

The Perception Of Melawi Junior High School Principals On Enhancing Ai-Based Learning

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Abstract: This study aims to describe the perceptions of junior high school (SMP) principals in Melawi Regency regarding the use of Artificial Intelligence (AI) to improve the quality of learning. The research approach used is descriptive quantitative with a sample of 40 school principals selected through purposive sampling technique. The questionnaire covers aspects of AI understanding, ethics, data privacy, the role of teachers, and competence development. The results show that the majority of principals have a positive perception of AI in education, with most respondents understanding the concept and function of AI and believing in its ability to enhance learning quality. They are also committed to the ethical use of AI and supporting academic integrity, reflected in the highest score (4.0) on the statement regarding AI as a tool to support teachers. However, the main challenges identified include the lack of AI content curation and validation (the lowest score of 3.0), limited infrastructure, and low familiarity with specific AI tools and practical application abilities (score of 3.2). Despite the positive perceptions, the optimal adoption of AI is hindered by technical and capacity challenges. Therefore, the recommendations from this study are to enhance continuous training, provide adequate infrastructure, and develop clear policies related to ethics and data privacy protection to support the effective implementation of AI-based learning.

Keywords: Artificial Intelligence (AI); Education ; Perception; School Principals,

INTRODUCTION

In the last few decades, Artificial Intelligence (AI) technology has brought a huge impact across various sectors, including education. Artificial Intelligence (AI) refers to systems designed to mimic human abilities in thinking, learning, problem-solving, and decision-making. The use of AI in education not only provides easier access to information but also opens up new opportunities for creating learning innovations that are more effective and efficient. The development of e-learning platforms, educational chatbots, and AI-based learning tools is becoming increasingly widespread, providing effective solutions to improve the quality of teaching and learning in schools.

Currently, AI is an increasingly relevant and urgent topic for discussion, especially in Melawi Regency. Although this technology has been widely implemented in urban areas, the use of AI in education in regions like Melawi Regency is still relatively new and presents its own challenges. This is related to limited resources, technological infrastructure, and a still limited understanding among education stakeholders, especially school principals. This research focuses on how school principals in Melawi Regency understand and implement AI in education, considering the importance of this technology for improving the quality of learning at the local level.

The use of AI in education offers various advantages, especially in improving the quality of learning and providing a more personal and flexible learning experience. AI technology is capable of analyzing big data to identify the learning needs of each

individual student, which allows the learning process to be better customized to each student's abilities. This also provides an opportunity for teachers to give more targeted feedback, support the design of more effective learning strategies, and help students develop according to their potential. Thus, the quality of learning can be improved due to a more individualized approach that focuses on student needs.

Furthermore, AI also plays an important role in optimizing education management. Through deeper data analysis, AI can provide insights regarding students' learning progress and the effectiveness of the teaching methods used. The use of AI in schools allows for better monitoring of students' learning processes, thereby creating a learning environment that is more responsive to changing educational needs. Data obtained from AI-based platforms can also be used to design educational policies that are more in line with regional needs, as regulated in Ministerial Regulation of Education and Culture No. 32 of 2019 concerning the Education Quality Assurance System.

However, even though many schools are starting to implement AI technology, in Melawi Regency, AI is still considered new, and many school principals have not fully grasped its potential and application in improving education quality. This makes the implementation of AI in schools in Melawi Regency a unique challenge that needs to be studied further to find the right solution. School principals, as leaders in education, have a strategic role in facilitating the implementation of technology, including AI. Therefore, school principals need to have adequate knowledge of AI, as well as the ability to motivate teachers and students to adopt this technology effectively and beneficially.

