

Decolonizing Inclusive Education: A Culturally Responsive Management Model (CRMM) to Empower Indigenous Papuan Children in Elementary Schools

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Abstract: This study aims to develop the Culturally Responsive Management Model (CRMM) based on the principles of decolonizing education to strengthen inclusive education governance for Indigenous Papuan children in primary schools. The study employed a Design and Development Research (DDR) approach consisting of three stages: needs analysis, model development, and model validation and refinement. The research was conducted in primary schools serving Indigenous communities in Merauke Regency, South Papua Province, involving 43 participants, including school principals, teachers, school supervisors, parents, Indigenous leaders, representatives of the local Education Office, and academics. Data were collected through document analysis, participant observation, semi-structured interviews, focus group discussions (FGDs), and expert validation and were analyzed using thematic analysis. The findings resulted in the Culturally Responsive Management Model (CRMM), comprising four core components: (1) Indigenous Knowledge Recognition, (2) Culturally Responsive School Leadership, (3) Indigenous Community Engagement, and (4) Inclusive Institutional Transformation. The study demonstrates that strengthening inclusive education requires not only improving educational access but also transforming school governance to recognize cultural identity, Indigenous knowledge systems, and collaborative partnerships with Indigenous communities. The proposed CRMM contributes to the literature on inclusive education by integrating perspectives of decolonization, epistemic justice, and culturally responsive educational management, while providing a practical framework for developing inclusive, context-sensitive, and sustainable education systems for Indigenous Papuan communities.

Keywords: Inclusive Education, Educational Decolonization, Responsive Management, Indigenous Communities, Child Empowerment

Abstrak: Penelitian ini bertujuan mengembangkan Culturally Responsive Management Model (CRMM) yang berlandaskan prinsip-prinsip pendidikan dekolonisasi untuk memperkuat tata kelola pendidikan inklusif bagi anak-anak asli Papua di sekolah dasar. Penelitian ini menggunakan pendekatan Design and Development Research (DDR) yang terdiri atas tiga tahapan, yaitu analisis kebutuhan, pengembangan model, serta validasi dan penyempurnaan model. Penelitian dilaksanakan pada sekolah dasar yang melayani masyarakat asli Papua di Kabupaten Merauke, Provinsi Papua Selatan, dengan melibatkan 43 partisipan yang terdiri atas kepala sekolah, guru, pengawas sekolah, orang tua peserta didik, tokoh adat, perwakilan Dinas Pendidikan, dan akademisi. Data dikumpulkan melalui analisis dokumen, observasi partisipatif, wawancara semiterstruktur, diskusi kelompok terarah (Focus Group Discussions/FGDs), dan validasi ahli, kemudian dianalisis menggunakan analisis tematik. Hasil penelitian menghasilkan Culturally Responsive Management Model (CRMM) yang terdiri atas empat komponen utama, yaitu: (1) Pengakuan Pengetahuan Adat, (2) Kepemimpinan Sekolah yang Responsif Budaya, (3) Keterlibatan Masyarakat Adat, dan (4) Transformasi Kelembagaan Inklusif. Penelitian menunjukkan bahwa penguatan pendidikan inklusif tidak hanya memerlukan peningkatan akses pendidikan, tetapi juga transformasi tata kelola sekolah yang mampu mengakui identitas budaya, sistem pengetahuan masyarakat adat, serta membangun kemitraan kolaboratif dengan masyarakat adat. CRMM memberikan kontribusi terhadap pengembangan literatur pendidikan inklusif dengan mengintegrasikan perspektif dekolonisasi, keadilan epistemik, dan manajemen pendidikan yang responsif budaya, sekaligus menyediakan kerangka praktis untuk mengembangkan sistem pendidikan yang inklusif, kontekstual, dan berkelanjutan bagi masyarakat asli Papua.

