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INDONESIAN EDUCATION CURRICULUM POLICY: ADAPTATION TO ERA 5.0 AND PREPARATION FOR ERA 6.0

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Abstract

This study examines Indonesia's educational curriculum policies in adapting to the 5.0 Era and preparing for the transition to the 6.0 Era. Employing qualitative methods, including interviews with educators, policymakers, and academics alongside a comprehensive literature review, the research identifies key trends, challenges, and opportunities in curriculum development. The findings emphasize the need for integrating advanced technologies, such as artificial intelligence and big data, and strengthening 21st-century skills, including critical thinking and creativity. However, significant challenges, such as infrastructure gaps and limited teacher training, hinder effective implementation. The study underscores the importance of a flexible and adaptive curriculum design, incorporating sustainability and digital literacy while advocating for cross-sector collaboration to bridge existing gaps. These results highlight strategic pathways to create an education system that is innovative, inclusive, and future-ready, addressing global demands while retaining local relevance. This research contributes valuable insights for policymakers and educators in designing curricula that prepare students for the complexities of the 6.0 Era.

Keywords: ***Curriculum Policy, Society 5.0, Education 6.0, Educational Transformation, Curriculum Challenges***

1. INTRODUCTION

Rapid global development in the era of the industrial revolution 5.0 brings new challenges to the education sector. In this era, it emphasizes the integration of advanced technologies such as artificial intelligence (AI), Internet of Things (IoT), and big data with human values, creating the need for human resources who are adaptive, innovative, and have high digital literacy skills. Education curriculum policies play a central role in answering these challenges by ensuring that the education system can produce graduates who are relevant to the needs of the times (Langoday et al., 2024).

Globally, education policy has become the focus for many countries in facing the dynamics of changing times. International organizations such as UNESCO, OECD, and the World Economic Forum continue to push for innovative education reforms to address the needs of an increasingly digitalized and knowledge-based workforce. Curriculum policy is one of the strategic instruments to ensure that the education system can produce individuals who are not only technically competent, but also adaptive to social, economic, and technological changes (Langoday et al., 2024; Komang, 2024; Yaraş & Kanatlı Öztürk, 2022).

In a global context, the era of the Industrial Revolution 5.0 presents great challenges and opportunities for education. In this era, collaboration between humans and intelligent technology is the main core, so the educational curriculum must integrate technology mastery, digital literacy, creativity, and critical thinking skills (Judijanto et al., 2024). Various countries have embarked on progressive steps to align their curricula with the needs of the era. Some countries such as Finland have adopted a phenomenon-based learning approach (Bayas, 2022; Symeonidis & Schwarz,

2016). Meanwhile, Japan introduced Society 5.0 as an educational concept that combines technology with social values for the welfare of the community (Miwa, 2020; Rojas et al., 2021). However, efforts to adapt education policies to global demands do not stop in the 5.0 era. Projections towards the 6.0 era hint at an era where technology integration will deepen, combining artificial intelligence, biotechnology, and sustainability-based innovation (Moleka, 2023). Education no longer only aims to prepare the workforce, but also creates agents of change capable of facing challenges such as climate change, social inequality, and the development of disruptive technologies. This requires curriculum policies that are not only adaptive, but also proactive in anticipating future needs.

Indonesia, the educational curriculum has undergone various transformations along with social, economic, and technological changes. The Independent Curriculum in Indonesia is one of the government's efforts to increase learning flexibility and support the development of creative and critical student character (Langoday et al., 2024; Syahrir et al., 2024). However, the challenges of the 5.0 era require a more comprehensive strategy, so curriculum adaptation not only requires adjustments to technology, but also must consider cultural elements, local wisdom, and global competitiveness (Harahap et al., 2023; Rusman et al., 2023). Although many studies have been conducted related to the implementation of competency-based curriculum, character strengthening, and technology integration in education, there are still research gaps that have not been fully answered.

The adaptation of curriculum policies to Society 5.0 is still not comprehensively measured. Society 5.0 emphasizes the use of technology to improve the quality of human life (Narvaez Rojas et al., 2021; Rusman et al., 2023). However, previous research conducted by (Akman & Erdirençelebi, 2024; Moleka, 2023; Sołtysik-Piorunkiewicz & Zdonek, 2021) tend to focus on technical mastery of technology, while the synergy between technology and solving social problems has not been studied much in the context of Indonesian education.