Based on this background, this study aims to identify the perceptions of school principals in Melawi Regency regarding the use of AI in education, as well as understand the extent to which they support the implementation of this technology to improve the quality of learning. This study also aims to identify the factors influencing school principals' attitudes towards the use of AI, as well as the constraints they face in its implementation. Specifically, the main questions in this research are: What are the school principals' perceptions about the use of AI in education? How do school principals view the potential of AI in improving the quality of learning? What are the factors that influence school principals' attitudes towards the use of AI in schools? To what extent do school principals understand and support the use of AI in improving the quality of teaching in their schools? This study also aims to provide constructive recommendations on how to overcome the challenges in implementing AI in Melawi Regency, as well as to suggest steps that can be taken by the education office, school principals, and other stakeholders to enhance the effective implementation of this technology. Factual data in the field shows that although the use of technology in Melawi Regency schools continues to develop, there are still many challenges that need to be addressed, including a low understanding of the benefits of AI-based educational technology. Along with the increasing interest in this technology, this

research is expected to contribute to efforts to advance the quality of education in Melawi Regency. With a deeper understanding of AI, it is hoped that school principals can direct their schools to utilize this technology to produce better and more efficient learning experiences for students. The recommendations resulting from this research can also be used to design better policies in the development and implementation of AI technology in education, thereby providing a positive impact on improving the quality of education in Melawi Regency.

RESEARCH METHOD

This research uses a descriptive quantitative approach that aims to describe the perceptions of junior high school principals in Melawi Regency regarding the use of Artificial Intelligence (AI) in learning. The descriptive quantitative approach was chosen because it allows researchers to objectively describe and analyze data concerning school principals' perceptions of AI technology in the educational context, without needing to test the relationship between variables. This approach is highly suitable for measuring the extent of school principals' understanding and attitude regarding the use of AI, which can later be used as a basis for designing strategies for implementing this technology in schools.

This research focuses on data collection through a survey given to school principals selected through purposive sampling. Purposive sampling is considered the most appropriate because it allows researchers to select respondents who meet certain criteria, namely school principals who have a basic understanding of AI technology. Thus, the data obtained are more relevant and can provide a more accurate picture of how school principals in Melawi Regency view and implement AI technology in learning. The population in this study is all junior high school principals in Melawi Regency, totaling 113 people. The research sample was taken by selecting 40 school principals relevant to these criteria. The selection of these 40 principals is based on the principle of key informants and feasibility considerations to achieve information sufficiency in the context of this descriptive research. The researchers believe that with this sample, all dimensions of perception related to AI understanding, ethics, and challenges have been deeply described within the context of the relevant school principals. Thus, the results of this study are expected to broadly describe the perception regarding the use of AI at the junior high school level in Melawi Regency.

The main instrument used in this study is a questionnaire designed to measure school principals' understanding and perception of the use of AI in education. Before use, the questionnaire underwent validity and reliability tests to ensure that the instrument could accurately and consistently measure the intended aspects. The validity test was carried out to ensure that every item in the questionnaire truly measures the intended concept, while the reliability test aimed to ensure the consistency of the results obtained from the questionnaire. The data collection procedure was carried out by distributing the questionnaire to junior high school

principals in Melawi Regency. This questionnaire uses a Likert scale (1-4) to assess the extent to which school principals understand various aspects related to the use of AI in education. The Likert scale was chosen because it allows researchers to measure the level of agreement or disagreement of respondents with the statements in the questionnaire. The collected data was then analyzed using descriptive statistics to quantitatively describe the research findings. The descriptive statistics used include calculating the average score (mean) to determine the level of school principals' understanding of AI use, as well as percentages to describe the distribution of answers for each questionnaire item. The research results will be presented in the form of tables and graphs to facilitate understanding and interpretation of school principals' perceptions of AI in learning. In this way, the research findings are expected to provide clear and easily understood insights regarding the views of school principals concerning the implementation of AI technology in education in Melawi Regency.

