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Character Value Negotiation in Artificial Intelligence-Based Learning: Study of Madrasah Aliyah Teachers

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Abstract:*The integration of artificial intelligence (AI) in Islamic education presents new challenges in the negotiation of character values in Madrasah Aliyah. This study aims to analyze how Madrasah Aliyah teachers negotiate Islamic character values amid the increasingly massive wave of AI-based learning. The study employs a phenomenological qualitative approach involving 12 teachers from 4 State Madrasah Aliyah in Central Java Province. Data were collected through in-depth interviews, classroom observations, and documentation analysis. The results reveal that teachers serve as active value mediators, integrating Islamic ethics into AI utilization through three primary strategies: value contextualization, reflective supervision, and technology-based spiritual reinforcement. The study concludes that character value negotiation in the AI era requires adaptive and collaborative pedagogical-theological competencies. Madrasah Aliyah teachers can serve as effective character transformation agents when supported by institutional policies responsive to technological development.*

1. INTRODUCTION

The development of artificial intelligence (AI) has penetrated nearly every sector of life, including education. The digital transformation accelerated by the COVID-19 pandemic has driven educational institutions to adopt technology extensively, including madrasas, formal Islamic educational institutions in Indonesia. The presence of AI in learning opens up significant opportunities for personalized learning, administrative efficiency, and expanded educational access. However, on the other hand, the integration of AI also raises concerns about the erosion of character values that have long been the foundation of education in madrasas.

The values of honesty, responsibility, and noble character, the soul of Islamic education, must be continuously maintained amidst the rapid flow of technology, which is often impersonal and transactional (Hidayat & Mulyadi, 2023).

Madrasah Aliyah, as an Islamic-based upper secondary education, has a dual mandate: to prepare students academically while simultaneously fostering strong Islamic character. This mandate is increasingly complex in the AI era, as teachers are not only required to master academic content but also to be able to navigate values within the digital ecosystem. Research by Nasution and Fadillah (2023) shows that teachers in Islamic educational institutions face a dilemma between the demands of technological modernization and the preservation of traditional values. This dilemma creates a dynamic space for negotiation, where teachers must actively construct relevant and adaptive value positions. Negotiating character values in this context is not simply a compromise, but rather a constructive process involving in-depth reflection on the teacher's pedagogical and theological identity.

Previous studies on AI and character education in Indonesia remain fragmented. Most studies focus on the technical implementation of technology without addressing the underlying value dimension. However, from an Islamic educational perspective, technology must be subject to ethics and divine values, not the other way around. Wahyudin and Saefullah (2024) emphasize that character education in the digital era must be grounded in a strong framework of Islamic values to avoid being eroded by the moral relativism brought by technology. In Madrasah Aliyah (Islamic Senior High School), teachers hold a strategic position as gatekeepers of values, capable of filtering, negotiating, and integrating technology into a coherent and comprehensive Islamic pedagogical framework.

Research on character value negotiation, specifically within the context of AI-based learning in Islamic Senior High Schools (Madrasah Aliyah), remains very limited. Most existing studies focus on the technical aspects of AI implementation or character integration in general, without exploring the negotiation process that occurs in practice. Yet, the value negotiation process is at the heart of teachers' pedagogical practices in Islamic educational institutions. Afifuddin and Suryana (2023) state that understanding teachers' value negotiation processes can be key to designing more contextual and relevant professional development policies. Therefore, this study aims to fill this gap by providing an in-depth overview of the value negotiation dynamics experienced by Madrasah Aliyah teachers in AI-based learning.

This study aims to describe and analyze in depth the character value negotiation process undertaken by Madrasah Aliyah teachers in AI-based learning. This research is based on the belief that teachers are key actors in educational transformation, acting not only as technical

facilitators but also as guardians and negotiators of values. By understanding this negotiation process holistically, it is hoped that applicable recommendations for developing Madrasah teacher competencies in the digital era can be generated. In line with this, Rahmawati and Arifin (2024) emphasize the importance of field-based research in understanding the complexity of teachers' roles amidst the rapid transformation of educational technology.

