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THE URGENCY OF ARTIFICIAL INTELLENGENCE-BASED LEARNING IN ENHANCING LOCAL WISDOM IN THE ERA OF SOCIETY 5.0

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Abstract: Artificial Intelligence (AI)-based learning has the potential to transform education in the Society 5.0 era by offering a more personalized and adaptive approach to teaching and learning. This has both positive and negative impacts. Among the negative impacts of progress are moral decadence and the decline of cultural values. Solutions are needed to address this by integrating local wisdom into learning. Furthermore, local wisdom must also coexist with technological advances in the era of society 5.0, namely artificial intelligence. This study aims to explore the urgency of artificial intellengence-based learning in enhancing local wisdom in the era of society 5.0. This study employed qualitative methods. Data collection was conducted through a literature review. The data collected came from several books, scientific journals and articles relevant to the research objectives. The results of this study show that artificial intelligence-based learning can enhance local wisdom in the era of Society 5.0 and has great potential to increase the effectiveness of the learning process, as teachers are able to integrate local wisdom-based content into their learning. Conclusion, an artificial intelligence-based learning can enhance local wisdom in the era of Society 5.0 and can be a solution to fortify students from moral decadence while still keeping up with the increasingly rapid advances in science and technology.

Keywords: Urgency, Learning, Artificial Intelligence, Local Wisdom, The Era Of Society 5.0

INTRODUCTION

The world has entered the era of Society 5.0 following an acceleration in technological development during the Industrial Revolution 4.0 period, especially during the COVID-19 pandemic. Whether we like it or not, and are ready or not, life will continue to progress and evolve. Therefore, it is essential to change our paradigm and be willing to learn so as not to be left too far behin. Artificial Intelligence (AI) is a concept originating from the era of learning, as well as hardware and software. This science is used to develop intelligence through hardware and software solutions, inspired by the

¹ Hikmawati, Nisrina, Imam Sufianto, and Jamilah. *Konsep Dan Implementasi Kecerdasan Buatan (Artificial Intellegence) Dalam Manajemen Kurikulum SD/MI*, ABUYA: Jurnal Pendidikan Dasar, Vol. I No. I 2023: I–16.



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reverse engineering of neural patterns operating in the human brain.² In the ever-evolving digital era, artificial intelligence has emerged as a revolutionary force that spans various sectors of human life. One area increasingly affected by these advancements is education. In the world of education, Al can help create a more personalized learning experience, which is essential in modern education that prioritizes individual learning paths.³ The implementation of artificial intelligence in the context of learning has laid the foundation for a radical shift in teaching and learning approaches.

In line with global demands to enhance the effectiveness and efficiency of the education process, the presence of Al promises innovative solutions that can positively impact students' development and improve the education system as a whole.⁴ It is important to understand that the implementation of artificial intelligence is not merely about introducing new technology into the classroom; it establishes a new foundation for interaction between educators, learners, and the curriculum. With advanced algorithms and the ability of machines to learn from data, Al enables an unprecedented level of personalized learning. Al can automate administrative tasks such as recording attendance, grading assignment, and generating reports. For example, Al-based grading system can quickly grade multiple-choice questions, essays, or even provide initial feedback for an assignment. By automating these tasks, educators can be freed from time-consuming administrative work and can focus more on more important aspects of teaching, such as interacting directly with students.⁵

Al in education not only serves as an aid to teaching but also opens new opportunities for educators to innovate in teaching methodologies. For example, by using Al-based platforms, educators can develop a curriculum that is more dynamic and relevant to current developments.⁶ On the other hand, the application of this technology can also enhance educators' ability to facilitate students in developing skills that are relevant in the digital age. Therefore, it is important to assess how Al-based education can be practically applied by educators in the context of Society 5.0. We must realize that this era of society 5.0, which includes various digital facilities, including artificial intelligence, is an inevitable part of history. This era also has the potential for negative impacts because not all global values are in line with the character of the nation. One of the negative impacts of globalization in Indonesia is the decline in morals and cultural values. This can be seen from events such as increasing violence among teenagers, cases

⁵ Jufrida, Basuki, F. R., & Kurniawan, W. *Desain Pembelajaran Berbasis Kearifan Lokal Bagi Guru SMP di Kabupaten Tanjung Jabung Barat.* J-PEMAS STMIK Amik Riau, Vol. 2 No. 2 2021: I–II.