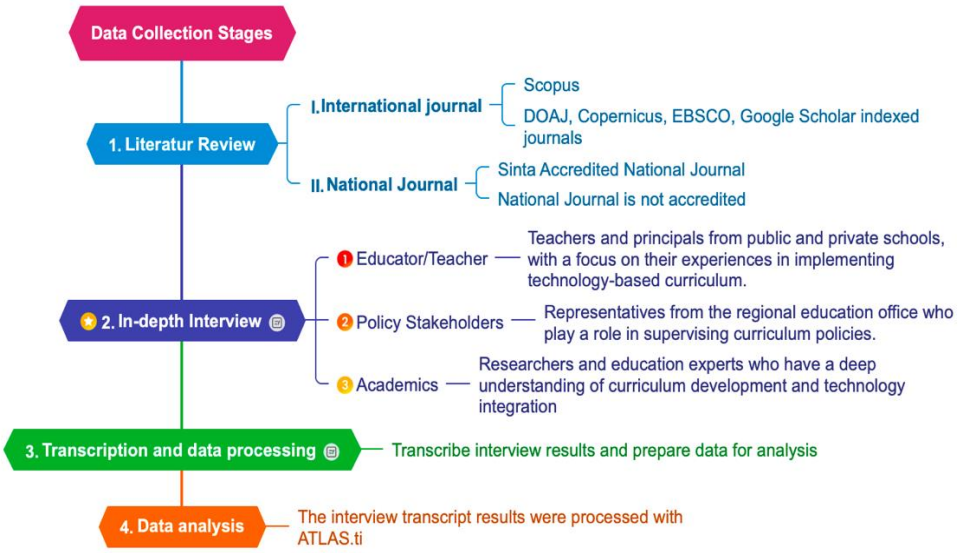
Preparations for the 6.0 era, which is projected to surpass smart technology with a deeper integration between humans and technology, are a bigger challenge for the education system (Legi et al., 2023; Moleka, 2023). The 6.0 era is predicted to bring fundamental changes through the integration of advanced technology such as artificial intelligence (AI), big data, and personalized-based adaptive learning systems. This era requires curriculum policies that can anticipate rapid changes in the world of work, technological innovation, and environmental sustainability challenges (Zen, 2019). For this reason, a systematic study is needed that identifies trends, opportunities, and challenges in Indonesia's education curriculum policy, especially in facing the 5.0 era and the transition to the 6.0 era. Unfortunately, there has not been much research that identifies Indonesia's readiness in developing curriculum policies to face these challenges, including strategies that need to be carried out to prepare students as competitive human resources.

The challenge of implementing curriculum policies is still a significant obstacle. Research (Chow, 2014; Langoday et al., 2024; Sebayang & Swaramarinda, 2020; Tan, 2012) It highlights education policies in a macro context, while challenges at the implementation level, such as low teacher digital competence, limited technological infrastructure, and gaps in access to education in remote areas, have not been analyzed in depth. Based on these problems, this study aims to: 1) Analyze Indonesia's education curriculum policy in its adaptation to the 5.0 Era, 2) Identify the challenges faced in preparing the curriculum towards the 6.0 Era, 3) formulate relevant and innovative curriculum policy strategies in preparing the education system towards the 6.0 Era. This research focuses on analyzing Indonesia's educational curriculum policies in facing the challenges of the 5.0 Era and preparing for the transition to the 6.0 Era.

2. IMPLEMENTATION METHOD

This study uses a qualitative method with data collection techniques through interviews, and literature review as the main approach to analyze educational curriculum policies in Indonesia in the context of adaptation to the 5.0 era and preparation for the 6.0 era. The combination of research techniques between interviews and literature reviews, aims to strengthen existing research data. This method is used to filter, evaluate, and integrate relevant literature in a systematic and

structured manner. In this approach, research is conducted to identify patterns, trends, and gaps in the literature related to educational curriculum policies, both from a national and global perspective. To strengthen the study of literature, interviews were conducted with educators, policy makers and academics with a total of 17 people from private and public schools in Jakarta, Bogor, Depok, Bekasi and Tangerang



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and identify gaps in previous research to support further research. The review literature used is sourced from:

- **International Journal**: Searches are carried out on databases such as Scopus, DOAJ, Copernicus, EBSCO, and Google Scholar to get references from international indexed journals. The focus is studies related to Society 5.0, the 6.0 era, and technology-based education policies.
- **National Journal**: The search is focused on SINTA-accredited and non-accredited journals, with special attention to articles that discuss the implementation of educational curriculum policies.

