, enabling students to apply religious values in their real lives. The research supports the view that religious education serves as a framework influencing individual behavior and values, especially amidst dynamic social changes (Heri & Ruswandi, 2022).

Furthermore, the research findings indicate that Islamic Religious Education (PAI) for students in Public Universities (PTU) plays a significant role in implementing Islamic teachings, realized through formal learning processes as well as co-curricular and religious activities. Islamic Religious Education at PTUs presents unique challenges distinct from religious education at Islamic Higher Education Institutions, such as UIN, IAIN, and STAIN, which are grounded in a religious-based educational environment. At PTUs, the approach to PAI often needs to be more adaptive to remain relevant to students from diverse backgrounds, facilitating the integration of Islamic values within a broader academic and social context. This study emphasizes that integrating religious values with general knowledge is an effective approach to preparing students for the challenges of globalization without sacrificing their religious identity (Rahim, 2020).

Overall, previous studies support the importance of religious education as a social institution that plays a crucial role in shaping students' character (Komariah & Nihayah, 2023). Through religious education, students not only gain religious knowledge but also undergo the development of morals, character, and ethics that are sustained over Time (Khaidir & Suud, 2020). Findings from these studies suggest that Islamic Religious Education (PAI) is not just a compulsory course in the curriculum but also an instrument for character building that can shape a generation of youth with integrity and high moral standards in facing life in the modern era.

The Islamic Religious Education (PAI) course, as an integral part of the curriculum, has experienced fluctuations in content standards due to the continuous evolution of the curriculum and changes in teaching approaches. This

paradigm shift has led to changes in teaching methods in Public Universities, creating specific challenges in the learning process within these environments. PAI does not only serve as a means of enhancing religious knowledge, but also as a platform to reinforce students' ethics and morality. Given the importance of religious education in the academic context, PAI at universities is expected to support students in building strong character, ethics, and a deeper understanding of Islam. However, the implementation of Islamic Religious Education in public universities often faces challenges related to teaching methods, relevant curricula, and the diversity of student backgrounds.

Therefore, the author is interested in exploring the various challenges that arise in teaching Islamic Religious Education in Public Universities. It is important to note that these challenges may differ from those faced in Islamic higher education institutions, particularly at Universitas Indonesia Maju Cianjur.

RESEARCH METHOD

The research method applied in this study is a qualitative method. Qualitative research is a research procedure that produces descriptive data in the form of written or oral words derived from information provided by individuals or observable behavior (Aspers & Corte, 2019). The purpose of this descriptive research is to construct a systematic, factual, and accurate description, image, or depiction of the facts, characteristics, and relationships between phenomena being investigated (Siedlecki, 2020).

Considering the type of research conducted by the researcher, the aim is to obtain as much data as possible and in-depth during the field research Activities (Moser & Korstjens, 2018). In qualitative methods, the researcher themselves, or with the assistance of others, serves as the main data collector (Lobe et al., 2020). Therefore, the presence of the researcher in the field is deemed absolutely necessary (Blettler et al., 2018). In other words, the presence of the researcher is critical to delve deeper into the problem formulation being discussed. As the key instrument, the researcher strives to obtain data on the challenges of managing Islamic Religious Education in Public Universities.

RESEARCH RESULT AND DISCUSSION
Challenges in the Management of Islamic Religious Education in Public Universities

The management of Islamic Religious Education (PAI) in public universities has gained attention from various studies, but several gaps have yet to be explored in depth. One of the main gaps is the lack of focus on curriculum models that integrate PAI with general knowledge, which presents a significant challenge in education at public universities such as Universitas Indonesia Maju (UIMA). Previous research has primarily highlighted the management of religious education in schools or religious-based universities. In contrast, public universities like UIMA, which have a broader focus on general knowledge, have received relatively little attention in this area. This gap calls for further investigation into how PAI can be effectively integrated with general education,

fostering a holistic educational approach that caters to both academic and spiritual development in the context of public universities.

The challenges in Islamic Religious Education (PAI) in public universities are multifaceted. Specifically, Chandra's research reveals several key issues, including the reconstruction of Islamic education. This discussion highlights the differences in the models of PAI development in public universities, which stem from varying interpretations of life's aspects. These differences are largely due to diverse understandings of social, cultural, and educational contexts. A framework based on the fundamental doctrines and values embedded in the Qur'an and the Sunnah serves as an alternative solution. These divine teachings and values are viewed as wise counsel for addressing a wide range of challenges, especially in the field of education. The study emphasizes the importance of aligning educational practices with Islamic principles, ensuring that PAI in public universities is not only academically relevant but also spiritually enriching, thus contributing to the moral and ethical development of students in a holistic manner (Chandra, 2020).

The next challenge is the spirit of inclusivity of Islamic teachings must be truly integrated in the teaching materials of the Islamic Religious Education curriculum (Ucan & Wright, 2019). However, it should be noted not to be trapped in inclusivity according to Western rhetoric related to pluralism theories, human rights, and others, because all of them must be returned to their original sources, namely the Qur'an and as-Sunnah, although with a critical spirit of every interpretation of these two sources (anggun & Mauli, 2019). The spirit of inclusivity at the University of Indonesia Maju (UIMA) is not just a slogan but is genuinely reflected in the integration of Islamic teachings within the curriculum of Islamic Religious Education (PAI). Through a holistic approach, UIMA ensures that Islamic values are not only taught theoretically but are also applied in daily life, creating a learning environment that fosters diversity and respects differences.

To address the challenges in education, a truly professional educator is needed. Educators are expected not only to perform their duties professionally but also to possess the knowledge and skills relevant to their areas of expertise, along with an Islamic personality. This approach will significantly impact the improvement of Islamic education quality in facing the challenges of modern times.

Position of Islamic Religious Education Courses in Public Universities

In the curriculum structure of the University of Indonesia Maju (UIMA) (Yuliah, 2020), Islamic Religious Education (PAI) is not only an integral part but also a main pillar in each study program. The long history of this university reflects that from its inception, PAI has been a core component that cannot be separated from its curriculum (Mengki & Azhar, 2023). The importance of PAI as a key subject is further emphasized by the decision of the Director General of Higher Education, Ministry of National Education of the Republic of Indonesia, Number: 38/DIKTI/Kep/2002, which clearly regulates the Guidelines for the Implementation of Personality Development Courses in Higher Education

(Marfiyanto, 2018). The presence and continuity of PAI in the curriculum demonstrate the university's commitment to Islamic education as a crucial aspect in the development of students' personalities.

The relationship between PAI courses and General courses

The relationship between PAI courses and other courses should be integrative and mutually supportive. PAI courses should ideally be the main courses that are functionally integrated with other courses, especially general courses, by containing religious moral content that is appropriate to the level and type of educational institution. Concretely, in learning PAI, students should be encouraged to develop science in more depth, which is in accordance with the framework of scientific concepts based on the study program they choose. Therefore, the field of knowledge or expertise that is in accordance with the student's study program must be really guided and sourced from Islamic teachings (Muhammad et al., 2023).

The importance of developing knowledge that aligns with religious values also contributes to creating an academically and religiously grounded campus life, even though the PAI course is only 3 credits. Unfortunately, in reality, PAI is often marginalized and alienated. It is considered a general subject that serves as a requirement rather than a specialized field of expertise. Furthermore, the development and implementation of science and technology (IPTEK) in daily behavior are not sufficiently linked to religious values (Wu et al., 2019). This indicates that there is still a lack of capability in developing theories or concepts of knowledge fully derived from Islamic teachings or values (Apriani et al., 2021).

Overall, PAI in Public Universities (PTU) is not only related to the cognitive aspect but also the affective aspect. PAI in PTUs is considered the foundation for shaping an Indonesian individual who is complete in character, faithful, and devoted to Allah SWT. PAI also serves as a source of inspiration for ethics, morals, and spirituality, as an effort to counter the negative impacts of modernity in the social and cultural changes of the nation. The implementation of PAI learning in PTU aims not only to fulfill the obligation of conducting lectures but also to have a clear vision and mission. The vision of PAI in PTU is to make religion a source of values and a guide for students' behavior as they engage with the discipline of their choice. Meanwhile, its mission is to motivate students to practice religious values for productivity and the utilization of science and technology.

Thus, the role of PAI at PTU is not only limited to the development of students' intelligence in religion theoretically and practically, but also as a driver for students to develop general science and its products. PAI at PTU is expected to function as a support for other courses, shape mentality, personality, and provide inspiration for students in the development of general course materials they study, with the hope that students have competence in general science based on the values and guidelines of Islamic religious teachings (Fuadi & Suyatno, 2020).

PAI Learning Design at Advanced Indonesia University

The design of Islamic Religious Education (PAI) learning at Universitas Indonesia Maju (UIMA) is indeed well-formulated. However, it is important to emphasize that an essential aspect that must be addressed first is the vision of PAI learning in higher education. This serves as the foundation for achieving a common understanding among the academic community.

Currently, PAI learning is still focused on academic routines without a clear orientation toward character and personality development for students. The impact of this focus is felt in the lack of creativity in conveying the messages of PAI lessons. It must be acknowledged that religious doctrines have not been fully delivered in an academic manner and have not yet reached the experiential field of the students.

To improve the quality of PAI learning, a more holistic approach needs to be adopted. This approach should not only emphasize the academic aspects but also focus on character development, ethics, and religious values. By doing so, students will be able to internalize religious teachings more effectively, apply them in their daily lives, and gain deeper experiences. This will have a positive impact in shaping a generation that is both ethical and highly competitive.

Development of Facilities and Infrastructure

Higher education institutions should support religious aspects by providing supporting facilities such as mosques or prayer rooms, spiritual units, and student activity units focused on Islamic affairs. While having a mosque at Universitas Indonesia Maju in Cianjur is a point of pride, there has not been sufficient effort to enhance religious activities there. The mosque has not been fully utilized as a center for education and culture. Religious education infrastructure, such as worship facilities on campus, plays a significant role. Many studies have examined the importance of worship facilities in Islamic boarding schools or religious-based schools, but the application of these facilities in general universities with a more diverse student population and different religious backgrounds has not been extensively studied. This raises the question of how religious facilities on campus can influence the learning of PAI and student participation in religious activities.

Islamic Religious Education (PAI) in higher education plays a strategic role in shaping students' character, morality, and ethics. As a compulsory course for Muslim students, PAI not only provides theoretical knowledge of Islamic teachings but also aims to shape students' personalities and character in line with religious values. However, the management of PAI in general universities faces various challenges that affect its effectiveness and relevance to the needs of today's students.

One of the biggest challenges in managing PAI is the teaching method, which tends to be non-interactive. Many PAI lessons still rely on lecture-based methods, which are inadequate for stimulating student interest and active participation. The constructivist learning theory proposed by Piaget and Vygotsky emphasizes that knowledge is built through experience and interaction. In this context, more active and collaborative teaching methods, such

as group discussions and problem-based learning, could improve students' understanding and engagement with PAI material. This is supported by research showing that students are more likely to understand the material when they actively engage in the learning process, rather than just being passive listeners.

The PAI curriculum that is less relevant to the needs of the times is also an issue faced (Alhamuddin et al., 2021). Most of the PAI curriculum still focuses on memorization and theory without relating them to the student's real-life context. Constructivist learning theory and its theory of contextual learning emphasize the importance of connecting learning materials with daily life. Therefore, there is a need to update the PAI curriculum that includes more applicable topics, such as ethics in the world of work, Islamic values in the face of globalization, and the application of religious teachings in students' social and professional lives (Dian et al., 2023).

The diversity of student backgrounds in public universities is also a challenge in the management of PAI. Not only Muslim students, but also students with different religious backgrounds and beliefs. In this case, the theory of inclusive education developed by Baker (2006) states that education must be able to respect diversity and provide space for all individuals to develop without discrimination (Walker & Graham, 2021). Therefore, PAI in public universities must be acceptable to all parties, with an approach that respects differences and prioritizes the values of tolerance and pluralism.

The use of technology in teaching PAI presents another challenge that needs attention. In Anderson's (2008) digital learning theory, technology is recognized as a tool that can expand access to education and provide a more interactive and engaging learning experience (Anderson & Vargas, 2020). The integration of technology in PAI teaching can offer students the opportunity to access broader and more in-depth materials, as well as engage with a variety of online platforms. The use of educational applications or online learning platforms can help students understand Islamic teachings through modern and engaging media, as well as increase their motivation to learn.

Character development theory, particularly from Lickona (1991), is also relevant in the context of PAI management in higher education. Lickona emphasizes the importance of character education that integrates knowledge, feelings, and actions (Pike et al., 2021). Therefore, PAI teaching should instill religious values in students that are not only intellectual but also emotional and practical, enabling students to apply Islamic teachings in their everyday lives, both inside and outside the campus.

Overall, managing PAI in general higher education faces significant challenges, ranging from monotonous teaching methods, irrelevant curricula, to the diversity of student backgrounds. Therefore, a more interactive approach is needed, one that aligns with the needs of the times and respects diversity. Referring to more modern learning theories, such as constructivism, contextual learning, and inclusive education, as well as leveraging technology, it is hoped that the management of PAI can be more effective in shaping students' character and understanding that aligns with the challenges of the present age.

CONCLUSION

In conclusion, this study discusses the challenges of managing Islamic Religious Education (PAI) in general higher education, with a focus on Universitas Indonesia Maju (UIMA). Several challenges identified include differences in the development models of Islamic education, the spirit of inclusivity in Islamic teachings, the role of educator professionalism, the position of PAI courses, the design of learning, and the development of supporting infrastructure. An alternative solution proposed is to build a conceptual framework based on the fundamental doctrines and values found in the Qur'an and Sunnah.

Another key challenge is integrating the spirit of inclusivity of Islamic teachings into the PAI curriculum, not merely following Western rhetoric of inclusivity, but focusing on original sources, namely the Qur'an and Sunnah. Addressing these educational challenges requires professional educators with knowledge, skills, and an Islamic personality who can contribute to improving the quality of Islamic education in response to contemporary developments. The PAI course is not only an integral part but also a key pillar of the UIMA curriculum, reflecting the university's commitment to shaping students' character.

The design of PAI learning at UIMA needs improvement by focusing on character and personality development through a holistic approach that encompasses academic, ethical, and religious values to enhance the quality of education. Religious facilities, such as mosques, should be strengthened and optimally utilized to support religious activities by providing adequate facilities. Overall, this study provides an overview of the challenges faced in managing Islamic education in general higher education, highlighting the key aspects that need attention in order to improve the quality of Islamic education at UIMA.

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The Implementation of In-Service Teacher Professional Education for Improving the Quality of Education in Indonesia: An Analysis of Digital Public Opinion

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Abstract: The purpose of this study is to analyze the extent of public perception of the implementation of the PPG program in the context of Indonesian education. This study uses a qualitative method using a deductive-inductive approach, data collection with web scraping techniques. The criteria for selecting data from comments are by selecting relevant and representative comments that include various views on the implementation of the Teacher Professional Program. The analysis technique used is to use text-based analysis to assess whether a comment is positive, negative or neutral supported by various references such as books, journal articles, and relevant references. The data in this study was taken from a post on Instagram entitled "Pros and Cons in PPG In-Position" on the @infoppg.id account. The reality is that the implementation of PPG is still reaping pros and cons caused by the lack of transparency in the implementation of the program.

Keywords:
In-Service and Pre-Service Teacher Professional Education; Web Scraping; Public Policy; Instagram

Abstrak: *Tujuan dari penelitian ini yaitu menganalisis sejauh mana realita persepsi masyarakat mengenai pelaksanaan program PPG dalam konteks pendidikan Indonesia. Penelitian ini menggunakan metode kualitatif dengan menggunakan pendekatan deduktif-induktif, pengumpulan data dengan teknik web scraping. Kriteria pemilihan data dari komentar dengan cara memilih komentar yang relevan dan representatif yang mencakup berbagai pandangan mengenai pelaksanaan Program Profesi Guru. Teknik analisis yang digunakan yaitu menggunakan analisis berbasis teks untuk menilai apakah suatu komentar bersifat positif, negatif atau netral dengan didukung berbagai referensi seperti buku, artikel jurnal, dan referensi yang relevan. Data pada penelitian ini diambil dari sebuah postingan di Instagram yang berjudul "Pro dan Kontra dalam PPG Dalam Jabatan" pada akun @infoppg.id. Realitanya pelaksanaan PPG masih menuai pro dan kontra yang disebabkan oleh kurangnya transparansi pelaksanaan program.*

Kata Kunci:
Pendidikan Profesi Guru Dalam Jabatan dan Pra Jabatan; Web Scraping; Kebijakan Publik; Instagram

INTRODUCTION

Educators have an important role in determining the success or failure of education. Professional educators with the primary task of educating, teaching, guiding, directing, training, assessing, and evaluating learners in early childhood education formal education pathways, primary education, and secondary education. If the teachers are of good quality, then education will be good. If the actions of teachers improve day by day, so will the state of our educational world. Conversely, if the actions from day to day get worse, then the worse our education world will be.

Educators as professionals function to increase dignity and are required to be able to implement the national education system and realize the goals of national education, namely the development of the potential of students to become human beings who believe and fear God Almighty, have a noble character, healthy, knowledgeable, capable, and creative. Every student in every educational unit has the right to get religious education by the religion they profess and is taught by educators of the same religion, both in public and private schools, every student has the right to get religious education by his religion must be fulfilled, then the government is obliged to provide/appoint religious teachers for all students by their religion both public and private schools (Samosir 2021).

Teacher Professional Education (PPG) is an important aspect of improving the quality of education in Indonesia. As part of education reform efforts, PPG aims to prepare teacher candidates with the necessary competencies to face the dynamics of modern education. However, the implementation of PPG does not escape from various pros and cons that arise in the community, especially in the era of information disclosure and public discussion through social media.

Every education unit in all paths, levels, and types of education is required to organize religious education. The management of religious education is carried out by the Minister of Religious Affairs. Article 4 Religious education in formal education and equality education programs shall be held at least in the form of religious subjects. Religious education serves to form Indonesian people who believe and fear God Almighty have noble morals and can maintain peace and harmony in inter- and inter-religious relations. Religious education aims to develop the ability of students to understand, internalize, and practice religious values that harmonize their mastery of science, technology, and art (Adiyono, Fitri, and Al Matari 2024; Jevisa and Suwendra 2024). Religious Education teachers are professional educators with the main task of educating, teaching, guiding, directing, training, setting an example, assessing, and evaluating learners (Mugo et al. 2024; Muhammadiah et al. 2022; Winarto, Syahid, and Saguni 2020).

The number of civil servants religious studies teachers continues to decrease, the government should pay more attention to determining the appointment of religious teachers, especially in the regions, because character education is built with religious knowledge to meet the needs of teachers, usually, the institution will recruit its teachers, paid by the institution that appoints them. The government only provides incentives registered in the decree Bupati, because the procurement of religious education teachers in schools

organized by the Regional Government is carried out by the Minister and/or Regional Government (Menteri Agama 2010).

About the appointment of religious teachers, Government Regulation Number 55 of 2007 concerning Religious and Religious Education which was clarified by Permenag Number 16 of 2010 concerning Religious Management in Schools aims to solve the problem of the appointment of religious teachers in public schools, Law Number 5 of 2014 concerning the State Civil Apparatus is crucial. The lack of formation of the appointment of Islamic teachers in schools and the Ministry of Religious Affairs is not involved in the preparation and proposal of religious teacher formation only involved in the need for information. There are two regulations of the Ministry of Education and Culture and the Ministry of Religious Affairs regarding the appointment of religious teachers and the uneven distribution of religious teachers.

Based on the results of research by the Research and Policy Center of the Ministry of Education and Culture regarding the analysis of teacher management policy studies to improve the quality of education, the following conclusions can be drawn: Problems related to teacher procurement stem from three things, namely the incompatibility of teacher qualifications with applicants' qualifications, formation not by needs, and teacher mutations that are not based on teacher qualifications.

Normatively, teachers as a profession are recognized by the state as well as society. However the definition is often narrowed down to a particular type of work without looking at the professional principles. Doctors, lawyers, accountants, and other professions are more recognized by society because the process of becoming a professional must go through a series of examinations organized by related professional organizations or prescribed educational institutions. A person can become a teacher just like that when he serves as an educator in an educational institution either as a Civil Servant (PNS) or non-civil servant. Its authority is attached to the certificate of deed IV issued by the Educational Higher Education Institution (LPTK). In practice, a person can become a teacher without a certificate IV as long as he can teach in an educational institution. This is what prompted the birth of various legal products aimed at reinforcing the position of teachers as a profession and regulating them.

