Strategy of islamic boarding school-based in facing the era of revolution 4.0 towards the era of society 5.0

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Abstract: This research is motivated by the importance of Islamic boarding school based education in Madrasah Ibtidaiyah to safeguard the next generation from the influence of globalization and the revolutionary era, and also as a platform for preparing them with knowledge of both religious and general subjects. Madrasah Ibtidaiyah is an education level equivalent to Elementary School in an Islamic Educational Institution, where the learning process is conducted formally and instills strong Islamic values. Madrasah Ibtidaiyah NWDI Nurul Haramain is one of the Islamic boarding school based schools whose presence can address parental concerns about moral disruption and technological advancements in the globally revolutionary era. The aim of this research is to investigate the development of Islamic boarding school based madrasah as an effort to face the challenges of the era 4.0 towards the era of society 5.0 at MI NWDI Nurul Haramain, marked by rapid and transformative technological advancements that require educational institutions like madrasah to adapt to various changes to remain relevant and effective. The researchers utilized a descriptive qualitative approach in conducting the research. Data was collected through non-participative observation, documentation, and interviews to gain a comprehensive understanding of the current situation of the madrasah and the challenges faced in confronting the era 4.0 towards the era of society 5.0. Data analysis employed the techniques of Miles and Huberman, focusing on data reduction, data presentation, and drawing conclusions. The research findings indicate that MI Nurul Haramain; 1) prepares madrasah teachers to possess digital skills, creative thinking, innovativeness, dynamism, and Quran memorization as a reinforcement, 2) conducts both intracurricular and extracurricular activities for students, and 3) integrates technology as a tool for teaching and learning activities.
Keywords: Madrasah, islamic boarding school, era 4.0.

Introduction

Education has become an essential necessity for individuals in society, both in the present and the future. Through education, the quality and capacity of human beings in processing and learning can be enhanced. The educational process undertaken by individuals has the potential to change mindsets and lead them towards a better life (Suryadi & Wike Silfia, 2019). As technology and time continue to advance, the need for knowledge among individuals will increase. This requirement extends beyond general knowledge to encompass religious knowledge, which plays a crucial role in understanding and adapting to various technological advancements in the current era. Moreover, religious knowledge is essential to fortify individuals against negative influences caused by technological and temporal developments, allowing them to uphold moral and religious values.

In the beginning, Islamic religious education was conducted in Islamic boarding school or mosques. As stated by Suryadi and Wike (2019), before the year 1900 Masehi, Islamic education took place traditionally in the form of surau/langgar and Islamic boarding school. Over time, Islamic boarding school has shown continuous development, providing significant benefits and influence in the midst of current life and education. With the existence of Islamic boarding school, many people come from distant places to seek religious knowledge, seeking blessings from the kiyai (religious teachers), and expecting various benefits and virtues present within the Islamic boarding school environment. The dormitory serves as the living quarters for the students provided by the Islamic boarding school's leadership, typically comprising several rooms housing around 10 to 20 students (Fahham, 2020). This environment reflects a social life that emphasizes good manners, moral character, and virtuous behavior while deeply engaging in religious studies. Thus, from Islamic boarding school, Islamic leaders are born who have the potential to transform the world towards a better direction.

Islamic boarding schools have become traditional educational institutions that play an important role in moral and intellectual development in Indonesia. However, with the emergence of the Industrial Revolution 4.0 era, which is marked by technological advances and digitalization, Islamic boarding schools face new challenges. This era demands the adoption of new technology, digital transformation, and the development of new skills for students. There is a lack of research on the digitalization of Islamic boarding schools, so much research on Islamic boarding schools focuses more on traditional aspects such as religious education and character formation. However, research on how Islamic boarding schools can adopt digital technology is still limited, so management and leadership strategies in the digital era are linked to effective management and leadership for Islamic boarding schools in facing the challenges of the digital era. There is a need to develop a leadership model that is relevant to the Islamic boarding school context in the 4.0 era. How Islamic boarding schools can equip students with relevant skills for the digital era, such as digital literacy, coding, and critical thinking skills needed in Revolution 4.0. This can certainly have a good impact on student development so that students will be able to make a significant contribution in preparing Islamic boarding schools to face the era of the Industrial Revolution 4.0 and improve the quality of education in Islamic boarding schools so that they are more relevant to the demands of the times. The implementation carried out by MI NWDI Narmada continues to provide new things to prepare students in the Islamic boarding school-based school environment to be able to develop skills, abilities and sufficient provisions for them in the future.

