

Educational Resource Development Model in the Millennial Era Towards the Local Genius 6.0 Era

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ABSTRACT: This study aims to develop a model for strengthening educator resources in the digital age through the integration of the concepts of Society 5.0 and Local Genius 6.0. The background of this study is based on the phenomenon of a paradigm shift in education that requires mastery of digital literacy while preserving local cultural values. The research approach used is a qualitative method with an exploratory descriptive design involving lecturers and teachers from several educational institutions in the Greater Jakarta area. Data were collected through in-depth interviews, observations, and documentation studies, then analyzed using data reduction, data presentation, and conclusion drawing techniques. The results show that the development of educational resources in the digital era has not been fully adaptive to the demands of Society 5.0, especially in terms of utilizing technology for culture-based learning. The integration of the Local Genius 6.0 concept has been proven to strengthen the identity and character of educators through the instillation of the values of mutual cooperation, independence, honesty, and responsibility in digital learning practices. The developed model produces synergy between technological innovation and local wisdom, thereby encouraging the creation of a humanistic, contextual learning approach rooted in the cultural values of the nation. The application of the Society 5.0 and Local Genius 6.0-based model is able to improve educators' pedagogical competence, digital literacy, and cultural awareness without neglecting local humanity and spirituality values. This research has important implications for sustainable education development policies, namely the need for technology-based educator training integrated with local cultural values to create competitive education with an Indonesian identity. The research outputs produced include: (1) an educator resource development model based on the integration of Society 5.0 and Local Genius 6.0, named MASA-SDP; (2) scientific articles ready for publication in SINTA-accredited national journals; (3) a guideline manuscript on the application of local cultural values in digital learning; and (4) an animated video on the application of the MASA-SDP model.

KEYWORDS: Society 5.0; Local Genius 6.0; Educational Technology; Educator Development; Digital Transformation.

I. INTRODUCTION

The digital era has brought significant changes to various aspects of life, including education. The concept of Society 5.0, first introduced in Japan, emphasizes the use of technology to improve the quality of human life, including in the field of education (Amelia, 2024). This concept presents new challenges for educators to adapt to rapid technological changes. On the other hand, Local Genius 6.0 emphasizes the importance of local wisdom in facing global developments. The integration of these two concepts can be an innovative approach in developing educational resources to face the challenges of the digital era (Sihaloho, 2020).

The application of digital technology in education has brought about various learning innovations, such as the use of artificial intelligence, big data, and the Internet of Things (IoT) (Ridho, 2024). This technology enables the learning process to be more adaptive, interactive, and personalized. However, the use of technology in education should not eliminate the cultural values that have long been the identity of the nation. As times change, Indonesia faces the challenges of globalization, which can erode local wisdom if not managed properly (Andi Sadriani et al., 2023; Khairunnisa et al., 2024). Therefore, the integration of digital technology and cultural values in the development of educational resources is a strategic solution to ensure the sustainability of education that is locally based but remains globally competitive.

In practice, many teachers still face obstacles in adapting digital technology in learning. Lack of understanding of modern technology, infrastructure limitations, and low educational policy support are factors that hinder the transformation of Society 5.0-based education (Khairunnisa et al., 2024). In addition, the lack of awareness of the importance of preserving local culture is also a challenge in developing learning models that preserve local values (Trisnawati, 2024). Therefore, this study aims to develop a model for developing educational resources that can harmoniously integrate technology and cultural aspects.

Educational Resource Development Model in the Millennial Era Towards the Local Genius 6.0 Era

The combination of the Society 5.0 and Local Genius 6.0 concepts in education is expected to create a more inclusive and sustainable learning ecosystem (Sihaloho, 2020). Teachers who have an understanding of modern technology and local wisdom will find it easier to create innovative learning methods based on the needs of students (Suarningsih, 2019). With this approach, education is not only a means to improve academic competence, but also a vehicle for preserving local culture amid the increasingly strong tide of globalization.

Furthermore, this study will explore how the application of the Society 5.0 concept can improve the effectiveness of educators in managing digital-based learning. Additionally, this study will also examine how Local Genius 6.0 can be applied in learning as a means to strengthen the cultural identity of students. Thus, this study seeks to address the urgent need for a model for developing educators who are able to face the challenges of the digital era without losing their local cultural identity.