RESULTS AND DISCUSSION

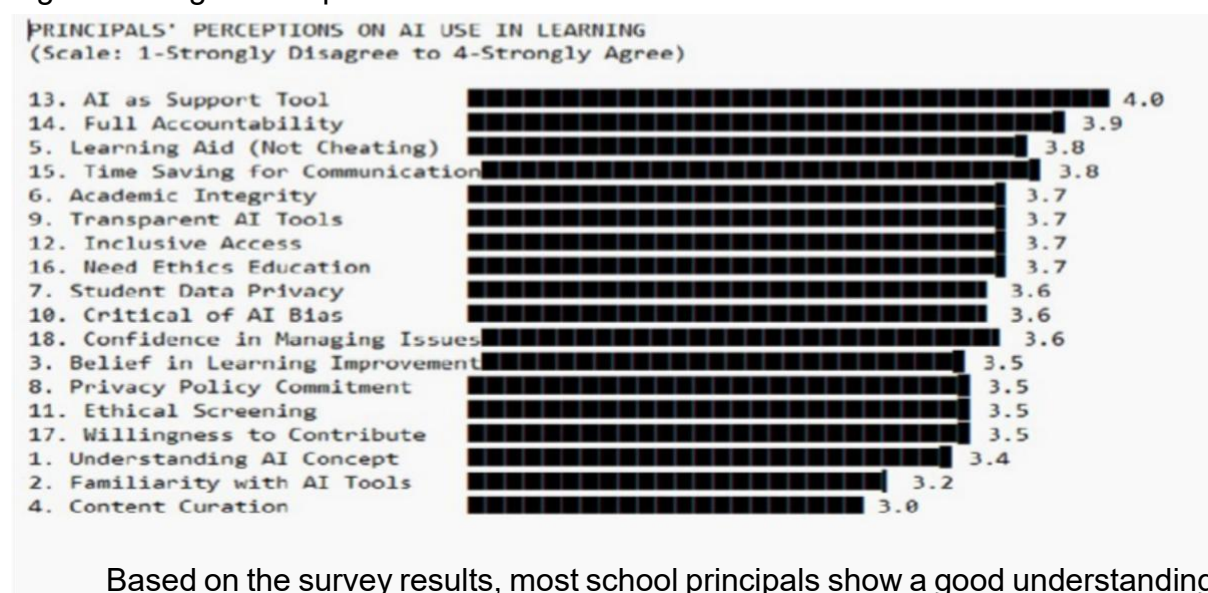
Survey Results

Table 1: Survey Results of School Principals' Perceptions on the Use of AI in Learning

NO.	Question	Average Score
1.	I understand what AI is and its functions.	3.4
2.	I am familiar with several AI tools for education.	3.2
3.	I am aware that the use of AI in learning can improve learning.	3.5
4.	I perform a strict process of curation and validation of every piece of information or content generated by AI before presenting it to students.	3.0
5.	I encourage teachers and students to use AI as a learning aid, not as a tool for cheating or plagiarism.	3.8
6.	I ensure that teachers also uphold academic integrity when using AI, for example in creating teaching materials or exam questions.	3.7
7.	I apply the principle of caution when inputting student personal data into AI platforms.	3.6
8.	I am fully committed to obeying and implementing all provisions stated in the privacy policy of the AI tools we use.	3.5
9.	I prioritize the use of AI tools that have high transparency and a firm statement of commitment to user data security.	3.7
10.	I am critical and alert to the possibility of AI output reflecting prejudice or bias.	3.6
11.	I conduct ethical screening and review of all content generated by AI to ensure no bias is passed on to students.	3.5
12.	I strive to take inclusive steps so that no student is left behind, ensuring all have an equal understanding of using AI for	3.7

	assignments.	
13.	I use AI as a support tool, not a replacement; the fundamental role of the teacher in educating remains irreplaceable.	4.0
14.	The involvement of AI does not shift my accountability; I am fully responsible for the learning outcomes.	3.9
15.	I utilize AI as a tool for saving administrative time to increase the intensity and quality of communication in improving learning at school.	3.8
16.	I need education and deeper understanding regarding the implementation of AI that upholds ethical values in education.	3.7
17.	I am willing to contribute to increasing awareness of AI ethics among teachers through sharing experiences.	3.5
18.	I am confident in managing and resolving ethical problems that may arise from the use of AI .	3.4

Figure 1 Image Description



Based on the survey results, most school principals show a good understanding of the concept and function of Artificial Intelligence (AI) in education, with an average score of 3.4. This reflects that they already have a basic understanding of how AI technology can be applied in various aspects of education, from learning to school administration management. This is consistent with previous findings which show that school principals in Indonesia generally realize the potential of AI technology to increase efficiency in the educational process (Sutrisno, 2022). However, despite this high understanding, challenges still remain in terms of the practical application of AI, especially related to limited infrastructure in some areas, including Melawi Regency.

