

Directionality Of Madrasah Teacher in the middle of the Artificial Intelligence/AI era (a philosophy review)

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ABSTRACT

Elementary school teachers hold a crucial role in building the foundation of their students' academic knowledge. This is not easy, especially given the increasingly complex challenges facing teachers today, with AI seemingly replacing teachers altogether. This article explores the professionalism of elementary school teachers amidst the onslaught of AI from a philosophical perspective. This perspective not only reveals the essential position of teachers but also examines how teachers must enhance and strengthen their professionalism as educators throughout history, particularly at the elementary school level. This study utilizes library research, using books, journals, and various printed and digital documentation as data sources. The results demonstrate that elementary school teachers face far more complex challenges than those faced by digitalization in previous eras. This pattern increasingly demonstrates the need for teachers to learn more, experiment with new approaches, and develop positive habits as steps to improve the quality of both teachers themselves and the educational institution's ecosystem.

Keywords: Elementary School Teachers, Teacher Professionalism, AI, Experimentation, Ecosystem

Introduction

The era of artificial intelligence (AI) is a time when computer technology is designed to perform tasks that normally require human intelligence, such as recognizing patterns, learning, making decisions, and adapting to new situations. In the field of education, AI began to be implemented in the early 2020s and gained significant attention in 2025 in Indonesia. The application of AI in schools includes the use of adaptive learning systems that can tailor material to individual student needs, the use of learning assistant chatbots, and the automatic analysis of learning outcomes data to assess student progress in real time. This AI era is

marked by increased integration of digital technology in various aspects of learning, from curriculum and teaching methods to school management, with the aim of creating a more personalized, inclusive, and effective learning experience.

Teachers, as central figures in education, have very diverse and essential roles and functions. In general, teachers not only function as instructors who deliver lesson material, but also instill patterns of habits and character that form the foundation for children's future development. The role of elementary school teachers is very complex because they must prepare lessons that touch on cognitive, affective, and psychomotor aspects at the same time, as well as guide students during a very crucial period of development (Fatihah & Maulida, 2023). Today, the challenges faced by elementary school teachers are increasing in line with the rapid changes of the times, especially in the era of the Industrial Revolution 4.0, which requires teachers to master 21st-century learning skills such as creativity, critical thinking, communication, and collaboration. In addition, teachers must also master various basic literacies, including numerical, scientific, information, financial, cultural, and civic literacy, in order to prepare students for a dynamic future (Fatihah & Maulida, 2023).

The real challenges faced by elementary school teachers stem not only from the need to master the curriculum and subject matter, but also from the complexity of students' diverse characters and needs. Teachers must be able to handle students from various social backgrounds and with different psychological conditions, such as students who have learning difficulties or who lack support from their families. In practice, teachers often face obstacles in educating students with learning difficulties, such as a lack of ideal learning time at home and minimal support from parents. This means that the efforts made by teachers, such as providing extra learning hours, sometimes do not produce optimal results.

Moreover, the workload of elementary school teachers is also increasing. They are not only responsible as teachers, but also act as mentors, motivators, caregivers, and sometimes even have to carry out administrative tasks that are quite time-consuming. This heavy workload causes some teachers to feel overwhelmed and experience stress, which affects the quality of their teaching. Many teachers feel that they have lost their role as educators who should focus on the overall development of students (Andalan ATK, 2024). The gap in educational facilities and infrastructure between regions also affects teachers' ability to provide quality education services. Teachers in remote areas with limited facilities have to work harder than teachers in urban areas, so investment and policies are needed to ensure equal access to and quality of education (Fatihah & Maulida, 2023).

The professionalism of elementary school teachers is an important issue that needs to be considered. Teachers, as professionals, are required to master four main competencies, namely pedagogical, professional, personal, and social, in accordance with the standards set by the government. This professionalism is not only related to mastery of subject matter and teaching methods, but also includes exemplary attitudes, integrity, and the ability to communicate effectively with students, colleagues, and parents (Sukmawati, 2023). The reality on the ground shows that although some elementary school teachers are certified and

perform their professional duties well, many still need improvement, particularly in technology mastery and continuous self-development (Daeng Manompo, 2024).

