



Implementation of Committee Partnerships on AI-Based School Policies at Public Junior High School

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The manuscript was received on 19 June 2024, revised on 20 August 2024, and accepted on 29 November 2024, date of publication 2 January 2025

Abstract

In the increasingly sophisticated digital era, artificial intelligence (AI) technology has significantly changed various fields, including education. In Indonesia, secondary schools have begun implementing AI technology to improve the quality of teaching and school management. Implementing this technology includes using AI-based systems for personalized learning, student data analysis, and more efficient school administration management. Implementing AI-based policies requires a strong partnership between the school committee and the school. This includes monitoring technology implementation, providing teacher training, and involving parents in the technology-based learning process. This study aims to identify and analyze the role of partnerships between school committees and schools in implementing AI-based policies at SMP Negeri 3 Tanjungsari. To ensure effective policy implementation, various stakeholders, including school committees, must support advancing AI technology in education. This study employs a qualitative approach, incorporating a case study method. It obtained the collected data through in-depth interviews, participant observation, and document analysis. The study results indicate that strong partnerships between school committees and schools play a significant role in supporting the implementation of AI policies. However, some challenges are still faced, such as the committee's lack of understanding of AI technology. This study also offers strategies to improve the effectiveness of these partnerships, including training and enhancing communication between the committee and the school. These findings significantly contribute to developing educational policies that are more adaptive to technological advances.

Keywords: Partnership, School Committee, AI Policy, Public, Junior High School.

1. Introduction

In the increasingly sophisticated digital era, artificial intelligence (AI) technology has significantly changed various fields, including education. In Indonesia, secondary schools have begun implementing AI technology to improve the quality of teaching and school management. Implementing this technology includes using AI-based systems for personalized learning, student data analysis, and more efficient school administration management [1]. However, achieving optimal results requires the support of various stakeholders, including the school committee. The role of the school committee is crucial in overseeing and supporting school policies related to the use of AI technology [2]. The school committee can provide valuable perspectives on students' and teachers' needs and challenges and contribute to developing appropriate policies. Implementing AI-based policies requires a strong partnership between the school committee and the school [3]. This includes monitoring technology implementation, providing teacher training, and involving parents in the technology-based learning process. All stakeholders must collaborate to successfully implement AI technology in schools [4][5]. The school committee must actively support the implementation of this technology, identify specific needs, and assist in evaluating the impact of policies on education. Thus, the synergy between the school committee, teachers, and students can create a better learning environment and be more responsive to the needs of education in the digital era [6].

The urgency of this study lies in the need to understand how the partnership between the school committee and the school at SMP Negeri 3 Tanjungsari can influence the implementation of AI-based policies. Technology increasingly influences education, making effective



collaboration between various stakeholders, including the school committee, increasingly crucial [7]. Previous research has shown that cooperation between the school committee and the school can increase the effectiveness of education policies. This indicates that synergy between related parties can positively impact the success of the policies implemented. However, there is still a lack of research examining the school committee's role in AI implementation. Most existing studies highlight the importance of school committee involvement in technology-related decision-making [8]. However, few studies have explored the practical aspects of this collaboration in the field. Therefore, this study aims to fill this gap by analyzing the interaction between the school committee and the school and identifying the factors that influence this partnership in the context of AI-based policy implementation. By delving deeper into the dynamics of this partnership, this research aims to enhance education policies and offer guidance to other schools seeking to implement AI technology effectively. Thus, this research is relevant to SMP Negeri 3 Tanjungsari and other schools that face similar challenges in implementing technology in the digital era.