Changes occurred in the 20th century, marked by the emergence of modern Islamic educational institutions in the form of schools or madrasah with distinct Islamic characteristics (Suryadi & Wike Silfia, 2019). With the continuous advancement of technology and time, the educational curriculum has been further developed. Educational institutions, especially Islamic boarding school, also began incorporating general knowledge subjects into Islamic-based schools, commonly known as madrasah, which are still integrated with the Islamic boarding school, system. Madrasah, particularly in Indonesia, is recognized as a public school with a curriculum that includes Islamic subjects. The term "Madrasah" originates from the Arabic word "darasa," (Wikipedia). The concept of Madrasah as an Islamic educational institution became known during the leadership of Nizam al-Mulk in Baghdad around the 5th-6th Hijri century or the 11th-12th century AD. Initially, education was conducted traditionally in mosques and daral-khuttab, it was established in madrasah by the government during that era. In the Indonesian dictionary, "madrasah" is defined as a school or educational institution based on the Islamic religion (KBBI online).

In the present era, numerous educational institutions have been established, both public and private, including general schools and religious-based madrasah. Education provided in madrasah is crucial for a child's development and has a significant influence on an individual's life, especially in the era of industrial revolution. This period is marked by the gradual erosion of moral and religious values due to the rapid advancements in technology and the modern age. Children's interactions have become

increasingly difficult to control with the rise of social media, exposing them to negative influences that are challenging to regulate effectively. The concept of the fifth industrial revolution (Industry 5.0) represents a refinement of the fourth industrial revolution (Industry 4.0). Industry 5.0 emphasizes the integration of advanced technologies such as AI, IoT, and robotics with human expertise and innovation to drive the development of more efficient, flexible, sustainable production systems that enhance well-being. Unlike the focus of Industry 4.0 on replacing human labor with machines or robots, Industry 5.0 aims to simplify and accelerate human work. Machines or robots cannot work optimally without human intervention or expertise. History records that only intelligent individuals who can grasp the spirit of the times, adapt to and remember every era, in accordance with its developments and dynamics (Ahmad, 2018).

Arifin's previous research results (2020) entitled Digitalization of Curriculum in Islamic Boarding Schools: Case Study in Modern Islamic Boarding Schools. This research discusses how a modern Islamic boarding school integrates digital technology in its curriculum. The research results show that the use of technology in teaching can increase students' learning motivation and prepare them with relevant skills for the digital era. Research conducted by Wahyu & Putra (2021) related to Islamic Boarding School Collaboration with the Technology Industry: Models and Practices. This study examines collaboration between Islamic boarding schools and the technology industry to support digital transformation. The research results show that this kind of collaboration can provide many benefits, including access to the latest technology and relevant training programs. Then research conducted by Hakim (2021) Transformational Leadership in Islamic Boarding Schools: Adaptation to the Industrial Revolution 4.0. This research analyzes the transformational leadership model applied in several Islamic boarding schools in order to face technological change. The results show that visionary and innovative leadership is very important to encourage technology adoption in the Islamic boarding school environment. These studies provide an in-depth view of various aspects of Islamic boarding school strategies in facing the Industrial Revolution 4.0 era and can be used as a reference in developing more effective strategies in the future.

The rapid technological advancements in the era of Industry 5.0 have brought significant impacts to various sectors of life, including the field of education. The transformation of technology and paradigm shift in this era demand educational institutions to continuously adapt and innovate to remain relevant and effective in providing quality education. One particular form of education under the spotlight is the madrasah, especially the madrasah ibtidaiyah based on Islamic boarding school. MI NWDI Nurul Haramain, as one of the Islamic boarding school based madrasah, is not exempt from facing various challenges and dynamics in confronting the era of Industry 5.0. This era marks fundamental changes in how people interact with technology, and the increasing use of information and communication technology by society. These changes require madrasah to address shifts in learning approaches, school management, and the utilization of technology in the educational process. Education in Islamic boarding school based madrasah has its own distinctive characteristics, integrating religious education with general education to shape students' noble character. However, in facing the era of Industry 5.0, madrasah need to consider how to combine traditional values with innovation to meet the increasingly complex and diverse educational needs. The emergence of Society 5.0 is expected not to alter the role of a teacher or educator in madrasah when imparting moral education and setting examples for students.