The challenges in elementary school teacher professionalism are also related to the demand to continuously adapt to the rapid development of science and technology. Teachers must be able to utilize technology as a learning tool to improve the effectiveness of the learning process. On the other hand, teachers are also faced with declining moral values in society, so they are required to be agents of character building who strengthen students' moral values and personalities so that they remain honest and have good social skills (The Urgency of Teacher Professionalism, 2025).

Dynamic and rapid changes in the curriculum require teachers to constantly update their teaching methods and materials to ensure they remain relevant and in line with the needs of the times. However, not all teachers have equal access to adequate professional development training, resulting in disparities in teaching quality among teachers (Intan Heldayani, 2024). Stress and high workloads further exacerbate this situation, with many teachers experiencing burnout, which leads to a decline in performance and a decrease in the quality of education received by students (Intan Heldayani, 2024).

According to the journal "The Importance of Applying Educational Philosophy by Elementary School Teachers" (2025), teachers not only serve as instructors, but also as builders of character and morals who are capable of bringing about social transformation at the elementary school level. The application of various perspectives of educational philosophy, such as progressivism, idealism, essentialism, and perennialism, helps teachers create a learning process that strengthens students' critical thinking, reflective, and integrity skills. Teachers who master educational philosophy will be able to organize meaningful, value-based, and future-oriented learning so that students can grow holistically, not only intellectually, but also emotionally and socially in a balanced manner.

Meanwhile, the journal "The Role of Teachers" states that mastery of educational philosophy helps teachers understand the essence of educational goals and design learning processes that are not only oriented towards mastery of material, but also towards character and creativity development. The philosophy of education provides a theoretical basis that encourages teachers to implement various innovations in learning according to student needs, manage classrooms effectively, and use technology wisely. This will contribute to improving teacher professionalism, which is essential to ensuring holistic and sustainable quality education.

Educational philosophy emphasizes the role of teachers as moral and social role models. A teacher must be able to model good behavior, increase empathy, and respect the diversity of students in order to create inclusive education. Teachers become the center of shaping a school culture that supports the values of justice, tolerance, and cooperation among students. With this approach, the learning process becomes an effective means of instilling the noble values of the nation while developing the individual potential of students in accordance with the ever-changing world.

The application of educational philosophy also teaches teachers the importance of active involvement and a holistic role in guiding students. Teachers must be able to combine cognitive, affective, and psychomotor aspects in daily learning so that students not only master knowledge but also have the character, attitude, and life skills to compete in the future. This attitude requires teachers to constantly innovate, be flexible, and be reflective of their teaching practices so that the learning process is meaningful and in line with local and global needs.

Research by Zulfa et al. (2025) shows that the application of AI in Islamic religious education contributes positively to improving teacher competence, especially in terms of creativity in classroom management and the use of digital learning media. Although AI has not completely replaced the role of teachers, its application has empowered teachers in facing the modern world of learning. On the other hand, research from the Ministry of Religious Affairs of the Republic of Indonesia (2024) highlights the importance of madrasah teachers' readiness in facing the challenges of AI, particularly in improving digital competence and the ability to manage students' increasingly advanced critical thinking skills. This study emphasizes that training and supportive policies are needed so that teachers can carry out their roles as educators and mentors to the fullest without losing their religious identity and character values.

A comparison of the two studies shows that although AI plays a significant role in assisting the learning process, the professionalism of madrasah teachers must be developed holistically. Teachers need to combine digital technical skills with a philosophical foundation in education that emphasizes moral and social roles, so that learning is not only academically effective but also capable of shaping the character and personality of students as a whole. Therefore, this study is very important as an effort to examine and formulate the direction of madrasah teacher professionalism in the era of AI from the perspective of educational philosophy. This study is expected to provide a strategic overview of how madrasah teachers can integrate artificial intelligence technology with strong religious values and character, thereby producing meaningful learning that is relevant to the needs of the times while maintaining the identity of madrasah education.

It is an introduction of the article (level one headings). The article structure contains (a) Title; (b) Author(s) name, affiliation, and email address of corresponding author; (c) Abstract; (d) Keywords; (e) Introduction); (f) Method; (g) Findings; (h) Discussion; (i) Conclusion); (j) Acknowledgements; (k) Funding; (l) References; and (m) Appendices (if any). Therefore, the article should clearly describe the background of the subject, the author's work, including the method used, results, and concluding discussion on the importance of the work.