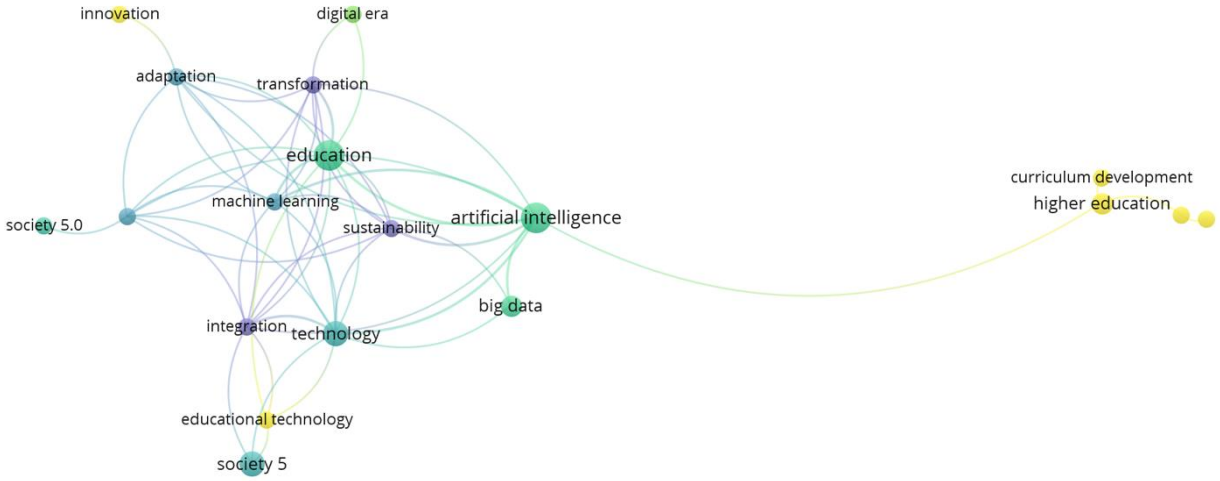
2. In the next stage, **in-depth interviews** were conducted with 17 resource persons with three main groups to obtain in-depth qualitative data, namely Teacher Educators and School Principals, Policy Makers, Academics and Researchers in the field of Education. The interview is semi-structured to provide flexibility in exploring the in-depth perspective of the respondent. The main questions are designed to direct the discussion, but respondents are given space to express additional views. Some of the categories of questions asked include: What are your opinions on the integration of technology in learning, Challenges faced in implementing technology-based learning, What is the role of the curriculum in the 5.0 Era in learning, What are the strategies that can be applied in future Education in the 6.0 Era, how to distribute technology infrastructure in learning equitably, How should a flexible curriculum approach be applied in learning
3. After the interview, **transcription and verbatim data processing** were carried out to ensure the accuracy of the data. After that, the data is processed and organized for analysis. This step is important to ensure that all qualitative data can be used to the fullest in the next stage of analysis.
4. The last stage is data **analysis using ATLAS.ti software**. This analysis process includes:
   - Identify the main themes and sub-themes that are relevant to curriculum adaptation in Era 5.0 and preparation for Era 6.0.

- Visualization of inter-thematic relationships to provide a deeper understanding of patterns and key factors in curriculum policy implementation.

This research method is designed to provide an in-depth and comprehensive overview of Indonesia's educational curriculum policy in adapting to the 5.0 Era and preparing for the 6.0 Era. With a combined approach of literature review and in-depth interviews, this study not only identifies literature gaps but also captures practical realities from the perspectives of educators, policymakers, and academics. The data analysis conducted using ATLAS.ti allows the study to formulate relevant key themes, patterns, and key factors to provide strategic recommendations for innovative, adaptive, and sustainable education policies.

3. RESULTS AND DISCUSSION

Based on the results of a literature review study of journal articles that were studied with research vulnerability in 2008-2024 from the results of the journal review of 65 articles used, a model of the results of the bibliographic data base processed with VOSviewer was found as follows:



literature related to education, technology, and curriculum in the digital era. This visualization illustrates the connectivity between various key keywords relevant to Society 5.0-based education policies and preparations towards the 6.0 Era. In this visualization, education becomes a connectivity center that connects various themes such as artificial intelligence (AI), big data, technology, sustainability, and curriculum development. Education plays a central role as the core of technological innovation that supports social adaptation and transformation.

Artificial intelligence (AI) is emerging as a key technology in creating personalization-based learning that allows for an adaptive approach to individual student needs. AI is directly connected to big data, which serves as an analytical basis for understanding learning patterns, predicting student needs, and supporting evidence-based decision-making in education. This is as revealed in the study (Abuhassna et al., 2024; Celik et al., 2024), which mentioned that the integration of AI in education can prepare students for a work environment that increasingly relies on smart technology. However, the main challenge in the application of this technology is the availability of infrastructure and training for educators to ensure that the technology can be used effectively.