² Zahara, Sofi Liza, Zahira Ula Azkia, and Muhammad Minan Chusni. *Implementasi Teknologi Artificial Intelligence (AI) Dalam Bidang Pendidikan*, Jurnal Penelitian Sains Dan Pendidikan (JPSP) Vol. 3 NO. I 2023: 7.

³ Holmes, Wayne, Maya Bialik, and Charies Fadel. Artificial Intelligence In Education Promises and Implications for Teaching. Journal of Computer Assisted Learning. Center For Curriculum Redesign, 2019.

⁴ Maulana, Muhammad Sony, Nurmalasari, Septian Rheno Widianto, Sri Dewi Ayu Safitri, and Reza Maulana. *Pelatihan ChatGPT Sebagai Alat Pembelajaran Berbasis Artificial Intellegence Di Kelas,* JOTIKA: Jurnal Penelitian Dan Pengabdian Masyarakat, Vol. 3 No. 1 2023: 16–19.

⁵ Baker, Ryan S., Taylor Martin, and Lisa M. Rossi. *Educational Data Mining and Learning Analytics*. (The Cambridge Handbook of the Learning Sciences, Second Edition, 2014).

⁶ Nastiti, Faulinda Ely, and Aghni Rizqi Ni'mal Abdu. *Kesiapan Pendidikan Indonesia Menghadapi Era Society* 5.0, Edcomtech, Vol. 5 No. 1 2020: 61–66.



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of bullying, drug abuse, corruption, prostitution, sexual harassment, and a decline in responsibility, work ethic, and discipline. All of this shows that the younger generation lacks knowledge of local wisdom and national identity.⁷

Today, local wisdom values have undergone a transformation in line with technological developments. Local wisdom values that coexist with technology certainly provide a new dimension to the implementation of education. Previous research on local wisdom-based learning has been conducted by who stated that local wisdom values can be integrated into the learning process because every culture has values that are highly beneficial in religious, economic, social, and educational life. Local wisdom values as teaching materials in learning can be useful for students as a foundation to fortify against the entry of foreign cultures that will impact the preservation of local culture. Furthermore, research on the use of artificial intelligence in learning states that artificial intelligence has great potential to increase efficiency and effectiveness in supporting the learning process because Al can overcome human limitations in the learning process.

Artificial intelligence-based learning integrated with local wisdom can solve problems caused by negative impacts. Artificial intelligence-based learning is a requirement to keep up with the rapid development of the times. This must also be in line with the concept of education that follows character by introducing local wisdom, which is the identity of the nation, to students. Character education based on local wisdom is an integration of three aspects, namely subjects, local wisdom, and character. Local wisdom can be used as a context in delivering subject content so that it implicitly conveys character values. Based on the explanation above, there is a need for artificial intelligence-based learning so that local wisdom can be enhanced in this era of society 5.0.

The use of technology in learning provides convenience and access for educators and learners to enhance creativity in designing teaching and learning activities based on digitalization. A variety of learning media technologies available today can be easily accessed, creating a more flexible learning environment in terms of space and time. The application of these learning media offers significant benefits in enhancing direct interaction between educators and learners, which in turn can motivate learners to be more active in self-exploration and reinforcement.

Currently, in facing the era of globalization and the rapid changes brought by internet technology and artificial intelligence, which impact social life, the environment, and other complexities. Therefore, it is imperative to prepare this generation to become productive contributors in their time, rather than parasitic burdens on their country. Educational reform is carried out by restructuring the curriculum. This includes revising the content

¹¹ Hosna, Rofiatul. *Melejitkan Pembelajaran Dengan Prinsip-Prinsip Belajar*. (Malang: Intelegensia Media, 2015), 7-8.



⁸ Achmad, W. K. S. *Transformasi Nilai-Nilai Kearifan Lokal Berbasis Teknologi*. Prosiding Universitas Kristen Indonesia Toraja, 2021: 8–16.