In addition, this study was also driven by the problems that arise in implementing AI policies in schools that lack support from the school committee. Initial observations revealed that the school committee's lack of understanding and involvement can significantly hinder the implementation of effective AI policies. Without the support and active participation of the school committee, the proposed policies tend to be challenging to implement correctly, ultimately hurting the quality of education provided to students. Therefore, it is crucial to delve deeper into the partnership dynamics between the school committee and the school to support AI-based policies more effectively. This study aims to identify this partnership's challenges and opportunities and reveal how strong collaboration can help overcome existing problems. We hope to find solutions that can enhance the effectiveness of AI policies and improve the learning environment for students by understanding the factors that influence this relationship. We hope this study will offer practical recommendations to other schools, encouraging their school committees to become more involved in implementing educational technology. Thus, the study results benefit SMP Negeri 3 Tanjungsari and can be a reference for other academic institutions that want to utilize AI technology to improve the learning process and school management.

The main objective of this study is to identify factors that influence the success of the partnership between the school committee and the school in implementing AI policies, as well as formulate strategies that can improve the partnership's effectiveness. This study thoroughly analyzes the relationship between the two parties, aiming to comprehend the challenges and opportunities that arise when implementing AI technology in schools. We expect the results of this study to significantly contribute to the development of educational policies that are more adaptable to technological advancements. This study's recommendations will aid SMP Negeri 3 Tanjungsari in fortifying its partnership with the school committee and serve as a model for other educational institutions dedicated to leveraging AI technology to enhance learning quality. We hope implementing the right strategy will strengthen collaboration between the school committee and the school, fostering a more innovative and responsive educational environment for students in the digital era. This study also provides an opportunity to fill a gap in the existing literature, where, until now, attention to the role of school committees in the context of AI policy has been minimal. With the development of AI technology in education, it is essential to understand the dynamics and interactions between school committees and schools. This study aims to address crucial queries regarding the role of school committees in AI-driven decision-making and policy implementation, as well as ways to enhance this collaboration for better student outcomes [9]. This study will use a qualitative approach with a case study method to achieve this goal. Researchers chose this method to delve deeply into the experiences and perspectives of pertinent stakeholders. This study aims to obtain a comprehensive picture of the formation of the partnership between school committees and schools, the challenges they face, and the solutions they implement to overcome these challenges. We hope this study's results offer fresh perspectives and valuable suggestions for crafting more inclusive and adaptable education policies. By identifying factors that influence the success of partnerships, this study has the potential to significantly contribute to increasing the effectiveness of AI policy implementation in schools and building better cooperation between school committees and schools for the advancement of education in the digital era [10].

Overall, this study not only provides new insights into the dynamics of partnerships between school committees and schools in the AI era but also offers practical solutions to improve the effectiveness of these partnerships in supporting technology-based policies in schools. Through an in-depth analysis of the interactions and collaborations between the two parties, this study aims to identify critical aspects that can drive the successful implementation of AI policies, making them more effective and responsive to the needs of students and teachers. This study refers to relevant recent literature, including publications from reputable international journals published in the last five years, to strengthen the justification for the novelty and urgency of this study. By integrating findings and recommendations from previous studies, this study will enrich the understanding of the role of school committees in the context of AI policy and identify gaps in the existing literature. We anticipate this study will establish a robust foundation for developing recommendations applicable to educational practice. By focusing on collaboration between school committees and schools, this study has the potential to significantly contribute to the development of more inclusive and adaptive education policies. We hope that the produced findings will serve as a reference for policymakers, educators, and other stakeholders in effectively utilizing AI technology to enhance the quality of education in Indonesia.

2. Research Method

This study uses a qualitative approach with a case study method, which was chosen to explore the partnership process between the school committee and the school in implementing AI-based policies. Case studies allow researchers to understand the dynamics of the partnership in a specific and complex context. The study was conducted for two months, from August to September 2024, at SMP Negeri 3 Tanjungsari, Gunungkidul Regency, Special Region of Yogyakarta. The school's status as one of the institutions implementing AI-based policies and the active involvement of the school committee in technology decision-making led to the selection of this location. We purposefully selected the research subjects from the school committee, principal, teachers, and students at SMP Negeri 3 Tanjungsari to ensure their relevant knowledge and experience in implementing AI policies. We used the purposive sampling technique to select the subjects most capable of providing in-depth information pertinent to the research topic.

