

Conceptual Study of Local Wisdom-Based Education Management Strategy in the 3T (Disadvantaged, Frontier, and Outermost) Areas of Simeulue Regency

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ABSTRACT

Objective: This study aimed to examine educational management strategies based on local wisdom in disadvantaged, frontier, and outermost (3T) areas, particularly in Simeulue Regency. The main focus is on how local values can be systematically integrated into education management to improve the quality and relevance of education in remote areas. **Methods:** This study used a qualitative approach based on conceptual literature studies. Data were collected through a search of scientific literature, government policies, and previous research results relevant to the topic of local wisdom and education management in the 3T region. The analysis was carried out descriptively and critically to compile a synthesis of education management models based on local cultural values. **Results:** The results of the study show that education in 3T areas faces infrastructure constraints, limited teachers, and low community participation. However, there is great potential in local wisdom, such as *smong* culture, mutual cooperation, and *nandong*, that can be integrated into the education management system. The synthesis produced a conceptual model based on participation, local values, and curriculum contextualization. **Novelty:** The novelty of this study lies in the systematic mapping of local values particularly *smong* and *nandong* into a coherent strategic management framework that transforms cultural wisdom into an operational education model. This conceptual contribution provides a new perspective on how indigenous cultural systems can be institutionalized within educational management structures, offering theoretical and practical implications for sustainable education in 3T regions.

INTRODUCTION

Education is a fundamental pillar of national development and human resource improvement. However, Indonesia still faces a stark disparity between urban and 3T (disadvantaged, frontier, and outermost) regions such as Simeulue Regency, Aceh Province, which suffer from inadequate infrastructure, limited qualified teachers, and weak community participation (Falah & Hadna, 2022); (Matondang, 2016). The average national schooling duration reaches 8.69 years, whereas in 3T areas it is only 5.1 years equivalent to fifth-grade level (Ghuzini, 2021). Geographical isolation, transportation barriers, and low economic capacity exacerbate these educational challenges.

In this context, managing education in 3T regions requires a culturally grounded strategy that integrates local wisdom into educational planning and practice. Local wisdom, defined as inherited social values and norms sustaining social harmony and environmental balance (Awaludin, 2025), can strengthen community engagement and contextualize learning. Simeulue Regency provides a distinctive case where rich local traditions *smong* (a tsunami folklore for disaster mitigation), *nandong* (a rhythmic oral art conveying moral and social messages), and *mutual cooperation* serve not only as cultural heritage but also as living systems of knowledge fostering adaptability and resilience (Im and Hidayat, 2023); (Kamaly et al., n.d.).

Integrating these local values into educational management enables schools to become cultural centers that reflect the community's lived realities. Previous studies have demonstrated that incorporating local culture enhances participation, nurtures character formation, and enriches curricula (Sakti et al., 2024); (Rohman, 2024); (Purwaningsih & Ridha, 2024). Such approaches align with the continuing education paradigm emphasizing the contextual relevance of learning (Jaya et al., 2023); (Læssøe, 2010).

Furthermore, community-based management built upon cooperation among schools, traditional leaders, and local governments has proven effective in overcoming resource constraints in 3T regions (Handayani & Hidayat, 2025); (Qomarrullah et al., 2024); (Sihombing et al., 2022). As Yusmandi et al. (2025) and Tuuk and Ratulangi (2025) note, two-way communication and participatory leadership are key to educational success in remote contexts. Therefore, this study aims to conceptually analyze the education management strategy based on local wisdom in Simeulue, emphasizing how smong, nandong, and gotong royong can inform an adaptive, participatory, and culturally relevant educational model.

Literature Review

A. Education Management in the 3T Region

Education management is a process that includes planning, organizing, implementing, and supervising all educational activities so that learning objectives can be achieved effectively and efficiently (Ekweogu and Emegwa, 2024). In the context of disadvantaged, frontier, and outermost (3T) regions, education management plays a crucial role in ensuring that access, equity, and quality of education are maintained amid limited infrastructure, human resources, and technological support (Vega et al., 2024).

According to Darim (2020), the 3T region faces various multidimensional problems, such as limited infrastructure, shortage of educators, and low community participation in education management. This condition causes many schools to have difficulty optimally carrying out their managerial functions. Presidential Regulation Number 63 of 2020 stipulates 62 districts as 3T areas, including Simeulue Regency in Aceh Province, which has severe geographical challenges owing to the location of the archipelago and limited transportation access.