Limited infrastructure in Melawi Regency, which is a more remote area in West Kalimantan, is a significant challenge in the implementation of AI technology in schools. This region faces challenges in terms of stable internet access, a lack of

adequate hardware, and low technology training for educators. This is consistent with research by Wahyuni (2020) which found that infrastructure and training are the main barriers to technology adoption in certain regions in Indonesia. Therefore, although school principals in Melawi Regency understand the function of AI, they face significant constraints in maximizing the potential of this technology.

The implication of this finding is that even though school principals have a fairly good understanding of AI, they need stronger infrastructure support and more in-depth training to be able to implement AI in learning. This demands leadership from the school principal to focus on developing adequate infrastructure, as well as fighting for access to training for teaching staff. The school principal must be able to manage the technological transition wisely, ensuring that AI technology can be well-integrated into the learning process despite resource limitations.

Understanding of AI

The majority of school principals involved in this study showed a fairly good understanding of the concept and function of Artificial Intelligence (AI) in the context of education. With an average score of 3.4 on a 1-4 scale, respondents showed that they have grasped the basics of Artificial Intelligence (AI), as well as how this technology can be implemented to support the learning process. This good understanding reflects school principals' awareness of the importance of Artificial Intelligence (AI) as a technology that can simplify various aspects of education, from learning to school administrative management.

Table: Understanding of AI

Assessment Aspect	Average Score	Description
Understanding of AI concept and function	3.4	The majority of principals have a fairly good understanding of AI
Basic understanding of AI in education	3.4	Respondents show a fairly good basic understanding of AI
Understanding of AI application in learning	3.4	Understanding of AI application in learning is quite good
Awareness of the importance of AI in education	3.4	Principals are aware of the importance of AI in education
Understanding of AI in school administration management	3.4	AI is considered important in school administration management
Awareness of AI efficiency in teaching and learning	3.4	Understanding of AI efficiency in the fields of teaching and learning

Most school principals also realize that Artificial Intelligence (AI) can increase efficiency in various ways, such as personalized learning, developing teaching

materials, and processing academic data. They view Artificial Intelligence (AI) as a tool that can optimize teaching methods and improve the overall quality of education. However, although their understanding is good, there are still challenges in terms of the practical implementation of this technology in schools. Despite their good understanding, school principals realize that to implement Artificial Intelligence (AI) effectively, they need further training as well as adequate infrastructure support. This indicates a gap between conceptual understanding and the ability to utilize Artificial Intelligence (AI) practically in the school learning context. Therefore, efforts to improve understanding and skills in using Artificial Intelligence (AI) among school principals and other educators are highly necessary.

Familiarity with AI Tools in Education

The latest survey results show that approximately 66% of school principals are already familiar with various Artificial Intelligence (AI) tools applied in the education world, such as ChatGPT, Gemini, Quizizz AI, and Canva Magic Write. Although most school principals have heard of these tools, the average score of 3.2 indicates that their understanding of the practical application and specific functions of these tools is still limited. This signals a gap between awareness of the existence of Artificial Intelligence (AI) technology and the ability to use it effectively in the context of daily education.

Table: Familiarity with AI Tools

Assessment Aspect	Average Score	Description
Familiarity with AI tools (ChatGPT, Gemini, Quizizz AI, Canva Magic Write)	3.2	The majority of principals are familiar with various AI tools, but practical understanding is still limited
Understanding of practical application of AI tools	3.2	Understanding of the practical application of AI tools is still limited.
Understanding of specific functions of AI tools	3.2	Understanding of the specific functions of AI tools is not yet optimal
Utilization of AI tool potential in learning	3.2	Most principals have not fully utilized the potential of AI tools.
Challenges of limited access to technology and training	3.2	Limited access to technology and training hinders the use of AI tools
Awareness of the positive impact of AI tools in education	3.2	Principals are aware of the positive impact of AI tools in education, although implementation challenges still exist.

Although familiar with the existence of these Artificial Intelligence (AI) tools, most school principals have not fully utilized the potential of this technology. Some school principals who have tried using these tools admit that they have not optimized their functions in improving the learning process in schools. This indicates that although there are attempts to try, many of them still need further support to be able to utilize Artificial Intelligence (AI) technology maximally in learning activities.