Teachers as a profession are regulated more clearly in these legal products. Professional teachers must have a teacher professional certificate. This is what prompted the implementation of the teacher certification program by a consortium of universities appointed by the government. The teacher certification program begins with an in-service teacher certification program both through the teacher portfolio assessment and training for those who have not passed the portfolio assessment and in-service teacher certification through the Teacher Professional Education (PPG) route. The program that is currently being rolled out is the Pre-Service PPG program. Currently, the Pre-Service PPG program has only entered the verification stage of the organizer's LPTK. Meanwhile, the implementation of the PPG program will begin in 2010. The PPG Para Jabatan program will play a role in producing prospective professional

teachers who are ready to serve at various levels of primary and secondary education and early childhood education.

Instagram, as one of the popular social media platforms in Indonesia, is an interesting place to explore people's views on PPG. Netizens' comments on Instagram reflect a variety of viewpoints, evaluations, and expectations regarding the implementation of PPG. Therefore, this study aims to conduct an in-depth analysis of netizens' comments on Instagram related to PPG, focusing on pro and con perspectives that arise in the context of Indonesian education. Research on netizens' comments about the implementation of Teacher Professional Education in Indonesia is very important to be carried out to understand the extent of public perception of the program. Through the analysis of comments on various social media platforms, researchers can gain in-depth insights into views, criticisms, and suggestions from different walks of life that may not be revealed through formal surveys. This can help the government and related institutions in evaluating the effectiveness of PPG implementation, identifying existing problems, and formulating better and targeted policies. Because evaluation can be present as a control and can provide input that can be considered to determine whether a program is feasible or not, whether it comes from stakeholders or public perceptions (Merentek et al. 2023). By knowing the public's perceptions, authorities can also increase the transparency and accountability of the program, and ensure that the main goal of the PPG, which is to improve the quality of education through teacher professionalization, can be achieved more optimally

In recent years, Teacher Professional Education has become the main focus of attention of the Indonesian government in efforts to improve the quality of national education (Noer and S.A.P 2023; Wahyu et al. 2024). The program is designed to ensure that prospective teachers have qualifications and competencies that are in line with the demands of the curriculum and global educational developments. However, the implementation of PPG cannot be separated from the spotlight and criticism from various parties.

Along with the development of technology and the increasingly widespread internet penetration in Indonesia, social media, especially Instagram, has become a place for people to share their views, opinions, and experiences related to various issues, including PPG. Public discussion through netizen comments on Instagram creates space to dig deeper into the pros and cons that may not always be reflected in the official narrative. In this context, this study was initiated to analyze netizen comments on Instagram that discuss the implementation of Teacher Professional Education. By understanding variations in emerging perspectives and sentiments, this study seeks to contribute to a better understanding of how society sees and responds to PPG. The findings of this study are expected to provide valuable insights for policymakers, education providers, and related parties in improving or strengthening the implementation of PPG for the realization of a quality education system in Indonesia.

RESEARCH METHOD

This research uses qualitative methods using a deductive-inductive approach. Data collection in this study used web scraping techniques, namely by collecting netizen comments on Instagram from posts related to implementing the Teacher Professional Program in the context of Indonesian education. Criteria for selecting data from comments by selecting relevant and representative comments that include various views on the implementation of teacher professional programs.

This research is based on an analysis of netizens' perceptions on Instagram regarding the implementation of teacher professional education programs which are further supported by scientific articles. The analysis technique used is to use text-based analysis to assess whether a comment is positive, negative, or neutral with the support of various references such as books, journal articles, and relevant references to enrich this research. The data in this study was taken from a post on Instagram entitled "Pros and Cons in In-Service PPG" on the @infoppg.id account, uploaded on September 21, 2023.

- Qualitative - Web Scraping - Descriptive -	→	- Data analysis - Display data - Theory	→	- Data processing - Conclusion
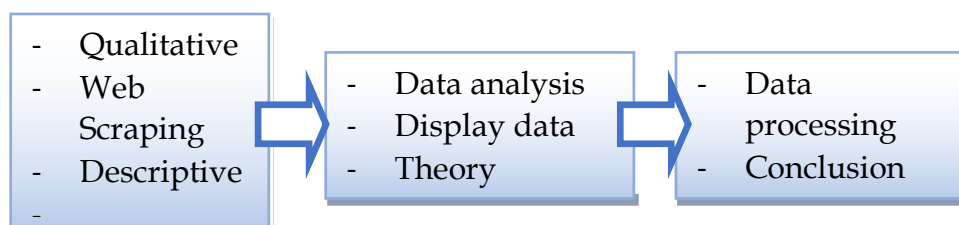
Figure 1. Methods used in research

RESEARCH RESULTS AND DISCUSSION

Pre-Departmental and In-Departmental Profession Education

Teacher Professional Education or PPG is a program that replaces the old concept of teacher professional education (PLPG), as quoted from the Higher Education Accreditation Board (BAN-PT) page. This program was launched so that teachers get teacher professional allowances like the previous program called Teacher Professional Education and Training (PLPG). Unlike PPG, the implementation of PLPG lasts short, which is only 11 days. The PLPG program can also only be followed by those who are already teachers and meet other requirements. PPG itself is divided into two, namely Pre-service and In-Service. It is said in the portal BAN-PT.

PPG Pre-Departmental

Pre-service PPG is an educational program held to prepare educational and non-educational scholars and applied scholars who have an interest in becoming teachers. The Pre-service PPG program can be followed at the nearest Educational Personnel Education Institution (LPTK). However, the LPTK concerned must have been appointed by the Ministry of Education, Culture, Research, and Technology (Kemendikbudristek) and indeed have a study program according to the relevant major. It can be concluded that the pre-service teacher professional education program can be followed by teachers who have not been appointed or have just graduated from undergraduate (Hanun 2021).

The government highlighted the importance of the existence of professional teachers marked by the issuance of general provisions of Law Number 14 of 2005 concerning teachers and lecturers in Article 1 paragraph (1) stating:

> *"Teachers are professional educators with the main task of educating, teaching, guiding, directing, assessing and evaluating learners at various levels and types of formal education. Furthermore, to ensure the implementation of its main duties. Article 8 of the same law requires teachers to have academic qualifications, competencies, educator certificates, be physically and mentally healthy, and have the ability to realize the goals of national education."* (Yadewani and Parlindungan 2024)

Based on the explanation above, teachers are considered professional positions and have units of expertise that can improve the quality of education. The professional demands of teachers must be addressed wisely by the government, one of the government's policies to produce professional teachers is the implementation of teacher professional education. The existence of PPG, which in recent years has been used as a solution in addressing teachers' professional problems so that they can produce quality and professional education by their professional fields (Hanun 2021). In response to this, Permendikbud Number 87 of 2013 concerning the pre-service teacher professional education program was issued in Article 1 paragraph (2) which states that:

> *"The teacher professional education program, hereinafter referred to as PPG, is an educational program organized to prepare S graduates! Education and non-educational S1 / DIV who have the talent and interest in becoming teachers to master teacher competencies as a whole by national education standards so that they can obtain professional education certificates in early childhood education, primary, and secondary education"* (Kebudayaan, 2022).

The purpose of implementing pre-service PPG is by educator competency standards in producing professional teachers (Maulana et al. 2023). So that based on the objectives that have been set, it will be possible to measure the level of effectiveness of the implementation of the PPG program in achieving the goals that have been set (Putridiyanti 2022). defines effectiveness as a measure that states the extent to which a goal or objectives (quantity and quality) have been achieved. If the results that have been achieved are by the objectives that have been set, then the results of the work can be said to have been effective.

PPG In-Departmental Profession Education

Contrary to the previous one, in-service teacher professional education is for S1 and D4 graduates majoring in education and non-education who already have teacher status in an educational unit (Hikmah 2023). The status of this teacher can be in the form of civil servant or non-civil servant, which is important to have taught and recorded in the basic education data (Dapodik). It can be concluded that the in-service teacher professional education program can only be followed by teachers who have been recorded in the deposit (Quatra 2023).

The implementation of In-Service PPG continues to reap pros and cons. Among netizens, some commented:

> *"First, the PLPG pattern. Despite the pluses and minuses, the PPG Daljab and PPG patterns are no longer in time. Although there are maximums and no"*

In terms of the scheme, the implementation of PPG takes 6 months (Kebudayaan 2020). It will be more efficient to use time if the implementation of PPG is integrated into lectures majoring in education, with the hope that later it will have implications for time efficiency. In addition, some netizens comment that for college graduates, there should be no need for PPG because in terms of the material studied at PPG, it is almost the same as the lecture material. Those who should take PPG should be graduates who are other than universities who want to teach. Regardless of the applicable rules, in theory, graduates from universities do not need to take PPG because the knowledge they have learned is considered sufficient as a requirement for teaching.

Teacher as a Professional Energy

Professional teachers are one of the decisive factors in improving the quality of education with all the competencies possessed (Alfaiz 2024). It suggests that a professional teacher is someone who not only provides knowledge but who can make his students able to plan, analyze, and conclude the problems faced. A professional teacher is a teacher who has the competence of knowledge, attitudes, and professional skills, both personal, social, and academic required to perform educational and teaching tasks (Naibaho and Butarbutar 2023).

The reform of the education system in Indonesia was marked by the passing of Law No. 20 of 2003 concerning the National Education System (Sisdiknas). The National Education System Law is a legal reference for every government policy in the field of education, including regulations on the rights and obligations of teachers as educators (Devita Nanda Oktavia et al. 2024). The government responded to the National Education System Law by issuing Government Regulation No. 19 of 2005 concerning National Education Standards. The regulation regulates 8 National Education Standards, one of which is the Standards for Educators and Education Personnel. To further clarify the legal rules regarding educators, Law No. 14 of 2005 concerning Teachers and Lecturers was passed. This law further became the legal reference for the issuance of other legal products about teachers (Mustofa 2021).

Teachers as professionals are described in the following National Education Law:

> *"Educators are professionals who are tasked with planning and implementing the learning process, assessing learning outcomes, conducting guidance and training, and conducting research and community service, especially for educators in universities."*

The minimum qualifications and teacher certification are affirmed in Article 42 paragraph 1, namely:

> *"Educators must have minimum qualifications and certifications according to the level teaching authority, physically and spiritually healthy, and can*
> *realizing the goals of national education."*

Government regulations in national standards of education (SNP) describe the Standards of Educators and Education Personnel relating to academic

qualifications and educator competencies. In Article 29 paragraph 2 it is explained that the academic qualifications of teachers ranging from early childhood to high school are S1 with educational backgrounds relevant to their respective fields and have a teacher professional certificate. While teacher competence is regulated in Article 28 paragraph 3, which includes pedagogic competence. personality competence, professional competence, and social competence. Therefore, in this PP on SNP, the profile of professional teachers is increasingly clear, namely having S1 academic qualifications, meeting 4 teacher competencies, and having a teacher professional certificate. The professional meaning is explained in the Law on Teachers and Lecturers, namely:

> "*Professional is a job or activity performed by a person and be a source of life-making that requires expertise, skills, or proficiency that meets certain quality standards or norms and requires professional education.*"

While the professional principles inherent in teachers are affirmed in Article 7 paragraph 1 of the Law on Teachers and Lecturers, namely:

> "*The teaching profession and the lecturer profession are special fields of work carried out based on the following principles: a) have talents, interests, vocations, and idealism; b) commit to improve the quality of education, faith, piety, and noble morals; c) have academic qualifications and educational background by the field of duty; d) have the necessary competencies by the field of duty; e) have responsibility for the performance of professional duties; f) obtain income determined by work performance; g) have the opportunity to develop professionally on an ongoing basis with lifelong learning; h) have a guarantee of legal protection in carrying out professional duties; and i) have a professional organization that has the authority to regulate matters related to the professional duties of teachers.*"

The meaning of professional teachers in the Law on Teachers and Lecturers is expressed more clearly to provide concrete guidelines regarding the standards and criteria that must be met by a teacher in Indonesia (Nugraha, Morrell, and Hardy 2024). However, there are ambiguous terms related to the four main competencies that must be possessed by teachers, namely pedagogical competence, social competence, personality competence, and professional competence. This confusion mainly lies in the use of the term "professional competence," which is often considered to overlap or have unclear boundaries compared to the other three competencies. Pedagogic competence focuses on the ability to manage effective learning, social competence in social interaction and communication, and personality competence in teacher integrity and morality.

Meanwhile, professional competence includes in-depth knowledge of the subjects taught and the ability to apply that knowledge in an educational context. This lack of clarity in definitions can cause confusion in the evaluation and professional development of teachers, as well as affect the public perception of professionalism standards in the world of education. The definition of professional competence is as follows:

a. Professional competence is the ability to master the subject matter broadly and deeply

b. Professional competence is the ability to master learning materials broadly and deeply which allows them to guide students to meet the competency standards set in the National Education Standards.

This notion of professional competence often becomes academically debated because it obscures the notion of the professional itself. In this case, professional competence is more focused on mastery and the ability to develop subject matter (Rama Danti, Syafe'i, and Sagala 2024). This means that teachers who are not education graduates are considered to have professional competence and can become professional teachers if they have a teacher professional certificate. This is the beginning of the discussion about the meaning of professional because its understanding is limited in the scope of competence as above. Even though the definition of professional teachers is those who have academic qualifications and 4 teacher competencies including these professional competencies.

After the teaching profession is regulated in the Teacher and Lecturer Law, the next policy step is to organize teacher academic qualification improvement programs and teacher certification programs. On that basis, the government through the Ministry of National Education designed a strategic plan related to this matter by applicable legislation. Improvement of academic qualifications and teacher competencies was carried out starting in 2005 and is expected to be completed in 2015 and all teachers are by the Teacher and Lecturer Law and PP SNP (Hamdi and Yustikasari 2024). Bahkan mulai tahun 2010, dimulai program rekrutmen guru sesuai dengan tuntutan UU Guru dan Dosen serta PP SNP.

But the reality on the ground is inversely proportional to what is expected. As stated by one netizen who commented, *"There are teachers who have been certified, entering the class Just giving notes. After it goes to the cafeteria or to the teacher's room to chat. Whether it's called professional"*.

The urgency of practicing the knowledge that has been gained after participating in the Teacher Professional Education Program has a crucial role in improving the quality of education and learning success. The practice of knowledge allows teachers to apply the theories and concepts they have learned into daily practice in the classroom (Bergmark 2023). This involves the use of effective teaching methods, the utilization of technology, and good classroom management. Teachers who actively apply knowledge can conduct continuous self-evaluation (Chang et al. 2022). They can identify strengths and areas for improvement, as well as develop action plans to improve the quality of their teaching.

In addition, some netizens gave positive comments that the PPG program had a positive impact according to what he experienced *"I am a PPG alumni, PPG is useful, there is a lot of knowledge that can be used in schools"*

Public Policy Analysis
In this Teacher Development and Improvement Policy, many issues of teacher improvement and professional development are now developing in the media regarding the change in the pattern of PLPG to PPG. The scope of public policy analysis, the meaning contained in the term "issue" is not what is generally

understood by ordinary people in everyday conversation (Wahab 2021). In essence, *policy issues* usually arise because there has been a cross-opinion among stakeholders about the direction of action that has been or will be taken, or conflicting views about the character of the problem itself.

Policy analysis is an applied social research that is systematically compiled to find out the substance of the policy to clearly know information about the problems answered by the policy and problems that may arise as a result of the application of the policy. The scope and method of policy analysis are generally descriptive and factual about the causes and effects of a policy. Public policy refers to all areas of government action stretching from economic policy to policy that usually refers to social policy including education, health, and other areas of welfare (Clark 2021).

Education policy, especially policies on the development and improvement of the teaching profession, must at least meet the challenges and demands of the global and the development of the times where that education policy analysis describes how the State plans and leads to education priorities, then the results of the analysis must be explained by the global factors of its policies (Matthew, Nikki, and Meghan 2021). Policy analysis is an applied social science discipline that uses a variety of research methods and arguments to generate and transfer information relevant to policy so that it can be utilized at the political level to solve policy problems (Zhang et al. 2020).

The product of policy analysis is advice. Specifically, it is advice that informs some public policy decisions (Chater and Loewenstein 2023). So public policy analysis is more of an advice or consideration for public policymakers that contains the problems faced, the tasks that must be carried out by public organizations related to these problems, and also various policy alternatives that may be taken with various assessments based on policy objectives.

Public policy analysis aims to provide recommendations to assist policymakers in their efforts to solve public problems. In public policy analysis, there is information related to public problems and arguments about various policy alternatives, as consideration or input to policymakers (Peters 2020). Public policy analysis based on policy studies can be distinguished between policy analysis before certain public policies and after certain public policies. Policy analysis before public policy is based on public problems alone so the result is a new public policy recommendation (Antasari 2021). Both policy analysis before and after the policy has the same goal, namely providing policy recommendations to policymakers so that more quality policies can be obtained (Mukherjee, Coban, and Bali 2021).

From that explanation, it cannot be said that PPG is a shortcut to becoming a professional teacher, but a very difficult and long path to take. Even to be able to take part in this PPG, prospective applicants are also expected to take part in SM-3T, namely Bachelor of Teaching in Remote, Outermost, and Frontier areas from the territory of the Republic of Indonesia. After graduating from PPG, they will get a Gr. degree and can only become CPNS. This PPG is also divided into two, namely pre-service education and in-service education. The number of prospective teachers who take part in this PPG must also be adjusted to *supply*

and demand (Uchtiawati 2020). Teacher Professional Education activities have many benefits for teachers, including: 1) Gaining experience on how to think and work in an interdisciplinary manner so that they can understand the relationship of knowledge in overcoming educational problems in schools; 2) Increasing teachers' experience and appreciation of the educational and learning process in schools; 3) Sharpen the power of reason in the study, formulation and solving of educational problems in schools; 4) Provide opportunities for students to be able to act as motivators, dynamicators, and form thoughts as problem solvers in learning (Febrianti 2023).

The benefits for schools are finding refreshment and new ideas in the learning process, both the teaching system and other educational tasks so it is hoped that the learning model will be better. In addition, the existence of prospective practical teachers can provide new colors even in a relatively short time (Sriwahyuni and Amelia 2021). To allow students to get input or motivation, especially related to higher education that they will take/live in the future.

The benefits for the community are the availability of prospective educators who have good quality and will foster community motivation to be more stable and believe that the world of education can provide satisfactory services. This will encourage the community to be more active in promoting the compulsory education program launched by the government. The advantages and disadvantages of PPG can be seen from the table below:

Table 1. Advantages and Disadvantages of PPG

Advantages of PPG	Disadvantages of PPG
1. Creating professional teachers 2. Improve teacher welfare 3. All non-education graduates can enter PPG	1. The cost of taking PPG is expensive 2. Socialization has not been maximized 3. Many teachers have not been able to Get out of his comfort zone

Regarding the public policy, one netizen commented on the teacher certification policy:

"What is clear is that teacher certification is very burdensome if the scheme is still like this because it has to queue millions of teachers who have not been certified who don't know how many years to complete. And is the most painful thing for teachers who have been decades (sorry, it's old, soon to retire) had to be eliminated by teachers yesterday afternoon, imagine what it's like to be them, Where is justice for teachers and when does the government value teachers?"

Policies that are now made by the government often get unfavorable responses from the community, especially in the scheme of implementing teacher certification. Maybe this is influenced by many factors.

CONCLUSION

The implementation of the Teacher Professional Education program is still reaping pros and cons. This is predominantly caused by the lack of transparency in the implementation of the program, the implementation time and often not on target, causing pros and cons that occur in the community. Regarding this phenomenon, it is hoped that the government will be more proactive in supervising the implementation of teacher professional education programs so that in practice it does not cause policy inequality to cause divisions in society, especially in the world of education. To achieve the goal of improving the quality of education, the government needs to improve the transparency and effectiveness of the implementation of the Teacher Professional Education program. Transparency in the process of selection, implementation, and evaluation of the program will increase public confidence in the government's seriousness in carrying out this program. With strict supervision and good management, problems such as improper implementation times can be minimized. This will not only strengthen the program, but will also contribute significantly to efforts to improve the quality of education in Indonesia. When the public sees that the Teacher Professional Education program is run honestly, effectively, and usefully, their support for the program will increase significantly. Transparency and integrity in the implementation of the program creates public trust, which is essential for long-term success. The effectiveness of the program, shown through tangible results such as improved teacher competence and a positive impact on the quality of teaching, will strengthen the community's belief that the program is indeed feasible and necessary. Thus, various controversies that previously arose due to dissatisfaction or misunderstandings can be minimized, creating a more conducive environment for collaboration between the government, educational institutions, and the community in achieving the common goal of improving the quality of education in Indonesia.