Under these conditions, education management cannot only rely on a formal administrative approach but must prioritize collaboration between stakeholders, namely, school principals, teachers, community leaders, parents, and local governments. This collaboration is needed so that the education system can adapt to the local social and cultural context. Yusmandi et al. (2025) and (Tuuk & Ratulangi, 2025) explain that effective two-way communication between schools and the community is the key to successful education management in the 3T region.

In addition, the success of educational management is greatly influenced by the capacity of school principals to carry out their role as learning leaders (Garza et al., 2014). School principals must empower existing community resources, optimize the role of local figures, and build social networks to support the development of educational institutions. Thus, education management in the 3T area is not only oriented towards achieving administrative targets but also on efforts to empower the community so that education can run sustainably and contextually according to local needs.

B. Concepts and Values of Local Wisdom

Local wisdom is a collection of values, norms, traditions, and knowledge formed from people's adaptation to their natural and social environment (Priyatna, 2016). Manihuruk and Setiawati (2024) defined local wisdom as a cultural expression that reflects human wisdom in maintaining a balance between individuals, society, and the environment. Local wisdom serves as a guideline for life and as a system of knowledge and values that can be used as a source of education.

In education, local wisdom is a source of character, morals, and cultural identity formation. Sholeh et al. (2025) emphasized that the values contained in local traditions can be integrated into the curriculum and school management, because they contain universal values such as mutual cooperation, responsibility, and social solidarity. Through such integration, learners not only gain academic knowledge but also learning experiences that are relevant to real life and the environment in which they live.

Simeulue Regency in Aceh Province has a rich culture that reflects the local wisdom of its residents. Some real examples include the tradition of mutual cooperation, *nandong* (the art of rhythmic speech that is full of moral values and togetherness), and *smong* (folklore about the tsunami, which is a means of disaster mitigation education). These values not only function as cultural symbols but also as a social education mechanism that shapes the behavior of the younger generation to be more adaptive, resilient, and caring for the surrounding environment.

Thus, local wisdom can be understood as an important social capital in supporting the success of education in 3T areas. Cultural values that live in the community can strengthen the learning process, increase community participation, and enrich students' learning experiences to be more contextual and meaningful.

C. Integration of Local Wisdom in Education Management

Integrating local wisdom into education management is an important strategy for building an education system rooted in community culture. Sawaludin et al. (2025) explained that this integration can strengthen the relevance of education to the socio-cultural life of students, foster a sense of pride in local identity, and increase community involvement in school management.

In the context of 3T regions, such as Simeulue Regency, the integration of local cultural values is a solution to overcome the limitations of formal resources. The tradition of mutual cooperation can be used in the construction and maintenance of school facilities, *nandong* can be used as a means of character education, and *smong* can be used as a learning material for disaster mitigation. Thus, education is no longer separate from people's lives but becomes part of the local social and cultural dynamics.

Analisna et al. (2024) emphasized that local community participation in school management increases the effectiveness of planning, implementation, and evaluation of educational programs. When the community is actively involved, they not only become beneficiaries but also partners in maintaining the sustainability of education. Collaboration among schools, local governments, and communities supports the implementation of the Merdeka Learning policy, which emphasizes the importance of contextualizing learning based on regional potential.

The integration of local wisdom in education management can be achieved through several strategic approaches (Sodiq et al., 2025):

1. Participatory planning involves communities and traditional leaders in preparing school work plans that are oriented toward cultural values.
2. The implementation of culture-based programs, such as holding extracurricular activities that display local traditions or integrating folklore into the learning process.
3. Collaborative evaluation assesses the success of the school not only from the academic aspect but also from the extent to which the school plays a role in preserving and implementing local cultural values.

This approach not only strengthens contextual and participatory education management but also supports the development of students' character and the cultural resilience of the community. Thus, the integration of local wisdom is not just a complement in education, but a fundamental strategy for creating a sustainable education system that is in accordance with the socio-cultural identity of the 3T region.

RESEARCH METHOD

This study uses a literature review approach based on a descriptive qualitative approach. This study does not collect field data but examines theories, concepts, results of previous research, and education policies that are relevant to the theme of education management strategies based on local wisdom in 3T areas (disadvantaged, frontier, and outermost), especially in Simeulue Regency. This approach was used to build a deep conceptual understanding of how local wisdom values can be integrated into education management systems in resource-limited areas that are rich in cultural potential.