The lack of deeper knowledge about these Artificial Intelligence (AI) tools could be caused by various factors, such as limited access to technology and minimal training provided to school principals and teaching staff. Often, school principals and teachers do not have the opportunity to learn more about how to use these AI tools effectively, so their understanding tends to be hindered. This limited access is one of the big challenges in the process of adopting Artificial Intelligence (AI) technology in the education sector. Limited access to training and technological resources is the main barrier to improving the skills of school principals and teachers in using Artificial Intelligence (AI) tools. In this context, even though they know about the tools, many of them do not feel confident or skilled enough to integrate them into teaching and learning activities at school. Therefore, it is important to realize that familiarity with Artificial Intelligence (AI) tools alone is not enough to maximize their impact on education.

On the other hand, although familiarity with AI tools in education is still limited, most school principals still realize the importance of this technology in increasing the effectiveness and efficiency of learning. They recognize that Artificial Intelligence (AI) tools can bring a positive impact to the advancement of education, both in terms of classroom management, development of teaching materials, and learning evaluation. This awareness shows a desire to utilize Artificial Intelligence (AI) technology more, even though the challenges in its implementation are still quite significant. For this reason, more in-depth training and more structured Artificial Intelligence (AI) tool introduction programs are needed for school principals and teachers. Programs like this will provide them with the opportunity to understand more deeply how AI technology can be applied practically in the learning process. By increasing their understanding and skills, it is hoped that Artificial Intelligence (AI) technology can be used more optimally to support more efficient and effective education in schools.

Survey results show that school principals are quite familiar with various AI tools such as ChatGPT, Gemini, Quizizz AI, and Canva Magic Write, although the average score of 3.2 indicates that their understanding of the practical application and specific functions of these tools is still limited. This finding reflects a gap between awareness of the existence of AI technology and the ability to use it effectively in daily practice. Previous research findings by Haryanto (2021) also show that many educators in Indonesia, including school principals, know about the existence of AI tools but have not fully utilized them in education. In Melawi Regency, the challenge

of access to adequate AI tools is a major barrier. In this region, many schools do not have adequate computer devices or internet networks to access AI tools optimally. This is in contrast to urban areas that are more advanced in technology access. Therefore, although school principals are familiar with AI tools, this access gap hinders the maximum utilization of the technology. In this context, school principals must play an active role in ensuring more equitable technology access for schools in remote areas like Melawi Regency. The implication of this finding is that school principals need to improve the practical understanding and use of AI tools by organizing technical training that focuses on AI tools that can help with learning. School principals also need to collaborate with relevant parties to increase access to devices and internet in schools with limited facilities.

Belief in Learning Improvement

Most school principals show a strong belief that the use of Artificial Intelligence (AI) can improve the quality of learning in schools. With an average score of 3.5, the majority of respondents believe that Artificial Intelligence (AI) can be an effective tool to support a learning process that is more efficient and effective. They view AI technology as a solution that can help various aspects of education, including personalized learning, simplifying administrative tasks, and providing more structured and targeted feedback for students.

Table: Belief in Learning Improvement

Assessment Aspect	Average Score	Description
Belief in improving learning quality with AI use	3.5	The majority of principals believe that AI can increase the efficiency and effectiveness of learning.
AI potential in providing innovative solutions in learning	3.5	AI helps individual teaching, real-time evaluation, and more flexible learning access
Belief in the positive impact of AI in improving the learning experience	3.5	AI is considered capable of improving student learning experiences and teaching effectiveness
Challenges of limited resources in AI application	3.5	Principals feel they need more support in the form of facilities and devices.
Importance of training for teachers in AI use	3.5	Principals consider training for teachers very important so that AI can be utilized well
Need for adequate technology infrastructure for AI application	3.5	Without a stable network, adequate devices, and a good management system, AI implementation will be hampered

School principals also understand that Artificial Intelligence (AI) has the potential to create creative solutions in overcoming challenges often found in classroom learning. Artificial Intelligence (AI) can support more individual teaching, allow for real-time evaluation, and provide wider and more flexible learning access for students. Thus, this technology is considered capable of overcoming some limitations in the traditional education system and providing new opportunities to improve the quality of teaching. This belief reflects the growing understanding among school principals about how Artificial Intelligence (AI) can improve the quality of education. They realize that Artificial Intelligence (AI) can bring a significant positive impact, both in terms of increasing teaching effectiveness and improving the student learning experience. However, even though many school principals already understand the potential of Artificial Intelligence (AI), they also realize that there are major challenges that must be faced to maximize its implementation in their schools.