Kata kunci: Pendidikan Inklusif, Dekolonisasi Pendidikan, Manajemen Responsif, Masyarakat Adat, Pemberdayaan Anak

INTRODUCTION

Inclusive education has evolved into a global paradigm emphasizing equal access, participation, and learning success for all students regardless of social, cultural, or geographic background (Sider et al., 2024). The implementation of inclusive education in indigenous communities still faces fundamental challenges because the approach used tends to be oriented towards mainstream education systems built on Western epistemology (Bogale & Alhur, 2026). As a result, curricula, learning practices, and school governance often ignore the cultural values, local languages, traditional knowledge systems, and social structures of indigenous communities (Becerra-Lubies, 2021).

This condition creates a mismatch between the formal learning environment and the context of students' lives, resulting in low learning engagement, a weak sense of belonging to the school, and limited opportunities for indigenous children to develop optimally (Firdausy et al., 2024). In Papua, these challenges are further complicated by the diversity of cultures, languages, and social systems of indigenous communities, which require an educational approach that is not only administratively inclusive but also responsive to cultural identity as the primary foundation of the learning process.

From the perspective of decolonizing education, inclusivity is not simply defined as expanding access to education (Jacob et al., 2025). It must be realized through a transformation of school governance that recognizes, values, and integrates indigenous knowledge systems into decision-making processes, curriculum development, school leadership, and partnerships with local communities. This approach positions indigenous communities as subjects with knowledge authority, not simply recipients of educational policies (Prest et al., 2021). A culturally responsive educational management model is needed as an institutional framework capable of bridging national education policies with local Papuan values. This model is expected to strengthen schools' capacity to create inclusive learning environments, increase the participation of indigenous families and communities, strengthen students' cultural identities, and encourage the sustainable empowerment of indigenous Papuan children.

Empirical evidence shows that the implementation of inclusive education in elementary schools serving indigenous Papuan children is still dominated by a managerial approach oriented toward national standards, thus failing to accommodate the diversity of cultures, languages, local knowledge systems, and social practices of indigenous communities as an integral part of the educational process (Becerra-Lubies, 2021). School governance tends to position indigenous communities as policy recipients, rather than as strategic partners in educational planning, implementation, and evaluation (Tamtik & Colorado, 2022). As a result, the learning process often takes place within a framework that is not aligned with the cultural identities of students, thereby reducing the relevance of education, weakening learning engagement, and limiting opportunities for indigenous children to develop optimally (Prest et al., 2021). The limited institutional capacity of schools to implement culturally responsive leadership, weak collaboration between schools and indigenous communities, and the lack of integration of local knowledge into the education management system indicate a fundamental gap between the principles of inclusive education and its implementation practices. This situation emphasizes that the main challenge of inclusive education in Papua is not merely an issue of access to education, but rather a failure of governance to build an education system that recognizes epistemic justice, respects cultural identity, and empowers indigenous communities as key actors in education delivery.

The success of inclusive education for indigenous communities is greatly influenced by the school's ability to integrate cultural dimensions into the education system (da Silva et al., 2024).

Research on indigenous students in Papua found that community involvement, the use of local languages, recognition of cultural practices, and the creation of a strong sense of school belonging can increase student participation and engagement in learning (Fiharsono et al., 2024). Research in Papua New Guinea revealed that the implementation of inclusive education that adopts a Western educational approach without considering the local social and cultural context tends to encounter community resistance and results in low effectiveness in learning practices. Other research on indigenous pedagogy shows that the integration of local knowledge, contextual curriculum, experiential learning, and the involvement of traditional leaders significantly strengthen cultural identity, increase student engagement, and produce a more inclusive learning environment. Most of this research still focuses on aspects of pedagogy and classroom learning, while studies on school management models that systematically integrate principles of decolonization, culturally responsive leadership, and collaborative governance to empower indigenous Papuan children are still very limited. This gap is an important foundation for this research to develop the Culturally Responsive Management Model as a framework for inclusive education governance rooted in the values of the Papuan indigenous community.