Method

This study uses a qualitative approach with a literature study method that involves collecting data from various written sources such as books, articles, and documentation on various internet platforms. The literature method was chosen because it relies on literature as the main source of data, including books, journals, magazines, research reports, theses, dissertations, and reliable online

sources. The research process includes collecting materials, reading deeply to find relevant ideas and information, taking notes, and processing these notes for analysis and compilation into conclusions in the form of a research report.

Research Procedure

The research began with the collection and selection of literature relevant to the research topic. After that, the reading materials were studied carefully to gain a comprehensive understanding. Next, the researchers made important notes which were then analyzed using content analysis, narrative analysis, meta-analysis, or comparative analysis techniques as needed. The results of the analysis were systematically organized to support the discussion and conclusions of the research.

Data Sources

Data was obtained from books, journals, articles, research reports, dissertations, and reliable online sources relevant to the topic.

Data Collection Techniques

Literature Study: Data collection was conducted by accessing various written sources, both printed and digital, related to the research topic as the main material for analysis.

Data Analysis Techniques

1. Content Analysis: Identifying themes and patterns from the collected literature.
2. Narrative Analysis: Describing and interpreting the content of the literature in depth.
3. Meta-analysis: Combining the results of various previous studies to find consistencies and differences.
4. Comparative Analysis: Comparing data from various sources to gain a broader and deeper understanding.

Results

The AI Era and Its Challenges for Primary Education

The rapid development of artificial intelligence (AI) in basic education is often praised as a promising revolution that will bring personalization and efficiency to learning. However, this optimistic narrative often obscures the reality of acute technological access gaps, especially in 3T (underdeveloped, frontier, and outermost) regions, where digital infrastructure is still far from adequate. Can AI truly contribute to educational equity if most students do not even have basic access to devices and internet connectivity? This raises profound questions about the inclusivity and fairness of education in the digital age (Kemenag Lampung Timur, 2024; UPY, 2025).

In addition, increasing dependence on technology also carries the risk of eroding humanistic values in basic education. AI, despite its sophistication, cannot replace the role of teachers in building empathy, morality, and social interaction, which are crucial in shaping children's character. Does the dominant shift towards the digitization of learning have the potential to reduce the quality of character education, which has been the main strength of basic education? This question must be the focus of intellectual reflection in every implementation of technology in the classroom (East Lampung Ministry of Religious Affairs, 2024).

Furthermore, reliance on AI without systemic support in the form of teacher training and adequate infrastructure provision has the potential to exacerbate educational inequality. Ideal collaboration between schools, the government, and stakeholders is a necessity, but have real commitments and implementation in the field been adequate? If not, AI in education risks becoming merely a technological showpiece without any substantive contribution to the quality and equity of education (Tridharma Dimas, 2024).

The Essence of Elementary School Teachers

The philosophy of education places elementary school teachers at the center of individual transformation, not only as conveyors of material, but also as shapers of morals and character. However, in practice, the role of teachers is often reduced to merely facilitating technology and managing the curriculum, neglecting fundamental social-emotional dimensions. This criticism reminds us that what is the meaning of "holistic education" if teachers lose their humanistic touch and ability to nurture character due to the pressure to use technology alone (Meri & Mustika, 2022).

An understanding of the ontology, epistemology, and axiology of education should equip teachers with a holistic view of students and the learning process. Unfortunately, the lack of philosophical training for teachers often renders this insight mere rhetoric without real implementation. This calls for an in-depth evaluation of how the teacher education curriculum is designed so that it does not only produce teaching technocrats, but also educators who act as agents of value formation (Amri, 2009; Mustadi, 2015).

More critically, the paradigm shift of teachers from "main instructors" to "technology facilitators" must be monitored so as not to erode the authority and creativity of teachers in educating. Teachers need to be revitalized as moral and social mentors with integrity, refusing to become mere "operators" of technology who lose sight of the essence of basic education in educating the whole person.