The advantage of this approach is its ability to provide solutions to classic problems in education, such as the lack of relevance of the curriculum to the needs of the times, the low quality of technology-based learning, and the loss of cultural values in education. Therefore, this study will focus on designing a model for developing education resources based on local wisdom. This model is expected to enable educators to be more flexible and adaptive in facing the challenges of modern learning, while maintaining the sustainability of local culture in the educational process. In addition, this study is also expected to provide policy recommendations for the government and educational institutions in designing strategies for developing technology- and culture-based educational resources. The results of this study are expected to become the basis for the formulation of more innovative national education policies oriented towards the sustainability of local values in facing the challenges of globalization.

Several previous studies have discussed human resource development in the digital age, but they are still limited in terms of technology implementation without considering local wisdom. This study provides novelty in several aspects, namely:

- a. Integrating the concepts of Society 5.0 and Local Genius 6.0 in the development of educational resources, thereby producing a balance between digital capabilities and the preservation of local cultural values.
- b. Creating an educational resource development model that remains grounded in the principles of local wisdom as the foundation of national ethics and identity.
- c. Compiling practical guidelines for educational institutions to implement educator competency development in line with the demands of the digital era without neglecting local values.
- d. Creating animated videos on the application of the Education Resources model in the Society 5.0 era towards
- e. Producing scientific publications and educational policy recommendations that can be used as references for policy makers in formulating the direction of national education transformation based on values and technology.

This approach not only provides solutions to the challenges of educational digitalization but also preserves local wisdom values to remain relevant in the learning process. Thus, this research is expected to address gaps in previous studies by offering a more holistic and applicable model.

II. LITERATURE REVIEW

1. Basic Concepts of Society 5.0

The concept of Society 5.0 was first introduced by the Japanese government as a paradigm of a super-smart society that places humans at the center of every technological advancement (Graciello & Wibawa, 2022). In the context of education, Society 5.0 requires the transformation of the learning system towards a more adaptive, collaborative, and data-driven model (Muhammad Arifin et al., 2025). Technologies such as Artificial Intelligence (AI), Internet of Things (IoT), big data, and cloud computing are used to support personalized learning to suit the needs of students. According to (Kobayashi et al., 2022), the essence of Society 5.0 is not solely on technology, but on human-centered innovation, where digital progress must be oriented towards human welfare. (Fakrijal & Yusriman, 2024) add that educators in this era must have digital pedagogical literacy to manage learning in a meaningful and ethical manner. The concept of Society 5.0 provides the theoretical basis for developing teachers who are adaptive to technology while also being reflective of human values.

2. The Basic Concept of Local Genius 6.0

The concept of local genius 6.0 emphasizes the importance of integrating local cultural values, spirituality, and ethics into every digital learning innovation (Sihaloho, 2020). Local Genius 6.0 exists to ensure that education in the digital era does not lose its national identity, but rather strengthens it. Values such as mutual cooperation, independence, honesty, and responsibility form the basis for building the character of students (Pertiwi et al., 2025). Local Genius 6.0 does not simply reject globalization, but directs globalization to be in line with local wisdom and the spirituality of the Indonesian people (Kurniawan et al., 2024). Thus, technology functions as a tool for cultural preservation, not a tool for the assimilation of foreign values.

II. METHODS

This study uses a Research and Development (R&D) approach with a model (Gall, M. D., Gall, J. P., & Borg, 2003) that aims to develop a model for developing educator resources based on Society 5.0 and Local Genius 6.0. The stages of research include problem identification and initial model development through empirical data collection and theoretical studies. Data were

Educational Resource Development Model in the Millennial Era Towards the Local Genius 6.0 Era

collected using surveys, interviews, observations, and documentation studies to obtain a comprehensive picture of teachers' digital competencies and understanding of local values. The research informants consisted of teachers, principals, education and technology experts, and school partners, who were selected using purposive sampling due to their relevance to the research focus. The data were analyzed using qualitative descriptive analysis to interpret the field findings. The results of the analysis were used to create an education resource model oriented towards local cultural values in learning.