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Green School and Its Implementation in Islamic Educational Institutions in Indonesia

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Abstract: *Climate change regarding global warming threatens human life on earth, so there needs to be solutions from various parties to reduce the negative effects of climate change. Implementing these principles in Islamic educational institutions in Indonesia still needs to improve understanding, policies, and implementation in the field. Therefore, this study aims to analyse the implementation of Green Schools in Islamic educational institutions in Indonesia, identifying factors that support and hinder its implementation. The research method used is a case study with a qualitative approach – data collection techniques using document analysis from research results published in national and international journals. Data analysis is done through data condensation, data display, and verification. The green school program is a program that must be implemented in educational institutions. Green schools and green buildings can improve teacher performance and academic achievement. Various Islamic educational institutions have carried out green school programs; some have received Adiwiyata awards from the Indonesian Government. However, Islamic education institutions still need to implement green schools properly. Islamic educational institutions should consistently implement green school programs in their respective institutions to reduce climate change's negative effects.*

Keywords:
Adiwiyata; Education institution; Green school

Abstrak: Perubahan iklim dan pemanasan global mengancam kehidupan manusia, sehingga diperlukan solusi dari berbagai pihak untuk mengurangi dampak negatifnya. Salah satu solusi adalah program green school di lembaga pendidikan, termasuk di lembaga pendidikan Islam di Indonesia. Namun, implementasi program ini masih menghadapi tantangan, terutama terkait pemahaman, kebijakan, dan pelaksanaan di lapangan. Penelitian ini bertujuan untuk menganalisis implementasi green school di lembaga pendidikan Islam, serta mengidentifikasi faktor pendukung dan penghambatnya. Metode yang digunakan adalah studi kasus kualitatif dengan teknik analisis dokumen dari jurnal nasional dan internasional. Program green school memiliki manfaat, seperti meningkatkan kinerja guru dan prestasi akademik siswa. Walau beberapa lembaga telah meraih penghargaan Adiwiyata, konsistensi penerapan di lembaga pendidikan Islam perlu ditingkatkan untuk mengurangi dampak perubahan iklim.

Kata Kunci:
Adiwiyata; Lembaga Pendidikan; Sekolah Hijau

INTRODUCTION

Among the issues that are now being touted by the world community is the issue of climate change. The climate change issue has been widely discussed for a few years after the emergence of giant industries in the oil, natural gas, and geothermal mining sectors that spread in various countries around the world. In a developing country, integration between policymakers is needed to build climate resilience and reduce disaster risk (Biagini & Miller, 2013).

Green School is an educational concept that emphasises environmental sustainability, wise management of natural resources, and the development of an attitude of caring for the environment. This concept aligns with Islamic teachings, which place humans as caliphs responsible for protecting and preserving nature. In the context of Islamic educational institutions in Indonesia, implementing Green Schools is a challenge and an opportunity to integrate Islamic values in protecting the environment and strengthening ecological awareness among the younger generation (Pujianto et al., 2021).

Environmental issues and climate change have become part of the science curriculum. In some studies (Carman et al., 2021) Educators can develop students' knowledge of climate change by connecting the topic to students' daily lives and ensuring that students feel part of helping to mitigate climate change. Students will likely engage in eco-friendly activities such as recycling, conserving water and energy, using public transportation, and purchasing organic, healthy, and fairly traded products requiring small lifestyle changes (Kagawa, 2007).

Referring to the facts of the current climate change conditions, humans have a responsibility to preserve the earth from damage and preserve it for human survival. Because those who will feel the most significant impact of the destruction of the earth are humans, they must find solutions to minimise or even overcome this global warming. One of the several ways that can be used is by doing reforestation. Trees with green leaves can absorb carbon dioxide (CO2) gas and convert it into oxygen (O2), which can benefit human respiration. Greening will reduce global warming (Muzadi & Mutholingah, 2019). Today, the environmental care movement is making much progress under the framework of the new green paradigm. However, despite the growing national attention and public interest in the go-green mentality, environmental education still seems stuck in the old environmental paradigm (Strife, 2010).

One of the efforts to overcome this climate change problem is to manage the environment to reduce the impact of climate change. This goal will be achieved if there is cooperation from all parties (Mustangin, 2017). Educational institutions are one of the places that can be used as a starting point to overcome current climate change. One of the efforts is the existence of *a green school program*. To realise this program, the Ministry of Education and Culture and Environment and Environment created the Adiwiyata program from elementary to high school (Nuzulia et al., 2019). The program is based on concerns about the lack of community concern for the environment. Teachers and students in schools are part of the community that can be empowered for the adiwiyata program because they gather at school, and it will be easy to carry out the adiwiyata

program. The focus of this Adiwiyata activity is to educate students and teachers to be concerned for the surrounding environment (Rokhmah, 2019).

Previous research on the implementation of Green Schools in Indonesia has discussed various aspects and challenges. One example is a study at SMP Negeri 9 and SMP Islam Amalina in South Tangerang, which shows the importance of the right strategy to overcome challenges, including lack of environmental awareness and limited resources. The study also highlights that schools in Indonesia must strengthen sustainable environmental education programs to contribute to sustainable development goals (Oknasari et al., 2023).

In addition, the study on "Adiwiyata School" at SD Muhammadiyah 24 Surakarta illustrates how the concept of Green School is applied through institutional strengthening programs. This implementation involves environmental training, the provision of recycling facilities, and improving school management. However, the study also identified challenges, such as lacking human resources and information systems readiness to support the program's implementation (Kuswati et al., 2024). And Previous research related to the empowerment of elementary school teachers' knowledge in supporting green schools shows the importance of increasing environmental competence for teachers as a determining factor in the success of environmentally friendly school programs (Ichsan et al., 2023).

From these various studies, it can be concluded that the implementation of Green Schools in Indonesia still faces significant challenges, including institutional readiness and resources. These studies provide an in-depth picture of the need for increased management, training, and environmental awareness among all stakeholders in public and private schools, particularly in Islamic educational institutions that are beginning to adopt the concept. Referring to the background described above, this study aims to analyse the implementation of green schools in Islamic educational institutions in Indonesia.

METHODS

This study uses a qualitative type of research with a case study method (McMillan & Schumacher, 2014). The data collection technique is to conduct document analysis by collecting secondary data from journal articles or online news sources (Bowen, 2009; Sukmadinata, 2011). The data source for this research is in the form of data or information obtained from national and international journals and some information from trusted websites in the publication range from 2010 to 2022. This research focuses on descriptive analysis by describing the data and then analysing and discussing it so that the data obtained can be studied clearly. Next, identify articles and create systematic categories based on research sub-topics (Hogarth et al., 2005). The data analysis technique of this research consists of 3 analysis steps: data condensation, data display and verification or conclusion-making (Miles et al., 2014).

RESEARCH RESULTS AND DISCUSSION
Basic Concept of Green School
According to *the United States Green Building Council (USGBC), a green school is a school building or facility that creates a healthy environment* conducive to energy-efficient learning and financial efficiency. (Ramli et al., 2012). *Green school* results from an agreement process on environmental planning, design, and construction of physical buildings that considers performance over a life cycle between 50 and 60 years (Ramli et al., 2012). In addition, Earthman defines green schools as mechanisms that conserve energy and water and are designed from materials that do not harm the environment (Earthman, 2009)Green schools must support the natural environment. In addition, the outside world is included in the building's design. Walking down the corridor, one will feel like nature is in charge of its design.

The concept of green schools in educational institutions in Indonesia refers to the Minister of Environment Number 05 Regulation of 2013 concerning Guidelines for the Adiwiyata Program. The Ministerial Regulation states that Adiwiyata schools are excellent and ideal schools as a place to acquire all knowledge, norms, and ethics that can be the basis for creating human welfare and sustainable development models. Green School, also known as the Adiwiyata program, is one of the State Ministry of Environment (KNLH) programs to encourage school residents to have knowledge and awareness in preserving the environment around their respective schools.

The existence of environmental education policies in formal and non-formal and informal educational institutions is expected so that all parties can develop environmental education institutions, improving the quality of human resources, developing facilities and infrastructure to carry out the efficiency of the use of the school budget; developing environmental materials; improve communication and communication; empowering community participation in implementation and development; and developing environmental education methods (Kospa, 2021). Environmental education is an effort to change behaviours and attitudes carried out by various parties or elements of society, aiming to increase public knowledge, skills, and awareness of the value of values (Azkiah, 2021).

Green schools must meet several principles from the physical aspect of school buildings. At least four essential characteristics define a green school: resource-efficient, physically and psychologically healthy, comfortable, adaptable, sensitive and flexible, and containing ecological principles (Edwards, 2006). Various scientific studies have shown a relationship between the physical environment of the school and the performance of teachers and student learning outcomes at school. According to the results of a study by Baker and Bernstein in 2014, when natural light is lost, melatonin cycles in children are disrupted, which affects attention levels in school (Figueiro & Rea, 2010). Teachers are more comfortable in classrooms with access to temperature control, whether thermostats or open classroom windows (Heschong & Mahone, 2003). A study conducted by Oetinger in 2010 that in his research entitled "*Green schools: Constructing and renovating school facilities with the concept of sustainability*"

examined the influence of green schools on the environment, health and education of students and stated that green schools have a positive effect on learning, reduce school financial costs, and reduce student absenteeism at school (Oetinger, 2010).

Goals of Green School

Among the goals of *Green School* is to maintain the school area and build school conditions. The Green School program also aims to create a good environment for schools to become a place of awareness and education for the entire school community so that the school community can be responsible for efforts to save the environment in the future and carry out long-term development (Hafidhoh, 2015).

According to Soeriatmadja, in the Adiwiyata Guidelines, environmental education must contain several objectives, (Rahmah, 2017) namely to help students have awareness and sensitivity to the environment and natural resources in totality and to help students have a basic understanding of the mutual relationship between the environment and natural resources (Fathurrahman et al., 2022).

Green schools are not limited to a green environment but are energy-efficient and clean. They can reduce or use the quantity of waste, such as recycling non-organic waste and utilising organic waste as compost (Salsabila, 2021) In the concept of adiwiyata, green schools must be able to optimise various potential natural resources to solve environmental problems faced by residents around them (Fathurrahman et al., 2022).

There are various advantages of having a green school. Among the advantages of green schools are improved student performance comfort, increased literacy and understanding of the environment and, increased resource efficiency and reduced carbon footprint (Taylor et al., 2013). Adanya ruang hijau di sekolah terbukti sangat berpengaruh terhadap prestasi dan kinerja akademik di sekolah (Browning & Rigolon, 2019). Academic ability is important because it predicts future health, welfare, social status, and economic conditions (Caro et al., 2015). Learning carried out in green spaces has been proven to positively impact students in terms of seriousness and student learning outcomes. Mason's research in 2022 revealed that after one lesson was taught in a green school park, children had better attention and better math learning outcomes in two tasks than after a similar lesson in a classroom setting (Mason et al., 2022).

Implementation of *Green Schools* in Islamic Educational Institutions in Indonesia

The Green School Program is an internationally recognised effort that transforms schools into environmentally friendly entities and engages the school community in efforts that have an impact on the environment (Dupuis & Durham, 2024). Several Islamic educational institutions have started *green school* programs. Information about the development of *green schools* in each school can be easily obtained in various online literature. However, in this article, the author

only selects some of the research results that are considered the most relevant about *green schools* in Islamic educational institutions in Indonesia.

MIN Tegalsari Wlingi Blitar, East Java, has implemented the Green School or Adiwiyata program at the primary level. This school uses the Adiwiyata program to strengthen students' love for the environment (Widiyaningrum et al., 2016) At the beginning of this program, ten schools around the island of Java became models or pilots for Adiwiyata schools (Wardani, 2023). MIN Tegalsari Wlingi Blitar, East Java, is a madrasah that received the adiwiyata award in 2013. The school adiwiyata program was then developed to instil the values of caring for the environment.

In its implementation, MIN Tegalsari integrates adiwiyata into learning so that learning is carried out in and outside the classroom. This learning is called Environmental Learning (PLH). This PLH learning was then revealed to several other activities such as writing scientific papers on the environment, waste recycling, *farmer club*, and Friday Loyal Clean Friday activities. As a complement to the Adiwiyata program, this school provides a greenhouse building in the form of a garden and fish pond for the preservation of plants and fish. The adiwiyata activities at MIN Tegalsari in order to strengthen the character of caring for the environment are carried out with four activities: the first is a policy regarding environmental insights, the second is an environment-based curriculum, the third is participatory-based environmental activities, and the fourth is environmentally friendly facilities and infrastructure in schools (Rokhmah, 2019).

The results of this study also mention four main activities in the Adiwiyata program at MIN Tegalsari, which include environmental insight policies, environment-based curriculum, participatory environmental activities, and environmentally friendly facilities and infrastructure. Research by Nuraeni (2022) supports these findings, suggesting that a holistic approach that includes school policies, curriculum, and community participation is essential for the success of environmental education programs (Nuraeni, 2022). There is growing evidence that green schoolyards, as school environments, can contribute to children's physical, mental, social and spiritual well-being (Bell & Dyment, 2008).

Other green school *programs* that are almost the same are also carried out at MI Negeri 1 Ponorogo, East Java. The activities carried out are the same as those carried out at MIN Tegalsari; the difference is in the activities in the program. The environment-based curriculum in MIN 1 Ponorogo emphasises the active involvement of teachers in learning. Teachers communicate the latest issues, both local, national and international, related to the environment in learning. Likewise, with participatory activities, teachers are actively involved in a special team called *a green club,* which is tasked with maintaining, managing, arranging and collecting used goods for recycling. The items used are then recycled and used as accessories in the classroom, such as vases, figures, and others. Participatory-based activities at MIN 1 Ponorogo are carried out by developing extracurricular activities and self-development and involving school residents and the involvement of outside parties such as coaching from Koramil in making bipori infiltration and collaborating with MAN 1 Ponorogo for waste

management training activities and making organic fertilisers. In terms of facilities and infrastructure that support *green schools*, MIN 1 Ponorogo is almost the same as MIN Tegalsari, such as appeals to save water and electricity, the presentation of balanced nutritious food and the provision of organic and inorganic waste bins (Wardani, 2020).

The study's results show that MI Negeri 1 Ponorogo implements the Green School program with a similar approach to MIN Tegalsari, but there are some significant differences in the implementation and involvement of teachers. In MIN 1 Ponorogo, the emphasis on an environment-based curriculum prioritises the active role of teachers in communicating relevant environmental issues. This is in line with the findings by (Nurzaelani, 2017), which states that teacher involvement in integrating environmental issues into learning can increase students' awareness of the community's environmental challenges.

The green school *program* is used to strengthen the character of caring for the environment. This also happened at MTsN 6 Sleman, stated in one of the madrasah missions: "Cultivating Caring Behavior for a Clean, Healthy, Beautiful and Grounded Environment to Participate in Preserving Nature." In the policy aspect of this madrasah, rewards *and punishments* are imposed for those who can carry out environmental care programs. The vision and mission of the madrasah are then lowered into the curriculum, and among them is an environment-based curriculum whose goal is to form a clean, healthy and environmentally friendly Muslim personality with *a bottom-up approach* (Nasir, 2009). In support of environmental concern, a hidden curriculum was created at MTsN 6 Sleman. This curriculum accommodates the problem of waste management and environmental cleanliness, as well as various invitations or warning stickers regarding cleanliness and maintaining school facilities so that they can still be used properly (Al Mawangir & Puspita, 2020).

The research results at MTsN 6 Sleman show that implementing the Green School program is integrated through policies, curriculum, and hidden curriculum. This madrasah emphasises strengthening the character of caring for the environment in its vision and mission and involving students and teachers in environmental programs that support awareness and positive action towards the environment.

Regarding facilities and infrastructure, the green school at MTsN 6 Sleman has various public facilities such as green parks, organic vegetable gardens, medicinal plants, and adequate waste disposal sites in every corner of the school. The madrasah provides an ablution place in a particular place, and then the water discharge is used for aquaponics, science learning, Bipori, and automatic garden irrigation. In the participatory aspect, MTsN 6 Sleman involves all parties in supporting *the green school program*. This participatory activity is carried out regularly, daily, weekly and monthly. These routine activities include classroom picket activities, waste management, and maintaining the cleanliness of the madrasah environment. With this routine activity, the school environment becomes very clean and maintained (Al Mawangir & Puspita, 2020).

Several factors support the *Green School program*. First, policies to build pro-environmental behaviour have become integral to strengthening character

education based on classes, schools, and community environments. In addition, it was also mentioned that pro-environmental behaviour had met the characteristics of character education, especially in terms of student integrity. The effectiveness of the strategic energy framework depends on significant efforts in enforcing behavioural and attitude changes among people (Farrow et al., 2017).

Second, the strong and passionate desire shown by the school to build behaviour (internal motivation) has been reflected by the 'personnel' who are mandated to realise and strengthen the sense of pro-environmental behaviour among school residents. Schools' high motivation to realise pro-environmental behaviour among school residents is most likely due to the contributions of the parties involved (Nurwidodo et al., 2019). Other factors are financial support, school environmental conditions, and support from outside parties interested in the school. The appreciation factor from external parties also affects the school's performance in obtaining Adiwiyata.

The results of this study conclude that the success of building pro-environmental behaviour in the Adiwiyata Green School is highly dependent on the active and sincere participation of all school residents, initiatives from management, full support from school leaders, integrated programs with character education enforcement, external support, and environmental conditions. The school environment, such as building arrangements and physical environments, enhances and reinforces pro-environmental behaviour. Therefore, the school is highly facilitated to achieve the status of an independent Adiwiyata green school successfully. The daily activity, the Adiwiyata learning club, intended to raise knowledge about pro-environmental behaviour with a religious touch, is an effort to strengthen pro-environmental behaviour throughout the school community (Nurwidodo et al., 2019).

Regarding evaluating the adiwiyata program in Indonesia, the author refers to the research results presented by Warju and Soenarto in 2017. This research is an evaluation research. The evaluation was carried out in 33 selected schools in Indonesia. The adiwiyata schools evaluated consisted of six elementary schools (SD), 15 junior high schools (SMP/MTs), nine high schools (SMA) and three vocational high schools (SMK). The research was conducted from June 2012 to June 2014.

From this research, several important conclusions can be drawn regarding evaluating the Adiwiyata program. The evaluation of *the "context" package* consisting of three aspects concluded that public awareness and expectations were excellent. Second, the relevance of the Adiwiyata program is categorised as very good and relevant to the community's needs, local potential, and environmental issues. Third, from the aspect of government regulations and policies, the central, provincial, or regional governments (districts/cities) are classified as strongly supporting implementing the Adiwiyata program in Indonesia. In general, the context of evaluation can be categorised as very good.

The evaluation of *"input"* consisting of four aspects concluded that: first, regarding the characteristics of the school principal, teachers, administrative staff, individual service officers, and school committees, all of them know and understand the vision, mission, and goals of education (100%), and are

categorised as very good. Second, regarding student characteristics, only 60%-73.33% of students know and understand the school's vision, mission, and environmental protection and management goals, which are categorised as good. Third, regarding the curriculum, the curriculum structure containing environmental protection and management has been included in the required subject syllabus, namely normative subjects and adaptive subjects integrated with environmental education and local content subjects applied monolithically and categorised as good. Fourth, regarding the characteristics of environmentally friendly infrastructure and school facilities that are considered safe. In general, the evaluation of feedback is considered good.

The evaluation from the side of the *"process"* consisting of three aspects concluded that learning preparation, first, there were only 8-12 subjects integrated with environmental education out of 15 subjects, only 53.33%-80% of the total subjects. Second, 57.14%-71.42% of teachers develop local (regional) and global environmental protection and management issues. Third, 57.14%-71.42% of teachers in each school have developed learning indicators and assessment instruments related to environmental protection and management, which is considered good. Regarding the learning process, 50%-60% of students have produced real works related to environmental protection and management. Second, 40%-50% of students presented environmental learning results through several media. These media are wall magazines, newsletters, tabloids, magazines, educational exhibitions, school websites, radio, television, and newspapers. Third, on average, there are three environmental actions organised by school partners that are followed by teachers and four by school partners that students follow, so this aspect is considered a good (Warju & Soenarto, 2017).