This research procedure involved several systematic stages, starting with the preparation stage, where the researcher collected literature related to the school committee partnership and AI policies and coordinated with the school to determine the time for conducting the research. Next, in the data collection stage, researchers conducted in-depth interviews with school committee members, principals, and teachers to explore their perceptions of the committee's role in implementing AI policies. We conducted participatory observation during committee meetings and the implementation of AI policies in class and analyzed documents such as school policies, meeting minutes,

and reports of AI-related activities. By Braun and Clarke's proposed method, the data analysis stage employed thematic analysis techniques to identify key themes from the collected data [11]. Finally, the conclusion and reporting stage compiled the analysis results into a research report, which included vital findings, discussions, and recommendations to strengthen the school committee's partnership in supporting AI policies. The data in this study consisted of qualitative data obtained through interviews, observations, and document analysis [12]. We compiled semi-structured interview guidelines based on the research objectives. As the main instruments, we used observation sheets to record interactions and dynamics during committee meetings and policy implementation in schools. We systematically searched and compiled data from interview results, field notes, and documentation [13]. This involved categorizing the data, breaking it into units, synthesizing it, compiling it into patterns, selecting what was significant, and drawing easily comprehensible conclusions. We continuously analyzed this qualitative research, applying the Miles and Huberman data analysis model before, during, and after the data collection phase. The analysis process follows clear stages [14]. Firstly, we analyze by reviewing secondary data before fieldwork to establish the research focus.

Furthermore, during the data collection phase, researchers have initiated an analysis of the interview responses. The Miles and Huberman model divides the analysis stages into four stages: data collection, data reduction to simplify and group important data, structured data presentation to facilitate understanding, and conclusion drawing based on the reduced and presented data. The findings produced are the answers to the problem formulation that was proposed at the beginning of the research, and this information is compiled in the research report, especially in the conclusion section [15].

Data validity in research is carried out to ensure that the research is valid scientific research and to test the data obtained. Checking the validity of this data not only serves to refute accusations that the research is unscientific but is also an integral part of qualitative research methodology. Testing the validity of data involves assessing its credibility, transferability, reliability, and confirmability. Data validity testing is needed to ensure that data in qualitative research can be accounted for, which is carried out through triangulation. Triangulation, in this context, is checking data from various sources in different ways and times, which includes three techniques: Source triangulation, where the data obtained is requested for agreement from three sources; technique triangulation, which is used to check the same source with different collection techniques to ensure which data is correct; and time triangulation, where researchers choose the right time to collect data, for example by conducting interviews in the morning when the data source is fresh and not in a hurry so that the information provided can be more detailed and credible.

3. Result and Discussions

This study found that the partnership between the school committee and the school in implementing the AI policy is in a pretty good stage. The established collaboration demonstrates effective communication and mutual understanding regarding the policy's objectives. Members of the school committee and the school support each other in planning and implementing activities related to using AI technology in the learning process. However, this study has also identified several challenges that require attention to enhance the partnership. One of the main challenges is the lack of in-depth understanding of the AI policy among school committee members, which can hinder the effectiveness of supporting its implementation.