This research is the first to explore how Islamic boarding school-based madrasas, especially MI NWDI Nurul Haramain, develop strategies in facing the Industrial Revolution 4.0 era. This research focuses on Madrasah an Islamic Education Institution, Madrasah Education in the Society 4.0 and 5.0 Era, Madrasah Preparation for the Society 5.0 Era which has not been widely discussed in previous literature. With this approach, the research is expected to provide a comprehensive picture of how MI NWDI Nurul Haramain develops effective strategies in facing the Industrial Revolution 4.0 era and

towards a more advanced digital era. This research also aims to be an important reference in developing digitalization strategies in other Islamic boarding school-based madrasah.

The presence of madrasah, which are on par with formal education, has become the choice of parents in various aspects, including character education, morals, and Quran memorization (tahfiz). This is evident from the increasing enthusiasm of the community towards education, which is experiencing changes and influenced by globalization, technology, social interactions, and the environment. These factors have led madrasah to be seen as a solution to open parents' perspectives, assuring them that their children can compete with advanced education. MI NWDI Nurul Haramain is the first madrasah ibtidaiyah under the auspices of the Nurul Haramain NWDI Narmada Islamic Boarding School Foundation. It was established in 2016 to nurture children in Islamic education, Quran memorization, and boarding school life. (Mutawalli, interview, 2024). The student's study, participate in activities, performances, reside, socialize, and learn religious knowledge together with their peers, all while being independent and adhering to discipline and rules, away from their parents but still guided by teachers. Living in the Islamic boarding school and asrama enables better control over their activities and interactions. MI NWDI Nurul Haramain stands as one of the Islamic boarding school based madrasah in NTB (West Nusa Tenggara). Its extracurricular, cocurricular, and cultural activities are excellent attractions for the community, resulting in an increasing number of applicants each year.

MI NWDI Nurul Haramain has experienced rapid growth since its establishment, starting with 34 students and currently reaching 150 students from various regions in NTB (West Nusa Tenggara). The students at MI NWDI Nurul Haramain are a mix of boarding students and full-day students. The educational system requires students in grades IV, V, and VI to stay in the boarding school, while students in grades I, II, and III are not obligated to do so but are allowed if they wish to. MI NWDI Nurul Haramain continues to run successfully until today, evident from the numerous achievements it has earned not only in religious fields but also in non-academic and academic domains, often securing champion titles. The school proudly displays certificates and trophies as evidence of these achievements (Mutawalli, interview, 2024).

From the initial observations, the researchers obtained information that MI NWDI Nurul Haramain is one of the Islamic boarding school madrasah established based on the community's request for children to deepen their Quran memorization, religious knowledge, and be able to compete at the global level. The madrasah aims to nurture students who can withstand the challenges of life with strong faith and utilize the Quran as their guidance, while also preserving their morals unaffected by negative behaviors and environments. In the execution of this research, the researchers will delve deeply into the information regarding the practices applied at MI NWDI Nurul Haramain in facing the era of Industry 5.0 within the Islamic boarding school environment. The research aims to understand how this madrasah adapts and innovates its learning approaches, school management, and the utilization of technology in the educational process to remain relevant and effective in facing the challenges of this advancing era.

The presentation above concludes that the community is highly interested in education provided by Islamic boarding school based madrasah, where students reside, receive teachings, and are guided by the Islamic boarding school administrators during their elementary school years. This phenomenon can be attributed to the fact that education has become a primary focus, continuously explored and pursued, to acquire knowledge that will be essential in facing the challenges of globalization. The hope is that students will possess sufficient knowledge and preparation to confront the changes and challenges of the world they will encounter in the future. The importance of this educational process lies in the fact that children are nurtured, educated, and instilled with learning habits from an early age through repeated teachings and daily practices within the madrasah environment at the Islamic boarding school. This approach aims to provide students with a strong foundation to tackle the challenges and transformations they may encounter in their lives.