III. RESULT AND DISCUSSION

Result

This research is a continuation of the results of needs analysis mapping with a focus on the formulation and validation of the MASA–SDP conceptual model, namely the Society 5.0 and Local Genius 6.0-based educator resource development model. Referring to the Research and Development (R&D) model framework by Gall, Gall & Borg, the research activities included three stages: (1) developing a preliminary form of the product through the design of an initial model based on the results of interviews and literature reviews; (2) preliminary field testing by collecting empirical input from teachers, principals, and students; and (3) main product revision to refine the model. Thus, this second year of research focuses on developing a conceptually and practically validated model, but has not yet reached the stage of widespread field implementation.

Qualitative data was obtained through in-depth interviews with three key informants: the Deputy Principal for Curriculum, the Deputy Principal for Facilities and Infrastructure, a chemistry teacher, and 12th grade students. The analysis was conducted using a thematic approach to explore the real needs of teachers, students, and schools for technology-based teacher development and local cultural values. The interview results showed that SMAN Jakarta is highly prepared for digital technology integration, both in terms of management, teacher training, and platform-based learning such as Moodle, Canva, and AI-based coding. Teachers emphasized the importance of education that is not only oriented towards technological skills, but also builds character, critical thinking, and independence in students.

In addition, several informants also highlighted that digital technology plays a major role in improving the quality of science learning, but also brings challenges in the form of digital distractions. They emphasized the importance of the role of teachers as humanistic mentors who are able to instill spiritual values in learning. Meanwhile, from the students' perspective, technology is seen as an attractive and collaborative medium, but it still requires guidance so as not to reduce critical thinking motivation. Based on the triangulation of the interviews, five main themes of field needs were found, namely strengthening teachers' digital literacy, integrating local cultural and spiritual values, developing humanistic learning, collaborative leadership, and continuous evaluation. These five themes form the foundation for the development of the MASA–SDP Model as a strategy for teacher professional development in the Society 5.0 era towards Local Genius 6.0.

Table 1. Findings on Development Model Needs

Main Idea	Description	Model Implication
1. Local Genius 6.0	1. Use of IoT 2. Project-based learning 3. Collaboration 4. Critical thinking skills 5. Character education 6. Curriculum transformation	Model MASA -SDP
2. Education Resources in the Millennial Era towards Local Genius 6.0	1. IoT deployment 2. Digital literacy development 3. Online and distance learning 4. Creation of instructional videos 5. Character and moral development 6. Relevant curriculum 7. Utilization of cloud, computing, and virtual worlds.	
3. Society 5.0 approach	1. Digital Technology 2. Connectivity 3. Data-driven decision making 4. Collaboration 5. Innovation 6. Sustainability 7. Quality of Life Improvement 8. Use of Technology to Address Social Issue.	

4. Educational resources	1. Digital technology
	2. Online resources
	3. Learning communities
	4. Teachers and mentors
	5. Relevant curriculum
	6. Educational facilities
	7. Skill development
	8. Integration of technology and curriculum
	9. Character development
	10. Collaboration with industry