In addition, educational technology plays an important role in integrating technology-based approaches such as machine learning into the curriculum to improve learning effectiveness. Meanwhile, Society 5.0 focuses on how technology can be adapted and integrated to solve social challenges, including in the education system. Technological adaptation in education demands digital literacy as a basic skill, while technology integration emphasizes the importance of using AI and big data to create innovative learning systems. Educational transformation includes not only mastering technology but also how technology is used to reduce educational gaps and support sustainability. The transformation of the education system is the main highlight in literature studies. This system transformation involves profound changes in curriculum structure and learning methods to integrate sustainability values. Education not only aims to produce technologically

proficient individuals, but also to produce a generation capable of solving real-world problems, such as environmental sustainability and climate change issues. Research (Legi et al., 2023; Rusman et al., 2023; Yaraş & Kanatlı Öztürk, 2022), shows that the transformation of education in the 5.0 era must adopt a cross-disciplinary approach that connects technology with sustainability.

Sustainability is an important theme that is depicted in the modern education system. Technologies integrated into education should not only focus on learning effectiveness but also support sustainable development goals. In this context, sustainability is an important element in designing relevant educational curricula and strategies for the future. Curriculum development and the role of higher education play a strategic role in ensuring the relevance of the education system to global needs (Langoday et al., 2024; Verona et al., 2023; Winata Komang, 2024). Curriculum development must reflect the needs of technology and digital skills, while higher education is a leader in preparing the younger generation to face the challenges of the 6.0 Era. A flexible, data-driven curriculum can help create learning that is adaptive, supportive, personalized, and relevant to global technological developments (Juliani & Aslan, 2024; Nygaard et al., 2008; Zufar et al., 2024).

Educational innovation is the main element in ensuring that the learning system remains relevant in the digital era. With innovation, education can leverage technologies such as AI and big data to create efficiencies, improve the quality of learning, and answer global needs. These findings confirm that education must be an agent of change that not only keeps up with technological developments but also leads social transformation to create a more inclusive, adaptive, and sustainable future. (Legi et al., 2023; Sebayang & Swaramarinda, 2020; Taxirovna, 2024; Wang, 2023) said education, technology, and curriculum development are interconnected in creating an education system that is responsive to global changes. Collaboration between the government, educational institutions, and the private sector is key to ensuring the effective implementation of technology-based policies, so that education can play a strategic role in shaping a competitive and innovative young generation.

The digital era is a global context that affects almost all elements of discussion. Rapid changes in technology and the needs of the world of work require the education system to continue to adapt. International collaboration is key to ensuring the curriculum remains relevant. Studies (Supriani et al., 2022; Yasykur et al., 2023) emphasized that sharing best practices between countries can help developing countries, such as Indonesia, to accelerate curriculum innovation and prepare young generations to face global challenges. (Supriani et al., 2022), Emphasizing curriculum innovation as a dynamic process and requiring the involvement of various parties to ensure the relevance and sustainability of an adaptive and effective curriculum. Thus, curriculum innovation is a strategic tool to improve the quality of education and prepare students to face future needs.

From the results of interviews with 17 resource persons to Teacher Educators and School Principals, Policy Makers, Academics and Researchers, the results of the interviews were processed using ATLAS.ti software to provide in-depth insight into the perceptions of educators, policy makers, and academics related to Indonesia's educational curriculum policies in adapting to the 5.0 Era and preparing for the 6.0 Era. The interview data is organized into several main themes and sub-themes, which are analyzed in depth to illustrate the interrelationship between factors. The main themes can be discussed as follows:

3.1 Main Theme: Education

Education plays a central role in the transformation of society towards the 5.0 Era and preparations for the 6.0 Era. As one of the main pillars of human development, the education system is expected to be able to adapt to technological developments and dynamic global needs. In this study, interviews conducted with educators, policy makers, and academics highlight the importance of developing education based on technology integration, increasing digital literacy, and adapting flexible and adaptive curriculum. The following are the results of data processing carried out with ATLAS.ti software regarding the main theme of Education:

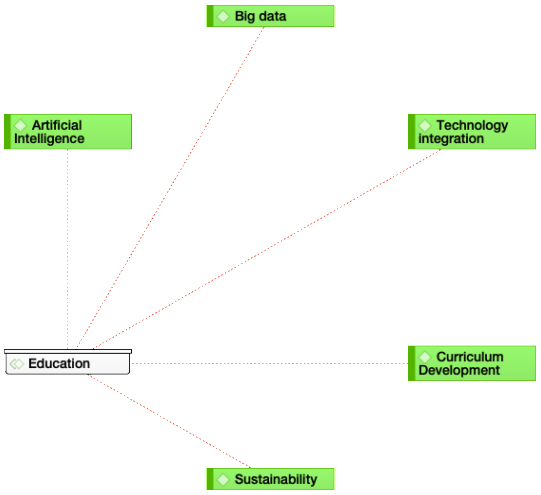


Figure 3. Interview Results on the Education Theme
Source: data processed, 2024

Based on Figure 3. The results of the interview on the Education Theme are known that Education plays a central role in technological and social transformation, especially in the Society 5.0 era and preparations for the 6.0 Era. The visualization of the Education theme illustrates the close relationship between curriculum development, sustainability, technology, big data, and artificial intelligence (AI). From the results of interviews analyzed using ATLAS.ti, it is emphasized that education is not only a medium for knowledge transfer, but also a strategic tool in creating a generation that is ready to face global challenges. Curriculum development is the main issue highlighted by resource persons from teachers and school principals. The resource person emphasized the importance of a flexible and digital literacy-based curriculum to ensure that students can keep up with technological developments. Academics added that the curriculum needs to be designed to support technology-based learning by integrating AI and big data. This finding is in accordance with previous research which states that flexible curriculum can create learning that is relevant to the needs of the industry in the digital era (Abuhassna et al., 2024; Celik et al., 2024; Moleka, 2023).

Sustainability is the main theme in the interview. Policymakers highlighted the importance of ensuring that technological innovation in education not only focuses on efficiency, but also supports sustainable development goals. Educational technology must be designed to reduce social disparities, especially in hard-to-reach areas. (Rokhimah et al., 2024; Siwitomo et al., 2023; Zen, 2019) affirming that sustainability-oriented education can be a solution to global challenges, including climate change and social inequality. Technology integration is one of the major challenges facing schools, especially in remote areas. The teacher said that the limitations of technological devices and internet connections are obstacles in the implementation of digital-based learning. Policymakers recognize that equitable distribution of technology infrastructure is still a big homework to support the transformation of Education based on Society 5.0.

In addition, big data is recognized as a potential tool to support adaptive learning and data-driven decision-making. However, its use is still limited in higher education institutions. Academics state that big data can be used to analyze student needs, predict learning patterns, and create a more personalized education system. Artificial intelligence (AI) is also an important topic discussed by the speakers. Academics see AI as a great opportunity to improve learning personalization, while teachers state that lack of training is a major obstacle to AI implementation in schools. Previous research confirms that AI can be an effective tool for creating adaptive learning, but it requires cross-sector collaboration to support its implementation.

Overall, the results of the interviews show that education in Indonesia is on the right track to transform towards Society 5.0 and Era 6.0. However, challenges such as infrastructure gaps, teacher

competence, and sustainability must be addressed immediately. With the right strategy, education can be the main driving force in creating an innovative, inclusive, and sustainable society. This narrative emphasizes that education is the key to creating a generation that is not only able to keep up with the times, but also lead global transformation.

3.2 Main Theme: Education Era 5.0

Education in the 5.0 Era presents a new paradigm that integrates advanced technology with human values to create innovative social solutions. Education plays a central role as a foundation to build a generation that can adapt, innovate, and lead social transformation in the midst of the complexity of global change. Based on the results of the interview on the Education Era 5.0 theme, the following results were obtained:

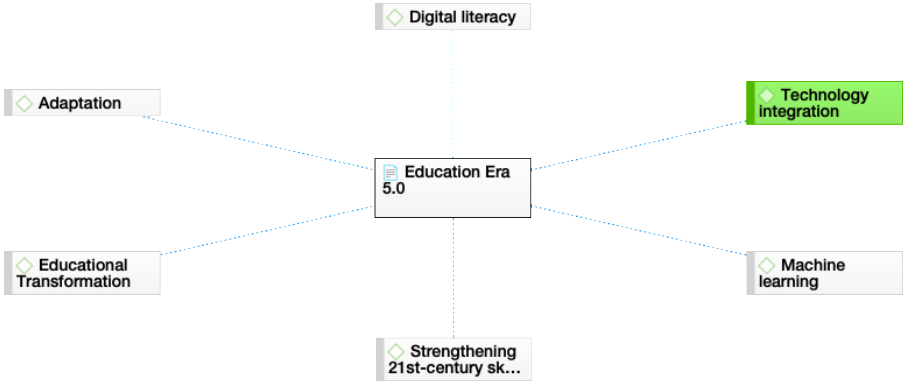


Figure 4. Research Results on Education Era 5.0
Source: data processed, 2024

From figure 4. The discussion of Education 5.0 describes various important elements in the Education Era 5.0, namely Digital Literacy, Technology Integration, Machine Learning, Strengthening 21st-Century Skills, Educational Transformation, and Adaptation. These elements show how education must evolve to meet the complex technological and social needs of the 5.0 Era. The results of the interview show that digital literacy is considered a fundamental element in preparing students to face the challenges of the 5.0 Era. Teachers and principals emphasize that students need to have the ability to understand, use, and evaluate digital information effectively. However, the resource person also revealed that digital literacy is still uneven, especially in areas with limited access to technology. (Akman & Erdirençelebi, 2024; Saraswati et al., 2022; Sindi Septia Hasnida et al., 2023), mentioned that digital literacy is a key skill in the modern education system, which helps students and teachers to become active and critical digital citizens, and digital literacy makes it easier for teachers to deliver lesson materials to students.