According to Connaway and Radford (2021), literature research is a scientific activity that is carried out by studying literature materials without the need to go to the field. Meanwhile, Lim (2025) explained that a descriptive qualitative approach allows researchers to describe phenomena in depth, based on the interpretation of literature sources. Therefore, this method was chosen to produce a conceptual and reflective synthesis of contextual and applicative local cultural values-based education management strategies in 3T areas such as Simeulue.

A. Types and Approaches to Research

This study was a descriptive conceptual study. Conceptual research is used to identify, examine, and analyze existing ideas, theories, and research results, with the aim of developing a new framework of thought or a more integrated conceptual model. In this context, a qualitative approach was used because it is interpretive and meaning-oriented. This approach allows researchers to understand the relationship between the concept of education management, local wisdom values, and the socio-cultural context of people in archipelagos such as Simeulue.

In other words, this study is not intended to measure variables but to interpret the results of previous research and relevant theories to gain a deep understanding of education management strategies based on local wisdom. The results of the analysis were then outlined in the form of a systematic description and conceptual synthesis that described the relationship between local cultural values and the effectiveness of education management in the 3T area.

B. Data Sources and Types

The data in this study were sourced entirely from the scientific literature relevant to the study topic. The main sources consist of academic books, national and international

journal articles, research reports, and government policy documents, such as Presidential Regulation Number 63 of 2020 concerning the determination of disadvantaged regions.

The data included two main categories. First, conceptual data, namely basic theories and principles that explain the concept of education management, culture-based approaches, and local wisdom integration models. Second, secondary empirical data, namely the results of previous research that discussed educational practices in 3T areas, community participation in school management, and the development of education based on local values. All data used were evaluated based on the relevance of the theme, academic validity, and credibility of the source, so that the results of the analysis had a strong and reliable scientific basis.

C. Data Collection Techniques

Data collection in this study was carried out through four systematic and sequential stages. The first stage is the literature inventory, which involves identifying and collecting literature sources relevant to the focus of the study. Literature sources were obtained from scientific databases such as Google Scholar, DOAJ, ResearchGate, and university repositories.

The second stage is resource classification, which is the grouping of literature based on thematic categories, which includes (1) theories and practices of education management in the 3T area, (2) the concept and values of local wisdom, and (3) strategies for integrating cultural values into education policies.

The third stage is analytical reading and recording, where the researcher conducts an in-depth review of the literature by paying attention to key concepts, findings, and relevant managerial models. Each source is analyzed to determine the relationship between management theory and local cultural values that can be adopted in education.

The last stage is theoretical synthesis, which involves bringing together the results of the literature analysis into a comprehensive conceptual form of thought. This process produces a complete picture of how local wisdom can function as a strategy in educational management in 3T areas.

This stage was prepared based on the guidelines for literature research as explained by Mirzaqon and Purwoko (2017), which emphasize that literature reviews must be carried out systematically to produce valid and directed conceptual conclusions.

D. Data Analysis Techniques

Data analysis was performed using content analysis. This method aims to interpret the meanings contained in various literatures by identifying themes, patterns, and relationships between the concepts that arise. According to Kleinheksel et al. (2020), content analysis allows researchers to find implicit meanings in scientific texts and organize them into new, more integrated forms.

The analysis process was performed in three stages. The first stage is data reduction, which involves selecting literature that is most relevant to the research topic and removing sources that do not support the focus of the study. The second stage is data clustering, where information is classified based on key themes such as education management, local wisdom, and cultural integration in school policies. The third stage is conceptual synthesis, which is the preparation of a framework that explains the relationship between theory and practice.

The results of this analysis process are in the form of mapping the relationship between education management theory and the application of local values in school

management in the 3T area. This approach provides a deeper understanding of the role of local wisdom as a strategic instrument in the development of contextual, participatory, and sustainable education.

E. Data Validity and Credibility

To ensure the validity of the study results, the researcher applied the principle of source triangulation, which compares information from various references to ensure the consistency and accuracy of the findings. In addition, only sources derived from reliable scientific publications, such as reputable journals, academic books, and official research reports, were used in the analysis.