Although previous studies have demonstrated the importance of culturally responsive education in improving Indigenous students' participation, engagement, and learning outcomes, the literature has predominantly focused on pedagogical strategies, curriculum adaptation, and classroom practices. The key conceptual gap is the limited understanding of how culturally responsive principles can be embedded in school governance and management to sustain inclusive education for Indigenous learners. In particular, existing research provides insufficient explanation of how leadership, institutional decision-making, community participation, and organizational transformation can be integrated to recognize Indigenous knowledge and cultural identity within formal school governance. This gap is particularly significant in Papua, where conventional management practices may prioritize standardized administrative and educational arrangements over Indigenous cultural values and community participation. To address this gap, this study develops the CRMM as a governance-oriented framework that integrates Indigenous Knowledge Recognition, Culturally Responsive School Leadership, Indigenous Community Engagement, and Inclusive Institutional Transformation. The specific novelty of CRMM lies in shifting culturally responsive education from primarily a classroom-oriented approach to an institution-wide management framework, positioning Indigenous knowledge, cultural identity, and community participation as integral elements of school governance. In doing so, CRMM provides a practical framework for advancing educational decolonization, epistemic justice, and sustainable inclusive education for Indigenous Papuan children.

The novelty of this research lies in the development of the CRMM as an innovative educational management framework that systematically integrates the principles of educational decolonization, culturally responsive leadership, collaborative governance, and Indigenous community empowerment into the governance of inclusive primary education. Unlike previous studies that primarily emphasize curriculum adaptation or culturally responsive pedagogical practices, this model positions school management as the central mechanism for institutional transformation by embedding Indigenous cultural values, local knowledge systems, participatory decision-making, and equitable stakeholder partnerships into school governance. Consequently, the CRMM expands the theoretical discourse on inclusive education by bridging educational management, decolonization, and epistemic justice while offering a comprehensive framework for understanding how culturally responsive governance can strengthen institutional inclusivity. From a practical perspective, the model provides an operational guide for school leaders and policymakers to design, implement, and evaluate inclusive

education policies that recognize Indigenous identities, promote meaningful community participation, and foster equitable and sustainable educational opportunities for Indigenous Papuan children. This research aims to develop a CRMM based on the principles of educational decolonization to strengthen inclusive education governance that can empower indigenous Papuan children in elementary schools through the integration of local cultural values, culturally responsive leadership, and collaborative partnerships between schools and indigenous communities.

METHOD

This study employed a Design and Development Research (DDR) approach to develop a CRMM for strengthening inclusive education for Indigenous Papuan children in elementary schools. DDR was selected because it provides a systematic process for developing an evidence-based educational management model through needs assessment, model design and development, and validation and refinement. The approach enabled the study to integrate the principles of educational decolonization, cultural responsiveness, and collaborative governance while addressing the gap between inclusive education policies and school management practices in Indigenous communities. The study was conducted in six elementary schools across three districts in Merauke Regency, South Papua Province: Animha, Jagebob, and Kurik. The schools were purposively selected based on four criteria: (1) serving a substantial proportion of Indigenous Papuan students, (2) operating within Indigenous communities, (3) demonstrating community involvement in school activities or decision-making, and (4) experiencing challenges related to the implementation of inclusive and culturally responsive education. The selection of six schools across three districts was intended to capture variations in school governance practices, community participation, cultural integration, and institutional conditions within Indigenous Papuan educational settings.

The study involved 43 participants, selected through purposive sampling based on their experience, knowledge, and direct involvement in inclusive education and school governance. The participants represented multiple stakeholder groups to ensure that the development of CRMM reflected perspectives from both within and outside the school institution. The participants consisted of three school principals, who provided information regarding school leadership, institutional decision-making, and management practices; nine classroom teachers, who contributed perspectives on the implementation of inclusive and culturally responsive practices at the school level; three school supervisors, who provided insights into educational supervision and policy implementation; 15 parents of Indigenous students, who represented family experiences, expectations, and participation in formal education; six Indigenous leaders, who contributed knowledge concerning Indigenous cultural values, community institutions, and Indigenous knowledge systems; three representatives of the local Department of Education, who provided perspectives on education policy and institutional implementation; and four academics in educational management and inclusive education, who contributed theoretical and methodological perspectives relevant to model development and validation. Thus, the participants represented a combination of school, family, Indigenous community, government, and academic stakeholders involved in the development and assessment of CRMM.