⁹ Saepurokhman, A., & Sumayana, Y. *Nilai Kearifan Lokal sebagai Bahan Pembelajaran Sastra di Sekolah Dasar*. Proceeding Seminar Internasional STKIP NU, 2017: 109–114.

¹⁰ Ismawati, N. A., & Ramadhanti, S. *Penerapan Artificial Intelligence dalam Mendukung Pembelajaran di Era Digital*. Prosiding Seminar Nasional I Amal Insani Foundation, 2022: 158–166.



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of what is taught in learning, as well as how teachers determine the appropriate models for teaching.¹² This study aims to analyze the urgency and integrating potential of artificial intellengence-based learning in enhancing local wisdom In the era of society 5.0.

RESEARCH METHODS

This article employs the library research method. The library research approach involves collecting data and information from various library sources, such as reference books, articles, notes, and various journals related to the issue under investigation. ¹³ This method also includes a scientific or theoretical review of the culture, local widom, values, and norms at the research location. It entails searching for data sources or references, such as books, articles, journals, and other scholarly works. Scientific works by book authors, academics, intellectuals, and experts in intelligence, in this case, Artificial Intellegence and local wisdom, are used as literature for data collection. The literature selected as data sources becomes comprehensive study material for the researchers. Subsequently, a critical analysis of the selected data sources is conducted. ¹⁴ Systematically, the steps in this library research process can be seen in the following chart.



Chart I.I: Library Research Step

From the chart above, it can be explained that the steps in literature research begin with a review of the literature, followed by data collection using concepts that will be determined in the research, then compiling existing concepts, and finally analyzing the data.

The data collection stages are as follows: I) Orientation stage, in which the researcher describes the collected data; 2) Reduction stage, in which the researcher reduces all information obtained in the first stage; and 3) Selection stage, after the researcher conducts an in-depth analysis of the data and information obtained, the researcher can construct the data obtained into a body of knowledge.¹⁵

RESULTS AND DISCUSSION

Learning in the Era of Society 5.0

We are currently facing an era of disruption. An era of rapid change. What is taught in schools is not directly proportional to what is happening outside. Changes outside are happening very quickly. Similarly, what students learn may lag far behind technological developments.¹⁶ Machine and human efficiency have begun to be connected to each



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¹² Hosna, Rofiatul. Teori Belajar Mengawal Era Society 5.0. (Malang: CV. Beta Aksara, 2020), 119.

¹³ Sari, Milya, and Asmendri. *Penelitian Kepustakaan (Library Research) Dalam Penelitian Pendidikan IPA*. NATURAL SCIENCE: Jurnal Penelitian Bidang IPA Dan Pendidikan IPA, Vol. 6 No. 1 2020: 41–53.

¹⁴ Sugiyono. *Metode Penelitian Kuantitatif, Kualitatif, dan R & D*. Alfabeta, 2022.

¹⁵ Sugiyono. *Metode Penelitian Kuantitatif, Kualitatif, dan R & D*. Alfabeta, 2022.

¹⁶ Hosna, Rofiatul. *Teori Belajar Mengawal Era Society 5.0.* (Malang: CV. Beta Aksara, 2020), 181.

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other through the Internet of Things (IoT) system. The Internet of Things allows various physical devices to be connected to the internet network. Examples include televisions, refrigerators, air conditioners, and so on, which can be easily controlled via a smartphone device to turn them on, turn them off, or perform other functions.

In this Era of Society 5.0, many fields are undergoing structural and systemic transformations, one of which is education. It appears that the government is currently aggressively developing several programs aimed at preparing human resources for the future through education.

The transformation of education must certainly be carried out at an accelerated pace to keep up with future developments. This is because the challenges facing the world of education are becoming increasingly complex and require serious preparation and thought. These are rapid and non-linear changes. This is a result of the advent of the Society 5.0 era. Technological advances with the principle of automation in almost all fields.

The Society 5.0 era, first initiated by the Japanese government, has several characteristics, including: I) Utilizing digital technologies such as the Internet of Things (IoT), artificial intelligence (AI), and robotics to meet human needs; 2) Prioritizing better community welfare by utilizing digital technology and innovation to meet human needs; 3) Combining the physical and digital worlds by utilizing technologies such as augmented reality (AR) and virtual reality (VR); 4) Prioritizing environmental sustainability by utilizing digital technology to reduce negative impacts on the environment.