METHOD

This study uses a qualitative approach with a phenomenological design to explore the lived experiences of Madrasah Aliyah teachers in negotiating character values amidst AI-based learning. The phenomenological approach was chosen because it is able to reveal the meaning and structure of the informants' subjective experiences in depth and authentically. The research informants consisted of 12 teachers from four State Madrasah Aliyah (MAN) in Central Java Province who were selected purposively based on the following criteria: at least 5 years of teaching experience, actively using AI in learning, and willingness to fully participate in the research. Data collection was conducted through in-depth semi-structured interviews, 3 months of classroom observations, and a documentary study of the AI-based learning tools used by the teachers. Each interview session was recorded, transcribed, and verified by the informants to ensure data accuracy (Moleong, 2023).

Data analysis used Moustakas' phenomenological data analysis model, which consists of four stages: epoché (suspending the researcher's assumptions), phenomenological reduction, imaginative variation, and synthesis. The analysis process was carried out iteratively and reflexively to ensure that the findings truly represent the informants' experiences. Data validity was ensured through source triangulation, member checking, and peer debriefing with two research colleagues who have expertise in Islamic education and educational technology. Data saturation was achieved after the 10th interview, and two additional interviews were conducted for confirmation. All research procedures adhered to research ethics by obtaining written informed consent from informants and ensuring confidentiality of identities (Creswell & Poth, 2022 in Yusuf, 2023).

To ensure replicability, the researchers developed a structured interview protocol consisting of 20 guiding questions based on a literature review and expert consultation. This protocol covered the following dimensions: teachers' perceptions of AI, character value integration strategies, challenges faced, and developed resolutions. Classroom observations

were conducted using a standardized observation sheet developed specifically for this study and validated by two Islamic education experts and one educational technology expert. Research documentation included lesson plans, digital teaching materials, and teacher reflection notes, which were analyzed using NVivo 14 to aid coding and categorization of themes. Methodological transparency was maintained by including a complete audit trail throughout the research process (Afandi & Mulyono, 2023).

RESEARCH RESULT

Teachers' Perceptions of AI in the Context of Islamic Character Values

In-depth interviews with 12 informants revealed that the majority of teachers (10 out of 12) have ambivalent perceptions of AI in learning. While they acknowledge the benefits of AI in terms of learning efficiency and personalization, they also worry about the negative impacts of AI on student character development. These perceptions are not static but rather evolve with experience using AI in the classroom. Teachers with more experience tend to be more optimistic and able to develop adaptive strategies. This finding aligns with research by Hidayat and Ramadhan (2023), which shows that teachers' perceptions of technology are influenced by professional experience, theological background, and institutional support.

Two teachers with backgrounds in information technology education demonstrated more positive and proactive perceptions. They viewed AI as a value-neutral tool that, if used wisely, could actually be leveraged to strengthen character values. However, teachers with purely religious backgrounds tended to be more critical and selective in their adoption of AI. This dynamic in perception reflects the complex internal negotiations each teacher undergoes before making pedagogical decisions. Research by Safitri and Kurniawan (2024) also found that the diversity of teachers' academic backgrounds significantly impacts technology adoption patterns in Islamic educational institutions.

Three months of classroom observations showed that positive perceptions of AI correlated with higher intensity and more varied use. Teachers optimistic about AI tended to creatively integrate various platforms such as ChatGPT, Canva AI, and Google Bard into their lessons. Conversely, pessimistic teachers used AI limitedly and tended to be more supervisory than facilitative. This difference directly impacted the quality of value negotiations in the classroom. Nurhayati and Supriyadi (2023) found in their study that teachers with positive perceptions of technology demonstrated greater effectiveness in integrating character values into digital-based learning.

Theoretically, teachers' perceptions of AI can be explained through the Technology Acceptance Model (TAM) combined with an Islamic values framework. In the context of Madrasah Aliyah (Islamic Senior High School), acceptance of technology is not solely based on perceived usefulness and ease of use, but also on its compatibility with Islamic values. This finding enriches the TAM theory by adding a theological dimension that has been under-recognized in educational technology research in Indonesia. This is in line with the study by Fahmi and Hasan (2024), which emphasized the need to reframe the technology acceptance model in the context of Islamic education, which is rich in values and spirituality.