The research was conducted in three main stages following the DDR framework. The first stage was needed assessment, which involved analysis of inclusive education policies and relevant literature on educational decolonization, inclusive education, and culturally responsive management, followed by empirical data collection through observations, semi-structured interviews, and Focus

Group Discussions (FGDs). This stage identified existing governance practices, institutional challenges, stakeholder needs, and opportunities for culturally responsive inclusive education. The second stage involved model design and development. Findings from the needs assessment were synthesized into the dimensions, components, indicators, and implementation mechanisms of CRMM. The model integrated four core components: Indigenous Knowledge Recognition, Culturally Responsive School Leadership, Indigenous Community Engagement, and Inclusive Institutional Transformation. The expert appraisal involving three validators with expertise in educational management, inclusive education, and Indigenous or culturally responsive education. The validation focused on four aspects: conceptual coherence, contextual relevance, feasibility of implementation, and clarity of the model components and indicators. Each validator reviewed the model and provided evaluative comments and recommendations. Revisions were made by comparing the validators' assessments, identifying areas of convergence and substantive recommendations, and incorporating revisions that strengthened the conceptual consistency, contextual appropriateness, and practical feasibility of the model. The revised model was subsequently discussed with relevant stakeholders through FGDs to ensure its contextual acceptability and practical applicability.

Data were collected through document analysis, participant observation, semi-structured interviews, FGDs, and expert appraisal. Document analysis examined education policies, regulations, institutional documents, and relevant records concerning inclusive education. Participant observation was conducted to understand school management practices, stakeholder interactions, and the integration of cultural values within the school environment. Semi-structured interviews and FGDs explored participants' perspectives regarding educational needs, governance challenges, cultural recognition, community participation, and the requirements for developing CRMM. Expert appraisal was conducted to assess the conceptual and contextual quality of the proposed model. The use of multiple data sources and collection methods enabled triangulation across stakeholder perspectives and strengthened the empirical basis of the model. The combination of school-level, family, Indigenous community, government, and academic perspectives was particularly important because CRMM was designed as an institution-wide management model.

The data were analyzed using thematic analysis. The analysis proceeded through data familiarization, initial coding, categorization of codes, identification and review of candidate themes, definition and refinement of themes, and synthesis of findings into model components. Coding was conducted systematically by the research team, with the emerging codes and themes reviewed and discussed among the researchers to compare interpretations and resolve differences through consensus. This process was used to maintain consistency in interpretation and reduce the potential influence of individual researcher subjectivity. The identified themes were subsequently compared across data sources and stakeholder groups to determine recurring patterns and areas of convergence or divergence. Themes that demonstrated sufficient empirical support were synthesized as the basis for constructing the dimensions and components of CRMM. To strengthen trustworthiness, the study employed source triangulation, method triangulation, member checking, peer debriefing, and expert appraisal. Member checking was used to confirm the accuracy of interpretations with relevant participants, while peer debriefing provided critical examination of the analytical process. Expert appraisal further assessed the theoretical consistency, contextual relevance, and feasibility of the developed model.

RESULTS AND DISCUSSION

Empirical findings reveal that the implementation of inclusive education in elementary schools serving indigenous Papuan children still faces limitations in accommodating the social, cultural, and epistemological complexities of local communities. The analysis shows that the success of inclusive education does not solely depend on the provision of educational access and services, but is strongly influenced by the capacity of school governance to recognize, integrate, and reconstruct local knowledge and cultural values of indigenous communities into educational institutional practices. Based on the process of needs analysis, development, and validation of the model, this study produces the CRMM as a conceptual and operational framework that broadens the perspective of inclusive education through an approach of decolonization, epistemic justice, and empowerment of indigenous Papuan children.