Today's students are the owners of the future. A future with the construction of Society 5.0, but at the same time in the era of VUCA: volatile, uncertain, complex, and ambiguous. Therefore, it is not enough to be equipped with a wealth of knowledge, but also with a way of thinking and local wisdom that can blend cultural values.¹⁷

Benefits Of Artificial Intellegence-Based Learning

Globalization, accompanied by developments in technology and information, has brought about a new combination of ways to find learning resources in the world of education. In teaching and learning activities, learning resources are not only centered on or fixed on a teacher. Rather, learning resources are anything that can be used as a tool or as preparation for learning. One tool that can be used as a learning resource is artificial intelligence, commonly referred to as AI (Astutik et al., 2023).¹⁸

The integration of Artificial Intelligence (AI) in education opens up various opportunities that have the potential to transform the way teaching and learning are done. With advances in technology, AI can improve teaching effeciency and the overall learning experience of students. By offering a more personalized and adaptive learning experience, AI allows educators to more easily meet student's individual needs, providing

¹⁸ Astutik, E. P., Ayuni, N. A., & Putri, A. M. (2023). Artificial Intelligence: Dampak Pergeseran Pemanfaatan Kecerdasan Manusia dengan Kecerdasan Buatan bagi Dunia Pendidikan di Indonesia. Sindoro Cendikia Pendidikan, 1(10), 101–112.



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¹⁷ Hosna, Rofiatul. *Teori Belajar Mengawal Era Society 5.0.* (Malang: CV. Beta Aksara, 2020), 183-184.



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a more tailored approach to education. The following is a description of the opportunities and benefits of Al-based learning.

I. Increased Teaching Efficiency

In classroom settings, Al can automate administrative tasks such as recording attendance, grading assignment, and generating reports. For example, Al-based grading system can quickly grade multiple-choice questions, essays, or even provide initial feedback for an assignment. By automating these tasks, educators can be freed from time-consuming administrative work and can focus more on more important aspects of teaching, such as interacting directly with students. Al allows educators to more quickly address students' individual needs, freeing up more time for personalized support and improving the overall teaching process.¹⁹

2. Adaptive Learning and Personalized Materials

Al-based adaptive learning platforms, such as DreamBox or Knewton, customize learning materials based on each student progress. For example, if a student is quicker to grasp math concept but struggles with algebra, the platform will automatically provide additional practive to help them strengthem their understanding of algebra. This dynamic customization allow students to learn at their own pace, ensuring that no student feels rushed or left behind. This helps to create a more personalized learning experience, which is especially important in modern education that prioritizes individual learning paths. This adaptive approach maximizes student engagement and encourages more effective learning.²⁰

3. Objective and Timely Assesment

Al-based exam system that grade essays, multiple-choice questions, and short answers can provide immediate feedback to students, allowing them to immediately spot areas for improvement once the exam is over. For example, platforms like Gradescope can automatically agrade and provide feedback for both simple and complex assignments. This benefits is very important for students and teachers, because it can save time and provide faster results. The ability to assess students quickly and objectively eliminates human bias in assessment, making the evaluation process more reliable and transparent.²¹ Al can assess not only traditional knowledge-based exams but also critical thinking and creativity skills that are not easily measured through conventional methods.

4. Inclusivity and Reducing Educational Gaps

Al-based platforms such as Duolingo, which are used for language learning, adjust the difficulty of tasks based on each learner's progress. A student who has difficulty remembering vocabulary may be given additional practice, while a student who is a quicker learns may be given more complex sentences. Al makes it possible a more

Rios-Campos, Carlos, Elva Soledad Mendoza Canova, Irma Rumela Aguirre Zaquinaula, Hilda Elisa Aguirre Zaquinaula, Daniel Jesus Castro Vargas, William Suarez Pena, and Carlos Evitt Tapia Idrogo. Artificial Intelligence And Education. Sout Florida Journal Of Develupment, Miami, Vol. 4 No. 2 2023: 641–55.