The credibility of the data is also strengthened through a process of cross-verification between theories and previous research results, so that the conclusions obtained are not merely the result of subjective interpretation but are the results of studies that can be scientifically accounted for. This reflective and interpretive approach is important to maintain a balance between theoretical analysis and contextual relevance to the sociocultural conditions of the Simeulue community.

F. Research Procedure

Overall, the research procedure consisted of five mutually sustainable steps. The first step was the formulation of the focus of the study, which set the direction of the research on the conceptual analysis of education management strategies based on local wisdom in the 3T area. The second step is the collection of library data, namely, the search and selection of literature relevant to the theme. The third step is the evaluation of the sources, which assesses the feasibility and credibility of the literature used. The fourth step is content analysis and synthesis, in which various theories and research results are integrated to form a comprehensive new understanding. The fifth step is the preparation of the results of the study, which produces a descriptive description of conceptual strategies that can be applied in the context of education in an archipelagic area such as Simeulue Island.

RESULTS AND DISCUSSION

A. Disadvantaged, frontier and outermost areas (3T)

Education in disadvantaged, frontier, and outermost (3T) areas, based on the results of literature analysis, shows the condition of the education system that faces multidimensional challenges due to limited infrastructure, human resources, and low implementation of education management based on local wisdom. This study uses a library research method with a content analysis approach to various sources of academic literature and relevant educational policies to identify the factors that cause the low quality of education and the potential for strengthening based on local values. Based on the analysis of documents and literature, the 3T area is described as an area that is geographically far from the center of economic and social activity, difficult to reach due to the lack of transportation, communication, and public facilities infrastructure, and has a scattered population with a low economic level (Darim, 2020). This has an impact on limited access to education and low-quality learning. The problems in the 3T region are complex and interrelated in nature.

First, from the perspective of educational infrastructure, many schools lack basic facilities such as proper buildings, laboratories, ICT facilities, and libraries, which leads to low effectiveness in the teaching and learning process (Randan et al., 2025). Second, in

terms of the availability of educators, most teachers are reluctant to be placed in the 3T area due to limited facilities and access to transportation, which results in a high teacher-student ratio and a decrease in teaching quality. Third, access to learning resources is still limited due to the lack of textbooks, digital materials, and technology-based learning facilities, thus creating a gap between rural and urban schools. Fourth, the socio-economic conditions of the community in the 3T area are also an important factor; many families live below the poverty line and prioritize family economic activities over children's education. Fifth, low connectivity and internet infrastructure exacerbate the education gap because of the difficulty in implementing technology-based learning.

Based on the results of the literature review, this condition requires the implementation of an educational management strategy that is participatory, adaptive, and based on local cultural values. According to Rosmana et al. (2022), education in the 3T area needs to be oriented towards the concept of education for survival, which adapts to the social and ecological conditions of the local community. The results of literature studies from several previous studies show that local wisdom can be used as a basis for strengthening education in the 3T area because it contains social values, ethics, responsibility, and community solidarity. The results of the identification of literature that became the study corpus are presented in Table 1.

Table 1. Literature Identification

Nu	Penulis	Judul	Temuan Utama
1	Yoga Ardian Fernandi	Exploring the Values of Local Wisdom of Javanese Culture as a Source of Character Education	Local cultural values can be used as a source of universal character education to build social ethics.
2	Randan, Ferry; Todingbua, Manuel A; Buku, Atus	Effectiveness of Services and Provision of Facilities/Infrastructure in Improving the Quality of Learning at the Elementary School Level within the Scope of the Nabire Regency Education Office.	Effectiveness of Services and Provision of Facilities/Infrastructure in Improving the Quality of Learning at the Elementary School Level within the Scope of the Nabire Regency Education Office.
3	Moh Zulkarnaen	Character Education Based on Local Wisdom in the Millennial Era	Local culture is adaptive knowledge that makes it easier for people to adapt to the environment and form social character.
4	Ali Imron, Ma'as Shobirin	Development of Local Wisdom-Based Teaching Materials for MI Teachers in Semarang City	Increase the insight and creativity of MI teachers in developing contextual teaching materials, which not only instill academic values but also strengthen the character and cultural identity of students.
5	Suhartini	Development of Local Wisdom-Based Teaching Materials for MI Teachers in Semarang City	The sustainability of education and the environment is influenced by government policies and community commitment to maintaining ecological balance.