Table 1. Themes, Sub-Themes, Field Evidence, and Analytical Interpretation

Findings Theme	Sub Theme	Field Data Evidence	Data Source/ Collection Technique	Analytical Interpretation
Dominance of Administrative Governance	Schools are oriented towards compliance with national standards	The principal and teachers explained that school planning focuses more on fulfilling administrative documents, curriculum targets, and formal evaluations.	P01–P03; T01–T09; INT; FGD	School governance remains predominantly compliance-oriented, with administrative requirements receiving greater attention than culturally contextualized decision-making.
Weak Integration of Local Knowledge	Culture, Indigenous languages, and community knowledge have not become primary sources of learning	Observations showed that most learning materials relied on general examples from national textbooks and were rarely developed from students' socio-cultural environment. Participants also reported that Indigenous knowledge and local language were not systematically integrated into school programs.	T01–T09; PR01–PR15; IL01–IL06; OBS; INT; FGD; DOC	A persistent epistemological gap exists between formal school knowledge and Indigenous knowledge, Indigenous epistemologies within formal education.
Limited Capacity of Teachers and Principals	Low culturally responsive management competency	Teachers expressed difficulties in connecting learning materials and school programs with children's cultural experiences and community life. Principals also identified the need to strengthen leadership and management capacity for culturally responsive education.	P01–P03; T01–T09; S01–S03; INT; FGD	Existing management capacity insufficient systematically translate cultural responsiveness into school leadership, planning, and educational practices.

Findings Theme	Sub Theme	Field Data Evidence	Data Source/ Collection Technique	Analytical Interpretation
Low Participation of Indigenous Communities	School–community relationships remain informative rather than collaborative	Indigenous leaders and parents reported that their involvement in school activities was generally limited to receiving information or participating in occasional activities. Their systematic involvement in school program planning and decision-making remained limited.	PR01–PR15; IL01–IL06; P01–P03; INT; FGD	Indigenous communities have not yet been positioned as strategic partners in education governance, indicating the need for institutionalized mechanisms for participatory and collaborative decision-making.

In-depth interviews with principals, teachers, parents, and traditional leaders revealed that the implementation of inclusive education in Papuan indigenous primary schools still faces several challenges in school governance. The informants revealed that education management still largely follows administrative mechanisms established by the government, while the specific needs of students based on local culture have not been fully incorporated into the planning and implementation of school programs. Furthermore, the informants highlighted the limited integration of cultural values, local languages, and indigenous knowledge into the learning process. The principal (KS-01) stated,

“So far, we've been following existing government regulations. The most common tasks include organizing school administration, work programs, reporting, and ensuring the curriculum is implemented. While we understand the importance of incorporating local culture, there haven't been any clear guidelines on how to incorporate it into school management.”

Another teacher informant also stated that school program implementation is still largely focused on meeting predetermined targets. Class Teacher (G-02) explained,

“Teachers must adhere to established learning objectives. Sometimes we want to incorporate examples from local communities, but time and learning materials are limited.”

Teachers revealed that learning materials still rely heavily on sources from national textbooks, while students' life experiences and knowledge of the surrounding community have not been widely utilized. Class Teacher (G-03) said,

“Children actually grasp the lesson more quickly when it's connected to their environment, such as nature, village life, or their parents' activities. But so far, we've mostly relied on examples from textbooks.”

Meanwhile, one parent of a student stated that while their children have strong cultural experiences from their families, these experiences haven't been widely transferred to the school environment. Parent (OT-04) stated,

“Children at home learn many things from their parents and the environment, such as how to get to know nature and our culture. But when at school, learning mostly follows books and does not use much of their experience”

Interviews with teachers revealed that most educators desire to implement culturally appropriate learning for their students, but still face limitations in knowledge, training, and implementation strategies. Classroom Teacher (G-05) explained,

“We know that children's cultures should be respected, but we haven't had much training on how to create learning that is truly culturally appropriate.”

The principal echoed this sentiment, stating that strengthening teacher capacity in culture-based education remains a key need. The principal (KS-02) stated:

“Teachers need to be mentored in developing learning that connects school material to community life. So far, training has focused more on curriculum and administration.”