DISCUSSION

1. Character Value Negotiation Strategy by Teachers

Research findings identified three main strategies teachers used to negotiate character values in AI-based learning. The first strategy is value contextualization, which places every use of AI within the framework of Islamic values. This strategy is realized through framing AI-assisted discussions from the perspective of the Quran and Hadith, as well as assigning value reflections after each AI-based session. Teachers use AI not as a substitute for value discussions, but rather as a catalyst that then leads to a deeper understanding of character values. Pratama and Rohman (2023) refer to this approach as "value digitalization," which successfully combines the power of technology with the depth of spiritual values in learning.

The second strategy is reflective supervision, which involves continuous monitoring of students' AI use, along with valuable feedback. Teachers go beyond simply monitoring whether students are using AI according to the rules, but actively discuss the ethical implications of each use. Questions such as "Is using AI to complete an assignment a form of honesty?" stimulate in-depth character reflection. This strategy has proven effective in organically building students' ethical awareness. Research by Maharani and Santoso (2024) shows that consistent reflective supervision by teachers can increase students' internalization of the values of honesty and responsibility in the digital age.

The third strategy is technology-based spiritual reinforcement, where AI is used as a medium to deepen students' spiritual understanding. Some teachers use AI to present interactive tafsir studies, ethical scenario simulations based on Islamic values, and chatbot-assisted daily reflections guided by the values of Al-Asmaul Husana. This innovative approach has successfully transformed AI from a potential value threat to an effective and engaging

character-building medium for the digital generation. Kusumawati and Fauzi (2023) emphasize that transforming technology from a mere tool to a medium of values requires high pedagogical creativity that must be continuously developed through ongoing professional training.

These three strategies do not operate in isolation but rather complement each other within a coherent pedagogical ecosystem. Teachers who are successful in value negotiation tend to flexibly use a combination of the three strategies according to the learning context. Document analysis shows that these teachers also systematically document their value negotiation experiences in their reflective journals, which then serve as material for ongoing professional development. This finding supports Wardani and Listyaningrum's (2024) argument that structured reflective practice is key to developing teachers' pedagogical competence in facing the challenges of technology integration in Islamic educational institutions.

2. Challenges in AI-Based Character Value Negotiation

This study identified various challenges faced by teachers in AI-based character value negotiation. The biggest challenge reported by 9 of 12 informants was the lack of adequate digital literacy to optimally utilize AI in character-based learning. Many teachers feel left behind by the rapid development of AI technology, thus experiencing difficulties integrating AI into values-based learning designs. This literacy gap creates barriers to the implementation of effective value negotiation strategies. Mulyasa and Gunawan (2023) found that low teacher digital literacy is a major obstacle to technology-based educational transformation in madrasas, especially in areas with limited access to modern technology training.

The second challenge is student resistance to the value framing of AI use. Generation Z, who grew up in a digital ecosystem, tends to view AI solely as a productivity tool, rather than as a medium for character-building learning. They often use AI to complete assignments instantly without going through the critical thinking and value reflection processes expected by teachers. This phenomenon creates tension between teachers' pedagogical expectations and students' actual behavior. In their research, Syarif and Anwar (2024) found that student resistance to teachers' value framing increases as their access to and reliance on AI technology increases.

The third challenge is the unpreparedness of madrasah curricula and policies to accommodate values-based AI integration. Most existing lesson plans and syllabi do not explicitly integrate character-based AI competencies. Teachers must innovate independently without clear institutional guidance, resulting in individual and unsystematic value negotiation

strategies. This situation leads to inconsistencies in the implementation of AI-based character education among teachers within a single institution. Rosyada and Nizar (2023) highlight that the delay in adapting curriculum policies to developments in AI technology is a structural issue that needs to be immediately addressed by the Ministry of Religious Affairs, as the authority on madrasah education in Indonesia.