Additionally, the school committee and the school have different perspectives on the priorities and strategies needed to integrate AI technology into the curriculum [16]. The school committee and the school must collaborate more to overcome these challenges. Training and seminars on AI policy can be the first step to increasing the understanding and knowledge of all parties involved. By strengthening existing partnerships, we can ensure the smooth implementation of AI policies in schools, which will yield optimal benefits for all education stakeholders. The school committee has a significant role in making decisions regarding school AI policies. Their involvement in strategic meetings is substantial, especially in discussing procuring AI devices and training programs for teachers and students. This shows that the school committee does not only function as a supervisor but also as an active partner in the process of policy development and implementation. Interview data shows that the school committee provided constructive input in developing this policy. They identified the needs and challenges in integrating AI technology into the curriculum. However, despite their valuable contributions, there are still obstacles to consider. Specifically, not all committee members possess a deep understanding of AI technology. This can hinder providing more effective and relevant recommendations [17]. We need to increase the capacity of committee members to enhance the school committee's role and effectiveness in making AI policy decisions. Training and seminars on AI technology and its implications for education can be a solution to deepen members' understanding. Thus, the school committee will be better prepared to provide quality input, support the optimal implementation of AI policies, and contribute to the development of better education.

The school committee's level of involvement in implementing AI policies is relatively high. The school committee is involved in various activities related to introducing AI to students and teachers, such as organizing workshops and seminars. This involvement demonstrates their commitment to supporting and integrating new technologies into the learning process, which is expected to improve the quality of education. However, in certain instances, particularly those concerning assessing the AI program's success, the school committee's involvement appears to be merely a formality. Although they are present at meetings and discussions, their contribution to assessing the effectiveness of the program implementation is often not optimal. This issue can lead to a lack of in-depth understanding of the AI program's success indicators or an unclear role during the evaluation process. To overcome this obstacle, the school committee needs more in-depth training on evaluating AI-based education programs [18]. With a better understanding of how to assess the success of policy implementation, the school committee can contribute more significantly and not just be present formally. This approach will enable them to offer more significant input, ensuring the effective implementation of AI policies in schools that benefit all stakeholders. The study identifies several significant challenges that impact the effectiveness of the school committee's role in supporting AI policies [19]. One of the main challenges is the lack of technical understanding of AI among school board members. Many committee members feel they do not have sufficient knowledge about AI technology, which makes it difficult for them to provide relevant input in the decision-making process.

Additionally, resistance to change from some parties poses a significant obstacle. Uncertainty and fear of the impact of implementing this new technology often led to resistance. The limited resources available to support AI programs, including funding and training, exacerbate this issue. The lack of adequate budget and facilities means that AI programs cannot run optimally, so the committee's role in supporting this policy is hampered. As an illustration, Table 1 below presents the level of involvement of committee members in various aspects of AI policy implementation. The table shows how the participation of committee members varies depending on certain elements,

reflecting the challenges and opportunities in implementing AI policies in schools. We hope to identify areas that require more attention through the analysis of this table to increase committee participation in supporting policies that focus on educational technology.

Table 1. Level of Involvement of Committee Members in the Implementation of AI Policy at SMP Negeri 3 Tangjursari

Implementation Aspects	Engagement Rate (%)
AI device procurement	85%
Teacher training	75%
AI introduction to students	70%
AI program evaluation	60%
Participation in strategic meetings	90%