The synthesis of the results of the literature analysis shows that education in the 3T region requires an approach that combines two main perspectives: structural capacity building and the empowerment of local socio-cultural values. Education based on local wisdom can be a strategic solution because it fosters a sense of ownership and social responsibility of the community towards schools. In line with the opinion Mof ade (2024), the integration of local culture in learning can be done by introducing traditional

activities, implementing local content, involving students in socio-cultural activities, and establishing cooperation between schools and communities to build a collaborative learning environment. This is in line with the theory of community-based education (Li & Yan, 2023), which states that the success of education in remote areas is determined by the extent to which communities are involved in the planning, implementation, and evaluation of educational programs. Therefore, the results of this study confirm that education management in 3T areas such as Simeulue needs to be designed in an adaptive, participatory, and rooted in local wisdom in order to be able to create an inclusive, relevant, and sustainable education system.

B. Strategy for the Integration of Local Wisdom in Education Management in the 3T Region

The results of the literature analysis show that the strategy of integrating local wisdom in education management in disadvantaged, frontier, and outermost (3T) areas such as Simeulue Regency plays an important role in strengthening the relevance, participation, and sustainability of education. Based on the research method used, namely literature studies, data were collected and analyzed through a content analysis approach to a number of literature and previous research results, such as (Poli et al., 2025); (Jawas, 2017); (Bennett et al., 2014), which emphasized the importance of collaboration between communities, schools, and local governments in building education based on socio-cultural contexts. The results of the study show that the strategy of integrating local wisdom must be carried out through a participatory and value-based management approach, where schools are not only formal institutions that carry out education policies but also centers for social learning and local cultural preservation. In Simeulue, the integration of local wisdom is carried out by optimizing the role of traditional values such as *gotong royong*, *smong* (folklore for disaster mitigation), *nandong* (the art of speech containing moral messages), and religious and customary traditions that teach cooperation and social responsibility. The strategies can be grouped into five main forms of implementation, as shown in Table 2.

Table 2. Strategy for the Integration of Local Wisdom in Education Management in the 3T Region

Nu	Strategy	Form of Implementation	Impact on Education
1	Participatory Planning	The principal involves traditional leaders, religious leaders, and the community in the preparation of school programs, including learning based on local values.	Increase the sense of belonging, social responsibility, and relevance of school programs to community needs.
2	Integration of Culture-Based Curriculum	Teachers adapt the curriculum to the local context, for example linking science lessons to marine ecosystems or social studies with local cultural history.	Learning becomes contextual, meaningful, and easier for students to understand.
3	Mutual Cooperation and Community Collaboration	The community and the school improve facilities, help with learning activities, and contribute local resources.	Increase social solidarity, strengthen community-school relations, and save educational operational costs.
4	Preservation of Traditions through School Activities	The school holds traditional activities such as <i>kenduri</i> , <i>nandong</i> , or cultural exhibitions as extracurricular activities.	Encourage cultural preservation and character education through hands-on practice.

Nu	Strategy	Form of Implementation	Impact on Education
5	Schedule Adjustment and Time Management	The school adapts the learning calendar to the seafaring season, harvest, or traditional activities of the community.	Student attendance increases, conflicts between education and economic activities decrease.

These five strategic forms illustrate how local wisdom serves as both a cultural foundation and a managerial mechanism for educational improvement. However, to avoid overlapping between practical forms and theoretical dimensions, these five strategies can be synthesized into four main components of the conceptual model developed in this study Cultural Core Values, Participatory Management, Contextual Curriculum, and Sociocultural Sustainability as shown below:

1. Cultural Core Values underpin strategies such as the preservation of traditions through school activities and nandong or smong-based learning. These practices reinforce moral education, social harmony, and cultural resilience in students Sholeh et al. (2025); (Im and Hidayat, 2023).
2. Participatory Management encompasses participatory planning and mutual cooperation, highlighting the collaborative role of school principals, teachers, community leaders, and parents in educational decision-making (Qomarrullah et al., 2024); (Sihombing et al., 2022)
3. Contextual Curriculum emerges from the integration of culture-based learning, where the curriculum adapts to regional potentials and local social realities, aligning with the Merdeka Belajar policy (Sawaludin et al., 2025; Rohman, 2024).
4. Sociocultural Sustainability relates to schedule adjustment and community collaboration, ensuring education aligns with community livelihoods and fosters intergenerational transmission of values (Bennett et al., 2014); Rosmana et al. (2022).