¹⁹ Baker, Ryan S., Taylor Martin, and Lisa M. Rossi. *Educational Data Mining and Learning Analytics*. (The Cambridge Handbook of the Learning Sciences, Second Edition, 2014).

Holmes, Wayne, Maya Bialik, and Charies Fadel. Artificial Intelligence In Education Promises and Implications for Teaching. Journal of Computer Assisted Learning. Center For Curriculum Redesign, 2019.

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inclusive learning environment, where students with different abilities can get support tailored to their needs. This personalized learning model helps bridge educational gaps, ensuring students who face learning challenges get the help they need, while more capable students are encouraged to develop further.²² This adaptive learning structure has the potential to improve overall learning outcomes across the spectrum of student abilities.

5. More Innovative Data-Based Teaching Methods

Al systems used in the classroom can track students progress acros various subjects and provide educators with in-depth analysis of which topic students are having the most difficult understanding. For example, platforms like Turnitin not only check for plagiarism but also analyze students' writing in terms of structure and originality, providing feedback on creativity and critical thinking skills. Al enables educators to make more data-based decisions regarding the effectiveness of their teaching methods and assists them in making more informed improvements. This opens up opportunities for more responsive and evidence-based education, which in turn will contribute to improving the overall quality of education.²³

The Urgency of Artificial Intelligence-Based Learning in Enhancing Local Wisdom in the Era of Society 5.0

The advancement of technology, Artificial Intelligence (AI) is increasingly being introduced in various aspects of education. For teachers, the application of AI is not just about using advanced technology, but also about how it can align the learning process with the individual needs of students and help support their development.

The implementation of Al by teachers in learning involves several important and interconnected steps. From the preparation of materials tailored to students' abilities to ongoing evaluation and improvements based on data analysis generated by Al systems, each step allows teachers to leverage technology to create a more efficient, inclusive, and data-driven learning environment.²⁴ Below are examples of Al implementation in the learning process that can help teachers optimize their teaching and provide more effective learning experiences for students.²⁵ Potential to produce a creative and high-quality learning environment.²⁶

²⁶ Hosna, R., & Fauzi, A. Building a Culture of Excellence: How Principal Supervision Shapes Professional Teachers through Collaborative Leadership? Jurnal Al-Tanzim: Jurnal Manajemen Pendidikan Islam, Vol. 09 No. 01 2025: 46.



²² Popenici, Stefan, and Sharon Kerr. *Exploring the Impact of Artificial Intelligence on Teaching and Learning in Higher Education*. Research and Practice in Technology Enhanced Learning, Vol. 12 No. 1. 2017.

²³ Holmes, Wayne, Maya Bialik, and Charies Fadel. *Artificial Intelligence In Education Promises and Implications for Teaching. Journal of Computer Assisted Learning*. Center For Curriculum Redesign. 2019: 213.

²⁴ Nainggolan, Hendra, and Rofiatul Hosna. *Peningkatan Keterampilan Digital Santri Dalam Meningkatkan Efektivitas Pembelajaran Hadis.* Jurnal Tarbiyah - Syari'ah Islamiyah, Vol. 31 No. 02 2024: 175-176.

Holmes, Wayne, Maya Bialik, and Charies Fadel. Artificial Intelligence In Education Promises and Implications for Teaching. Journal of Computer Assisted Learning. Center For Curriculum Redesign. 2019: 213.



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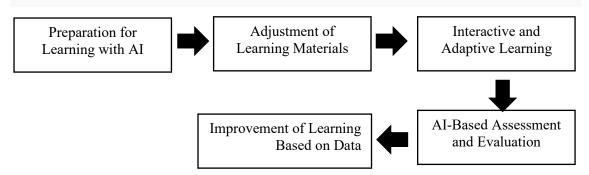


Chart: I.2 Implementation AI in the Learning Process

Local wisdom refers to the noble values that apply in the way of life of a community or local society, including protecting, managing, and preserving the environment in a sustainable manner. Local wisdom is the identity of a nation or region. Local wisdom also refers to the values that apply in society and guide daily behavior. The identity or cultural personality of a nation enables it to absorb and even transform cultures originating from outside or from other nations into its own character and capabilities.²⁷