In addition, technology is the main component in the transformation of education in the 5.0 Era. Teachers stated that technology such as digital devices and learning apps helps create more interactive and adaptive learning. However, infrastructure challenges and lack of teacher training are the main obstacles to the integration of this technology. said the integration of technology in education requires strong infrastructure support and intensive training for teachers to ensure the success of Education and teaching. Machine learning is one of the key factors in Education in the 5.0 era where machine learning can be used to create personalized and data-based learning. This technology allows the education system to analyze student needs and provide appropriate learning recommendations. In the results of the interview, there is Strengthening 21st-Century Skills where strengthening 21st century skills such as critical thinking, collaboration, creativity, and communication are one of the main focuses in the interview. Teachers mentioned that these skills need to be integrated into the curriculum to ensure students can compete in the global job market. (Margunayasa, 2024; Noptario et al., 2024; Pare & Sihotang, 2023), said 21st century skills are

becoming a core element in modern education, allowing students to adapt to rapid technological and social changes.

Policymakers emphasized that educational transformation in 5.0 Era requires a paradigm change, from a traditional learning approach to a technology-based approach. This transformation involves the use of advanced technologies such as AI and big data to support better decision-making in education. (Abuhassna et al., 2024; Celik et al., 2024; Moleka, 2023) emphasizing that technology-based education transformation must focus on adaptive and evidence-based learning to improve the quality of education. In the interview results, the adaptation of the education system to technological developments is the main challenge, especially in ensuring equal access and the ability of educators to utilize technology. Teachers in public schools mentioned that despite national policies such as the Independent Curriculum, implementation at the local level often faces obstacles such as lack of training. Previous interviews and research support these findings by emphasizing the importance of technology-based approaches and sustainability in the modern education system.

3.3 Main Theme: Curriculum Challenges Towards the 6.0 Era

Entering the 6.0 Era, the education system faces great challenges in adjusting the curriculum to be relevant to increasingly complex and dynamic global needs. This era is not only marked by technological advancements such as artificial intelligence (AI), big data, and the Internet of Things (IoT), but also demands the integration of human values, sustainability, and personalization of learning. Based on the results of the interviews conducted, it is known that the factors that are challenging in the curriculum towards the 6.0 Era are illustrated in the following image:

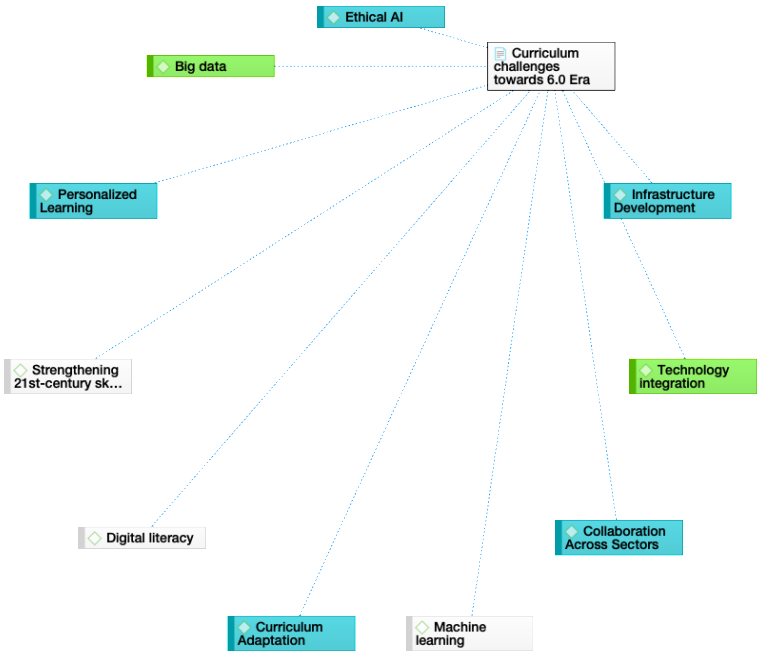


Figure 5. Research Results Curriculum Challenges Towards Era 6.0
Source: data processed, 2024