This synthesis clarifies that the five practical strategies identified in Table 2 collectively support the formation of a comprehensive education management framework built upon four theoretical pillars. The model emphasizes that local wisdom is not an isolated cultural element but a systematic managerial foundation that connects community participation, curriculum relevance, and cultural preservation into a unified approach. As by Sagala (2013) and Faiz and Soleh (2021) suggest, effective education management in 3T areas must go beyond infrastructure improvements and focus on the creation of a social education ecosystem rooted in community culture and shared values.

In the policy context, this integrative framework aligns with the Freedom to Learn (Merdeka Belajar) principle, promoting flexibility and local autonomy in curriculum design and school governance. Therefore, the integration of local wisdom in education management in Simeulue is both a cultural innovation and a strategic managerial model that strengthens identity, enhances participation, and ensures sustainable education aligned with the region's sociocultural characteristics.

C. Implications for Education Management in 3T Regions

Based on the results of the literature review and conceptual synthesis analysis, the application of the strategy of integrating local wisdom in education management has significant implications for strengthening school management systems in disadvantaged, frontier, and outermost (3T) areas. The results of this literature research show that local wisdom plays a role not only as cultural heritage but also as a social resource and managerial instrument that can strengthen the effectiveness and sustainability of

educational delivery. In the context of educational management, these implications include planning, implementation, supervision, and increasing community participation.

First, in the dimension of educational planning, the application of local values such as mutual cooperation and deliberation encourages the formulation of school programs that are participatory and in accordance with community needs. Principals and teachers act as facilitators who coordinate the aspirations of local communities to translate them into the vision and mission of educational institutions. This strengthens the theory of participatory management of all (2013), which emphasizes the importance of the involvement of all stakeholders in educational decision-making.

Second, in the dimension of education implementation, local wisdom helps create a learning environment that is relevant to the social and geographical context of the 3T area. Values such as cooperation, discipline, and responsibility, which are internalized in the local culture, can be used as principles of classroom management, student discipline, and social interaction in schools. This is in line with the concept of education for survival by Faiz and Soleh (2021), which places education as a means of forming people's adaptive abilities to the challenges of living in remote areas of Indonesia.

Third, in terms of supervision and evaluation, cultural values such as openness, honesty, and social responsibility can strengthen the community-based supervision system, where the community plays an active role in assessing school performance. This form of oversight is more social and moral than administrative but effective in fostering transparency and public accountability at the local level.

Fourth, the most important implication is to increase community participation in the program. Community involvement in the planning, implementation, and monitoring of school activities creates a strong sense of ownership of educational institutions. Schools no longer stand as formal institutions separate from social life; rather, they have become centers of cultural activities that nurture the collective values of society. From the perspective of David-Chavez et al.'s (2020) community-based education theory, this condition is an indicator of the success of community-based education because the sustainability of school programs is highly dependent on social support born from the culture of mutual cooperation.

Another implication that emerged was the formation of an adaptive education management model, in which principals and educators have the flexibility to develop curricula and learning activities based on local characteristics without ignoring national standards. This approach is relevant to the Merdeka Learning policy, which gives autonomy to educational units to adapt learning to the socio-cultural context and the needs of students. Thus, it can be concluded that the integration of local wisdom has a positive impact on education management in the 3T area because it strengthens the collaborative system, expands community participation, and creates a school organizational culture based on the moral and social values of the local community. This implies a paradigm shift from administrative education management to value, culture, and social sustainability-based management, so that schools in the 3T area can develop as institutions that not only educate, but also humanize and cultivate their communities.

D. Impact on the Quality and Sustainability of Education

The literature synthesis results show that implementing education management strategies based on local wisdom in disadvantaged, frontier, and outermost (3T) areas directly impacts improving the quality and sustainability of the education system. The

literature review confirms that integrating local cultural values into school management can increase the relevance, effectiveness, and community participation in educational activities, which ultimately contributes to the quality of the learning process and outcomes.

First, from the aspect of learning quality, the application of local wisdom makes learning activities more contextual, meaningful, and in accordance with students' social reality. Teachers no longer only transfer knowledge but also guide students to understand moral values, ethics, and social responsibility through cultural-based activities such as mutual cooperation, traditional ceremonies, and local economic self-sufficiency practices. This is in line with the view of Mestre et al. (2006) that the quality of education is not only measured by academic ability but also by the success of schools in forming adaptive characters to the social environment.