Therefore, this research answers questions related to the problem formulation of how collaboration between Islamic boarding schools and the technology industry can support digital transformation in Islamic boarding schools and what challenges and opportunities are faced by Islamic boarding schools in the digitalization process. Digitalization allows students to access a wider and more varied range of learning resources via the internet, including e-books, learning videos and online courses. The use of technology allows the development of more innovative and interactive learning methods, such as project-based learning, e-learning, and the use of educational applications. With close collaboration between Islamic boarding schools and the technology industry, the digital transformation process in Islamic boarding schools can run more quickly and effectively, as well as providing significant benefits for the entire educational ecosystem in Islamic boarding schools. It is hoped that this research can provide a comprehensive picture of how Islamic boarding schools can develop effective strategies in facing the era of the industrial revolution 4.0 and towards a more advanced digital era.

Method

This research employs a qualitative descriptive approach because the researcher aims to understand complex issues related to the studied object. The focus is to gain in-depth insights and systematically depict the facts observed in the field, presented in the form of descriptions. Purposive sampling is utilized in this study as it allows the researcher to select specific data sources based on certain considerations. Purposive sampling is used to select Islamic boarding schools that have certain characteristics such as having adopted digital technology, being in the process of digitalization, or having the potential for digitalization. This is done to gather information from various informants and to explore multiple aspects that contribute to the emergence of theories (Sugiono, 2015). Additionally, purposive sampling is chosen to ensure that the data collected aligns with the researcher's specific interests.

Data analysis follows the Miles and Huberman technique (Sugiono, 2015), which is a method of analyzing qualitative data. The data collection techniques include observation of the school's condition, documentation to complement the data, and conducting interviews with various supporting sources in the school (Basrowi & Suwandi, 2008). The interview instrument was used to obtain more in-depth qualitative data regarding views, experiences and hopes regarding the application of technology in Islamic boarding schools. The subjects are teachers, students, santri with a semi-structured format to provide insight in exploring relevant topics using audio recordings for interviews which will be transcribed later. Then documentation to collect and review related documents such as curriculum, policies, activity reports and digital learning materials. With this systematic approach, the research is expected to provide a comprehensive and in-depth picture of Islamic boarding school strategies in facing the Industrial Revolution 4.0 era and towards a more advanced digital era.

Results and Discussion

Madrasah an islamic education institution

In an institution, it is not only about providing general education, but also instilling religious values so that it becomes a fortress to prevent students from engaging in actions that violate Islamic principles. The term "Islam" in Islamic education also indicates the specificity of such education, where Islamic education stands out (Ahmad Tafsir, 2010). Behaviors can be observed in this era of advanced technology, where despite technological advancements, there is a loss of morality, commonly known as moral disruption. The presence of Islamic education carries the responsibility of providing guidance, counseling, and direction to the potential of children, so that they can fulfill their roles (Jalaludin, 2010). This is reflected in the government regulation (PP) No. 55 of 2007 concerning Religious Education and Affairs.

MI NWDI Nurul Haramain is a formal educational institution located in a very geographical setting, serving as an educational center despite being surrounded by local rice fields. With a moderate

climate and situated in a Islamic boarding school environment, the teaching and learning process can be carried out effectively. The supportive environment will have a positive impact on the students, and even the surrounding rice fields can serve as a place to broaden their thinking horizon and provide opportunities for direct practical learning experiences.

Education in Islamic boarding school based madrasah has its own distinct characteristic, which is the integration of religious education with general education to shape students' character with noble morals. However, in facing the 5.0 era, madrasah need to consider how to combine traditional values with technological innovations to respond to the increasingly complex and diverse educational needs. Islamic education aims to prepare individuals to become stewards of the Earth, tasked with preserving nature and creating social welfare (Sutiawan & Hamdarida, 2023). The goal of MI NWDI Nurul Haramain's establishment is to produce students who are capable of memorizing the Quran. The availability of facilities and infrastructure supports adequate teaching and learning activities to achieve optimal support for effective and efficient learning. The educational staff must meet the set standards to support the realization of effective and efficient teaching and learning activities with maximum results. Each component's main tasks and functions must be implemented, and human resources in MI NWDI Nurul Haramain should be equipped to support the future development of the world.