Conceptually, it can be used in implementing *green schools*, including three steps. First, in the curricular field, environmental learning is carried out in an integrated manner with existing subjects. Teachers must be good at packaging learning with an applicative understanding and learning experience. Second, the extracurricular field aims to form students' concerns for environmental conservation through environmental counselling activities and environmental work competitions. Third, the field of school environmental management, namely through (a) the use and arrangement of school land into natural laboratories such as gardens and medicinal plants, invitations to save energy and water, waste recycling through *the process of reduction*, *reuse*, and *recycle*, and (b) social, environmental management in the form of habituation of positive natural behaviours including discipline, cooperation, care, honesty, and appreciation Local Wisdom (Jamora Nasution, 2018).

Regarding physical development, buildings in Indonesia use *the green bullying model* every year. The International Finance Corporation (IFC), a member of the World Bank Group, has collaborated with *the Green Building Council Indonesia* (GBCI) to develop the EDGE (*Excellence in Design for Greater Efficiencies)* certification. This certificate will be given to *green buildings* in Indonesia (https://www.rei.or.id/). According to the GBCI report, every year, the number of physical buildings based on Green Building increases by 50%. One of the results of a study on school physical buildings in Turkey revealed that there

needs to be a thorough evaluation of planning, design, material selection, and exterior shape, and there needs to be an analysis of characteristics by the climate and surrounding natural conditions. The physical construction of schools in Turkey has not fully considered the principles of green building (Çakır & Tuna Taygun, 2021).

CONCLUSION

Regulations on green school programs in Indonesia have existed for a long time, but in their implementation, all educational institutions have not carried out the green school program. The implementation of green schools in Islamic educational institutions has taken place, but not all have implemented the green school program. Its implementation is carried out through policies that accommodate green schools, develop a curriculum integrated with green schools, maximise the participation of all school residents to implement the green school program, and provide all facilities and physical means to support the green school program. The implementation of green schools in Islamic educational institutions is almost the same as other institutions because it refers to the green school indicators determined by the Ministry of Environment and Forestry. Further research is recommended to compare the implementation of the Green School program between Islamic educational institutions and general education institutions. This research can identify factors that affect differences in program implementation and best practices that Islamic educational institutions can adopt.

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Digital-Based Character Education Innovation for Shaping a Well-Characterized Indonesian Generation

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Abstract: The use of information technology as a learning medium reflects the process of modernization in education in Indonesia, aligning with the demands of the times and global developments. However, behind these benefits, there are risks that need to be addressed, such as the potential increase in demoralization among students. This concern is significant for educators, parents, and society as a whole. This article aims to analyze the strengthening of character education based on information technology as a significant innovation in the formation of a better national character. This study employs a qualitative approach with an in-depth literature review, analyzing research related to the utilization of information technology for character development among students. The findings indicate that the modernization of education through information technology can create more equitable and inclusive access to education, open new perspectives for educators and learners, and enhance the overall quality and meaning of education. Additionally, information technology accelerates the exchange of information, making it an effective means for strengthening student character. Information technology products provide a broad and engaging learning space, enabling students to share experiences, exchange information, and interact with experts. This supports the development of personal potential and character strengthening, allowing students to become more responsible and integral individuals.
Keywords:
Character; Education; Information; Technology

Abstrak: Penggunaan teknologi informasi sebagai media pembelajaran mencerminkan proses modernisasi pendidikan di Indonesia, yang sejalan dengan perkembangan zaman dan tuntutan global. Namun, di balik manfaat tersebut, terdapat risiko yang perlu diperhatikan, yaitu potensi peningkatan demoralisasi di kalangan pelajar. Hal ini menjadi perhatian penting bagi pendidik, orang tua, dan masyarakat. Artikel ini bertujuan untuk menganalisis penguatan pendidikan karakter berbasis teknologi informasi sebagai sebuah inovasi yang signifikan dalam pembentukan karakter bangsa yang lebih baik. Penelitian ini menggunakan pendekatan kualitatif dengan metode studi pustaka yang mendalam, menganalisis kajian terkait pemanfaatan teknologi informasi dalam penguatan karakter peserta didik. Hasil penelitian menunjukkan bahwa modernisasi pendidikan melalui teknologi informasi dapat menciptakan akses pendidikan yang lebih adil dan inklusif, membuka perspektif baru bagi pendidik dan peserta didik, serta meningkatkan kualitas dan makna pendidikan secara keseluruhan. Selain itu, teknologi informasi mempercepat pertukaran informasi, menjadikannya sarana yang efektif untuk penguatan karakter peserta didik. Produk teknologi informasi memberikan ruang belajar yang luas dan menarik, memungkinkan peserta didik untuk saling berbagi pengalaman, bertukar informasi, dan berinteraksi dengan para ahli. Hal ini mendukung pengembangan potensi diri dan penguatan karakter, sehingga peserta didik dapat menjadi individu yang lebih bertanggung jawab dan berintegritas.
Kata Kunci:
Informasi; Karakter; Pendidikan; Teknologi

INTRODUCTION

In this digital era, the utilization of information technology as a learning tool offers opportunities to strengthen character education among the younger generation. Indonesian society faces various moral and social issues that require serious attention, making character development a priority in the education system. The integration of information technology into education not only enhances access and quality of learning but also provides a platform for more dynamic interactions between students, educators, and other educational resources. By leveraging information technology, character education is expected to be more effective in shaping individuals with positive values, social responsibility, and a sense of national pride, thereby contributing to the advancement of a better nation (Hidayati & Prabowo, 2021).

The rise of demoralization in the digital era has become a phenomenon in the historical journey of the Indonesian nation. The weakening of noble cultural values such as honesty, politeness, responsibility, tolerance, empathy, and integrity has become a fact evident across various levels of society, from ordinary citizens to state officials. The prevalence of immoral acts such as physical violence, sexual harassment, bullying, hate speech, radicalism, premarital sex, drug abuse, and other inappropriate behaviors among students and university students is an irony amid the government's efforts to modernize education to enhance students' competencies in addressing global challenges (Suhendro & Rahardjo, 2020).

The emergence of a physical violence case involving the child of a former tax official against a teenager in Jakarta has delivered a serious blow to the education sector. The act was premeditated, recorded using a smartphone, and shared on social media by one of the perpetrators. Ironically, the assault concluded with a celebration that starkly depicted a loss of humanity — one of the nation's noble cultural values. Another concerning fact is the increasing number of students dropping out of school due to pregnancies outside of marriage, reflecting the prevalence of promiscuity among teenagers. Data from the Religious Court (Pengadilan Agama, PA) of Ponorogo Regency, provided to the Gender and Children Studies Center (PSGA) at IAIN Ponorogo, reveals this alarming trend. In 2019, out of 97 marriage dispensation cases received by the court, 42 cases (43.2%) were due to pregnancy, while 55 cases (56.7%) were for other reasons. In 2020, of 241 dispensation cases, 91 (37.7%) were pregnancy-related, and 150 (62.2%) were for other reasons. By 2021, the number of dispensation cases increased to 266, with 131 cases (49.2%) due to pregnancy and 135 cases (50.8%) for other reasons (Syah et al., 2023). In addition, the rise of hate speech that occurs on social media that triggers brawls between students or physical and verbal violence should be a serious concern for the government, especially the ministry of education and culture as a policy maker in Indonesia.

The presence of information technology as a supporting tool for education is akin to a double-edged sword; on one hand, it can bring significant benefits, while on the other, it can lead to detrimental effects. It is undeniable that the development of information technology, with its various digital platforms, has

become a medium that contributes to the process of demoralization among students. The availability of information technology has made it easier for students to access a wide range of news and information (Khan & Hamid, 2022). Various acts of demoralization reflecting a decline in ethics and morality—such as pornography, indecent behavior, hedonistic lifestyles, physical violence, and hate speech perpetrated by peers, adults, or even public officials—are easily accessible to everyone, including students and university students who represent the future pillars of the Indonesian nation.

The Indonesian education system is currently facing a dilemma. The acceleration of Information Technology (IT) in the form of digital media within the education sector no longer merely demands readiness from education providers and users but forces all stakeholders to master and implement it in educational practices (Andalas, 2020). A study by Massie and Nababan on the impact of online learning on students' character education revealed alarming findings: character education and student character are in a concerning state because most schools and teachers are unprepared to face social changes and employ modern learning methods to harness technological advancements (Massie & Nababan, 2021). Meanwhile, research by Nisa Khairuni highlighted that the use of social media—one aspect of technological advancements—though bringing positive impacts, also has negative effects on the character formation of students. These include a lack of discipline, laziness, frequent lying, engaging in fights, disrespectful communication and attire, lack of respect for parents, and a tendency to insult others (Khairuni, 2016) (Khairuni, 2016). These findings provide empirical evidence of the adverse effects of social media on the changes in students' character, ethics, and morality when social media is not used wisely and intelligently.

The novelty of this research lies in its holistic approach, integrating character education reinforcement with digital literacy and responsible utilization of information technology. Unlike previous studies that primarily focused on the negative impacts of technology use, this research emphasizes optimizing information technology to foster positive student character through programs that teach digital ethics and the wise use of social media. Additionally, the study proposes developing a curriculum that incorporates critical and creative skills in using technology, enabling students to not only consume information but also become creators who can disseminate positive values. Through this approach, character education is expected not only to address existing issues but also to create a younger generation that is sensitive to social issues, possesses high moral awareness, and serves as agents of change capable of contributing to the development of Indonesian national character..

Despite the controversies it has sparked, the development of information technology with various digital products in the post-COVID-19 pandemic era should serve as a turning point for the rise of a new education model in Indonesia, particularly in strengthening character education for students. According to Sutomo, elementary and middle school students, typically aged between 10–15 years, are highly susceptible to character changes (Sutomo & Milyani, 2019). Therefore, elementary and middle school students can receive

character education through social media, a product of information technology (Liu & Kuo, 2020) .

Information technology products in the form of digital platforms have become public spaces capable of transforming the way teenagers live (Zis et al., 2021). The perspective of needs serves as the key to utilizing technology in education. Ethics and guidelines for becoming wise users of information technology across various platforms remain a critical area of discussion, seeking appropriate models that can be easily accepted by all stakeholders in the educational sphere. These include parents, students, educators, educational institutions, and the government as policymakers. (Restianty, 2018).

Students and university learners are assets of a nation. They are educated individuals who will carry forward the history and existence of Indonesia. As part of the global community, they will spend significant time in the virtual world while facing the realities of the demographic bonus predicted to occur between 2030 and 2040. This implies that today's students will become the active contributors during this period.

Therefore, the new normal era, marked by increased use of information technology, should serve as a momentum for strengthening character education. This effort must begin early to ensure that the younger generation can thrive and compete in a predominantly virtual world. This paper aims to analyze the effectiveness of information technology as a tool for strengthening students' character to enhance the moral foundation of the Indonesian nation. Information technology, with its array of digital products, should not merely be a means of entertainment. Instead, it must be leveraged to reinforce the internalization of character education across all educational levels, emphasizing role models and harmonizing educational elements to nurture the character of the nation's youth.

To enhance the effectiveness of information technology in strengthening the character of students, there needs to be a systematic integration between digital technology and character education curricula at all educational levels. First, schools should develop learning programs that utilize applications and digital platforms that support the teaching of moral and ethical values, allowing students to learn through practical experiences. Additionally, there should be training for educators to optimize the use of technology in the classroom, including ways to demonstrate exemplary behavior in their interactions with students. Collaborative programs between schools, parents, and the community should also be implemented, where information technology is used to create social projects that involve students, allowing them to contribute positively and internalize character values in their daily lives. With this integrated approach, it is hoped that information technology will function not only as an entertainment tool but also as an effective means of building strong and positive character in Indonesia's younger generation.

RESEARCH METHOD

This research uses a qualitative approach with content analysis as the data analysis technique. The data collection techniques employed in this study include library research, observation, and note-taking. The steps for data collection in this study follow the suggestions of Arikunto, which are: (1) reading relevant books and journals related to Character Education Strengthening based on Information Technology to shape the character of the Indonesian nation, (2) mastering theory, (3) mastering methods, (4) searching for data and finding data, (5) analyzing the data found in-depth, (6) making comprehensive improvements, and (7) drawing conclusions (Arikunto, 2014).

The focus of this study is an analysis of how information technology, including social media and digital platforms, can be used as a tool to support character education. In this research, the author uses qualitative data analysis, conducting direct synthesis of the methods in the research articles through a process of (1) data reduction, where the author selects and categorizes data to be analyzed, including words, sentences, or expressions according to the qualitative research methods, both direct and indirect methods; (2) data display, where the author presents the selected and categorized data and analyzes the research method types used; and (3) verification, where the author concludes the results of the analysis of the qualitative research method used (Muchtar, 2013).

RESEARCH RESULT AND DISCUSSION

The Urgency of Character Education

Character is a reflection of a person's behavior that distinguishes them from others. According to Poerwadarminta, character refers to habits, nature, mental traits, morals, and ethics that set a person apart from others (Poerwadarminta, 2007). According to Endang Sumantri, character is a positive quality possessed by an individual that makes them attractive and appealing, indicating a person's reputation or someone who is unusual or has an eccentric personality (Sumantri, 2011). Meanwhile, Ahmad Tafsir defines character as the spontaneity of human actions or behaviors that have become ingrained in the individual, so when they emerge, there is no need to think about them again (Tafsir, 2014). Therefore, as a behavior or attitude that arises spontaneously, character can be shaped, developed, and strengthened through education as an effort to develop the potential possessed by individuals over a certain period systematically.

Character education can be understood as a means to develop students' potential so that they can think positively, behave morally, and act in accordance with the character and noble values of the nation (Aruzi et al., 2022). Aan Hasanah argues that character education is a systematic effort to instill and consistently develop the qualities of character based on religious, cultural, and national philosophical values, which are internalized by students at home, in school, and in society in their daily lives, shaping their behavior and character (Hasanah, 2012). Character education involves moral education, which includes knowledge, feelings, and actions (Salahudin & Alkrienchie, 2017). Zubaedi describes it as the process of cultivating intelligence in thinking, attitude, and behavior according to the noble values that form one's identity (Zubaedi, 2011).

It is done with full awareness to change one's nature, morals, and ethics to grow into maturity, enabling them to make wise decisions (Ratna Megawangi, 2004), distinguishing between right and wrong, and practicing the truth in accordance with human values, while avoiding actions that can harm others, thus creating a conducive environment for the growth of individual freedom (Koesoema, 2010).

Character education implemented in schools essentially serves to: 1) develop the fundamental potential of students to be good-hearted, think positively, and behave appropriately; 2) strengthen and build the behavior of a multicultural nation; 3) enhance the civilization of the nation to be competitive in the global community. Character education is carried out through various media, including families, educational units, civil society, the government, and mass media. The essence of character education is to shape a resilient, competitive, dynamically developing nation, oriented towards science and technology, all of which are imbued with faith and devotion to God Almighty based on Pancasila (Daryanto & Darmiatun, 2013). Therefore, the formation of character is a necessity in educational implementation, alongside the specific competencies required by students. Competencies based on good character will lead individuals to realize their essence and life's purpose, which is to contribute positively to their family, society, and country. On the other hand, competencies that are not balanced with good character are more likely to create selfish individuals who may justify various means to achieve their goals, even at the expense of the interests of many others.

Information Technology as an Educational Media

The term Information Technology (IT) refers to the combination of two words that carry essential meanings. According to Law No. 11 of 2019 on the National System of Science and Technology, technology is defined as a method or technique, as well as the process or product resulting from the application of various scientific disciplines that generate value to meet human needs, sustain life, and improve the quality of life. Technology can also be understood as the knowledge of techniques, methods, or ways to create or make something from what did not exist into something that helps sustain human life.

Meanwhile, information, according to the Indonesian Dictionary (KBBI), refers to a message (utterance or expression) or a collection of messages consisting of an ordered sequence of symbols, or meanings that can be interpreted from a message or a collection of messages. Information can be recorded or transmitted. According to McLeod (2001), as quoted by Agustin in the Tabarru' Journal, information is data that has been processed, or data that carries meaning, and is also one of the data sources available to managers and can be managed like other resources (Agustin, 2018). Information is data that has been handled to form a more useful and critical design for the recipient. The source of information becomes data. Information represents reality that illustrates events and actual occurrences (Hisabi et al., 2022). In everyday life, information is often synonymous with news, reports, or announcements about an event conveyed by someone or media, whether in the form of data, audio, visuals, or audio-visual.

Thus, information technology is a general term for any technology that helps humans create, modify, store, communicate, and/or disseminate information. Information technology integrates high-speed computing and communication for data, audio (sound), and video. Information technology also includes communication technology, so it is not only in the form of computers but also includes smartphones, TVs, and electronic devices. Information technology, both implicitly and explicitly, is not just about computer technology; rather, it is a combination of computer technology and communication technology, which can be classified into six forms, including: 1) communication technology; 2) input technology; 3) output technology; 4) software technology; 5) storage technology; and 6) processing machine (Stair & Reynolds, 2021).

The advent of information technology is one of the products of advancements in science. Every innovation created in information technology is intended to benefit human life in carrying out daily activities. Applications in information technology have made it easier to access up-to-date information for personal life, such as health information, hobbies, culinary, healing places, education, and spiritual well-being. It also facilitates access to a variety of news or events happening in the local environment as well as events occurring around the world.

The development of information technology has become a medium that connects interactions and cooperation between individuals and groups, or between one group and another, regardless of boundaries, distance, time, race, social status, ideology, or other factors that have historically hindered communication and exchange of ideas. Its presence is increasingly needed by all layers of society to carry out various business sectors, professions, and services, thus driving the transformation of civilization towards a society that is technologically literate and knowledgeable.

In the field of education, the emergence of terms related to information technology that begin with "e," such as e-learning, e-journal, e-books, e-library, e-paper, and so on, marks a significant change in the way educational processes are carried out, driven by the advancements in information technology. This has become a new fact, indicating that there has been a shift in educational practices that are becoming increasingly familiar to educators and students. The rapid development of technology demands that the education sector adapt to the digitalization of educational systems based on information technology, which is a hallmark of the Society 5.0 era. In preparing for the challenges of the Society 5.0 era, the curriculum design highlights several substantive points, including: 1) character education, 2) the ability to think critically, innovatively, and creatively, and 3) the ability to apply technology in this era (Yuniarto & Yudha, 2021).

The use of technology in education is considered crucial in the global era because it aligns with the ongoing developments in the world. The integration of technology into the learning process can take place during tasks, assignments, and evaluations. Through technology, students not only gain references for additional materials but more importantly, they develop a deeper understanding of technology as a learning medium. According to Aan Hasanah, students should be guided to become knowledge producers, not just passive consumers of

knowledge or mere users of technology. This can bring about positive changes in students, instilled through a strong reading and writing culture that is practiced using technology in the right way (Hasanah et al., 2022).

Wisdom in responding to or utilizing digital technology involves a shift in mindset towards the role of information technology. It's not just about being aware of it or using it for entertainment, but about maximizing its potential to enhance the educational process. According to Aan Hasanah, there are three mindsets in approaching digital technology: 1) Self-regulation, the drive to accept the presence of new technologies and the belief that technology should be learned with discipline and consistency; 2) Self-Motivation, building self-confidence in using new technology to foster innovation, exploration, and the willingness to take risks; and 3)Leadership, the ability to develop independent, optimistic, and visionary thinking (Hasanah, 2023)

The role of educators and parents in providing guidance and support to students in using information technology as a learning medium is essential. This guidance is necessary to direct students to use technology wisely and intelligently, making it a habit that produces positive outcomes and valuable digital products for their lives in the digital era. The existence of digital products serves as a medium that connects teachers and parents, facilitating monitoring and evaluation of students' progress. Therefore, teachers and parents must continuously update themselves on technological developments so they can consistently monitor and supervise students' learning processes in a sustained and effective manner.

Development of Nation Character Education

The model of teaching national character values often experiences dynamic changes in line with changes in national leadership. National character education policies are not free from various problems and challenges, as these policies influence the model of teaching national character values in schools. The realization of national character development is achieved by helping students build strong character. The essence of delivering the values of national character is to be possessed and developed by students as preparation for their future. Character education aims to develop values that form the national character, namely Pancasila. This education is carried out to foster and develop the character of citizens so that they can realize a society that is devoted to the Almighty God, just and civilized in humanity, united in spirit of Indonesia, democratic in nature, led by wisdom in deliberation, and with social justice for all Indonesians (Alawiyah, 2012). (Faridah Alawiyah, 2012).