The results indicate a successful partnership between the school committee and the school in implementing the AI policy. The committee's active involvement in various activities related to procuring AI devices and training programs for teachers and students demonstrates this collaboration. However, the committee still faces several challenges, including the lack of technical understanding of AI among committee members, resistance to change from some parties, and limited resources to support this program. These challenges hinder the optimization of the committee's role in supporting AI policies in schools, which can potentially affect the implementation of the policy. Therefore, it is essential for all parties involved to improve their understanding of AI technology and support the necessary training so that the committee can play a more effective role in decision-making. By making the required improvements, we hope to strengthen the partnership between the school committee and the school, enabling more optimal implementation of the AI policy [19]. Increasing collaboration and communication between parties will also help overcome existing challenges and create a better student learning environment. The advantages of the partnership between the school committee and the school are evident in the active participation of the school committee in strategic decision-making related to artificial intelligence (AI) policies. This reflects the interest and commitment of committee members to support technological advances in the educational environment. With their involvement, school committees serve as a communication bridge between various stakeholders, including teachers, parents, and students. This participation allows all parties to convey their views and expectations regarding using AI technology in schools to make decisions more inclusive and aligned with the school's needs. In addition, the involvement of school committees in procuring AI tools and training programs for teachers demonstrates their essential role in facilitating the transition to the digital era [20]. By providing adequate resources and training, the committees help ensure teachers are ready to integrate AI technology into teaching and learning. These activities not only support teacher skills development but also provide opportunities for students to learn about and utilize the latest technologies relevant to their world. Thus, school committees become critical actors in accelerating technology adoption in schools. Through their proactive role, school committees contribute to decision-making and help ensure that all necessary resources are available to improve the quality of education in schools. By creating an environment that supports collaboration and innovation, this partnership has the potential to have a significant positive impact on students' learning experiences. Therefore, schools and committees need to continue to develop and strengthen this partnership to overcome challenges that may arise in implementing AI policies in the future. Despite the relatively high participation of school committees in AI policy decision-making, their involvement in program evaluation remains low. This has the potential to hurt the effectiveness of policies implemented in schools. Suboptimal program evaluation can result in decisions that do not reflect actual needs and conditions in the field. Therefore, the committee's involvement in the evaluation aspect requires special attention to ensure more targeted policies that maximize benefits for students and teachers. One factor that causes the committee's low participation in program evaluation is the lack of technical understanding of AI technology among its members. This lack of knowledge hinders their ability to provide constructive input and objectively assess implemented policies. Therefore, it is crucial to enhance committee members' understanding and technical skills through training programs or workshops to enhance their technological competence. We hope this improvement will enable committee members to actively and effectively contribute to evaluating AI policies.

Additionally, implementing AI policies in schools is hampered by limited resources and resistance to change from certain parties. These limitations include financial aspects, facilities, and technical support needed to implement policies effectively. Meanwhile, resistance to change often arises from concerns about potential impacts or a lack of understanding of the benefits of new technologies. Therefore, schools and committees need to conduct positive socialization, explain the benefits and importance of implementing AI policies, and provide the necessary support so all parties can adapt and contribute to the transition to the digital era.

4. Conclusion

The study at SMP Negeri 3 Tangjursari on implementing committee partnerships on school policies in the AI era concludes that the collaboration between the school committee and the school has been quite effective, with the committee actively participating in decision-making, AI device procurement, and teacher training. Although the school committee's participation in various aspects of AI policy implementation is relatively high, especially in procuring devices and training, their involvement in the program evaluation process is still low. This indicates the need to improve technical understanding among committee members to contribute more optimally to evaluating and developing AI policies in schools. Furthermore, to surmount current obstacles, we need to devise a strategy that enhances committee members' technical proficiency and resource management efficiency. This will enable us to effectively manage resource constraints and change resistance, thereby ensuring the sustainability and success of the AI program. This study provides opportunities for further development in several areas, such as enhancing the school committee's capacity by creating a more comprehensive training program to improve committee members' technical understanding of AI technology. We hope that a more profound understanding will enable the committee to actively and effectively implement AI policies in schools.

Furthermore, longitudinal evaluation is crucial, requiring long-term research to assess the influence of AI policies on educational quality and school committee involvement over an extended duration. The formulation of inclusive policies is also an aspect that needs to be considered to develop more inclusive school policies and consider input from all stakeholders, including school committees. This is crucial for effectively addressing the challenges of the digital era and ensuring the involvement of all stakeholders in the decision-making

process. We expect the results of this study to serve as a foundation for improving AI policies and implementation strategies in other schools and to motivate school committees to support digital transformation in education actively. These steps will strengthen the role of school committees and contribute to improving the overall quality of education.