New Approaches

The paradigm shift in education from conventional models to interactive learning Technology-based education requires teachers to become not only users but also developers of new pedagogical strategies. However, this change is often interpreted superficially as mere digitalization, without addressing the true substance of education. When teachers are caught up in the euphoria of technology, the greatest risk that arises is the reduction of the meaning of education to merely operating digital devices. As Asniar (2020) argues, teachers who lack critical pedagogical awareness tend to view technology as a substitute

tool, rather than a means of emancipating learning. Therefore, educational reform should not stop at technical innovation, but rather be directed at strengthening teachers' reflective and ethical abilities in humanizing the learning process.

New approaches to education should be rooted in the dialectic between Innovation and values. Teachers who continually experiment without a clear philosophical framework are likely to lose their way in constructing meaningful learning. True experimentation is a critical act, not simply trying something new. Tridharma Dimas (2024) emphasizes the importance of reflection in every pedagogical innovation, so that teachers do not become trapped in mechanistic reproduction of methods. This means that technology should be a space for intellectual liberation—not a substitute for the teacher's moral role, but rather an enhancement of their capacity to guide students to think, ask questions, and evaluate independently.

Furthermore, a new approach demands teachers' courage to challenge the hierarchical and bureaucratic education system. In this context, teachers must be agents of change capable of negotiating technology with humanitarian values and social justice. Education policies that overemphasize digital transformation without considering ethical and social aspects will reinforce dehumanization in education (PPG Dikdasmen, 2024).

Therefore, a new approach should be oriented toward the humanization of technology making digitalization a space to expand freedom of thought, not to standardize the creativity of teachers and students.

Strengthening Positive Habits

Positive habits like reading, critical thinking, and imagination are not just learning activities, but rather a form of resistance to the increasingly instant and passive culture of the digital age. Teachers have a moral responsibility to ensure that these habits are not lost amidst the rapid but shallow flow of information. Ilmi et al. (2017) show that learning that fosters critical thinking habits can only be formed when teachers facilitate a discursive space where students can question and construct their own knowledge. Thus, building positive habits means training students to not only "know" but also "be aware" of why and why they are learning.

However, this process will not be successful if the teachers themselves do not internalize it. Reflective habits. Teachers who solely emphasize reading routines without contextualizing their meaning risk instilling a mechanistic learning culture. Pratiwi et al. (2021) assert that learning habits unconnected to the social meaning and ethics of knowledge will only produce obedient students, not free thinkers. Therefore, building positive habits must be seen as an ideological process—an effort to instill critical awareness of knowledge, not merely an instrumental habit.

In the context of national education, strengthening positive habits should also be can be read as a resistance strategy to the humanitarian crisis in the modern education system. Literacy, imagination, and critical thinking are the foundation for a generation capable of negotiating technological advances without losing their human roots. Ruangguru (2025) highlights that digital literacy without moral literacy will only produce a generation of technocrats

without empathy. Therefore, teachers need to ensure that positive habits not only shape intellectual skills but also build character rooted in ethical awareness and social responsibility.

Conclusion

Elementary school teachers hold a fundamental responsibility in building the scientific, moral, and spiritual foundations of their students from an early age. Amid the advancement of technology and the rise of Artificial Intelligence (AI), the teacher's role cannot be replaced but rather must evolve. Teachers are required not only to act as transmitters of knowledge but also as moral guides, facilitators of critical thinking, and preservers of humanity within the learning process.

The emergence of AI brings a dual impact: on one hand, it enhances the efficiency and accessibility of education; on the other, it risks diminishing the humanistic essence of learning if not accompanied by the teacher's wisdom and ethical reflection. Therefore, the professionalism of elementary school teachers should aim at balancing technological mastery with ethical and spiritual awareness. Teachers must cultivate a philosophical understanding of their identity as educators whose mission is to humanize students, not merely to transfer information.

This study reveals that in facing the challenges of the digital and AI-driven era, elementary school teachers must continuously learn, experiment with innovative pedagogical approaches, and nurture positive habits that support their professional growth. These efforts not only contribute to the personal development of teachers but also to the improvement of the broader educational ecosystem. Thus, the direction of teacher professionalism in the era of AI must be grounded in the balance between technological competence, humanistic values, and sustained philosophical reflection as the foundation for building meaningful and character-oriented education.

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