The implementation of individual character derived from the result of the integration of the four parts of the nation's character in accordance with the principles of Pancasila was developed from the Master Design of the National Character Development in 2010-2025 as follows:

1. Heart training related to feelings, attitudes and beliefs or faith that produce indicators in the implementation of becoming religious, honest, responsible, social care and environmental care;

2. Thinking related to the reasoning process to seek and use knowledge critically, creatively, and innovatively, it produces indicators of the implementation of intelligent, creative, reading-loving, and highly curious human beings;

3. Sensory processing related to the process of perception, readiness, imitation, manipulation, and creation of new activities accompanied by sportsmanship and producing healthy and clean human indicators;

4. Sport is concerned with willpower and creativity which is reflected in caring, imagery, and the creation of novelty which then produces indicators of human beings who care and can work together (Permatasari, 2024).

Character education has become one of the priority programs in the National Policy for the Development of National Character. This policy was developed collaboratively by various ministries, non-ministerial agencies, and non-governmental organizations involved. The implementation of the character education policy is carried out in three stages: 1) The first stage (2010–2014), which was a phase of consolidation and implementation; 2) The second stage (2015–2019), which was a phase of strategy consolidation and implementation; 3) The third stage (2020–2025), which is a phase of sustainable development based on the results achieved in the first and second stages. The character education policy is then implemented through three strategies: top-down stream, bottom-up stream, and revitalization of programs (Alawiyah, 2012). The use and utilization of information technology has become a reality as a medium for character development that aligns with behavioral changes and character formation.

The involvement of the government in shaping students' character is crucial because character education plays an essential role in students' success, which is closely related to the instilling of values and moral behavior that reflect the noble values of the nation. Therefore, to develop the previous character education policies that align with the era, the government, through the Ministry of Education and Culture as the educational policymaker in Indonesia, has issued the Ministry of Education and Culture Regulation (Permendikbud) No. 20, Article 1, of 2018, on the strengthening of character education in formal education units. This regulation states that the strengthening of character education (PPK) is an educational movement under the responsibility of educational units to strengthen students' character through the harmonization of the heart, feeling, mind, and physical activities, with the involvement and cooperation between educational units, families, and communities as part of the National Mental Revolution Movement (GNRM) (Panoyo et al., 2019).

The Strengthening Character Education (PPK) embodies core values that are interrelated: religiosity, nationalism, independence, mutual cooperation, and integrity. These values are integrated into the curriculum and are implemented through formal, non-formal, and informal education channels. There are five main character values sourced from Pancasila that are prioritized in the development of the PPK movement. Each value does not stand alone; instead, they interact with one another, develop dynamically, and form the wholeness of

personal integrity. The main character values include: (Rahmadani & Hamdany, 2023):

1. Of religious character reflects belief in God Almighty, which is manifested through behavior in carrying out religious teachings and beliefs adhered to. This includes respect for religious differences, prioritizing tolerance in carrying out worship, and living in harmony and peace with adherents of other religions. The implementation of these values can be seen in the attitude of love of peace, tolerance, respect for differences, firmness of stand, self-confidence, cooperation between adherents of various religions, rejection of bullying and violence, friendship, sincerity, non-imposition of will, love for the environment, and protection of the weak and marginalized;

2. The value of nationalist character reflects a way of thinking, behaving, and acting that shows loyalty, concern, and high appreciation for the nation's language, physical, social, cultural, economic, and political environment. This involves placing the interests of the nation and state above the interests of individuals and groups. Nationalist attitudes can be seen through respect for one's own culture, efforts to preserve cultural heritage, willingness to sacrifice, achievement, love for the homeland, protecting the environment, obeying the law, discipline, and respecting cultural, ethnic, and religious diversity; cultural,

3. The value of integrity is a foundational value that shapes a person's behavior to become an individual who is always trustworthy in speech, actions, and work. This includes commitment and loyalty to humanitarian and moral values. The character of integrity encompasses responsibility as a citizen and active involvement in social life, with consistency between actions and words based on truth. An individual with integrity also respects the dignity of every person, including those with disabilities, and is capable of providing a good example.

4. The value of independence reflects the attitude and behavior of not being dependent on others, and using all one's energy, thoughts, and time to achieve hopes, dreams, and goals. Independent students demonstrate a strong work ethic, resilience, fighting spirit, professionalism, creativity, courage, and a commitment to lifelong learning.

5. The value of mutual cooperation reflects actions that appreciate the spirit of teamwork and collaboration in solving problems together. This includes building communication and friendship, as well as providing assistance to those in need. Students are expected to show respect for one another, be able to cooperate, be inclusive, commit to collective decisions, and engage in deliberation to reach consensus. Furthermore, they are expected to demonstrate attitudes of mutual help, empathy, solidarity, reject discrimination and violence, and show voluntary action.

The strengthening of national character education should involve non-educational aspects, such as economic, legal, political, socio-cultural, and

religious aspects, leadership, the environment, and the integration of information technology (Sutarjo, 2021). Character education is developed through three educational pathways: formal, non-formal, and informal education. Formal education includes primary, secondary, and higher education. Character education in non-formal education is carried out in early childhood education, courses, equivalency education, literacy education, and other non-formal educational programs. Meanwhile, informal education takes place within the family and community. Character education in formal and non-formal education is carried out through an integrated approach across all subjects, the development of the school culture, the implementation of co-curricular and extracurricular activities, and the habituation of behaviors within the educational environment. The process of character education in informal education, such as within the family, involves education, nurturing, habituation, and role modeling carried out by parental (Alawiyah, 2012). The continuity of the educational process in all educational pathways cannot be separated from the role of information technology.

Therefore, character education can be implemented in all subjects that relate to norms and should be developed and linked to everyday life. The function of implementing character education strengthening is to improve and reinforce the roles of families, educational institutions, communities, and the government to participate and take responsibility in developing the potential of citizens and the nation, aiming to build an advanced, independent, and prosperous nation.

Strengthening Information Technology-based Character Education.

The use of information technology as a form of education modernization to improve the quality and standards of education in the global era has had a significant impact on the effectiveness of the learning process. Educators and students can take advantage of educational technology media by identifying problems encountered in learning and finding solutions through appropriate Information and Communication Technology (ICT) applications (Gani, 2014). However, in reality, the modernization of education often reduces competencies in the field of character education and tends to be neglected (Santoso, 2017).

The emergence of the Covid-19 pandemic became a turning point for accelerating the use of information technology in the implementation of teaching and learning processes, which had to be conducted online (Hanifah Salsabila et al., 2020). The phenomenon of activities carried out virtually in education and other sectors, such as Work From Home (WFH), online learning, online seminars or webinars, online markets (buying and selling), and so on, has created new habits (the new normal) that must be addressed wisely by various parties.

The role of information technology in the new normal era in the education sector has become crucial for all educational stakeholders, including schools, parents, students, and policymakers. The development of information technology in the form of social media and various digital platforms such as Instagram, WhatsApp, TikTok, YouTube, and others has become a close companion for both educators and students. A teacher can use these platforms to

conduct teaching activities that are efficient, inexpensive, and easy. For some students, social media can serve as a means of self-actualization and a space to share personal experiences that they cannot find in the real world. In the modern era, many students aspire to become YouTubers, vloggers, or content creators because of the prestige and financial rewards they can gain once their content goes viral (Reynard et al., 2024). Therefore, the transition in life style and culture of students should be addressed wisely immediately.

In building character, the education and learning process should not only be oriented toward becoming consumers of knowledge but also producers of knowledge. To become producers of knowledge, a culture of reading and writing must be nurtured through the use of information technology. The use of information technology should encourage students to become individuals who can write in a scientific and systematic manner. This must be done integratively through character-based and culturally grounded information technology education. Information technology should be used to nurture and develop students' character so that they can produce creativity and productivity (Hidayah, 2011).

According to Lickona, character education must involve methods, techniques, and materials to ensure that children have no excuse or desire for goodness that precedes knowledge of the value of goodness, so they develop an attitude of loving what is good, such as kindness, and ultimately they are willing to perform good deeds (Lickona, 1991). Therefore, the momentum of the development of information technology and its digital platforms should be wisely utilized by all parties as a medium to strengthen the character of students, who have already embraced and become comfortable with using these platforms in their learning activities and daily life interactions.

According to Aan Hasanah, there are 8 methods for utilizing the presence of information technology to strengthen character education in the global era, as follows:

1. Use Technology Wisely: Technology is a medium that should be used proportionally, according to its primary purpose and function, by accessing only sites or content that are relevant to the needs. Overuse that wastes time and data on less useful information or content should be avoided.
2. Provide Good Examples: Social media, as a product of information technology, was created to facilitate communication and interaction in an open manner. Therefore, it is essential to prioritize good ethics, courtesy in communication, and exchanging information on social media. Avoid provocative, insulting, or harmful speech as it leaves a digital footprint accessible to all users.
3. Be an Open Character Educator: Information technology, with its various digital platform derivatives, is an "open space" that can be accessed by anyone. Therefore, anyone can become a source of inspiration by sharing principles of goodness, honesty, wisdom, and values that reflect the culture of the nation.

4. Use Social Media Positively: Social media is a vast "space" that stores content created by its users. Social media should be utilized to post positive content that can provide information and inspiration to others, encouraging them to improve themselves.

5. Provide Enjoyable Learning: Digital media is dynamic and can adapt to users' needs. The use of digital products for learning purposes is an enjoyable medium for students, as educational games can serve as both an educational tool and entertainment that alleviates boredom and increases interest in learning.

6. Utilize Character Education Apps: Digital technology is a product of scientific progress designed to meet human needs through algorithms that automatically categorize various needs. Therefore, digital technology can be set up to access inspiring stories, games, or educational content that delivers moral messages, strengthening students' character when accessed continuously and consistently.

7. Provide a Safe Learning Space: Digital products like social media, in its various forms, act as source linkers that connect students with vast information and knowledge, accessible anytime and anywhere as long as there is an internet connection. Students can quickly gain knowledge and learn independently, no longer relying solely on information from teachers or parents.

8. Teach About Online Rights and Safety: The presence of digital technology teaches students about the rights that need to be protected, such as setting specific passwords to avoid phishing attempts—efforts to gain personal, account, and financial data for criminal purposes (Hasanah, 2023).

The development of digital platforms as a derivative product of information technology has increasingly raised public awareness of the crucial role of social media as a contemporary medium that can be utilized as part of the learning process in character building. The presence of various digital platforms can serve as a supportive media for strengthening the character of students. Therefore, elementary and secondary school students can benefit from character education through social media (Juwita et al., 2015). The presence of religious leaders, scholars, academicians, cultural figures, motivators, and influencers through content on digital social media platforms can be leveraged by educators or parents as references and digital literacy resources to strengthen the character of students.

Students can learn independently by becoming role models for themselves or their peers through the creation of positive content on character formation as part of the innovative values of implementing the Merdeka Belajar curriculum and Kampus Merdeka (MBKM), as envisioned by the Ministry of Education and Culture in line with the development of the digital world. This includes the creation of creative positive content related to self-actualization and the filtering of content on digital platforms appropriate for the students' age and needs. Therefore, character education through information technology can become an effective medium for shaping a generation that is not only academically intelligent but also possesses integrity and high social responsibility. This will

contribute to the formation of a better society where every individual can actively participate in creating a positive environment and supporting the development of the nation's character.

Previous research by (Andalas, 2020; Massie & Nababan, 2021), focused primarily on the negative impact of technology use. However, this study highlights significant benefits, such as empowering students to learn independently and act as role models through the creation of positive content, which aligns with the values in the Merdeka Belajar curriculum and Kampus Merdeka (MBKM). This not only encourages students to develop creativity but also helps them build better character and social responsibility. However, this study also has limitations, especially related to the restricted access to technology, which may hinder participation from all students. Additionally, not all students may be motivated to engage in content creation or possess the required skills, which could lead to variability in the quality of content produced. Another challenge is the content filtering process, which requires critical skills that may not be present in all students. Therefore, while this research offers a promising approach to character education, it is necessary to consider factors that could affect its success in practice.

CONCLUSION

The need for information technology has increasingly become a priority in education at all levels, serving as a medium for learning that supports the strengthening of character education. With proper utilization, information technology can enhance equitable and inclusive access to education, open new perspectives for both educators and students, and accelerate the exchange of information. This creates an interactive and enjoyable learning environment for students, facilitating the sharing of experiences and interactions with experts. Thus, information technology plays a crucial role in shaping the nation's character through the development of the younger generation's potential.

Suggestions for future research include conducting longitudinal studies to understand the long-term impacts of technology use in character education. Research can also include an analysis of the challenges faced by educators and students in implementing information technology, as well as strategies to overcome these obstacles.

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Digital Al-Quran: A Medium to Assist Students in Practicing Religious Rituals

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Abstract: This research aims to explore the potential for using digital Al-Quran in enriching the religious practices of students at the Faculty of Technical and Vocational Education, Indonesian Education University (FPTK UPI). This research adopts a survey research design with a quantitative approach. Data was collected through a questionnaire given to FPTK UPI students, with a focus on the use of the Digital Al-Quran and its impact on their religious practices. Statistical analysis is used to analyze data to gain a deeper understanding. The research results show that the digital Koran positively influences religious practice by providing easy access to religious teachings, increasing understanding, and showing good levels of engagement, confirming its role as a potential tool in enriching students' religious experiences. Thus, the digital Al-Quran is recognized as having great potential to increase religious understanding and religious involvement in higher education environments in Indonesia, especially at FPTK UPI.

Keywords:
Digital Al-Qur'an; Religious Understanding; Rituals

Abstrak: *Penelitian ini bertujuan untuk mengeksplorasi potensi penggunaan Al-Qur'an digital dalam memperkaya praktik keagamaan mahasiswa di Fakultas Pendidikan Teknik dan Kejuruan Universitas Pendidikan Indonesia (FPTK UPI). Penelitian ini mengadopsi desain penelitian survei dengan pendekatan kuantitatif. Data dikumpulkan melalui kuesioner yang diberikan kepada mahasiswa FPTK UPI, dengan fokus pada penggunaan Al-Qur'an Digital dan dampaknya terhadap praktik keagamaan mereka. Analisis statistik digunakan untuk menganalisis data guna mendapatkan pemahaman yang lebih mendalam. Hasil penelitian menunjukkan bahwa Al-Qur'an digital secara positif memengaruhi praktik keagamaan dengan memberikan kemudahan akses terhadap ajaran agama, meningkatkan pemahaman, dan menunjukkan tingkat keterlibatan yang baik, mengkonfirmasi perannya sebagai alat yang berpotensi dalam memperkaya pengalaman keagamaan mahasiswa. Dengan demikian, Al-Qur'an digital diakui memiliki potensi besar untuk meningkatkan pemahaman agama dan keterlibatan keagamaan di lingkungan pendidikan tinggi di Indonesia, khususnya di FPTK UPI.*

Kata Kunci:
Al-Qur'an Digital; Pemahaman Agama; Ritual

INTRODUCTION

The Qur'an, as the holy book of Islam, holds an immeasurable role in guiding and inspiring the lives of humankind. It is regarded as a revelation given to Prophet Muhammad SAW, consisting of 114 surahs and 6,666 verses (Syaf, 2022). The Qur'an serves not only as a religious guide for worship, law, and social dealings but also promises complete answers to various contemporary issues. The Qur'an is not merely a text to be read; it must also be understood and practiced to truly provide its full benefits to Muslims (Olan et al., 2019).

The greatness of the Qur'an lies in its ability to bring peace to the human soul (Akbar, 2013). Regardless of understanding its meaning, reading this sacred text is considered an act of worship that brings rewards for Muslims. However, beyond mere recitation, a deep understanding and practice of the teachings contained within it are essential for guiding life towards divine approval and achieving happiness in both this world and the hereafter (Maharani et al., 2018).

As a source of law and guidance for Muslims, the Qur'an remains relevant as a guide for modern life due to its universal and timeless teachings. The Qur'an provides guidance on ethics, morality, and ways of living that are applicable in various contemporary contexts. For example, research shows that values such as justice, honesty, and social responsibility taught in the Qur'an are crucial in today's global society (Albayrak, 2020; Hasan, 2018). In all matters, the Qur'an continues to serve as a source of inspiration and guidance for the actions and behaviors of Muslims. This highlights the importance of not only reading but also understanding and applying its teachings in everyday life.

With the passage of time, the Qur'an has transformed into a digital format accessible through specialized applications. The phenomenon of the digital Qur'an reflects a shift in human perspectives, increasingly aligned with technological advancements. In the ever-evolving era of information and communication technology, the digital Qur'an is available in various formats—such as computer software, web applications, and mobile apps—many of which can be accessed for Free (R. Ali & Isnaini, 2024).

The digital Qur'an not only provides easier access but also offers a range of features that enrich the reading experience. These include verse and word searches, translations in multiple languages, asbabun nuzul (context of revelation), and commentary from different tafsir (exegeses) (Umar & Ulumuddin, 2020). The diversity of digital Qur'an formats provides alternative options for the public, and features like copy-paste functionality, font type, and size adjustments enhance its appeal among users.

For the millennial generation, the digital Qur'an is often the preferred, more practical choice. Millennials tend to favor solutions that are efficient and easily accessible. The digital Qur'an provides a solution for those less inclined to use a printed Qur'an, offering convenience for those who do not carry a physical copy regularly (Abdussalam et al., 2021).

However, alongside the rapid growth of digital Qur'an applications, concerns have emerged regarding the authenticity and accuracy of the verses and interpretations contained within them. The prevalence of hoaxes and misuse of Qur'anic verses highlights the need for stricter oversight and regulation of digital

Qur'an applications. Relevant institutions, such as the Institute for the Study and Development of Mosques, Prayer Rooms, and the Qur'an (LPMQ), play a crucial role in verifying (tashih) the Qur'an distributed in Indonesia (Puspitasari, 2022).

The research on the use of digital Qur'an applications in supporting religious practice among students has been limited, primarily focusing on general accessibility and functionality. However, specific studies targeting the unique impact and effectiveness of digital Qur'an usage in university settings, particularly among students in technical and vocational fields such as those at the Faculty of Technology and Vocational Education (FPTK) at Universitas Pendidikan Indonesia (UPI), remain unexplored. This research, therefore, fills a critical gap by investigating how digital Qur'an applications serve as an accessible, practical medium to enhance religious engagement and practice within this student demographic.

This study is unique in its exploration of how digital Qur'an applications support the religious practices of students in technical and vocational disciplines, offering flexibility amidst demanding schedules and academic pressures. By examining student attitudes and behaviors, the research assesses perceptions of ease and accessibility in using digital Qur'an applications compared to traditional text, bringing to light any changes in religious practices and spirituality. Additionally, this study delves into the impact of digital media on religious engagement, investigating the ways in which technology aligns with modern digital trends to facilitate spiritual practices within the rhythm of students' everyday lives. By addressing these under-researched areas, this study provides valuable insights into the intersection of digital technology and religious practice in academic settings, expanding on the ways digital media can support spiritual needs within specialized student populations. Additionally, it may guide educational institutions in fostering religiously inclusive digital environments to accommodate diverse student practices and further encourages the development of faith-based technological solutions. This research aims to explore the potential for using digital Al-Quran in enriching the religious practices of students at the Faculty of Technical and Vocational Education, Indonesian Education University (FPTK UPI).

RESEARCH METHOD

This study adopts a survey research design with a quantitative approach to investigate the role of the Digital Qur'an as a medium in supporting religious practices among students of the Faculty of Technical and Vocational Education (FPTK) at the Universitas Pendidikan Indonesia (UPI). The research population consists of active FPTK UPI students who use the Digital Qur'an in their religious practices. A random sampling technique using simple random sampling was applied, and the sample size for this study was 120 students (Sugiyono, 2019).

The primary instrument used in this study is a questionnaire distributed via the Google Forms platform (gForm). The questionnaire is carefully designed to gather information related to respondents' profiles, duration of Digital Qur'an usage, frequency of use, motivations, Qur'anic understanding, impacts on worship, ease of verse search, and main reasons for usage (Arikunto, 2013). Prior

to distribution, the questionnaire was piloted with a sample of respondents to ensure the clarity and validity of the questions.

The data collection procedure begins by distributing the questionnaire to selected respondents via Google Forms. Each respondent is given a brief explanation regarding the research objectives and instructions for completing the questionnaire (Creswell, 2019). Data collection takes place within a specified time frame, as agreed with the respondents, ensuring that participation is voluntary and the information provided is kept confidential.