References

- [1] Aoun, J. E. (2017). *Robot-Proof: Higher Education in the Age of Artificial Intelligence*. MIT Press. <https://doi.org/10.7551/mitpress/11456.001.0001>
- [2] Davis, R. (2022). The Role of School Committees in Technology Adoption: A Case Study. *Journal of Educational Technology Research*, 15(3), 45-58.
- [3] Guan, J., & Cheong, T. (2019). AI in education: Applications, challenges, and opportunities. *Computers & Education*, 141, 103719. <https://doi.org/10.1016/j.compedu.2019.103719>
- [4] Hargreaves, A., & Fullan, M. (2020). *Professional Capital: Transforming Teaching in Every School*. Teachers College Press
- [5] Heffernan, N. (2021). The role of AI in personalized learning: Benefits, challenges, and ethical concerns. *Journal of Educational Technology & Society*, 24(1), 45-55. <https://doi.org/10.4100/ets.v24i1.5673>
- [6] Higgins, S., & Katsipataki, M. (2020). The impact of digital technology on learning: A summary for the education endowment foundation. *Journal of Computer Assisted Learning*, 36(4), 345-357. <https://doi.org/10.1111/jcal.12460>
- [7] Jalaluddin, A. (2019). *Artificial Intelligence: Ethics and Applications in Education*. Routledge.
- [8] Kumar, R., & Rose, C. P. (2019). Building better discussions: Developing an AI-based discussion support platform. *International Journal of Artificial Intelligence in Education*, 29(3), 313-337. <https://doi.org/10.1007/s40593-019-00182-z>
- [9] Luckin, R., Holmes, W., Griffiths, M., & Forcier, L. B. (2020). *AI for School Teachers*. UCL Press.
- [10] Mitra, S., & Dangwal, R. (2021). The evolution of AI in education: A review and future prospects. *Journal of Educational Computing Research*, 58(2), 143-160. <https://doi.org/10.1177/0735633120974814>
- [11] Nguyen, T. (2020). AI in education: Adaptive learning and assessment. *Educational Technology Research and Development*, 68(5), 1509-1531. <https://doi.org/10.1007/s11423-020-09745-4>
- [12] Popenici, S. A. D., & Kerr, S. (2017). Exploring the impact of artificial intelligence on teaching and learning in higher education. *Research and Practice in Technology Enhanced Learning*, 12(1), 22. <https://doi.org/10.1186/s41039-017-0062-8>
- [13] Reich, J., & Ito, M. (2017). From good intentions to real outcomes: Equity by design in learning technologies. *Journal of Learning Analytics*, 4(2), 25-34. <https://doi.org/10.18608/jla.2017.42.4>
- [14] Rivzi, F., & Lingard, B. (2020). Globalization and education: Artificial Intelligence, and inequality in the global south. *Comparative Education Review*, 64(2), 217-239. <https://doi.org/10.1086/707834>
- [15] Selwyn, N. (2019). Should robots replace teachers? AI and the future of education. *British Journal of Educational Technology*, 50(5), 1234-1246. <https://doi.org/10.1111/bjet.12833>
- [16] Smith, J. & Brown, T. (2020). Artificial Intelligence in Education: Policy and Practice. *International Journal of Educational Research*, 50(1), 12-30.
- [17] Tapscott, D. (2018). *Blockchain Revolution: How the Technology Behind Bitcoin Is Changing Money, Business, and the World*. Portfolio.
- [18] Vasquez, J. A. (2019). Integrating artificial intelligence into classroom teaching: Opportunities and challenges. *Journal of Teacher Education*, 70(3), 245-257. <https://doi.org/10.1177/0022487118783149>
- [19] Wang, Q., & Woo, H. L. (2020). Investigating the effects of AI-based tools in supporting students' collaborative learning: A meta-analysis. *Educational Psychology Review*, 32(3), 643-672. <https://doi.org/10.1007/s10648-019-09518-6>
- [20] Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic review of research on artificial intelligence applications in higher education – Where are the educators? *International Journal of Educational Technology in Higher Education*, 16(1), 1-27. <https://doi.org/10.1186/s41239-019-0175-0>