From the observation results, researchers found that parents with various professions such as teachers, traders, laborers, craftsmen, and others choose the Islamic boarding school based elementary Islamic school (Madrasah Ibtidaiyah) at MI NWDI Nurul Haramain to entrust their children's education. In facing the 4.0 era, it is a collective responsibility, including educational institutions like madrasah, to carry out the mandate and obligations stipulated in Law No. 20 of 2003, aimed at developing the potential of Indonesian human resources and equipping them with various competencies.

Here are some interview results with parents who entrusted their children to MI NWDI Nurul Haramaian. One of the parents is Ika Ratna Dewi, who acts as the guardian of students in classes I & IV at MI NWDI Nurul Haramain. She stated that:

"I chose MI (Madrasah Ibtidaiyah) and specifically MI Nurul Haramain. The main reason, and also the hope of every parent who sends their child to a boarding school- based school, is that my child will receive and be taught more about Islamic values. At MI NWDI Nurul Haramain, there is also a program called 'Wafa' aimed at improving the quality of students in reading the Qur'an. So, after completing the 'Wafa 8' program, the children are encouraged to memorize the Qur'an. It's not just about memorization; they also learn the correct way to recite the Quran (both the pronunciation and the rules of recitation). I want to see them become independent, but I believe every child attending MI and being boarded here has parents who want them to become independent from an early age. And now, it's evident that my child's Qur'an recitation is better than mine." (Ika, Interview, March 13, 2024).

Suriani, the parent whose two children have already graduated, and the youngest is currently in third grade, also chose to send her child to MI NWDI Nurul Haramain. She stated,

"I enrolled my child there because of the emphasis on religious education. While at home, my child spends most of the time playing, and as parents, we tend to fulfill their wishes. However, at the boarding school, the children learn a wide range of skills, as I have been informed by their teachers. My child can now read the Qur'an fluently and confidently. Apart from religious education, they are also provided with a foundation in general knowledge because we, as parents, are uncertain about how long we will be able to guide them. At MI NWDI Nurul Haramain, the children are thoroughly prepared to face the challenges of their future in the outside world, where competition is fierce, and their religious knowledge will serve as their guiding light. I firmly believe that character education is effectively instilled in children within the boarding school environment. So, I allow them to encounter whatever they may face outside because it reflects the reality. Within the boarding school, they learn discipline, experience both successes and setbacks, and deal with various challenges, and these experiences will also be valuable for their lives beyond the boarding school." (Suriani, Interview, Feb 20, 2023).

The motivation held by Ika Ratna Dewi shares similarities with Suriani's motivation. They both desire for their sons and daughters to acquire a strong foundation in religious knowledge as they face their future lives, as this will enable them to make the Quran their guiding principle. Furthermore, they have hopes that their children, as the future generation, can confront the challenges of an ever-expanding world while steadfastly adhering to their principles and the religious knowledge they possess. Naturally, they also hope for their children to become righteous individuals, both boys and girls.

Faridawati Wardani, as a parent whose child graduated in 2023, expressed the following about her decision to enroll her child in MI NW Nurul Haramain:

"I chose to send my child to MI NW Nurul Haramain because I saw that the school and its educational system are excellent for children. I also decided to have my child stay in the boarding school to foster independence, and I have noticed significant positive changes in my child since they started boarding there. Before attending the boarding school, my child struggled with reading the Qur'an, but after boarding, alhamdulillah, they can now read fluently. They even had the honor of representing the school in a recitation competition at the district level for MI schools in Narmada and won second place. Moreover, MI NWDI Haramaian has high-quality educators who guide and educate the children diligently. As parents, we are not worried about the influence of globalization and rapid technological advancements because MI NWDI Nurul Haramain prepares the children to face such challenges." (Faridawati Wardani, Interview, March 22, 2024).

Rochayati, a parent who sent her child to board at MI NWDI Nurul Haramain from grades 1 to 6, also expressed the same sentiment. She stated:

"The education that my child receives at MI NWDI Nurul Haramain aligns with my beliefs, and I firmly believe that this is the best MI school. With the rapid advancement of technology, I certainly have concerns, but I am confident that if my child already knows Allah and His Messenger, they will be safe in this world and the hereafter, and that is what I have found in this MI school. The children are nurtured and educated in a wonderful manner, and in addition to that, they have plenty of activities. The boarding school environment does not make them feel bored because they have many friends and siblings." (Rochayati, Interview, Feb 23, 2023).