The collected data will be analyzed using descriptive statistical methods, including mean calculations, percentages, and graphs to visualize the results of the Research (Miles et al., 2014). Inferential analysis may be applied to identify correlations between variables, if necessary. Ethical principles of research, including privacy and confidentiality of respondent data, will be upheld throughout the study (Neuman, 2014). By using this method, this research is expected to make a meaningful contribution to understanding and documenting the impact of the Digital Qur'an on the religious practices of FPTK UPI students.

RESEARCH RESULTS AND DISCUSSION

This section presents the results and discussion from the survey on the use of Qur'an applications among students of the Faculty of Technical and Vocational Education (FPTK) at the Universitas Pendidikan Indonesia (UPI). The survey results cover respondent profiles, application usage duration, frequency of use, motivations, Qur'anic understanding, impacts on worship, ease of verse searching, and main reasons for usage. The discussion provides an in-depth analysis of these findings to offer a comprehensive understanding of the topic.

1. Ressponden Profile

    The participant profile for this survey reflects gender diversity among students of the Faculty of Technical and Vocational Education (FPTK) at Universitas Pendidikan Indonesia (UPI). Of the total 54 respondents, 69.1% were female students, while the remaining 30.9% were male students. This higher female participation rate highlights a significant interest and engagement among female students in using Qur'an applications as part of their religious practices.

    This phenomenon suggests that the Qur'an application holds a particular appeal for female students at FPTK UPI. Potential differences in preferences or needs between female and male students warrant special consideration in the development and enhancement of Qur'an app features. Recognizing that the majority of participants are female can guide developers in understanding and accommodating gender-specific needs more effectively by designing features that are responsive to diverse user demographics. Thus, the respondent profile not only reflects gender diversity among FPTK UPI students but also provides a foundation for tailoring Qur'an application development strategies to be more relevant

and beneficial for the entire student religious community.

Jenis Kelamin
55 jawaban

- Laki-Laki
- Perempuan

69,1%

30,9%
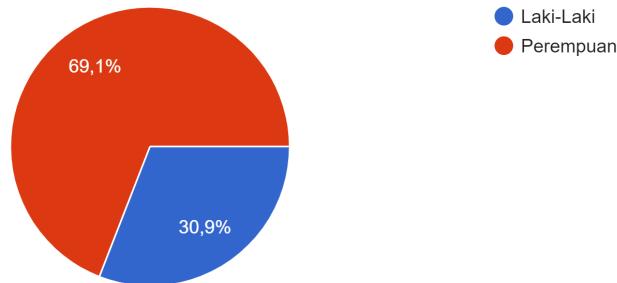
2. Duration of Use of the Al-Qur'an Application

A detailed analysis of the duration of use of the Qur'an application by respondents revealed significant variations, reflecting varying levels of involvement among students of the Faculty of Technology and Vocational Education (FPTK) of the University of Education Indonesia (UPI). From a total of 54 respondents:

Berapa lama Anda telah menggunakan aplikasi Alquran?
53 jawaban

- Kurang dari 6 bulan
- 6 bulan - 1 tahun
- 1-2 tahun
- Lebih dari 2 tahun

43,4%

24,5%

13,2%

18,9%
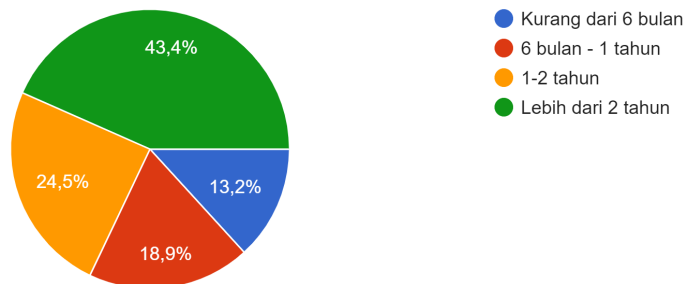
- Less than 6 Months:

  Respondents with less than six months of usage may indicate recent adoption of this technology. Further analysis could examine whether they have prior experience with similar applications or if certain environmental changes have influenced this new adoption. This insight could help identify factors driving the recent interest and adoption patterns, such as shifts in study demands, peer influence, or increased digital literacy, allowing for a deeper understanding of what motivates newer users to integrate digital Qur'an applications into their religious practices.

- 6 Months - 1 Year:

  Users who have been using the app for 6 months to 1 year may have gone through an adaptation phase and may have experienced a change in their perception of the app during this period.

- 1-2 Years:

Respondents with app usage between 1 to 2 years may reflect users who have built a habit of using the app. The analysis can explore whether there is an upward or downward trend in the frequency of use during this period.

- More than 2 Years:

The majority of respondents who have used the application for more than two years offer valuable insights into the long-term impact of digital Qur'an applications on their religious practices. Further analysis could explore how this application has become an integral part of their religious routines, shedding light on the enduring appeal and influence of digital tools in sustaining religious engagement.

A deeper understanding of these usage duration differences allows this study to provide insights into the factors that influence technology adoption within religious contexts. Analyzing user experiences and perceptions across each duration category can offer valuable information to enhance the development of digital Qur'an applications and to better comprehend the dynamics of technology use in religious practices among FPTK UPI students. This, in turn, could guide the refinement of application features, making them more responsive to the evolving needs and routines of diverse users.
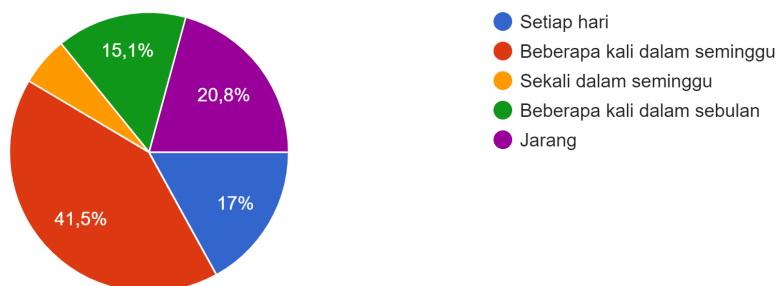
3. Frequency of Use of Al-Qur'an Applications in a Month

The analysis of the frequency of use opens the door to understanding the pattern of students' habits in reading the Qur'an through the application. An in-depth understanding of the factors that affect this frequency can help app developers in crafting relevant motivational features or campaigns.

From the analysis of the frequency of use of the Qur'an application by students of the Faculty of Technology and Vocational Education (FPTK) Universitas Pendidikan Indonesia (UPI), varied patterns of habits were revealed. From a total of 54 respondents:

Seberapa sering anda menggunakan aplikasi Al-Qur'an dalam sebulan?
53 jawaban

Legend:
- Setiap hari
- Beberapa kali dalam seminggu
- Sekali dalam seminggu
- Beberapa kali dalam sebulan
- Jarang

15,1% / 20,8% / 41,5% / 17%

- Daily:

Students who use the app on a daily basis may reflect a high level of involvement and seriousness in carrying out religious practices. Analytics can explore whether there are any additional needs or specific features that could improve their experience.

- Several Times a Week:

     The majority of respondents who use the app several times a week create the potential to understand the habit of reading the Qur'an regularly. Developers can explore how to maintain consistency in app usage and perhaps provide additional incentives.

 • Once a Month and Several Times a Month:

     Respondents with monthly usage frequency showed variation in engagement rates. The analysis can explore the factors influencing sporadic use and devise strategies to increase their engagement.

- Infrequently:

     Students who use the application infrequently may face specific challenges or barriers in adopting this technology. Further analysis could provide insights into potential obstacles, offering guidance on how the application might be adjusted to better meet their needs.

     By gaining a deeper understanding of the frequency of digital Qur'an application usage, developers can design more targeted strategies to enhance engagement and positively impact Qur'an reading habits through the app. Tailoring feature relevance to user habits could create a more personalized experience, supporting consistent religious practice among FPTK UPI students. This approach could foster a supportive digital environment that aligns with students' unique usage patterns and religious needs.

4. Motivation and Understanding of the Qur'an

     The increase in motivation and understanding of the Qur'an through the application highlights its positive impact in supporting students' religious practices. An in-depth understanding of how apps create motivational and learning effects can be the basis for the development of new features.

Apakah anda merasa aplikasi Al-Qur'an memotivasi anda untuk membaca dan memhami Al-Qur'an secara lebih teratur?

53 jawaban
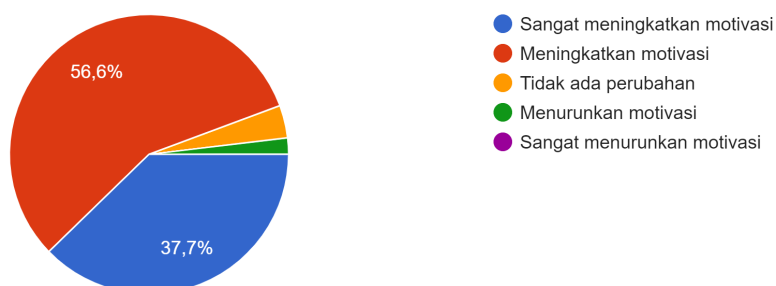
- Significantly Increases Motivation:

     Respondents who experience a notable boost in motivation could be subjects for in-depth studies to identify specific elements in the application that deliver positive impacts. This analysis may reveal the features that are most effective in enhancing motivation.

- Decreases Motivation:

  Although the percentage is low, further investigation is needed to understand why some respondents report decreased motivation. This could be due to certain features or usage barriers that require improvement.

- No Change and Increases Motivation

  Analyzing respondents who report no change or an increase in motivation could help developers better understand the variation in user experiences and the factors affecting motivational impact.

  A detailed analysis of the impact on motivation and Qur'anic understanding through the application can enable developers to create targeted strategies to amplify positive effects. This information could guide the development of new features or enhancements that create a more satisfying and beneficial experience, supporting students in their religious practices.

5. The Impact of the Application of the Qur'an in Worship and Religious Practice

   The digital Qur'an application has had a positive impact on religious practices by enhancing accessibility, understanding, and user engagement. The app allows users to access the Qur'an anytime, anywhere, and includes additional features such as tafsir (interpretations) and translations, which deepen users' understanding of the holy text (Abbas et al., 2019; M. Ali & Hussain, 2020). Supporting students in their worship and religious practices, further analysis could uncover specific features that significantly contribute to improving the quality of their religious lives. This insight can direct further feature development to provide a more valuable resource in daily religious engagement.

Bagaimana aplikasi Al-Qur'an membantu anda dalam menjalankan ibadah dan praktik keagamaan anda?

53 jawaban
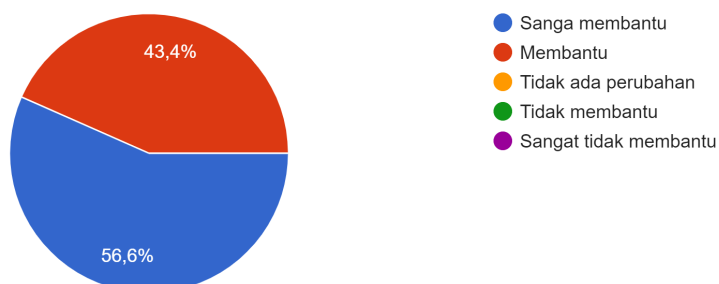
- Help:

  Respondents who feel that the application is "helpful" indicate a positive contribution, even if it may not be substantial. An analysis can delve into specific elements that users find beneficial and how these aspects influence their religious experiences. Understanding which features or functionalities are perceived as supportive can provide valuable insights into the practical enhancements the app

offers. This information can guide further refinement to make the app more attuned to users' needs, thereby fostering a more meaningful religious engagement among users.
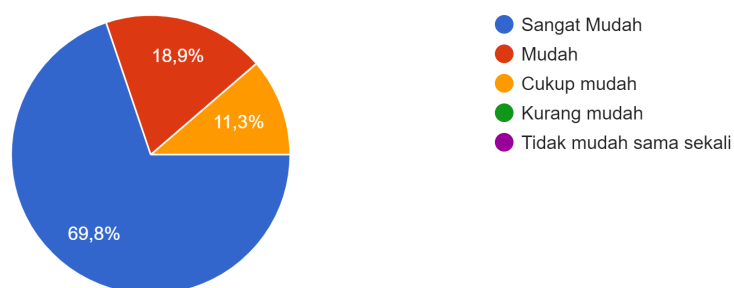
• Very helpful:

The majority of respondents who stated that the application is "very helpful" create opportunities to identify specific features or aspects that have a significant impact. Further analysis can reveal the reasons behind this "very helpful" rating and how the application has shaped their religious lives.

By gaining a deeper understanding of the positive impact of the digital Al-Qur'an application on worship and religious practices, developers can focus on enhancing or developing features that users find most valuable. This information can serve as a strategic guide to ensure the application continues to contribute meaningfully to the quality and consistency of worship and religious practices among FPTK UPI students.

6. Ease of Finding Qur'an Verses

The ease of searching for Qur'an verses through the application is an important factor in speeding up the search process and facilitating quick access to religious references. Further analysis can identify the search features that users value the most.

Sejauh mana aplikasi A-Qur'an memudahkan anda untuk mencari ayat-ayat Al-Qur'an yang anda butuhkan?

53 jawaban

Legend:
- Sangat Mudah
- Mudah
- Cukup mudah
- Kurang mudah
- Tidak mudah sama sekali

Pie chart values: 18,9% / 11,3% / 69,8%

• Very Easy:

The majority of respondents who found searching for Al-Qur'an verses "very easy" reflect high satisfaction with the application's search feature. Further analysis can delve into specific features that make the search process more efficient and satisfying.

• Easy:

For respondents who found it easy to search for Al-Qur'an verses, deeper analysis could reveal any differences in user experiences within this group and why they rated the ease of searching so highly.

• Fairly Easy:

Respondents who consider the search "fairly easy" might indicate certain elements that could be improved or enhanced. An analysis of this
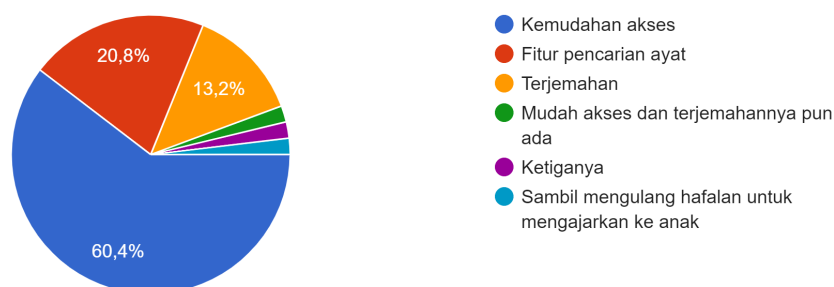
area could identify ways to increase their comfort and ease when using the search feature.

By gaining a deeper understanding of users' experiences in searching for Al-Qur'an verses, developers can pinpoint the features most valued by users and make relevant improvements. This information provides a foundation for optimizing the Al-Qur'an application's search functionality, creating a more efficient and satisfying experience for FPTK UPI students in exploring their sacred text. Alasan Utama Pengunaan Aplikasi Al-Qur'an.

Understanding the primary reasons for usage, such as ease of access, additional features, and motivation for reading, is essential to enhancing and expanding the reach of Al-Qur'an applications. To support this, developing a more interactive and informative application is critical. For instance, research highlights the importance of Al-Qur'an applications that not only present the text but also provide detailed interpretations and historical context to deepen users' understanding (Putra & Hidayaturrahman, 2020). Integrating artificial intelligence technology could further enrich the application, offering deeper analysis of Al-Qur'an verses, thus broadening its relevance and user engagement in digital religious comprehension. Developers can leverage these findings to design updates that are more responsive to users' needs, creating a tool that both supports and enriches their religious practices.

Apa alasan utama anda menggunakan aplikasi Al-Qur'an?
53 jawaban

- Kemudahan akses
- Fitur pencarian ayat
- Terjemahan
- Mudah akses dan terjemahannya pun ada
- Ketiganya
- Sambil mengulang hafalan untuk mengajarkan ke anak

- Ease of Access:

     Most respondents view ease of access as a primary factor in their use of the application. Further analysis could explore what users perceive as "easy access," such as user interface design, loading speed, or other elements that contribute to a smooth and convenient experience.

- Verse Search Feature:

     Respondents who prioritize the verse search feature may value efficiency and speed in locating specific verses. Additional analysis could help identify which aspects of the search feature could be improved or expanded to enhance user satisfaction.

- Al-Qur'an Translation:

For respondents who cite Al-Qur'an translation as a key reason for usage, analysis could delve into their satisfaction with the quality and completeness of translations provided by the application.

- Combination of Factors:

    Respondents selecting a combination of factors, such as ease of access, verse search, and translation, provide insights into how these elements interact and influence the overall user experience.

- Use for Children's Education:

    Those who use the application to support their children's memorization and learning activities reveal the app's potential as a tool for family religious education. Deeper analysis could explore specific needs and how the application can better support religious education within family settings.

    By understanding the primary motivations for use, developers can design updates and improvements that are more aligned with user needs and preferences. This information serves as a strategic foundation to ensure that the Al-Qur'an application remains an effective and valuable tool in supporting the religious practices of FPTK UPI students.

User engagement in an application can be increased if the application provides an interactive and easily accessible experience (Alalwan et al., 2020). In this case, the digital Qur'an not only provides holy texts, but also various supporting features such as interpretations, hadiths, and other religious content that can deepen students' understanding of religion (Lubis, 2020). These features provide a richer learning experience, which in turn increases students' engagement in their religious practices.

Thus, the digital Qur'an not only facilitates access to holy texts, but also plays a role in improving the quality of FPTK UPI students' worship practices. This study emphasizes that the integration of technology into spiritual life can enrich students' religious experiences and support them in maintaining consistency in worship, even though they are supported by high academic demands. Therefore, further development of digital Qur'an applications that are responsive to user needs and preferences is essential to support religious practices that are more inclusive and relevant to the times.

CONSLUSION

Based on this study, it can be concluded that the use of digital Qur'an applications is effective in supporting religious practices among FPTK UPI students. Students demonstrate a high level of comfort and practicality in using digital Qur'an applications, which enhances their engagement in religious activities.

The use of digital Qur'an contributes positively to understanding and memorizing Qur'anic verses. Furthermore, the interactivity of these applications supports a more engaging learning experience, particularly for a generation accustomed to technology. In the context of Islamic teaching and education development, this study provides a foundation for enriching religious teaching methods. Integrating technology, such as digital Qur'an applications, can serve

as an effective means to increase students' interest and participation in religious education. This approach is expected to strengthen religious values and support the quality of Islamic education within academic settings.

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Islamic Religious Education in the National Education System: Opportunities and Challenges for Character Building

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Abstract: This research aims to provide an in-depth understanding of the concept of Islamic Religious Education (PAI) in the context of Indonesia's national education system. It analyzes the role of PAI in shaping the character, morals, and spirituality of students to produce individuals who are devout, pious, and possess noble character. Using a qualitative case study approach, data was collected through interviews, direct observation, and analysis of relevant documents. The findings highlight that although PAI plays a crucial role in character development, there are challenges such as limited instructional time, lack of interest from students, and a disconnect between religious and general education. The study suggests reforming PAI through innovative teaching strategies, increased family support, and professional development for teachers. The research concludes that PAI has significant potential to contribute to character education in Indonesia, forming morally sound individuals who contribute positively to society.
Keywords:
Curriculum Reform; National Education System; Spiritual Development

Abstrak: *Penelitian ini bertujuan untuk memberikan pemahaman mendalam mengenai konsep Pendidikan Agama Islam (PAI) dalam konteks sistem pendidikan nasional Indonesia. Penelitian ini menganalisis peran PAI dalam membentuk karakter, moral, dan spiritual siswa untuk menghasilkan individu yang beriman, bertakwa, dan berakhlak mulia. Menggunakan pendekatan kualitatif dengan studi kasus, data dikumpulkan melalui wawancara, observasi langsung, dan analisis dokumen terkait. Hasil penelitian menunjukkan bahwa meskipun PAI berperan penting dalam pengembangan karakter, terdapat tantangan seperti keterbatasan waktu pengajaran, rendahnya minat siswa, dan ketidakselarasan antara pendidikan agama dan umum. Penelitian ini menyarankan reformasi PAI melalui strategi pembelajaran inovatif, peningkatan dukungan keluarga, dan pengembangan profesionalisme guru. Penelitian menyimpulkan bahwa PAI memiliki potensi besar dalam pendidikan karakter di Indonesia, membentuk individu yang berakhlak baik dan berkontribusi positif bagi masyarakat.*
Kata Kunci:
Pengembangan Spiritual; Reformasi Kurikulum; Sistem Pendidikan Nasional

INTRODUCTION

The progress and dignity of a nation depend heavily on the support of its human resources (HR) to achieve these goals (Regilme Jr, 2019). This support is reflected in various factors, including faith, morality, health, knowledge, creativity, independence, democratic participation, and responsibility as citizens (Ulum, 2020).