Local wisdom is basically developed and taught from generation to generation, starting from the family to the community. Local wisdom can be manifested in tangible and intangible forms, such as language, literature, arts, ceremonies, customs, keris, and so on. Local wisdom has many roles and benefits for human life. The functions of local wisdom are as follows: I) As a means of conserving and preserving natural resources; 2) As a means of developing the quality of human resources; 3) As a means of developing culture and science; 4) As advice, beliefs, literature, and taboos; and 5) As a means of social integration. Based on the above description, local wisdom refers to all human potential and work that contains wise values and is passed down from generation to generation in a region. This includes knowledge about norms, ethics, laws, and behaviors that are considered good and right in the local culture, and are able to survive over time.

Advances in information technology in the era of society 5.0 not only transcend cultural boundaries but can also reduce national identity. The introduction of local wisdom in learning is expected to become a source of cultural literacy for students so that they are not easily influenced by foreign cultures that are currently easily accessible to students.³⁰ Local wisdom contains many examples of good role models and life

³⁰ Joyo, A. *Gerakan Literasi dalam Pembelajaran Bahasa Indonesia Berbasis Kearifan Lokal Menuju Siswa Berkarakter*. Jurnal KIBASP (Kajian Bahasa, Sastra, Dan Pengajaran), Vol. 1 No. 2, 2018: 159–170.



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²⁷ Achmad, W. K. S. *Transformasi Nilai-Nilai Kearifan Lokal Berbasis Teknologi*. Prosiding Universitas Kristen Indonesia Toraja, 2021: 8–16.

²⁸ Iswatiningsih, D. *Penguatan Pendidikan Karakter Berbasis Nilai-Nilai Kearifan Lokal di Sekolah.* Satwika (Kajian Ilmu Budaya Dan Perubahan Sosial), Vol. 3 No. 2 2019: 155–164.

²⁹ Achmad, W. K. S. *Transformasi Nilai-Nilai Kearifan Lokal Berbasis Teknologi*. Prosiding Universitas Kristen Indonesia Toraja, 2021: 8–16.

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wisdom. The importance of local wisdom in education is part of the effort to improve our national resilience as a nation.³¹

Artificial intelligence-based learning needs to be integrated with local wisdom because local wisdom can convey the social values that exist in the region. Artificial intelligence-based learning that integrates local wisdom has the ability to blend local values that make students develop a positive attitude in interpreting the values of local wisdom, which is the identity of the nation.³² Therefore, Al-based learning is very important to be implemented in order to enhance local wisdom in this era of Society 5.0 and teachers are expected to consistently integrate content based on local wisdom into their teaching.

The implication of this study is that the application of artificial intelligence in learning offers great opportunities to preserve local culture while increasing cultural awareness among the younger generation, which can enhance local wisdom in this era of Society 5.0. However, its successful implementation requires cooperation between the government, educational institutions, and the community. The government can play a role by providing technological infrastructure and regulations, while the community can help by providing rich and diverse cultural data.

CONCLUSION

Al-based learning in the era of society 5.0 holds great potential to enhance the quality of education, both in terms of teaching effectiveness and student learning experiences. This technology enables more personalized and adaptive learning, with content that can be tailored to the individual abilities of each student. By using Al-based systems, educators can monitor student progress in real-time and adjust their teaching methods to meet their needs. Given these challenges, it is crucial for educational policies to support and facilitate the use of Al by providing ongoing training for educators and ensuring adequate infrastructure. Clear and structured policies regarding the use of Al in education will greatly support the widespread adoption of this technology. Educators need time and space to develop their skills in utilizing Al, and with the right support, they will be able to integrate this technology more effectively into their teaching. When applied wisely, Al-based learning can bring significant positive changes to education, enhancing student learning experiences and creating a more dynamic and inclusive educational environment in the future.

Artificial Intelligence (AI) in the era of society 5.0 is not just technology, but the core of a deep digital transformation. All has penetrated into many aspects of our lives, from the way we work to the way we interact with each other. By understanding the potential and challenges of AI, we can harness this technology to create a better future for all. Apart from access to technology, digital literacy is also very important. Students need to have basic skills in using technology, including AI, in order to make optimal use

Disi, L., & Hartati, D. Y. Pembelajaran Bahasa dan Sastra Berbasis Kearifan Lokal sebagai Upaya Optimalisasi Pendidikan Karakter Menuju Dunia Global. Pembahsi: Jurnal Pembelajaran Bahasa Dan Sastra Indonesia, Vol. 8 No. 2 2018: 1–1.