Figure 5 from the results of the interview, it is known that there are challenges in facing the Era 6.0 curriculum which includes technological, social, and policy aspects. The results of interviews with educators, policy makers, and academics revealed that one of the main challenges is the use of artificial intelligence (AI) in education. While AI offers great opportunities for personalization of learning and increased efficiency, its implementation still faces barriers related to ethics, data protection, and potential algorithmic bias. Policymakers emphasized the need for clear regulations to ensure the ethical and transparent use of AI, in line with the principles of fairness and security. Previous research by (Abuhassna et al., 2024; Moleka, 2023) emphasized the importance of responsible AI application in education. In addition to AI, big data is an important element in

supporting data-driven education. From the results of the interview, it is known that big data can be used to analyze student needs and create adaptive learning approaches. However, its use is still limited in many educational institutions, especially at the primary and secondary levels, due to the lack of infrastructure and competence of educators in data analysis. Research (Legi et al., 2023; Yaraş & Kanatlı Öztürk, 2022; Zufar et al., 2024) highlighting the great potential of big data in improving the effectiveness of education but emphasized that its success depends heavily on the readiness of the technology infrastructure.

Personalized learning is one of the focuses in interviews, where teachers emphasize the importance of technologies such as AI and big data to create learning experiences tailored to students' individual needs. However, infrastructure constraints, especially in remote areas, often hinder the implementation of this approach. On the other hand, strengthening 21st century skills, such as critical thinking, creativity, collaboration, and communication, is a priority in compiling the Era 6.0 curriculum. These skills must be integrated into the learning process, although traditional approaches still dominate in many schools. Research (Celik et al., 2024; Margunayasa, 2024; Sukirwan et al., 2024; Sundar et al., 2024) mentioned that 21st century skills are a fundamental element in modern education to face global changes that emphasize critical thinking, creativity, collaboration, and communication, must be deeply integrated into the learning process.

However, curriculum flexibility is also a big challenge. Policymakers stated that rigid curriculum structures often hinder adaptation to technological developments and global needs. This view is supported by research (Langoday et al., 2024; Verona et al., 2023; Winata Komang, 2024) who emphasized that curriculum adaptation requires a responsive approach to the times, considering local needs. The integration of technology in learning is one of the biggest obstacles faced by schools, especially in areas with limited access. Teachers reveal that the lack of technology training and resources often limits the effectiveness of technology implementation in learning. Another obstacle is the lack of technological infrastructure that is evenly distributed throughout the region. Policymakers and teachers agree that infrastructure limitations, such as poor internet connections and a lack of technological devices, are the main obstacles to the implementation of technology-based curricula. Digital literacy is also an important challenge in the Era 6.0 curriculum. The resource person noted that there is a digital literacy gap between students in urban and rural areas, which creates inequality in access to digital learning.

Cross-sector collaboration, including government, private sector, and educational institutions, is considered important to support the implementation of the Era 6.0 curriculum. Policymakers stated that this collaboration can accelerate the equitable distribution of technology and the development of training for teachers. (Siwitomo et al., 2023) It shows that cross-sector collaboration is a strategic approach to address complex challenges in education. Overall, the results of this interview show that the curriculum challenges towards the 6.0 Era involve various interrelated aspects, from the integration of technology and the ethics of using AI to the strengthening of 21st century skills and curriculum adaptation. Previous research has emphasized that addressing these challenges requires a holistic approach that includes infrastructure investment, teacher training, and cross-sector collaboration. With the right steps, education can be the main foundation in forming a generation that is ready to face the 6.0 Era.

3.4 Main Theme: Curriculum Preparation Strategy Towards the 6.0 Era

The curriculum development strategy towards the 6.0 Era emphasizes the integration of advanced technology, strengthening 21st century skills, and adapting to dynamic global needs. Based on the results of the interviews conducted, the results of the analysis were as follows:

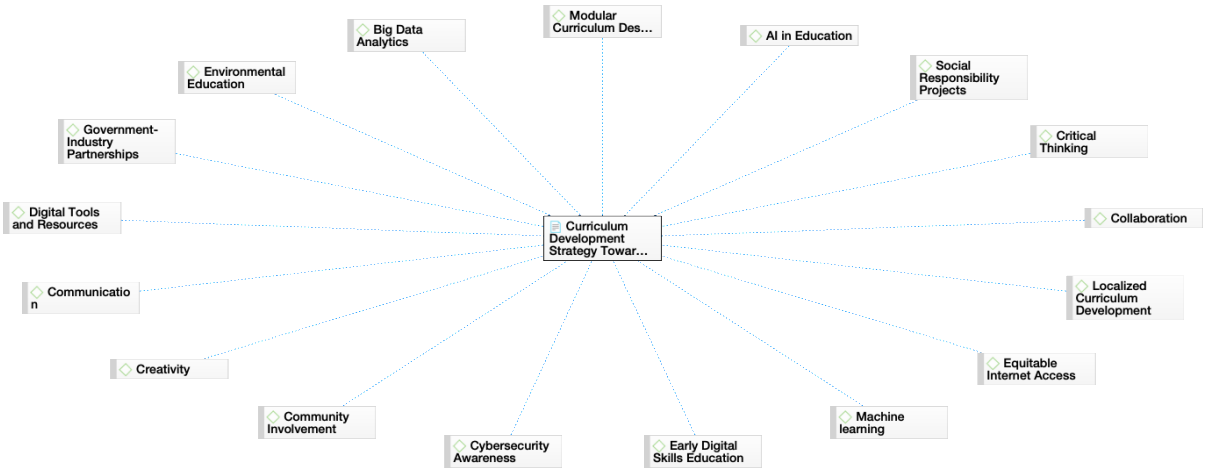


Figure 6. Research Results Curriculum Preparation Strategy Towards the 6.0 Era
Source: data processed, 2024

Figure 6 shows the results of interviews on the Curriculum Preparation Strategy Towards the 6.0 Era. In facing the challenges of the 6.0 Era, curriculum development strategies are the main focus to ensure that education is able to meet increasingly complex global needs. Interviews with educators, policymakers, and academics revealed that technology integration, strengthening 21st century skills, modular curriculum design, and sustainability approaches are key elements in this strategy. From the results of the interview, modular curriculum design became one of the main themes raised. The speakers emphasized the importance of flexibility in the curriculum to allow students to choose learning paths that suit their interests and needs.

The integration of technology such as artificial intelligence (AI), machine learning, and big data is also a priority in curriculum development. This technology allows for more effective personalization of learning, although the limitations of infrastructure and the competence of educators are a major challenge. (Pendidikan et al., 2024; Ridho et al., 2022; Zen, 2019) emphasized that the success of technology integration is highly dependent on the readiness of infrastructure and adequate teacher training. In strengthening 21st century skills, such as critical thinking, creativity, collaboration, and communication, it is also an important aspect expressed by teachers. They stated that project-based learning and problem-based learning are very effective in developing these skills. These findings are in line with research (Celik et al., 2024; Margunayasa, 2024; Sukirwan et al., 2024; Sundar et al., 2024), which emphasizes that 21st century skills are the foundation for preparing students for global change. In addition, the results of the interviews highlighted the importance of sustainability as part of the curriculum. Sustainability education, such as learning about climate change and social responsibility, is considered important to form students who care about the environment.

Digital literacy is identified as a fundamental skill that needs to be taught from an early age. The resource person emphasized the importance of integrating digital literacy into learning, including an understanding of cybersecurity and the ethical use of technology. Cross-sector collaboration is one of the key strategies conveyed by policy makers. Cooperation between the government, industry, and local communities is considered important to ensure the relevance of the curriculum to the needs of the world of work. However, infrastructure challenges remain a major obstacle to the implementation of this strategy. Uneven internet access and a lack of technological devices in some regions hinder the implementation of technology based.

Overall, the curriculum development strategy towards the 6.0 Era requires a holistic and integrated approach. By combining advanced technology, 21st century skills, sustainability, digital literacy, and cross-sector collaboration, curricula can become more relevant, adaptive, and inclusive. This strategy not only prepares students to face global challenges but also forms a generation that is

innovative, environmentally conscious, and ready to lead future social transformations.

4. CONCLUSION

The findings of this study highlight the critical need for Indonesia's education curriculum to adapt to the challenges of the 5.0 Era and proactively prepare for the upcoming 6.0 Era. The integration of advanced technologies such as artificial intelligence, big data, and machine learning emerges as a pivotal factor for ensuring education remains relevant in a rapidly evolving global context. The curriculum must also emphasize the development of 21st-century skills—critical thinking, creativity, collaboration, and communication—while incorporating sustainability and digital literacy as foundational components.

Despite significant progress, challenges persist in implementing these strategies, particularly in addressing infrastructure limitations, enhancing teacher competencies, and ensuring equitable access to technology. Collaborative efforts between the government, private sector, and educational institutions are essential to overcome these obstacles. The study further underscores the importance of a flexible and adaptive curriculum that aligns with local and global needs, leveraging modular design and data-driven approaches to enhance personalization in learning.

In conclusion, this study provides strategic recommendations to foster a curriculum that is innovative, inclusive, and capable of shaping a competitive and sustainable generation. Future research is encouraged to explore the practical applications of these strategies, particularly in developing regions, to ensure that education systems nationwide are equipped to face the demands of the 6.0 Era**.**

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