Human resources that are considered "holistic" encompass all these factors and have become a primary focus of the government, particularly through the education system. However, efforts to develop "holistic" individuals through education are far from simple. Presently, we observe a rise in negative character traits within society, including among students (Sauri, 2010).

A compelling statement asserts that losing wealth means losing something. Losing health signifies losing something more valuable (Watson et al., 2020). But losing character equates to losing everything (Firmansyah, 2019). This is no exaggeration, as exemplified in Jared Diamond's book Collapse, where the decline of societal character contributed to the fall of civilizations. The Qur'an also records examples such as Sabaiyah which collapsed due to bad character (Tafsir, 2014)

Education in Indonesia, from the colonial era to independence, has exhibited a significant pattern of dualism, characterized by the separation between secular general education and religious education. This dualistic system was initially introduced by the Dutch colonial government through a secular education framework, while Islamic education, represented by pesantren at that time, did not emphasize general knowledge (Hamami, 2021). Previous studies have highlighted that this dualism poses substantial challenges to the development of Islamic education. The dualistic education system has led to disparities in the management of education between general and Islamic education, particularly in aspects such as curriculum, educational management, and available resources (Rakhimovna, 2024)

Various theoretical studies indicate that Islamic Religious Education (PAI) plays a strategic role in shaping students' character. The concepts of tarbiyah (education), ta'dib (moral development), and ta'lim (the imparting of knowledge) derived from Islamic teachings serve as the foundational principles of Islamic Religious Education (Rochman et al., 2023). However, the theoretical achievements and practical implementation of PAI in schools continue to face numerous challenges. One of the primary issues is the limited allocation of time for this subject, which is often insufficient to provide an in-depth understanding of Islamic teachings (A. H. Hamim et al., 2022). In their research, Hamim et al. also observed that students' interest in PAI tends to be low, exacerbated by a lack of parental support. Consequently, the outcomes of Islamic Religious Education in schools remain suboptimal.

Di samping itu, dinamika kurikulum pendidikan agama Islam sering kali Islamic Religious Education (PAI) often struggles to align with the developments in the general education curriculum. Changes in the national curriculum aimed at enhancing the quality of education frequently fail to fully integrate updates in Islamic education. This results in a theoretical gap between efforts to strengthen

character education through PAI and general education policies that are more focused on cognitive achievements (Julaeha, 2019). Ideally, character education through PAI should serve as a crucial tool for building students' morals and ethics within schools.

Previous research has highlighted the pivotal role of PAI in shaping students' character. PAI is considered one of the primary pillars of character education, as the development of a student's character is believed to begin with instilling religious values from an early age. (Hartati, 2021) emphasizes that the content of PAI in schools is a critical component in supporting character education. Through PAI instruction, students are introduced to various aspects of religious life, including aqidah as the foundation of faith, the Qur'an and Hadith as life guides, fiqh as a framework for worship laws, Islamic history as a source of exemplary behavior, and akhlaq as ethical guidelines for distinguishing between right and wrong conduct.

Research also shows that the primary goal of PAI is to develop students' personalities, reflected in their behavior and thought patterns in everyday life (Hawa, 2023). Furthermore, the success of PAI in schools heavily depends on the implementation of appropriate teaching methods. Other studies emphasize the importance of innovative teaching strategies in PAI to enhance Islamic character formation. However, findings also underscore challenges related to the readiness of educators to effectively apply these strategies. This issue highlights a gap between theory and practice, particularly concerning the professionalism of PAI teachers in executing these educational approaches.

Overall, this review indicates that while Islamic Religious Education (PAI) is widely recognized as playing a crucial role in shaping students' character, there are still significant gaps in its implementation. These gaps encompass issues related to time allocation, curriculum integration, family support, and teacher professionalism. Such challenges highlight the need for reforms in PAI teaching approaches and greater support from various stakeholders to ensure that the objectives of PAI can be achieved more effectively in the future.

Every educator must possess a strong understanding of curriculum development, as it serves as a vital pedagogical foundation in the field of education. Through the curriculum, educators can outline their efforts to help students develop their potential in various dimensions, including physical, intellectual, emotional, social, and religious aspects. A curriculum is often seen as a guiding document for teachers, providing a framework for designing and implementing the teaching and learning process (Alvunger, 2018).

In the context of Islamic education, the curriculum concept has a profound impact on shaping the morals or character of students. Character education serves as a fundamental principle that reinforces an individual's identity and intelligence, which are influenced by both the school environment and external surroundings (Ayuningsih et al., 2020)

This study aims to provide an in-depth understanding of the concept of Islamic Religious Education (PAI) within the framework of Indonesia's national education system. The research focuses on analyzing the role of PAI in shaping students' character, morality, and spirituality, with the ultimate goal of fostering

individuals who are devout, God-conscious, and possess noble character. Additionally, it explores the implementation of PAI within the formal education curriculum in Indonesia and examines how this curriculum supports students' spiritual and moral development.

Furthermore, this study identifies challenges in PAI implementation, including limited teaching hours, low student interest, and the imbalance between religious and general education. It also proposes solutions to optimize PAI's role in fostering students' Islamic character through innovative teaching strategies, increased family support, and enhanced teacher professionalism.

The novelty of this research lies in its use of a case study approach, which provides a comprehensive overview of how PAI is implemented in Indonesian schools and the challenges encountered in practice. Moreover, it highlights the gap between religious and general education, emphasizing the need for curriculum integration to strengthen character education and religious values.

This study underscores the importance of educational reform, particularly in enhancing teacher professionalism and adjusting the curriculum to achieve a better balance between religious and general education. With strong contextual relevance, this research demonstrates the critical role of PAI in cultivating a morally and spiritually upright generation, which is urgently needed in addressing the nation's current character challenges.

RESEARCH METHOD

This study employs a qualitative method with a case study approach to deeply understand phenomena within specific contexts. As outlined by Creswell (Creswell, 2019), this approach is particularly relevant for exploring the concept of Islamic education within the national education system. The research aims to provide a comprehensive description and in-depth understanding of the implementation of Islamic Religious Education (PAI) within the national curriculum, focusing on the how and why of its integration into Indonesia's educational policies.

Case studies were selected based on their relevance to the research objectives, identifying specific educational institutions as "bounded systems" defined by time and place. Data collection involved in-depth interviews with teachers, students, and school administrators, direct field observations, and document analysis of policy materials such as educational laws, government regulations, and ministerial decrees. The use of a multisource approach, in line with Yin's principles, ensured data triangulation to enhance the validity of the research dinding (Disas, 2017).

Relevant literature, including books, journals, and scholarly articles, was integrated during the data collection process to establish a solid theoretical foundation. Data analysis was conducted descriptively, identifying key themes, patterns, and relationships between categories derived from multiple sources. Pattern matching and direct interpretation techniques were employed to generate an in-depth understanding of PAI implementation. The study's findings were then used to develop a comprehensive concept of Islamic education,

encompassing its definition, policy framework, objectives, and position within the national education system.

The research report is structured narratively to provide a coherent and comprehensive depiction. Each section of the report includes a case description, thematic analysis, and practical insights into the implementation of PAI within the context of national education. The findings of this study are expected to contribute to the development of Islamic education policies in Indonesia by highlighting the practical implications of the research findings. The validity of the results was strengthened through data triangulation and cross-checking methods across various sources of information.

The strength of the case study approach lies in its ability to delve deeply into phenomena, provide rich contextual understanding, and produce findings that are both informative and relevant in addressing issues related to Islamic education within the national education system.

RESEARCH RESULT AND DISCUSSION
Definition of Education in Islam

Islamic education holds a pivotal position in human life, inherently occupying a central and strategic role in shaping social life and situating individuals within the pluralism of their existence. In the context of Islam, education is often referred to using the terms tarbiah, ta'lim , and ta'dib. These terms have roots in the Qur'an and Hadith, forming the foundation of Islamic educational concepts (Ilham, 2020). Tarbiyah typically refers to a holistic nurturing process encompassing intellectual, moral, and spiritual aspects of learners (Naseem & Ahmad, 2024). Islamic education aims to develop individual character in alignment with Islamic teachings, enabling learners to grow into morally upright individuals who contribute positively to society (Nata, 2016).

As emphasized by (Abdullah, 2018), Islamic education aims to shape a balanced human personality, harmonizing intellectual, moral, and spiritual dimensions. These terms highlight that education in Islam addresses critical aspects of human development—physical, intellectual, and spiritual—working collectively to cultivate exemplary Islamic character. This multidimensional approach underscores the significance of Islamic education in fostering individuals capable of navigating and enriching a diverse and pluralistic social environment.

Definition and Purpose of Islamic Religious Education

Islamic Religious Education (PAI) is a systematic effort to guide students to understand, appreciate, and practice the teachings of Islam in their daily lives. According to Majid and Andayani (2019), the main goal of PAI is to form individuals who are faithful, devout, and morally upright. PAI also focuses on the development of students' character in intellectual, emotional, and spiritual aspects. This education aims to prepare students to face the challenges of life, actively participate in nation-building, and contribute to creating a harmonious society.

From a philosophical perspective, Al-Ghazali (Hamim, 2017) emphasizes that education aims to eliminate bad character and instill good character in students, so they can achieve happiness in this world and the hereafter. Meanwhile, Ibn Khaldun views education as a process of awareness to understand the natural and social phenomena more broadly, not limited by space and time (Akbar, 2015). From the Western perspective, the concept of good education is also conveyed by John Dewey, who views education as a process of growth and development of the essence of life (Mualifah, 2013)..

According to (Tafsir, 2014), PAI has three main goals: to realize the concept of insan kamil(a perfect human being), to create insan kaffah (a holistic individual), and to provide awareness of human's role as Allah's servant and caliph on earth. Insan kamil refers to an individual who is complete in spiritual, intellectual, and social aspects, ready to be a blessing to all the worlds.

In the context of regulations in Indonesia, PAI also plays a significant role in the national education system. Based on Government Regulation No. 55 of 2007 on Religious Education and Religious Education Institutions, the goal of PAI is to form students' personalities that are faithful and devout, and able to practice their religion well in various aspects of life (Prasetiya, 2019). PAI is regulated as an integral part of the education curriculum that must be taught at all levels of education, from primary education to higher education. This affirms that PAI is not merely an additional subject but a central component in shaping students' character and morality in accordance with the religious values applicable in Indonesia.

Basic Islamic Religious Education

The foundation for the implementation of Islamic Religious Education (PAI) in Indonesia is based on three main aspects: ideal foundation, structural foundation, and operational foundation. The ideal foundation for the implementation of Islamic Religious Education (PAI) in Indonesia is deeply rooted in the values of Pancasila, which is the philosophical foundation of the state. The first principle of Pancasila emphasizes belief in the One and Only God, which is a core concept that aligns with the goal of PAI to instill faith, devotion, and religious values in students. This ideal foundation serves as the guiding framework to ensure that PAI contributes to the moral and spiritual development of individuals in society. It shapes the character of students, helping them to develop a strong belief system and to live according to Islamic teachings in their daily lives.

The ideal foundation refers to the principles of Pancasila, especially the first principle, which emphasizes the importance of belief in the One and Only God (Prasetia, 2020). In this context, the foundation of religious education must reflect the religious values that shape a nation's character to be faithful and devout. The structural foundation is derived from various regulations, including the 1945 Constitution, which guarantees freedom of religion and religious education in Indonesia (Pinilih, 2018). This regulation strengthens the implementation of religious education at all levels of education.

The operational foundation is based on regulations that directly govern the implementation of PAI, such as Government Regulation No. 55 of 2007, which affirms that religious education must be provided at all levels of education with the aim of improving understanding, appreciation, and practice of religious teachings (Rahman, 2022).

The role of PAI in Indonesia's education regulations is acknowledged by the government as an effort to build the nation's character with noble morals and good manners. Additionally, PAI is expected to guide students in understanding the teachings of Islam more deeply, covering aspects of faith, ethics, fiqh, and the relationship between humans, God, and fellow creatures. With regulations that emphasize the importance of PAI, the government aims to achieve educational goals that not only focus on intellectual development but also on the balanced formation of moral and spiritual character.

Nasional National Curriculum and Education System

The Islamic Religious Education (PAI) curriculum is an integral part of Indonesia's national education system. This curriculum is designed to achieve comprehensive educational goals, including cognitive, affective, and psychomotor aspects of students Pendidikan Agama Islam dalam Sistem Pendidikan Nasional di Indonesia (Samrin, 2015). The PAI curriculum includes lessons on faith (aqidah), Islamic law (syariah), and morals (akhlak), all of which are directly referenced from the Qur'an and Hadith as the primary sources of Islamic teachings.

According to (Sya'bani, 2018), the curriculum plays a crucial role in providing direction and guidance for religious education based on Islamic principles. The PAI curriculum is not only aimed at imparting religious knowledge but also at instilling moral and spiritual values in students' everyday lives. This underscores the importance of teachers in shaping students' Islamic character and creating a conducive learning environment for the development of good manners akhlakul karimah. The National Education System Law No. 20 of 2003 also emphasizes that religious education is an inseparable part of the national education system. This education aims to develop students' potential so that they possess a personality that is faithful, knowledgeable, and morally upright (Kasiono et al., 2022).

Islamic Religious Education plays a central role in shaping students' character based on Islamic teachings. PAI not only provides religious knowledge but also aims to instill moral and spiritual values that can be applied in daily life (Taufik, 2021). Through a structured curriculum and strong regulatory support, PAI becomes an integral part of Indonesia's national education system. This education prepares students to become individuals with noble character, contribute to society, and act as a mercy to the world rahmatan lil 'alamin. Its role extends beyond simply imparting religious knowledge; it aims to instill values, ethics, and behaviors rooted in Islamic teachings. The two main goals of PAI present significant opportunities but also challenges, particularly in developing character that aligns with societal expectations in a constantly changing world.

One of the primary opportunities of PAI lies in the integration of universal values such as honesty, respect, empathy, and social responsibility. These values are not only in harmony with Islamic principles but also align with the broader goals of character education within the national curriculum. Through the integration of these values, PAI can be a powerful tool to foster moral integrity and social cohesion, especially in a diverse society (Akrim, 2022). This helps prepare students to face social challenges and contribute positively to their communities, reinforcing the idea that education is not just about academic intelligence, but also about shaping responsible and compassionate individuals.

At the same time, the alignment of PAI with national character education objectives provides further opportunities. Indonesian educational policies emphasize the importance of character development, and PAI, with its focus on Islamic values, becomes a natural partner in this effort. By emphasizing ethical principles such as environmental preservation, respect for diversity, and social responsibility, PAI contributes to the formation of responsible citizens. This alignment ensures that character education is not confined to a single subject but is integrated throughout the entire education system.

However, challenges persist in the implementation of PAI as a tool for character development. One major challenge is the overload of the curriculum, where academic subjects are often prioritized, leaving little time and attention for character education (Ilham, 2020). This imbalance can limit the impact of PAI on students' moral and ethical development, diminishing its role in shaping their character. In environments where academic achievement is emphasized, the depth and breadth of character education are often overlooked, preventing PAI from fulfilling its objectives optimally.

Additionally, Indonesia's cultural and religious diversity complicates the standardization of PAI. This diversity means that Islamic teachings may vary across regions, creating challenges in the creation of a uniform PAI curriculum. Differences in the interpretation and practice of Islam in various communities can hinder the implementation of a cohesive national framework. This diversity requires a flexible and context-sensitive approach to ensure inclusivity without compromising the core values that PAI seeks to impart.

The competence of teachers is also a significant factor that influences the success of Islamic Religious Education (PAI) in shaping character. Although many educators are enthusiastic about teaching Islamic values, there is often a lack of opportunities for professional development that equip teachers with the pedagogical skills necessary to teach character education effectively. Without continuous training, teachers may struggle to adopt innovative teaching methods or create engaging and impactful lessons. Therefore, improving teachers' competence in content knowledge and teaching techniques is crucial for the success of PAI in shaping students' character.

The rapid development of technology and globalization also presents both opportunities and challenges for character education. Digital platforms can serve as an effective tool for delivering PAI content, offering new avenues for engagement and interactivity. However, technology also exposes students to

global influences and ideologies that may contradict the values taught in PAI. The challenge is how to manage this exposure to ensure that technology is used to enhance, rather than undermine, the character-building objectives within Islamic Religious Education.

Evaluation of character development remains a complex issue. Traditional assessments often focus more on cognitive achievements, while moral and ethical development is often overlooked. This makes it difficult to comprehensively measure the impact of PAI on the formation of students' character. Therefore, developing effective evaluation tools for character education is essential to ensure that PAI truly achieves its goal of shaping morally responsible individuals.

To address these challenges, a more comprehensive approach is needed that involves policymakers, educators, and the community. Policymakers must ensure that PAI is given sufficient priority in the curriculum by providing adequate resources for effective implementation. Teachers need ongoing professional development to keep their teaching skills relevant and impactful. Additionally, the wise use of technology should be encouraged to ensure that these tools reinforce, rather than undermine, the values taught in PAI.

Collaboration between schools, families, and communities is also crucial in creating an environment that supports character education. When the principles taught in PAI are reinforced at home and within the community, students are more likely to internalize and apply them in their daily lives. By addressing these challenges and leveraging existing opportunities, Islamic Religious Education can play a transformational role in shaping the character of future generations. Through these efforts, PAI can fulfill its potential as a force in shaping a better national character.

CONCLUSION

This study reveals the important role of Islamic Religious Education (PAI) in shaping the character, morals, and spirituality of students in Indonesia. Based on a case study analysis, PAI is an integral element in the national education system aimed at creating individuals who are faithful, pious, and have noble character. With philosophical foundations, government regulations, and Islamic education concepts such as *tarbiyah*, *ta'lim*, and *ta'dib*, PAI helps to build an Islamic character that focuses not only on cognitive intelligence but also on spiritual and social development.

The study emphasizes that although PAI has great potential in creating insan kamil (a perfect human being), there are several challenges in its implementation, including limited teaching time, the imbalance between religious education and general education, and the low interest of students in PAI. To bridge these gaps, there is a need for updates in teaching strategies, the improvement of teacher professionalism, and better integration of the curriculum between religious and general education. Overall, this study highlights the importance of PAI in shaping a generation that is not only academically competent but also possesses an Islamic character. Thus, PAI can serve as a

cornerstone in building a harmonious, civilized society grounded in strong spiritual values, making religious education an important instrument in national development.

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Islamic Education-Based Entrepreneurship as a Catalyst for Student Business Motivation

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Abstract: One crucial factor in promoting entrepreneurship within a country is the role of universities through the implementation of entrepreneurship education. This form of education not only offers a theoretical foundation in entrepreneurial concepts but also shapes students' attitudes, mindsets, and perspectives towards starting businesses. This research seeks to understand the concept and implementation of entrepreneurship education in university courses aimed at fostering students' entrepreneurial interests, the factors that drive this interest, and the advantages of entrepreneurship education. Using qualitative methods with a phenomenological approach, the study gathered data from purposively selected participants through observations, interviews, and documentation. Data validity was ensured through triangulation techniques. Findings reveal that entrepreneurship education, effectively integrated into university courses, significantly boosts students' interest in entrepreneurship. Besides theoretical insights, students gain practical experiences that enhance essential skills, such as marketing, business management, and performance evaluation. Factors influencing entrepreneurial interest include personal ambition, supportive educational environments, and firsthand experiences in business activities. The benefits of these courses include increasing students' motivation, skills, and preparedness for the business world, along with contributing positively to the country's economic development by nurturing a new generation of entrepreneurs.