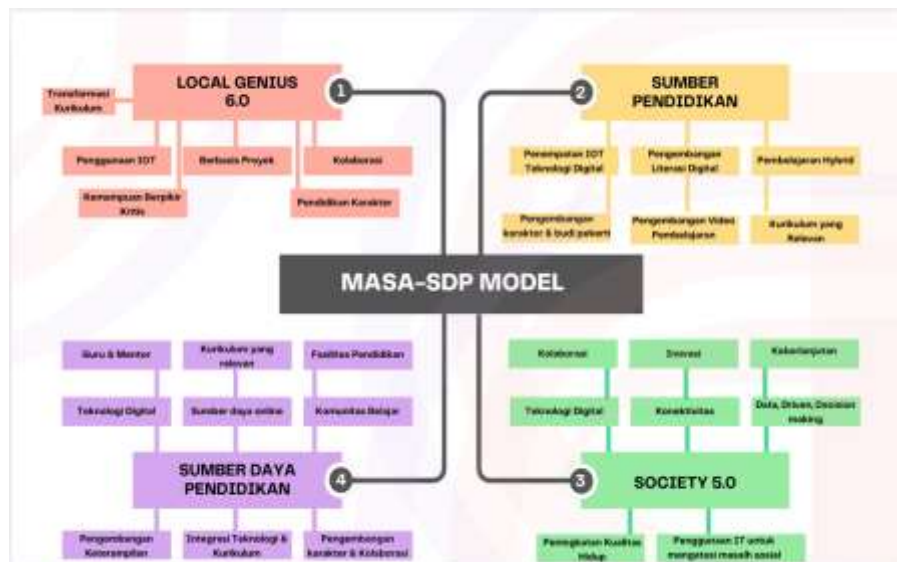
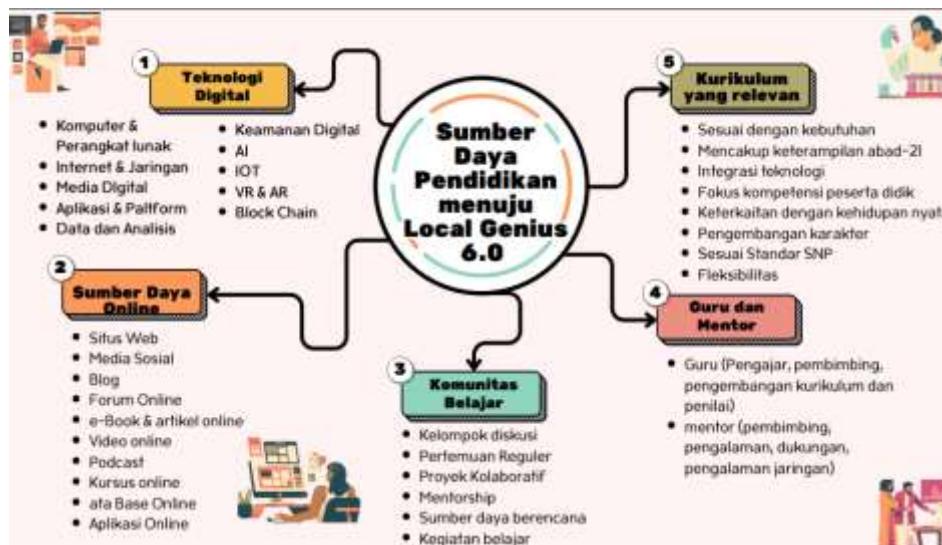


Figure 2. MASA-SDP Model

Figure 2 shows the MASA–SDP Model, which forms the basic framework of the study. This model explains the process of teacher transformation in facing the digital era by balancing three main elements, namely input, process, and output. Input includes digital competency requirements, local cultural values, and educational institutional support. The process emphasizes technology-based teacher training and local wisdom, the development of contextual digital content, and reflective collaboration between teachers and students. The output and outcome are the emergence of digitally competent educators who still have local character, critical and creative students, and a sustainable educational ecosystem rooted in culture. This model forms the foundation of the philosophy that technology in education is not meant to replace humans, but to humanize the learning process.