Irma Suriani, as the parent of a third-grade student at MI NWDI Nurul Haramain, also expressed her views:

"I chose MI NWDI Nurul Haramain because of its excellent religious education. The children are instilled with religious knowledge from a young age. If I were to send my child to a regular school outside, and not boarding here, there would be more time for them to use gadgets at home. So, I chose MI NWDI Nurul Haramain because they have a full school day focused on learning, especially religious studies. I have observed positive changes in my child's daily activities, such as their prayers, studies, memorization of prayers and the Quran. They quickly absorb the learning because at MI NWDI Nurul Haramain, teaching is implemented through repeated practice and reinforcement every day. Currently, the thing that worries me the most is gadgets, as if they are not controlled, children may not be able to choose what is appropriate for them to see. They absorb everything that comes out of their headphones, and it is very dangerous for us as parents." (Irama Suriani, Interview, Feb 20, 2023).

The hopes expressed by these parents paint a picture of how madrasah, as a religious school, is often chosen as a place to educate children amidst the development and influence of globalization and technology. This also indicates that the role of education in a boarding school-based madrasah has a significant impact on both students and parents. The activities conducted within the boarding school environment encourage independence in children, limit gadget influences, and are conducted under the guidance of capable, active, nurturing, and tech-savvy teachers who understand the developments in the era of 4.0 to 5.0. Teachers in these schools are technologically literate and prepared to participate, bringing significant influence to the children in madrasah-based boarding schools. The education provided in the boarding school setting affirms that future leaders can emerge from madrasah. Furthermore, the integration of robotic technology with human skills and innovations can drive the development of more efficient, flexible, sustainable production systems, ultimately enhancing well-being. While the era of Industry 4.0 emphasized the potential for machines or robots to replace human labor, the era of Industry 5.0 aims to facilitate and accelerate human work. Machines or robots cannot function optimally without the intervention or expertise of humans. History has shown that only intelligent individuals can read the spirit of the times, endure, and be remembered in every era, adapting to the development and dynamics that accompany it.

Madrasah education in the society 4.0 and 5.0 era

The development of technology and teaching methods in the 4.0 era has also progressed. The Society 4.0 era is characterized by the advancement of information and communication technology, which involves active human participation. In this era, one noticeable development is the widespread presence of the Internet of Things (IoT) in various aspects of society's life. In the field of education, we can observe that the utilization of Information and Communication Technology (ICT) and curriculum

changes become necessary efforts to be made in response to this era. Preparing internet access and computer devices, which have become essential tools for the teaching and learning process, is crucial. Initially, madrasah conducted face-to-face learning, but in the 4.0 era, it can also be facilitated through digital means, such as online or virtual learning, with the assistance of social media platforms that support online implementation. This demonstrates that changes and advancements will continue to unfold, and madrasah must a dopt a proactive approach in preparing for these transformations.

The development stemming from the Industry 4.0 revolution, which is perceived to potentially diminish the role of humans and be technology-driven, is now known as the Society 5.0 era. With this new concept, Society 5.0 represents a human-centric and technology-based society developed by Japan. Through Society 5.0, Artificial Intelligence (AI) will transform the big data collected through the internet in all aspects of life into a new wisdom that is dedicated to enhancing human capabilities and creating opportunities for humanity. (Yamani & Jamil, 2022). The concept presented by Japan aims to address human challenges in facing the Industry 4.0 revolution, so the benefit of this society lies in allowing individuals to enjoy life to the fullest. As technology is created for this purpose, societal disparities will be diminished, and the quality of life will improve for the community.

Mantilina Ervina, as the parent of a student at MI NWDI Nurul Haramain, also expressed her views: "Of course, with the development of the increasingly sophisticated industrial revolution, students face many challenges, how can they be involved in technological developments without neglecting the provision of religious knowledge, although of course the sophistication and robots that are created cannot beat the greatness of humans who have hearts. conscience. I am not afraid of the development of the 4.0 revolution or the more sophisticated 5.0 revolution, because teachers will definitely prepare the best for their students, so choosing MI NWDI Narmada is one of the reasons, so that children can develop the abilities they have while adhering to the teachings Islam".