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³¹ Hariadi, J. Pembelajaran Bahasa Indonesia Berbasis Kearifan Lokal. Jurnal Samudra Bahasa, Vol. 1 No. 1 2018: 1–9.



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of it. Meanwhile, education in the digital era is a necessity. By using technology wisely, we can create more effective, engaging, and relevant learning experiences for future generations. However, we must also pay attention to existing challenges and strive to overcome the digital divide.

The innovative use of artificial intelligence enables the creation of a more efficient and effective learning environment. Teachers can maximize the learning experience by utilizing artificial intelligence as a tool in the learning process. In addition, teachers should also integrate content based on local wisdom into learning to protect students from moral decadence while keeping up with the rapid advances in science and technology. Thus, artificial intelligence-based learning is very important to be applied in enhancing local wisdom in the era of society 5.0.

REFERENCE

- Astutik, E. P., Ayuni, N. A., & Putri, A. M. (2023). Artificial Intelligence: Dampak Pergeseran Pemanfaatan Kecerdasan Manusia dengan Kecerdasan Buatan bagi Dunia Pendidikan di Indonesia. *Sindoro Cendikia Pendidikan*, *I*(10), 101–112. Achmad, W. K. S. 2021. *Nilai-Nilai Kearifan Lokal Berbasis Teknologi*. Prosiding Universitas Kristen Indonesia Toraja, 8–16.
- Baker, Ryan S., Taylor Martin, and Lisa M. Rossi. 2014. *Educational Data Mining and Learning Analytics*. The Cambridge Handbook of the Learning Sciences, Second Edition.
- Hariadi, J. 2018. Pembelajaran Bahasa Indonesia Berbasis Kearifan Lokal. Jurnal Samudra Bahasa, Vol. 1 No. 1, 1–9.
- Hikmawati, Nisrina, Imam Sufianto, and Jamilah. 2023. Konsep Dan Implementasi Kecerdasan Buatan (Artificial Intellegence) Dalam Manajemen Kurikulum SD/MI. ABUYA: Jurnal Pendidikan Dasar, Vol. 1 No. 1: 1–16.
- Holmes, Wayne, Maya Bialik, and Charies Fadel. 2019. *Artificial Intelligence In Education Promises and Implications for Teaching. Journal of Computer Assisted Learning*. Center For Curriculum Redesign.
- Hosna, R., & Fauzi, A. 2025. *Building a Culture of Excellence: How Principal Supervision Shapes Professional Teachers through Collaborative Leadership?* Jurnal Al-Tanzim: Jurnal Manajemen Pendidikan Islam, Vol. 09 No. 01, 46.
- Hosna, Rofiatul. 2015. *Melejitkan Pembelajaran Dengan Prinsip-Prinsip Belajar*. Malang: Intelegensia Media.
- Hosna, Rofiatul. 2020. *Teori Belajar Mengawal Era Society 5.0.* Malang: CV. Beta Aksara. Ismawati, N. A., & Ramadhanti, S. 2022. *Penerapan Artificial Intelligence dalam Mendukung Pembelajaran di Era Digital.* Prosiding Seminar Nasional I Amal Insani Foundation, 158–166.
- Iswatiningsih, D. 2019. *Penguatan Pendidikan Karakter Berbasis Nilai-Nilai Kearifan Lokal di Sekolah*. Satwika (Kajian Ilmu Budaya Dan Perubahan Sosial), Vol. 3 No. 2, 155–164.
- Joyo, A. 2018. *Gerakan Literasi dalam Pembelajaran Bahasa Indonesia Berbasis Kearifan Lokal Menuju Siswa Berkarakter*. Jurnal KIBASP (Kajian Bahasa, Sastra, Dan Pengajaran), Vol. 1 No. 2, 159–170.
- Disi, L., & Hartati, D. Y. 2018. Pembelajaran Bahasa dan Sastra Berbasis Kearifan Lokal