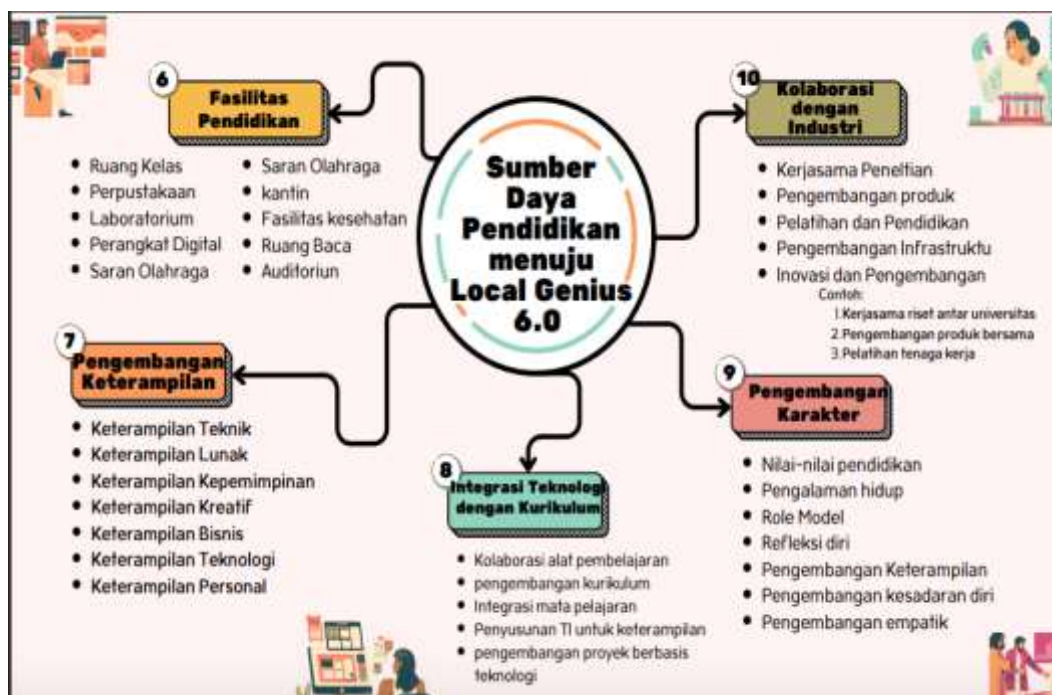


Figure 3. Educational Resource Design towards Local Genius 6.0

Furthermore, Figure 3 expands this framework in the form of Educational Resource Design towards Local Genius 6.0. This figure explains how the education system is transforming to integrate digital technologies such as the Internet of Things (IoT), cloud computing, and project-based learning with local wisdom values. Here, education not only functions as a means of transferring digital knowledge, but also as a vehicle for preserving cultural values and character building. This design emphasizes the importance of balancing technological advancement and local wisdom so that education can create a generation that is intelligent, ethical, and rooted in national identity.

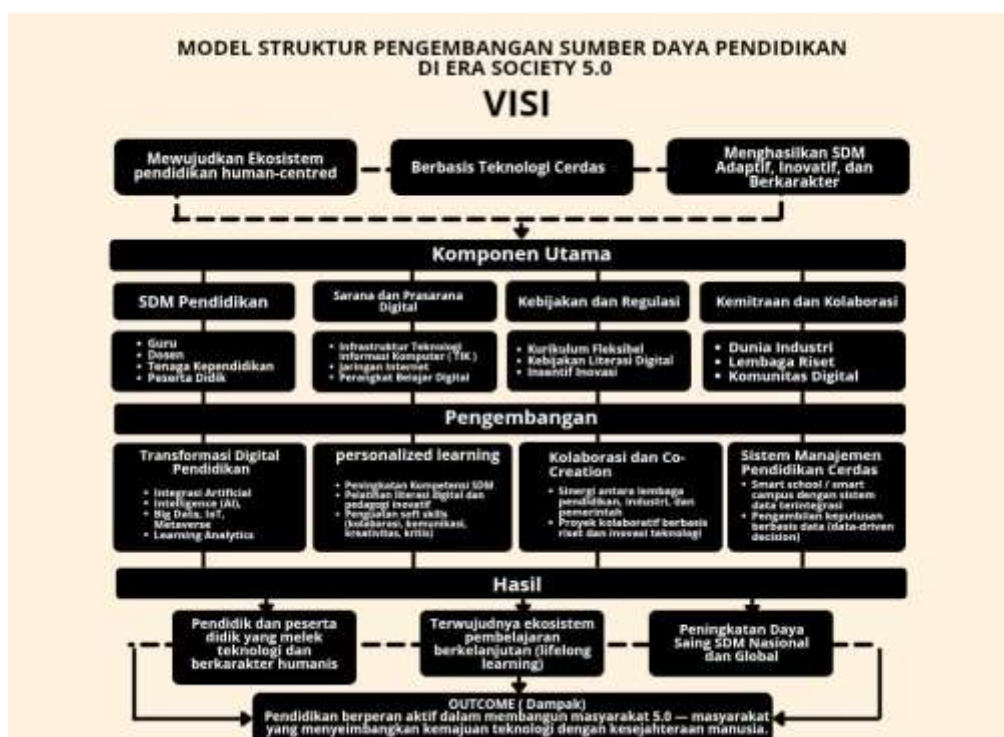


Figure 4. Model of Educational Resource Development Structure in the Society 5.0 Era

Figure 4 illustrates the Model of Educational Resource Development Structure in the Society 5.0 Era, which shows the systemic relationship between various educational components such as teachers, students, technology, policies, and learning communities. This structure shows that teachers are the central link between humans and technology, acting not only as facilitators of digital

Educational Resource Development Model in the Millennial Era Towards the Local Genius 6.0 Era

learning but also as guardians of human values. Education in the Society 5.0 era requires digital pedagogical literacy, reflective collaboration, and policy support that promotes sustainability.