Second, from the institutional quality dimension, community involvement in school planning and supervision strengthens transparency and accountability. When the community is actively involved, public trust in schools increases, and this becomes an important social capital for maintaining the reputation of educational institutions.

Third, from the perspective of the quality of educators, local values such as sincerity, responsibility, and dedication inspire teachers to work with high commitment despite the limitations of facilities. Teachers become agents of social change who not only teach but also educate based on human values living in the community.

Fourth, a significant impact can be seen on the sustainability of education, where schools based on local wisdom have better resilience to social and policy change. Cultural values inherited from generation to generation make education not just a formal program but also a part of the life of the community that continues to develop. For example, the practice of smong local wisdom in Simeulue not only serves as disaster mitigation knowledge, but also becomes part of the curriculum of social values that strengthens collective awareness of the environment and humanity. Thus, education is a means of cultural preservation and at the same time a forum for the formation of the character of the younger generation who appreciate local values as part of the nation's identity.

In the context of policy, the management model based on local wisdom also supports the principle of Freedom of Learning because it encourages the autonomy of educational units in adapting learning to the needs and potential of the region. This reinforces the idea that the sustainability of education does not only depend on financial support or infrastructure, but also on the sustainability of the social, cultural, and moral values maintained by society. Thus, it can be concluded that the application of local wisdom in education management in the 3T area not only improves the quality of education academically but also builds a sustainable education system, rooted in cultural values, and oriented towards strengthening the character of local communities as the main foundation of national education development.

E. Conceptual Synthesis and Educational Management Model Based on Local Wisdom

Based on the results of the literature review, this study formulates a conceptual synthesis showing that an education management model based on local wisdom in disadvantaged, frontier, and outermost (3T) areas must be grounded in the integration of cultural values, community participation, and adaptive national education policies. The analysis of previous studies reveals that local wisdom functions as both a value system and a

knowledge framework that guides the planning, organizing, implementation, and supervision of education in a contextual and sustainable manner. Relevant education, as stated by Herlambang (2015), must be rooted in community culture and develop adaptive capacity toward the social environment, while Sagala (2013) emphasized that education management should not only focus on administrative performance but also mobilize sociocultural potential to ensure the continuity of education. The integration of these ideas forms a conceptual model that positions schools as centers of community learning where cultural values such as mutual cooperation, responsibility, deliberation, and environmental stewardship become the ethical foundation of each managerial process. Within this model, the principal acts as a collaborative leader who bridges national education policy with local cultural practices, while teachers serve as facilitators who translate cultural values into learning experiences relevant to students' social realities. Community participation becomes the foundation that supports the financing, supervision, and continuity of school programs, whereas local governments provide policy reinforcement and institutional resources (Suryaman, 2025).

In the context of Simeulue, this conceptual model is reflected in the synergy between smong as a form of disaster-mitigation education, nandong as a medium for moral and cultural literacy, and gotong royong as a social system that strengthens solidarity and collective responsibility within the school community. The synthesis of literature results in four interrelated components of education management based on local wisdom, namely: (1) Cultural Core Values as the moral foundation and source of educational ethics, (2) Participatory Management that encourages inclusive decision-making among schools, communities, and local governments, (3) Contextual Curriculum that adapts learning content to the sociocultural and ecological realities of the region, and (4) Sociocultural Sustainability that ensures the intergenerational transmission of cultural and educational values. These four components interact dynamically to form a synergistic pattern of relationships between schools, society, government, and culture. In this synergy, schools act as the drivers of values and centers of contextual learning, society functions as the custodian of culture and an active partner in education, government serves as the policy facilitator ensuring equity and resource distribution, and local culture provides moral legitimacy that gives education its ethical direction and social acceptance.

Through this integrated framework, the local wisdom-based education management model transforms education from a mere administrative system into a cultural ecosystem that unites moral values, social participation, and policy support. The proposed model presents a new paradigm of education management in 3T regions—one that views education as a living social process rooted in culture and community, capable of producing not only academic achievement but also cultural resilience, social cohesion, and sustainable development. Consequently, this model is not only relevant to Simeulue Regency but also serves as a conceptual framework that can be replicated in other 3T regions to promote equitable, participatory, and culturally grounded education systems in Indonesia.