ANNUAL CONFERENCE for Muslim Scholars

Rofiatul Hosna, et.al – Universitas Hasyim Asy'ari Jombang

- sebagai Upaya Optimalisasi Pendidikan Karakter Menuju Dunia Global. Pembahsi: Jurnal Pembelajaran Bahasa Dan Sastra Indonesia, Vol. 8 No. 2, I–I.
- Jufrida, Basuki, F. R., & Kurniawan, W. 2021. *Desain Pembelajaran Berbasis Kearifan Lokal Bagi Guru SMP di Kabupaten Tanjung Jabung Barat.* J-PEMAS STMIK Amik Riau, Vol. 2 No. 2, I–II.
- Mahbubah, Royyanatul, and Rofiatul Hosna. 2024. *Efektivitas Platform Digital Berbasis Google Slide Terhadap Hasil Belajar Pada Pembelajaran Agama Islam Di Sekolah Dasar*. Al-Mudarrisa: Journal Of Education Vol. 7 No. 2.
- Maulana, Muhammad Sony, Nurmalasari, Septian Rheno Widianto, Sri Dewi Ayu Safitri, and Reza Maulana. 2023. *Pelatihan ChatGPT Sebagai Alat Pembelajaran Berbasis Artificial Intellegence Di Kelas*. JOTIKA: Jurnal Penelitian Dan Pengabdian Masyarakat, Vol. 3 No. 1: 16–19.
- Nailus, Saadah, and Cahyo Hasanudin. 2023. *Implementasi ChatGPT Sebagai Inovasi Media Pembelajaran Bahasa Indonesia Di Era Society 5.0*. Prosiding Seminar Nasional Daring, Vol. 1 No. 1: 593–604.
- Nainggolan, Hendra, and Rofiatul Hosna. 2024. *Peningkatan Keterampilan Digital Santri Dalam Meningkatkan Efektivitas Pembelajaran Hadis*. Jurnal Tarbiyah Syari'ah Islamiyah, Vol.31 No. 02.
- Nastiti, Faulinda Ely, and Aghni Rizqi Ni'mal Abdu. 2020. *Kesiapan Pendidikan Indonesia Menghadapi Era Society 5.0.* Edcomtech Vol. 5 No. 1: 61–66.
- Pontjowulan. 2023. *Implementasi Penggunaan Media ChatGPT Dalam Pembelajaran Era Digital*. Educationist: Journal Of Education And Cultural, Vol 2 No. 2: 1–8.
- Popenici, Stefan, and Sharon Kerr. 2017. Exploring the Impact of Artificial Intelligence on Teaching and Learning in Higher Education. Research and Practice in Technology Enhanced Learning, Vol. 12 No. 1.
- Rios-Campos, Carlos, Elva Soledad Mendoza Canova, Irma Rumela Aguirre Zaquinaula, Hilda Elisa Aguirre Zaquinaula, Daniel Jesus Castro Vargas, William Suarez Pena, and Carlos Evitt Tapia Idrogo. 2023. *Artificial Intelligence And Education*. Sout Florida Journal Of Develupment, Miami, Vol. 4 No. 2: 641–55.
- Saepurokhman, A., & Sumayana, Y. 2017. *Nilai Kearifan Lokal sebagai Bahan Pembelajaran Sastra di Sekolah Dasar*. Proceeding Seminar Internasional STKIP NU, 109–114.
- Sari, Milya, and Asmendri. 2020. *Penelitian Kepustakaan (Library Research) Dalam Penelitian Pendidikan IPA*. NATURAL SCIENCE: Jurnal Penelitian Bidang IPA Dan Pendidikan IPA, Vol. 6 No. 1: 41–53.
- Sugiyono. 2022. *Metode Penelitian Kuantitatif, Kualitatif, dan R & D*. Alfabeta.
- Zahara, Sofi Liza, Zahira Ula Azkia, and Muhammad Minan Chusni. 2023. *Implementasi Teknologi Artificial Intelligence (AI) Dalam Bidang Pendidikan*. Jurnal Penelitian Sains Dan Pendidikan (JPSP), Vol. 3 No. 1.