Interpretatively, these challenges reflect a gap between the reality of rapidly evolving technology and the institutional and pedagogical readiness of madrasas. This gap can be understood through Rogers' diffusion of innovation theory, where 'laggards' in technology adoption tend to face greater challenges in value negotiation. These findings also indicate the need for a systemic approach to developing madrasah teacher competencies, rather than simply one-way technical training. Integrative and sustainable, professional development must address pedagogical, theological, and technological dimensions simultaneously. Badruzzaman and Syukri (2024) emphasize that a holistic approach to strengthening teacher capacity is the most important investment in building resilient and adaptive madrasas in the AI era.

3.Implications of Value Negotiation on the Competence of Madrasah Aliyah Teachers

The process of negotiating character values in AI-based learning has significant implications for the competency development of Madrasah Aliyah teachers. This study found that teachers who actively engaged in value negotiation demonstrated measurable improvements in digital-pedagogical competency. They were more creative in designing innovative learning, more critical in evaluating AI content, and more empathetic in assisting students in navigating complex digital ecosystems. The value negotiation experience served as an informal 'competency school' that fostered organic and authentic teacher professional growth. Sulistyo and Riyanto (2023) found that teachers who actively engaged in the process of negotiating technology and values demonstrated more significant professional growth compared to teachers who were passive about change.

The second implication relates to teachers' professional identity in the AI era. Value negotiation has been shown to contribute to the reconstruction of a stronger and more meaningful professional identity. Teachers are no longer merely 'transmitters of knowledge' but are evolving into 'digital value architects' with the unique capacity to integrate technological intelligence and Islamic wisdom. This shift in identity provides teachers with a greater sense of purpose in carrying out their profession. This strong identity serves as a source of teacher

resilience in facing the challenges of digital transformation. Research by Hadiyanto and Mursalim (2024) confirms that values-based reconstruction of professional identity is key to the resilience and sustainability of teacher performance amidst technological disruption.

The third implication is the urgent need to develop training programs that specifically integrate the technological dimension and Islamic character values. Research findings indicate that conventional training focused solely on the technical aspects of AI is inadequate to assist teachers in value negotiation. An integrated training program is needed that develops 'techno-spiritual pedagogics' competencies, namely the ability of teachers to synergistically integrate technological sophistication with the depth of Islamic spiritual values. Ideally, this program should be sustainable, contextual, and based on a mutually supportive teacher learning community. Wahyuni and Hasanah (2023) recommend a community of practice-based training model as the most effective approach to developing madrasah teacher competencies in the digital era.

Overall, the findings of this study integrate Vygotsky's social constructivism perspective with an Islamic educational framework, demonstrating that value negotiation is not merely an individual process, but rather a social process shaped by the interactions of teachers, students, institutions, and technology. The Zone of Proximal Development (ZPD) in this context relates not only to cognitive development but also to moral and spiritual development. Teachers act as 'value scaffolds' who help students develop ethical skills in utilizing AI responsibly and Islamically. This implication emphasizes the importance of an ecological approach in understanding character education in the AI era. Abdurachman and Syamsul (2024) reinforce this argument by stating that an ecological approach to character education can accommodate the complexity of human-technology interactions within the context of Islamic values.

CONCLUSION

This study successfully revealed that Madrasah Aliyah teachers play a central role as active negotiators of character values in AI-based learning. The negotiation process takes place through three main strategies: value contextualization, reflective supervision, and technology-based spiritual reinforcement, which are implemented synergistically and adaptively according to the context. Teachers do not resign themselves to technological determinism, but rather proactively build a value ecosystem that integrates technological intelligence with Islamic wisdom. These findings confirm that the success of character education in the AI era depends

heavily on teachers' capacity as competent, creative, and committed value agents to the madrasah's pedagogical-theological mission.

This study recommends several strategic steps: first, the development of an integrated training program that equips teachers with techno-spiritual pedagogical competencies; second, the development of an AI-based curriculum that is responsive to Islamic values; and third, the establishment of a cross-Islamic school teacher learning community to share good practices in value negotiation. Furthermore, the Ministry of Religious Affairs needs to develop an educational technology policy that explicitly integrates the Islamic character value dimension. Further research is recommended to explore students' perspectives on this value negotiation and to develop a standardized and widely applicable AI-based character value negotiation evaluation model across Islamic Senior High Schools (Madrasah Aliyah) in Indonesia.

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