Keywords:
Entrepreneurship Education; Entrepreneurial Motivation; Students

Abstrak: *Salah satu faktor penting dalam pertumbuhan kewirausahaan di suatu negara adalah peran perguruan tinggi melalui penyelenggaraan pendidikan kewirausahaan. Pendidikan kewirausahaan tidak hanya memberikan dasar teori tentang konsep wirausaha, tetapi juga berperan dalam membentuk pola pikir, sikap, dan pandangan mahasiswa terhadap wirausaha. Penelitian ini bertujuan untuk mengetahui konsep pendidikan kewirausahaan, implementasinya dalam perkuliahan guna untuk menumbuhkan minat berwirausaha pada mahasiswa, faktor-faktor yang mendorong minat berwirausaha, serta manfaat dari mata kuliah kewirausahaan bagi mahasiswa. Penelitian ini menggunakan metode kualitatif dengan pendekatan fenomenologi. Subjek penelitian dipilih melalui teknik purposive sampling. Data dikumpulkan melalui observasi, wawancara, dan dokumentasi, dan dianalisis menggunakan teknik triangulasi untuk menjamin keabsahan data. Hasil dari penelitian ini menunjukkan bahwa pendidikan kewirausahaan telah diintegrasikan secara efektif ke dalam mata kuliah kewirausahaan, yang berperan besar dalam meningkatkan minat mahasiswa terhadap dunia wirausaha. Mahasiswa tidak hanya mendapatkan pengetahuan teoretis, tetapi juga pengalaman praktis yang memperkuat keterampilan mereka dalam bisnis, seperti strategi pemasaran, pengelolaan usaha, dan evaluasi kinerja. Faktor-faktor yang memengaruhi minat berwirausaha meliputi keinginan pribadi, dukungan lingkungan pendidikan, serta pengalaman langsung dalam kegiatan bisnis. Manfaat dari perkuliahan ini antara lain peningkatan motivasi, keterampilan, dan kesiapan mahasiswa untuk menghadapi dunia usaha setelah lulus, serta kontribusi positif terhadap pengembangan perekonomian negara dengan munculnya wirausaha-wirausaha baru.*

Kata Kunci:
Pendidikan Kewirausahaan; Motivasi Berwirausaha; Mahasiswa

INTRODUCTION

Indonesia is a developing country with significant economic potential, continually facing various challenges to achieve inclusive and sustainable economic growth (Kurniawan & Managi, 2018). A strong economy requires a workforce equipped with skills, innovation, and the ability to create new job opportunities. In this context, the role of entrepreneurship education serves as a crucial foundation in shaping individuals to become self-reliant, creative, and highly competitive (Turmuzi et al., 2022).

Entrepreneurship education has become a focal point in various studies, given its significant role in shaping the entrepreneurial attitudes and skills of the younger generation (Ratten & Usmanij, 2021). Through structured programs, entrepreneurship education not only introduces students to the fundamentals of starting and managing a business but also fosters critical thinking, problem-solving, and resilience (Hameed & Irfan, 2019). This type of education encourages students to explore opportunities, take calculated risks, and develop the perseverance necessary to succeed in competitive environments. Entrepreneurship education is defined as an educational program that not only equips students with business skills but also fosters an entrepreneurial mindset, enabling them to recognize opportunities amidst economic challenges (Herlina et al., 2024). This approach is crucial given Indonesia's economic challenges, such as unemployment and economic distribution inequality, which require innovative and sustainable Solutions. (Suryahani et al., 2024) This emphasizes that, although Indonesia has a diverse economic sector ranging from agriculture to industry, there are still significant challenges to be addressed in achieving a more equitable economic distribution.

Furthermore, in the context of globalization and the Industrial Revolution 4.0, entrepreneurship education is not only relevant, but also an important tool in preparing Indonesia's young generation to face rapid market and technological changes (Turmuzi et al., 2022). Entrepreneurship education plays a vital role in enabling young generations to explore opportunities in the digital era, including creating startups, developing small businesses, and understanding the global business ecosystem. However, there remains a theoretical gap in understanding entrepreneurial adaptation in the era of Industry 4.0. Many studies have yet to delve deeply into effective strategies for entrepreneurship education to address the evolving dynamics of technology and the digital market(Faludi & Gilbert, 2019).

In this regard, this research offers novelty by exploring an approach to entrepreneurship education that focuses on developing digital skills and adapting to the global digital business ecosystem. This research not only highlights the importance of entrepreneurship education in shaping entrepreneurial attitudes and skills, but also proposes a more adaptive education model to technological changes and global market dynamics (Mulyani, 2012).

Entrepreneurship education has become an integral part of shaping human resources capable of adapting to the dynamics of the times and contributing to economic development. The role of students as the next generation poses unique challenges in fostering entrepreneurial interest and

skills. Specifically, in the context of Islamic Education (PAI) students at Sunan Gunung Djati State Islamic University (UIN SGD) Bandung, these challenges are increasingly relevant. The role of entrepreneurship in this context extends beyond economic aspects to include ethics, morality, and Islamic values, making it essential to develop an entrepreneurial mindset that aligns with religious principles while addressing contemporary economic demands.

The implementation of entrepreneurship education in universities serves as an alternative effort to reduce unemployment (Byun et al., 2019). Entrepreneurship courses based on practical experience, known as entrepreneurship concepts and skills, form the backbone of equipping graduates with essential skills for achieving success. The teaching methods employed in entrepreneurship education are crucial for shaping individuals' mindsets and behaviors, fostering entrepreneurial interest and aspirations. Business Planning, as a mandatory subject in entrepreneurship education, equips students with the knowledge and experience necessary for self-development and business creation. This course emphasizes the practical application of entrepreneurial concepts, enabling students to develop strategic thinking, identify market opportunities, and build sustainable business models. By integrating theory with hands-on learning, entrepreneurship education prepares students not only to enter the workforce but also to create jobs, contributing to economic growth and reducing reliance on traditional employment sectors (Igwe et al., 2021).

Fostering an entrepreneurial spirit among university students is believed to be an alternative solution to reducing unemployment rates, as graduates are expected to become educated young entrepreneurs capable of starting their own businesses. In today's and future business world, success increasingly relies on knowledge and intellectual capital. (Adnyana & Purnami, 2016; Gultom, 2021). Besides that (Desi, 2022) This research discusses the importance of entrepreneurship education in higher education to face the challenges of the Fourth Industrial Revolution, focusing on the use of digital technology by students. The study emphasizes how students need to develop technology-based entrepreneurial skills in order to remain competitive in the global era.

The young generation or commonly called the millennial generation including students are considered as agents of development change. Students are part of a dynamic community group, meaning that students can follow the changes that occur in society both in terms of social, economic, technological, political, and so on which with their intellectual capacity students are able to develop themselves. Entrepreneurship is a fairly appropriate alternative choice for students to develop their potential, this is in line with (Hasan, 2020) The role of young entrepreneurs in reducing unemployment in Indonesia highlights that entrepreneurship education in higher education is a strategic step toward creating young entrepreneurs capable of starting their own businesses. This approach is considered effective in reducing graduates' dependence on formal employment opportunities. By equipping students with the necessary entrepreneurial skills, universities can help foster self-employment and encourage the development of small and medium-sized enterprises (SMEs), which play a significant role in driving economic growth and job creation.

Entrepreneurship education empowers students to be innovative, resourceful, and proactive, enabling them to contribute to solving the unemployment issue and enhancing the national economy.

In 2023, the Government will increase the allocation of people's business loans (KUR) to IDR 450 trillion from the previous IDR 373 trillion. One of the things that is encouraged by the increase in credit allocation is the Super Micro KUR which is intended for millennial entrepreneurs, young MSMEs, or young people who are just starting a business. This step opens up the widest opportunities for the younger generation to pursue the path of becoming entrepreneurs. Moreover, the number of entrepreneurs or entrepreneurs in Indonesia is still relatively low. According to the Ministry of Cooperatives and SMEs, currently Indonesia has only reached an entrepreneurship ratio of 3.47%(Moerdijat, 2023).

The entrepreneurial ratio is a key prerequisite for Indonesia to become a developed country by 2045. Therefore, Indonesia needs to have a minimum entrepreneurial ratio of 4% of the total population. For comparison, Singapore's entrepreneurial ratio has already reached 8.6%, and Thailand's is above 4%.

Although research on entrepreneurship has been conducted for a long time, and factors influencing entrepreneurial interest have been identified, the role of entrepreneurship education is still widely debated. This includes the extent to which entrepreneurship education affects interest, motivation, and creativity in entrepreneurship, including student motivation to engage in entrepreneurship.

Based on the above discussion, the objective of this study is to explore and understand the concepts, characteristics, and implementation of entrepreneurship education in the classroom as an effort to increase entrepreneurial motivation among students at the Faculty of Tarbiyah and Teacher Training at UIN Sunan Gunung Djati Bandung. The novelty of this research lies in its specific focus on how entrepreneurship education within a religious higher education environment can play a role in shaping motivation and entrepreneurial mindset in students traditionally directed toward religious and pedagogical education.

This research provides significant benefits for higher education, particularly in the context of developing entrepreneurship curricula. It can serve as a foundation for universities to consider when designing and implementing more effective entrepreneurship programs, which not only focus on technical aspects but also aim to foster an entrepreneurial mindset. Furthermore, the findings of this study are expected to contribute to improving the quality of graduates, better preparing them for the business world, both locally and globally, as well as supporting efforts to reduce unemployment among graduates through the development of educated young entrepreneurs.

RESEARCH METHOD

This research aims to understand and describe how Entrepreneurship Education and its Implementation can enhance students' entrepreneurial motivation. In this context, the researcher seeks several references from e-articles, journals through

platforms such as Google Scholar, ATTHULAB: Islamic Religion Teaching & Learning Journal, and e-books.

This study employs a qualitative research approach. According do (Hardani, 2020), qualitative methodology is a research process that generates descriptive data concerning individual behaviors observed in written or spoken words. Qualitative research is typically conducted to investigate phenomena comprehensively and in-depth by collecting as much descriptive data as possible (Nassaji, 2020). Therefore, inductive analysis is extended to discover the true meaning of the phenomenon being studied. The objective of this study is to systematically organize descriptions, facts, characteristics, and relationships between the studied phenomena, based on expert knowledge, and by describing students' experiences in developing their interest in entrepreneurship. To investigate this phenomenon, the researcher asks several questions to the respondents, then collects their responses for analysis (Arseven, 2018). This discussion will further explore how the implementation of entrepreneurship education can improve entrepreneurial motivation among students at the Faculty of Tarbiyah and Teacher Training, UIN Sunan Gunung Djati Bandung.

RESEARCH RESULT AND DISCUSSION
Entrepreneurship Education
The Faculty of Tarbiyah and Teacher Training at UIN Sunan Gunung Djati Bandung, through the Islamic Education program, offers an Entrepreneurship Education course to motivate and help students develop their interest and talent in entrepreneurship. This course not only provides theory but also practical experience, such as creating labels, packaging products, and developing business idea journals. These activities help students understand and prepare for the business world. Entrepreneurship education has also proven to increase students' interest in entrepreneurship by providing both knowledge and real-life experiences.

However, there are many debates that arise regarding entrepreneurship education provided as part of the learning process in formal educational institutions. This debate is mainly concerned with the application of terms such as entrepreneurship education versus corporate education. There is a conceptual difference between entrepreneurship education and corporate education. The concept of entrepreneurship education focuses on developing an attitude of independence, while corporate education aims to create individuals who are able to seek opportunities. But, (Pinontoan, 2021) argue that the two terms have the same concept but differ in their context. The United States and Canada are more likely to use the term entrepreneurship education, while the United Kingdom and Ireland emphasize the term corporate education more.

The conceptual and contextual debates between entrepreneurship education and business education are quite extensive, requiring a more precise definition of entrepreneurship to be provided to the younger generation in their formal educational process. According to Lubis (2020), entrepreneurship education is defined as the process of equipping individuals with the ability to

recognize commercial opportunities and insights, self-esteem, knowledge, and skills to act based on their own thinking.

Many business experts use the term entrepreneurship education by focusing on the principles of activities involved. According to (Hasan, 2020), an entrepreneur has the character of an innovator. Meanwhile, according to (Zulhimma, 2018) An entrepreneur is a creator of wealth and someone who is willing to take on challenges. With these definitions of entrepreneurship, it is necessary for entrepreneurship education to have a curriculum and teaching materials that focus on studying sources of opportunities and the process of discovery (Hasan, 2020), where individuals are directed to build creativity, take risks, and turn their ideas into tangible actions. (Fajriani Azis, 2022).

Entrepreneurship education, is a training process for students to face an uncertain future by equipping them with the ability to create businesses (Wardhani & Nastiti, 2023a). Therefore, it is essential to align entrepreneurship education conceptually with its recipients, considering aspects such as curriculum, teaching materials, and teaching methodology. According to (Mulyani, 2011), the main focus in the entrepreneurship education curriculum is on teaching materials that can encourage entrepreneurial attitudes, develop skills, and provide managerial training.

Thus, entrepreneurship education, through various types of educational processes and training, aims to influence the attitudes, behaviors, values, or intentions of individuals toward the concept of independent business as a viable career in society. An entrepreneur refers to an individual who has the ability to turn ideas into real actions. This involves creativity, innovation, risk-taking, as well as the ability to plan and manage projects to achieve goals. In line with this, entrepreneurship education can be defined as the process of applying knowledge, forming attitudes, and developing skills and competencies in a professional manner.

Entrepreneurship education aims to teach students how to become independent business owners (Wahyudiono, 2016). In addition, it is also about creating and maintaining a learning environment by promoting entrepreneurial traits and behaviors, such as being creative and independent thinkers, risk-takers, responsible, and respecting diversity (Putri, 2017).

Characteristics of Entrepreneurship Education

The six characteristics and traits of entrepreneurship include: 1) Confident and optimistic, having strong self-confidence, not dependent on others, and individualistic. 2) Task- and result-oriented, need to achieve, profit-oriented, have a strong drive, energetic, diligent and steadfast, determined to work, and initiative. 3) Dare to take risks and love challenges. Able to take reasonable risks. 4) Leadership, leadership spirit, adaptable to others, and open to suggestions and criticism. 5) Originality, innovative, creative and flexible. 6) Future-oriented, have a vision and perspective on the future (Mahdani, 2019).

Entrepreneurship education essentially focuses on cultivating an entrepreneurial culture. Its goal is to assist aspiring entrepreneurs in identifying and pursuing opportunities, not just limited to increasing start-ups, innovative

businesses, and creating new job opportunities. Through entrepreneurship education offered in higher education institutions, the younger generation will be supported in preparing themselves to become more creative and confident in undertaking various activities. This process aims to instill a mindset that embraces innovation, risk-taking, and resilience—key qualities for thriving in an ever-evolving business landscape. (Damayanti, 2012).

As a field of study, entrepreneurship education must have the capacity to instill skills in students, enabling them to develop themselves and serve as catalysts for socio-economic change within society. This will empower the creation of a prosperous future society, not only for the students themselves but also for the surrounding community. By equipping students with the necessary entrepreneurial mindset and practical skills, education in entrepreneurship can contribute to fostering innovation, job creation, and community development, ultimately enhancing both individual and collective well-being.

Implementation of Entrepreneurship Education in Increasing Student Entrepreneurial Motivation

Entrepreneurship education has been integrated into entrepreneurship courses that aim to introduce students to the world of entrepreneurship (Arum & Anasrulloh, 2024). With this course, it is hoped that students can be motivated and develop their interests and skills so that they are able to be entrepreneurs after graduation.

The implementation of entrepreneurship education is aimed at developing entrepreneurial attitudes through the material presented to students, which can be integrated with the curriculum at the university. The content developed for students includes learning encouragement related to entrepreneurship within the campus environment. This approach not only provides students with theoretical knowledge but also fosters a practical mindset, encouraging them to identify opportunities, take calculated risks, and engage in innovative thinking that will help them become successful entrepreneurs in the future. (Wardhani & Nastiti, 2023b). To develop an entrepreneurial attitude through entrepreneurship education, planning involving lecturers, employees, students, and the surrounding environment needs to be carried out to identify relevant developments. Entrepreneurial attitudes have an important role in the entrepreneurial spirit, skills, and collaboration in creating opportunities from existing challenges. According to the Ministry of Education, the purpose of entrepreneurship education is to form individuals as a whole, who in addition to having human traits also have an understanding and skills in entrepreneurship (Prihantoro & Hadi, 2016).

The Faculty of Tarbiyah and Teacher Training UIN Sunan Gunung Djati Bandung strives to facilitate the education of its students. The Islamic Religious Education Study Program at the Faculty of Teacher Training is also one of the study programs that requires Entrepreneurship Education courses with one of the goals being to motivate and assist students in developing their interests and talents in entrepreneurship. The education and learning process aims to enable

students to receive as much information as possible so that persistence, skills, intelligence and intelligence are the main focus.

"Alhamdulillah, with the availability of the entrepreneurship education course and the materials presented, we have gained knowledge about the world of entrepreneurship. We are also motivated; what once seemed uncertain to try, we now feel ready and confident to start and manage a business. In addition, we were equipped with practical entrepreneurial skills that provided us with important experiences in entrepreneurship. We even had the opportunity to create labels, packaging for products/services we would develop, and for the final assessment, we created a journal based on our business ideas."

The results of the interview suggest that the learning system can trigger creative ideas, provide the necessary infrastructure for entrepreneurship on campus, and present examples of successful entrepreneurship within the campus environment, all of which can enhance student motivation to become entrepreneurs. In addition to teaching students the concepts of entrepreneurship, professors also assign practical entrepreneurship tasks so that students can directly experience what it takes to be an entrepreneur.

There is empirical evidence showing that entrepreneurship education has a positive impact on entrepreneurial interest. It is undeniable that entrepreneurship courses play a crucial role in sparking students' interest in becoming entrepreneurs. Entrepreneurship learning allows collaboration with various parties involved in the process. Furthermore, this learning provides students with new experiences. Students do not only grow intellectually but also develop the skills needed to face real-life challenges. With entrepreneurship skills gained through education, learning, and training within an academic environment, students are better prepared to face life confidently.

Entrepreneurial values can be instilled in students through various teaching and learning activities (Kusuma, 2017). Lecturers with knowledge and understanding of entrepreneurship can guide students in establishing and developing businesses, thus accelerating the growth of new entrepreneurs. Universities are expected to be more active in fostering an entrepreneurial spirit on campus by providing adequate infrastructure and resources, as well as creating a conducive environment that shapes students' mindset toward entrepreneurship (Hidayat, 2019).

The positive thing in the form of learning or entrepreneurship courses is when students are motivated to try to get out of their comfort zone and start managing their own business. Entrepreneurship education has a great influence on students' interest in entrepreneurship (Sonia, 2023). Therefore, it is important to enhance entrepreneurship education so that students can change their mindset toward entrepreneurial motivation. The material taught in entrepreneurship courses should contain information and knowledge derived from entrepreneurship theories taught by lecturers. Thus, the information received can guide students to manage businesses effectively and transform their attitudes and behaviors. Furthermore, entrepreneurship can help tackle poverty and improve the well-being of the people. It provides opportunities for individuals to start their own businesses, create job opportunities, reduce unemployment,

and increase per capita income, which will ultimately drive economic growth in the country.

Through a structured and applicable approach, entrepreneurship education can instill values of innovation, risk-taking, and adaptability to change. This is crucial in facing the dynamics of the continuously evolving global market. By optimizing entrepreneurship education, universities can produce graduates who are not only ready to face the workforce but also possess an innovative spirit that can drive the national economy through the emergence of new, competent, and highly ethical entrepreneurs.

Motivation is an invisible capital. Students undoubtedly have a passion to improve their family's economy, aspire to become wealthy, and so on. These are all aspects of entrepreneurial motivation. The desire to have more can drive an individual to become an outstanding and good person. Entrepreneurial behavior is in line with the behavior of those who are motivated to achieve high performance (Arni et al., 2022). Motivation in entrepreneurship is a driving factor that encourages students to engage in entrepreneurial activities. Motivation can be likened to a force that drives someone to take action. Entrepreneurial motivation consists of various reasons that encourage students to participate in entrepreneurial endeavors. This motivation may stem from a desire to improve their economic situation, gain independence, or pursue personal ambitions, all of which play a critical role in shaping an individual's involvement in entrepreneurship.

CONCLUSION

The research findings indicate that entrepreneurship education has been integrated into the curriculum at the Faculty of Tarbiyah and Teacher Training, UIN Sunan Gunung Djati Bandung. The goal is to equip students with the entrepreneurial spirit and skills needed for success after graduation, as well as to support the economy. The learning process includes both theory and practice, where students learn how to market products, serve customers, and evaluate sales results.

Internal factors such as personal needs and external factors such as education and the entrepreneurial environment can influence entrepreneurial interest. Common barriers faced include a lack of capital and experience, as well as fear of failure. Overall, this course has a positive impact by enhancing students' knowledge, skills, and motivation in entrepreneurship. Students gain practical business knowledge, which is expected to be beneficial both during their studies and after graduation.

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