Madrasah education in the Society 4.0 and 5.0 era is a dynamic and evolving field. It requires a balance between preserving traditional Islamic educational values and embracing the advancements brought by modern technology. By integrating innovative teaching methods, fostering digital literacy, and promoting interdisciplinary learning, madrasahs can prepare students to thrive in a rapidly changing world while maintaining their cultural and religious identity. Society 4.0, also known as the Fourth Industrial Revolution, represents a fusion of technologies that blur the lines between the physical, digital, and biological spheres. It emphasizes the integration of cyber-physical systems, the Internet of Things (IoT), artificial intelligence (AI), and big data. Society 5.0 is an evolution from Society 4.0, focusing on a human-centered society that balances economic advancement with the resolution of social problems through a system that highly integrates cyberspace and physical space. It aims to achieve sustainability and well-being for all.

Madrasah preparation for the society 5.0 era

Education in madrasah must certainly be able to face the challenges posed by the Society 5.0 era. Therefore, all parties must address every issue that arises, be capable of maintaining and dealing with crises, ensuring that any educational achievements in a madrasah are not lost. Madrasah education at MI NWDI Nurul Haramain continuously enhances competencies in all areas, especially in the field of Education. Embracing innovation to avoid falling behind and being overtaken by the rapidly evolving times is a task that must always be undertaken in madrasah education. Conscious of this, all stakeholders continue to provide guidance and support to ensure that students receive proper education and a comfortable learning environment during their stay and studies at MI NWDI Nurul Haramain.

At MI NWDI Nurul Haramain, various programs and activities are provided to sharpen the skills of students, such as performing in art shows, public speaking events, and promoting a love for literacy. These activities help students become accustomed to presenting themselves in front of a large audience, making them adept at socializing and blending with society while still maintaining the values taught during their time in the boarding school. The method of Wafa is utilized for memorizing the Qur'an. MI NWDI Nurul Haramain continues to strive towards developing students to become the nation's future generation, not only possessing good morals and religious principles but also capable of competing and excelling in the rapidly evolving technological advancements of the present era. Emphasizing character education is aimed at molding Quranic generations who can uphold the principles of Islam. The madrasah is developed to prepare future generations to face the challenges of the Industry 5.0 revolution.

One of the programs implemented at MI NWDI Nurul Haramain in preparing for education to face the 5.0 revolution is evident in the implementation of Quranic learning using the Wafa method.

This method is a Quranic learning approach that maximizes the comprehensive, integrative, easy, and enjoyable right-brain approach (Singgarani et al., 2021). The right brain encompasses creativity, imagination, movement, and positive emotions that accelerate the absorption of new information and result in long-term memory. This method also combines the work of the right brain with the left brain, where the left brain focuses on repetition that leads to short-term memory absorption. The Wafa method consists of five flagship programs: 1) Recitation and writing, 2) Memorization (Tahfidz), 3) Translation (Tarjamah), 4) Comprehension (Tafhim), and 5) Interpretation (Tafsir). The Wafa method teaches students to read and memorize the Quran by maximizing the right-brain hemisphere. This method is considered a new approach, yet it is practical and enjoyable in the learning process. The Wafa method itself refers to the concept of Quantum Teaching with a right-brain approach (associative, imaginative, and others). Quantum teaching is defined as a teaching method that guides students to willingly learn, making it a necessity, motivating and inspiring activity. In the Wafa method of learning, the 5P method (Opening, Experience, Teaching, Assessment, and Closure) is employed (Qisom, 2019).

In implementing the learning, teachers utilize and use multimedia such as videos, animations and interactive presentations in the learning process. Not only that, students are also invited to see firsthand real practice in the field. The development of interesting and interactive digital teaching materials packaged by teachers in carrying out the teaching and learning process takes place, this can certainly make it easier for students to follow the process of receiving the material easily. Learning materials for all classes include the use of instructional videos and animations to explain complex concepts. Teachers use interactive presentations with the help of projectors to teach mathematics, making learning more interesting and easier for students to understand. Get to know the parts of a computer (monitor, keyboard, mouse). With these specific changes, the Islamic boarding school curriculum not only becomes more relevant to the era of Industrial Revolution 4.0 and Society 5.0, but also provides students with the skills and knowledge necessary for success in the future.