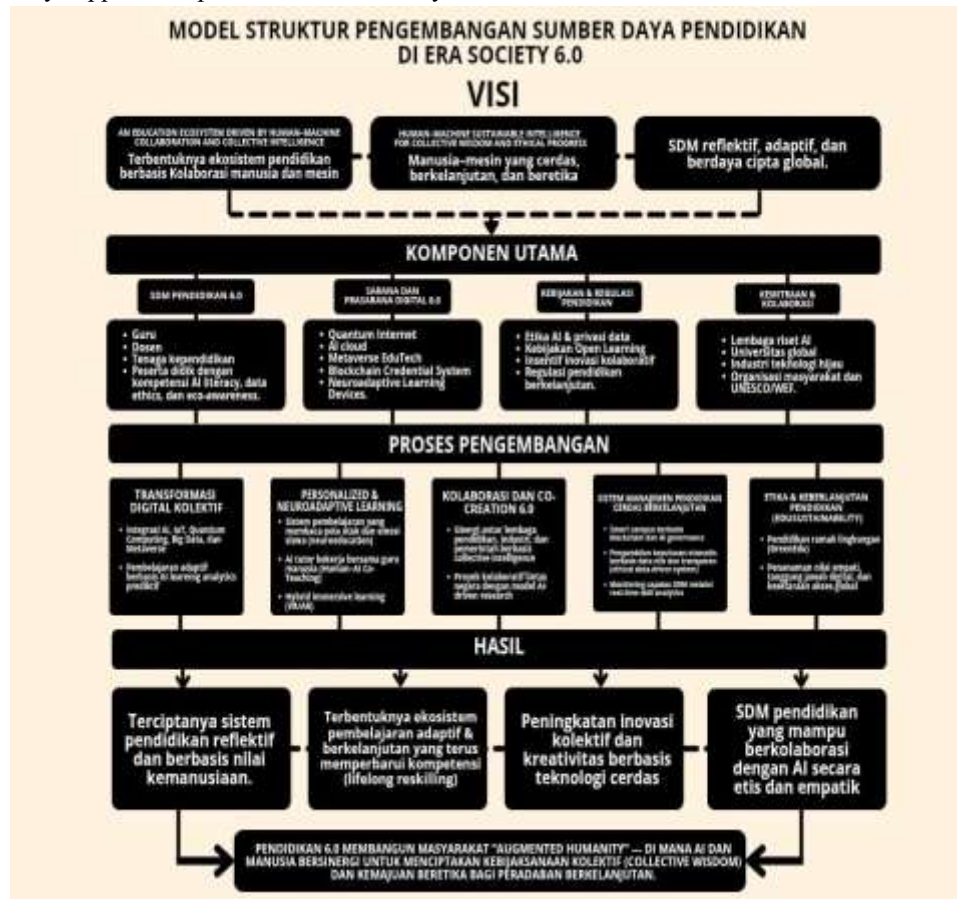


Figure 5. Model of Educational Resource Development Structure in the Society 5.0 Era

Figure 5 is an improvement on this structure, adding an integrative dimension between technology, culture, and humanity. In this model, technology serves to strengthen humanity and culture, rather than negate them. Teachers become agents of change who combine technological innovation with local values through a humanistic approach, in accordance with the principles of The Ethics of Care in education.