One of the main challenges faced by school principals is the limitation of resources available to support the implementation of AI technology. Although they believe in the benefits of Artificial Intelligence (AI), the majority of school principals feel that they need more support in the form of adequate facilities, hardware, and software so that they can utilize this technology maximally. Without sufficient resources, the effective implementation of Artificial Intelligence (AI) in schools will be very difficult to do.

Besides limited resources, school principals also realize that adequate training for teachers is very important to ensure the success of Artificial Intelligence (AI) implementation in learning. Many teachers may not be accustomed to using sophisticated technology in teaching, so there is a need for special training programs to develop their skills in using Artificial Intelligence (AI) tools effectively. Without sufficient training, even the most advanced tools will not provide a maximal impact on the quality of learning.

Not only that, improving technology infrastructure in schools is also an important aspect that needs attention. Without a stable internet network, adequate computer devices, and a learning management system that can support the use of Artificial Intelligence (AI), the process of integrating this technology will be hindered. Therefore, school principals acknowledge that strong infrastructure is one of the main requirements for Artificial Intelligence (AI) technology to be successfully implemented in education.

To realize their belief in the potential of Artificial Intelligence (AI), school principals need stronger support in terms of training and adequate facilities. With more in-depth training and improvements in technology infrastructure, they will be more ready to integrate this technology into the learning process. In this way, it is hoped that Artificial Intelligence (AI) can be used optimally to support the achievement of educational goals that are more efficient, effective, and relevant to the times.

The majority of school principals show a strong belief that the use of AI can improve the quality of learning in schools, with an average score of 3.5. They believe that AI can support a learning process that is more efficient and effective, provide innovative solutions in teaching, and improve the student learning experience. This finding is consistent with research by Sari (2022), which shows that the implementation of AI in education can improve teaching quality by means of personalized learning and faster and more accurate evaluation. However, in Melawi Regency, the biggest challenge lies in the limited technology infrastructure that hinders the maximal implementation of AI. Without adequate access to hardware and a stable internet network, AI cannot be utilized optimally to improve learning. This limitation hinders school principals in realizing the full potential of AI technology in education. The implication of this finding is that school principals must be more proactive in advocating for improved technology infrastructure in their schools. Furthermore, school principals need to ensure that teachers have adequate training in using AI to improve the quality of learning. School principals also need to have a strategic plan to overcome existing technical constraints, so that AI technology can be utilized more effectively.

Challenges in the Use of Artificial Intelligence (AI)

Although school principals generally understand the benefits of Artificial Intelligence (AI), they also face various challenges, especially related to the quality of content generated by this technology. With a score of 3.0 on the question related to the curation and validation of content generated by Artificial Intelligence (AI), school principals show awareness of the importance of verifying information generated by Artificial Intelligence (AI) before it is used in learning. This is important to ensure that the information received by students is accurate, relevant, and in accordance with applicable educational standards. School principals feel that, although Artificial Intelligence (AI) can speed up and simplify many aspects of learning, there is a risk that AI-generated content may not be well-verified or less relevant to the local context. They recognize that Artificial Intelligence (AI) can generate a large amount of content quickly, but it still needs to go through a strict curation process by educators to ensure its accuracy and quality. Therefore, although Artificial Intelligence (AI) can be a very beneficial tool, school principals emphasize the need for human involvement in checking and validating the generated information.

Another challenge is the gap in technical understanding between school principals and teachers. Although school principals are aware of the benefits of Artificial Intelligence (AI), they also recognize that the adoption of this technology at the teacher and student level requires greater support, both in terms of training and the provision of adequate devices and resources. Thus, to overcome this challenge, school principals expect further training that focuses on technical skills and the ethics of using Artificial Intelligence (AI) in schools.