There are three components within a madrasah to address the challenges faced by society in the world of madrasah education. The first is the ability to solve problems, both by teachers and students, as this requires strategies to find solutions that align with desired outcomes. The second is the proficiency in Higher Order Thinking Skills (HOTS), which needs to be consistently cultivated by both teachers and students to adapt and think critically in the future. Lastly, the ability to engage in activities is intended to nurture imagination and independent thinking, ensuring that each individual is not easily influenced.

These challenges must be answered quickly and precisely so as not to contribute to an increase in unemployment. The government as a policy maker must respond to the 4.0 era with a new movement. One of the movements launched by the government is a new literacy movement to strengthen and even displace the old literacy movement. The intended new literacy movement focuses on three main literacies, namely, 1) digital literacy, 2) technological literacy, and 3) human literacy (Ghufron, 2018). These three skills are predicted to be skills that are really needed in the future or in the industrial era 4.0.

Digital literacy is aimed at increasing the ability to read, analyze and use information in the digital world (big data), technological literacy aims to provide an understanding of how machines and technological applications work, and human literacy is aimed at improving communication skills and mastery of design science (Ghufron, 2018). The new literacy provided is expected to create graduates who are competitive with perfecting the old literacy movement which only focused on improving reading, writing and mathematics skills. Adaptation of the new literacy movement can be integrated by adjusting the curriculum and learning system as response to the industrial era 4.0.

AT MI Haramain Narmada in facing this industrial era the steps taken are 1). involving students in various kinds of activities related to self-development both in the fields of literacy and technology, 2). Providing opportunities for students to be involved in various kinds of self-development activities to be able to increase the knowledge and experience they will have, 3), teachers improve their skills and quality by participating in activities, seminars and carrying out developments that can provide experience in teach. So it is important to understand that MI Nurul Haramain continues to develop and prepare teachers, students and all stakeholders in the school environment to be able to face challenges both in the 4.0 era and/or towards the 5.0 era.

Conclusion

Learners act as agents of conservation, where educational institutions must function operationally and practically to advance learning activities oriented towards instilling and preserving indigenous socio-cultural values that possess resilience and homeostasis (Asfiati, 2020). As innovative agents, learners must be encouraged to play their role in developing knowledge, disseminating, socializing, and applying it. Through these roles, education can produce a society of learners expressed by their enthusiasm in seeking information, utilizing it, and communicating it effectively. Education, as a change agent, has consequences on the application of educational innovation products. It acts as a filter for social change. Education is not only focused on the present but is dynamic and anticipatory of change. With these roles, education is required to have educational resources to prepare resilient, excellent, participatory, and competitive agents of change.

Based on the research findings and discussions, it can be concluded that the approach adopted by MI NWDI Nurul Haramain in facing the 5.0 era is by preparing teaching resources with digital skills, creative thinking, and creativity. Madrasah teachers are required to be more innovative and dynamic in their classroom teachings and the memorization of the Quran to strengthen themselves in anticipation of future changes. As a result, the teachers can provide education and conduct teaching activities effectively amidst the increasing influence of globalization and the Industry 5.0 revolution. Machines or robots cannot function optimally without human intervention or expertise. In addition, MI NWDI Nurul Haramain has implemented technology as a tool for teaching and learning activities. This ensures that graduates from the madrasah can work in their respective fields with the necessary criteria required by industries, ultimately contributing to reducing unemployment rates in Indonesia. The challenges faced by the madrasah have inspired the preparation of human resources ready to face these challenges. The madrasah's duty lies in leveraging various opportunities to nurture students, enabling them to compete and excel in the limitless global era.

The Society 5.0 era has brought huge changes to the world of Indonesian education. Many challenges and problems have been created so that educational institutions, especially Islamic boarding schools, must be mentally prepared and more demanded not only to be able in the religious field but also to be able to overcome and face the turmoil of the society 5.0 era this time, meaning that they are not only superior in the field of religion but also superior in the field of science and technology and science

The findings of this study can be a reference for education policymakers to take progressive and wise steps in preparing students to become technologically skilled future leaders. The key strategies implemented include utilizing modern technologies such as e-learning platforms, animated videos, simulations, and mobile applications to increase interactivity and engagement in learning. This innovation allows students to understand learning more deeply through interesting media, in accordance with the way the digital generation learns. So that graduates of pesantren-based Madrasah are not only qualified in the field of religion are able to use digital tools as a means to learn and spread religious values.

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