F. Theoretical Reflections and Policy Implications

The conceptual study of education management based on local wisdom in disadvantaged, frontier, and outermost (3T) areas provides a theoretical reflection that the success of education does not only depend on structural aspects such as

infrastructure, curriculum, or human resources, but also on the cultural strength and social values of the community. The results of theoretical synthesis from Krasny and Tidball (2009), Sagala (2013), and Berkes and Ross (2013) show that education rooted in local culture will be more resilient, relevant, and accepted by the community because it is contextual and participatory.

The local wisdom-based education management model developed in this study represents the paradigm of education as a cultural system, where education is seen as part of a social system that fosters solidarity, strengthens identity, and develops human values. Thus, the concept of educational management is not only interpreted as an administrative function but also as a social practice oriented towards cultural preservation and character building. This reinforces the view that a bottom-up approach based on community values is more effective than a uniform top-down approach.

Education in 3T areas requires institutional autonomy so that schools can adjust policies to meet the needs and characteristics of the local community. From a policy perspective, the results of this study have important implications for the formulation of local and national government strategies for the equitable distribution of education quality.

First, the government must develop an education policy that recognizes and integrates local values into the curriculum, school management, and teacher training. This can be achieved by strengthening local content, preparing culture-based curriculum guidelines, and coaching school principals to implement participatory management. Second, affirmative policies are needed for the 3T region in the form of incentives and resource support to facilitate culture-based educational innovation, including the use of local learning media and extracurricular activities that elevate regional traditions. Third, a collaborative mechanism is needed between schools, Indigenous peoples, and local governments to create an inclusive and socially equitable education system. The implementation of this policy supports the vision of Merdeka Belajar by expanding school autonomy, strengthening community participation, and ensuring the sustainability of cultural values in the learning process.

Theoretically, the results of this study contribute to the development of a new paradigm in education management, namely the Local Value-Based Education Management Model, which can be used as a reference for developing education policies in the 3T region in Indonesia. Thus, this reflection emphasizes that local wisdom is not just a complementary element but is the core of humanistic, contextual, and sustainable education management practices.

CONCLUSION

Fundamental Finding: This conceptual study found that education management based on local wisdom in disadvantaged, frontier, and outermost (3T) areas, especially in Simeulue Regency, is a strategic approach that can address the multidimensional challenges of education in areas with limited infrastructure and human resources. Local cultural values such as gotong royong, smong, and nandong serve as social and moral foundations that strengthen community participation, enrich the learning process, and increase managerial effectiveness. The local wisdom-based education management model produced through library synthesis consists of four main components: (1) cultural values as the foundation of educational ethics, (2) participatory management involving the community, (3) contextual curriculum that is in accordance with regional potential,

and (4) socio-cultural sustainability as a bond between generations. These findings confirm that the success of education in 3T areas is determined not only by structural support but also by the strengthening of the value system and social participation of the community.

Implication: The results of this study imply the need for a new paradigm in educational management policies and practices that are more participatory, contextual, and local values-based. Local and national governments should develop educational policies that provide space for school autonomy to integrate local wisdom into the curriculum, learning activities, and school management systems. This approach is in line with the vision of Merdeka Belajar and can serve as a model for developing more inclusive and socially just educational policies. In addition, the results of this study also provide a theoretical contribution in the form of strengthening the "Local Value-Based Education Management Model" paradigm, which can be used as an academic and practical reference for educational institutions in the 3T region to build an independent, adaptive, and sustainable education system.

Limitation: The main limitation of this study lies in its conceptual and literature-based nature; therefore it has not been supported by empirical field data. The analysis is based only on the results of the literature review and relevant policy documents, without directly verifying education management practices in Simeulue Regency. Therefore, the results of the synthesis obtained are theoretical and require further empirical testing to validate the proposed model's effectiveness.

Future Research: The Future research should be conducted using field research with a qualitative approach or mixed-methods to test the real implementation of this education management model based on local wisdom. Future research can focus on (1) empirical analysis of the role of school principals and teachers in implementing local values in school management, (2) measuring the impact of local wisdom on the quality of learning and character of students, and (3) evaluation of regional education policies in supporting the sustainability of local culture-based models. Thus, further research will enrich the scientific evidence and strengthen the conceptual basis of the model generated through this literature review.

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