One important finding from this survey is that school principals realize the importance of strict curation and validation of information generated by AI, with an average score of 3.0. They realize that although AI can generate a large amount of content quickly, a strict verification process is still needed so that the information received by students is accurate and in accordance with educational standards. This is consistent with research findings by Putri (2021) which show that errors in content curation and validation are one of the main challenges in the use of AI in education. In Melawi Regency, this challenge is felt more acutely due to the limited human resources trained to perform AI content curation and validation. Many teachers and school principals in the area are not yet skilled in verifying information generated by AI, so they worry that students might receive incorrect or less relevant information. Therefore, training in this area is very important to ensure that the content used in these schools is accountable. The implication of this finding is that school principals must ensure that there is a clear mechanism for carrying out curation and validation of content generated by AI. School principals must play an active role in ensuring that teachers have the skills to verify AI content before it is used in the learning process.

Ethics and Academic Integrity

Commitment to academic integrity is one of the top priorities for school principals. With an average score of 3.8, the majority of school principals affirm that Artificial Intelligence (AI) must be used as a learning aid, not for the purpose of plagiarism or cheating. They believe that although AI can speed up the process of creating teaching materials and exam questions, this technology must be used in an ethical and responsible manner. School principals show a high awareness that the utilization of AI in education needs to be carried out with strong moral principles.

School principals also emphasize the importance of strict supervision over the use of Artificial Intelligence (AI) by teachers and students to prevent potential misuse. They encourage the use of Artificial Intelligence (AI) to improve the quality of learning, not to facilitate cheating in exams or academic assessments. Therefore, it is important for every school to have a clear policy regarding the use of Artificial Intelligence (AI) and ensure that all involved parties adhere to the existing rules.

School principals also show the importance of teaching ethics in technology use to students. They strive to create a culture that supports the positive and responsible use of Artificial Intelligence (AI), so that students can understand how to use technology in a way that supports their learning and personal development, without violating existing academic norms and values.

The majority of school principals affirm the importance of academic integrity in the use of AI, with an average score of 3.8. They are committed to using AI as a learning aid, not for the purpose of plagiarism or cheating. This reflects a high awareness of ethics in the use of AI technology. This finding is consistent with research by Andayani (2020) which emphasizes the importance of strict supervision over the

use of technology in education to prevent potential misuse. In Melawi Regency, challenges related to ethics and academic integrity may be more pronounced due to the limited understanding of AI technology among most teachers and students. Without adequate understanding, there is a risk of AI misuse, such as using technology to cheat or manipulate learning outcomes. Therefore, school principals need to ensure that all involved parties understand and adhere to the ethical principles in the use of AI. The implication of this finding is that school principals must develop clear policies regarding the use of AI in schools, as well as ensure that all parties involved in learning understand how to use this technology ethically and responsibly.

The findings above show that school principals have a good understanding of the potential of AI in education, but the implementation of this technology still faces various challenges, especially in terms of infrastructure, training, and academic integrity. To successfully manage the AI technology transition, school principals must be visionary and proactive leaders. They need to advocate for improved infrastructure, provide adequate training for teachers, and ensure that AI technology is used ethically and responsibly. School principal leadership is also very important in creating a technology culture in schools. The school principal must be an agent of change who encourages the gradual adoption of technology and ensures that all parties involved in learning are ready to face it. In the context of Melawi Regency, school principals need to consider local factors and existing challenges, as well as design appropriate strategies to overcome these constraints and utilize AI technology maximally.

CONCLUSION

Based on the results of this survey, it can be concluded that school principals in Melawi Regency have a fairly positive perception of the use of Artificial Intelligence (AI) in education. The majority of school principals recognize the great benefits that AI can offer, especially in improving the quality of learning, administrative efficiency, and providing a more personal and measurable learning approach. However, the main challenges they face include issues of ethics, academic integrity, and student personal data protection, which are major concerns in the implementation of AI in schools.

To optimize the use of AI in Melawi Regency schools, the following is needed:

1. More in-depth and structured training for principals and teachers. This training should not only be theoretical provision but also based on a coaching model that allows principals to receive direct mentoring in AI implementation at school. Through the coaching-based training model, principals can overcome existing technical and ethical challenges, as well as learn how to manage the processing of student personal data wisely.
2. The immediate implementation of clear policies related to the use of AI and the management of student personal data to ensure academic integrity and privacy are maintained in AI-based learning processes.

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