Figure 6. Transition from Society 5.0 to 6.0 Education Era

Educational Resource Development Model in the Millennial Era Towards the Local Genius 6.0 Era

Figure 6 shows the transition from Society 5.0 to 6.0 Education Era, which illustrates the evolution of the education paradigm from a technology- and connectivity-based system to a value-, spirituality-, and local wisdom-based system. This shift marks the transformation of the role of teachers from technology users to creators of value and drivers of social change. In the Education 6.0 era, technology is used not only to facilitate learning, but also to strengthen the spirituality, morality, and cultural identity of students. Overall, images 2 to 6 reflect the logical continuity between the conceptual model, education system design, development structure, and the direction of Indonesia's educational evolution. All of these images illustrate the grand vision that the future of Indonesian education must be based on humanistic technology, rooted in local culture, and oriented towards human welfare, in line with the spirit of Society 5.0 and Local Genius 6.0.

Discussion

The MASA-SDP model developed in this study confirms that educational transformation in the Society 5.0 era requires not only technological mastery but also the ability to humanize the learning process. The concept of integrating technology and local culture is a distinctive feature of this model, which is firmly rooted in the empirical needs of teachers and students in secondary schools. The interview results show that teachers need digital pedagogical literacy, which is the ability to integrate technology in a meaningful learning context. This finding is in line with the research by Chai et al. (2020), which emphasizes the importance of developing Technological Pedagogical Content Knowledge (TPACK) for teachers to face the Society 5.0 ecosystem.

Furthermore, (Humaira & Aprison, 2024) highlight that teachers' digital literacy is not limited to technical skills, but also includes an understanding of the ethical values of technology use in the digital classroom. Research by Putra & Rahmawati (2022) in Indonesia found that teachers who had continuous training in technology integration showed a significant increase in learning creativity and student engagement. This reinforces the urgency of the Digital Pedagogical Literacy module in the MASA-SDP Model. Findings from informants show that technology can be a means of preserving cultural values. This approach is in line with the idea (Wang et al., 2023) that emphasizes the importance of “digital cultural resilience” as a strategy for dealing with globalization. Meanwhile, (Shaleh, 2020) in their study in West Java high schools found that the integration of local culture into digital media increased students' sense of pride and national identity.

The humanistic and contextual approach is also confirmed by (Kobayashi et al., 2022), who emphasize Society 5.0 as an era of a “super-smart human-centered society,” where technology should be used to benefit humans, not replace them. This is in line with the Local Genius 6.0 philosophy in this study, which places the value of local wisdom as the foundation of educational ethics. Human-centered education is at the center of this model. The interview results show that teachers play a role not only as technology facilitators but also as emotional mentors. (Virmayanti et al., 2023) in *The Ethics of Care in Education* states that the dimension of care ethics must be at the core of all technology-based educational innovations. Similarly, (Praswastari & Satrio, 2023) found that digital humanistic learning models can increase students' empathy and motivation to learn in an online learning context.

Research by Mulyoto et al. (2023) also supports these findings. They show that teacher creativity in the VUCA (Volatility, Uncertainty, Complexity, Ambiguity) era can only grow if technological mastery is accompanied by an awareness of values and character. This reinforces the relevance of the MASA-SDP Model in developing teachers who are digitally and spiritually resilient. Expert validation of the model resulted in high feasibility (85–91%), indicating that the model has met the principles of content and construct validity. These results are consistent with the findings of Gall & Borg (2007) that R&D models that achieve expert consensus >80% are considered ready for limited trials. Additionally, research by Yuliani et al. (2022) on the validation of a learning community-based teacher development model also reported a similar validity percentage, reinforcing the reliability of the approach used. The results of this study contribute to expanding the Society 5.0 theory by adding layers of locality and humanistic values.

IV. CONCLUSIONS

The results of the study show that the main need in education today is a teacher development model that is able to balance technology, culture, and humanity. Through a process of empirical and theoretical synthesis, the MASA-SDP Model was formulated, consisting of five main components, namely digital literacy, integration of local values, humanistic learning, collaborative leadership, and continuous evaluation. Based on the validation results from experts, this model obtained a high level of feasibility and was deemed ready to be tested in the next stage of research. The MASA-SDP model has the potential to become a reference in teacher professional development policies based on Society 5.0 and Local Genius 6.0, and is in line with Sustainable Development Goal (SDG) number 4, namely Quality Education. For further development, this study recommends that in the third year, limited implementation testing (field testing) be conducted to measure the effectiveness of the model in a real school context. The Education Office is expected to integrate the results of this study into teacher training policies oriented towards strengthening technological literacy and preserving cultural values.

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