The community is generally present when schools need support for specific activities, but they are not widely involved in the program planning and policy development processes. A traditional leader (TA-01) stated,

“We want to help educate children because we have knowledge of the culture and life of the community. But so far, schools have mostly run their own programs.”

In line with that, the student's parents explained, Student's Parents (OT-05):

“Parents usually only come if there are meetings or school activities. In determining children's education programs, we have not been involved much.”

Table 2. Main Dimensions of the CRMM Based on Empirical Findings

Model Dimensions	Empirical Field Findings	Conceptual Interpretation	Operational Implementation Indicators
Indigenous Knowledge Recognition	Schools have not systematically integrated local knowledge, Indigenous languages, cultural values, community history, and Indigenous life practices into the learning process and school decision-making. However, informal practices among teachers indicate the use of local cultural contexts as learning resources.	Recognition of Indigenous knowledge constitutes the initial foundation for decolonizing education by positioning Indigenous epistemology as a legitimate source of knowledge alongside academic knowledge.	(1) Teachers integrate local cultural knowledge and Indigenous perspectives into lesson content; (2) teachers use relevant local languages, cultural symbols, and examples during learning; (3) schools document and maintain records of locally relevant Indigenous knowledge; and (4) schools involve Indigenous elders or cultural representatives in learning activities and curriculum-related discussions.
Culturally Responsive School Leadership	School leadership remains more focused on fulfilling administrative requirements than on developing culturally responsive strategies. Principals need greater capacity to understand students' cultural identities and develop contextualized school policies.	Culturally responsive leadership functions as a transformation mechanism that connects formal education policies with the socio-cultural needs of Indigenous communities.	(1) School leaders formulate a culturally responsive school vision and policy; (2) principals involve teachers, families, and Indigenous representatives in relevant decision-making; (3) school leaders provide professional development to strengthen teachers' cultural competence; and (4) schools establish practices that promote a culturally safe and respectful learning environment.
Indigenous Community Engagement	The relationship between schools and Indigenous communities remains largely consultative and has not yet fully developed into a strategic partnership in educational planning and evaluation.	Indigenous community involvement strengthens the social legitimacy of schools and supports educational governance based on collaboration and shared ownership.	(1) Schools establish regular communication forums with Indigenous communities; (2) teachers and schools involve families in relevant learning activities; (3) school leaders invite Indigenous representatives to participate in

Model Dimensions	Empirical Field Findings	Conceptual Interpretation	Operational Implementation Indicators
			educational planning and policy discussions; and (4) schools and communities jointly identify and address educational challenges affecting Indigenous students.
Inclusive Institutional Transformation	School structures and organizational cultures continue to follow standardized educational patterns that are not fully adaptive to the needs of Indigenous Papuan children.	Institutional transformation is required to shift inclusive education from merely providing access toward an educational system that recognizes identity, facilitates participation, and supports student empowerment.	(1) Schools develop and implement culture-based inclusive education policies; (2) teachers adapt curriculum content and learning strategies to students' cultural and contextual needs; (3) schools implement contextual and culturally relevant learning innovations; and (4) schools conduct student evaluation using approaches that recognize cultural, linguistic, and individual diversity.

The research identified four main dimensions of the CRMM: Indigenous Knowledge Recognition, Culturally Responsive School Leadership, Indigenous Community Engagement, and Inclusive Institutional Transformation. These dimensions demonstrate that decolonizing inclusive education requires schools to recognize Indigenous epistemologies, develop culturally responsive leadership practices, establish meaningful partnerships with Indigenous communities, and adapt institutional structures to local contexts. The operational indicators translate these dimensions into observable school practices, including integrating Indigenous knowledge into learning, involving relevant stakeholders in decision-making, developing culturally responsive policies, adapting curriculum and teaching strategies, and conducting evaluations that recognize student diversity. Thus, CRMM positions inclusive education not only as a matter of access, but also as a process of strengthening cultural identity, participation, agency, and empowerment among Indigenous Papuan children.

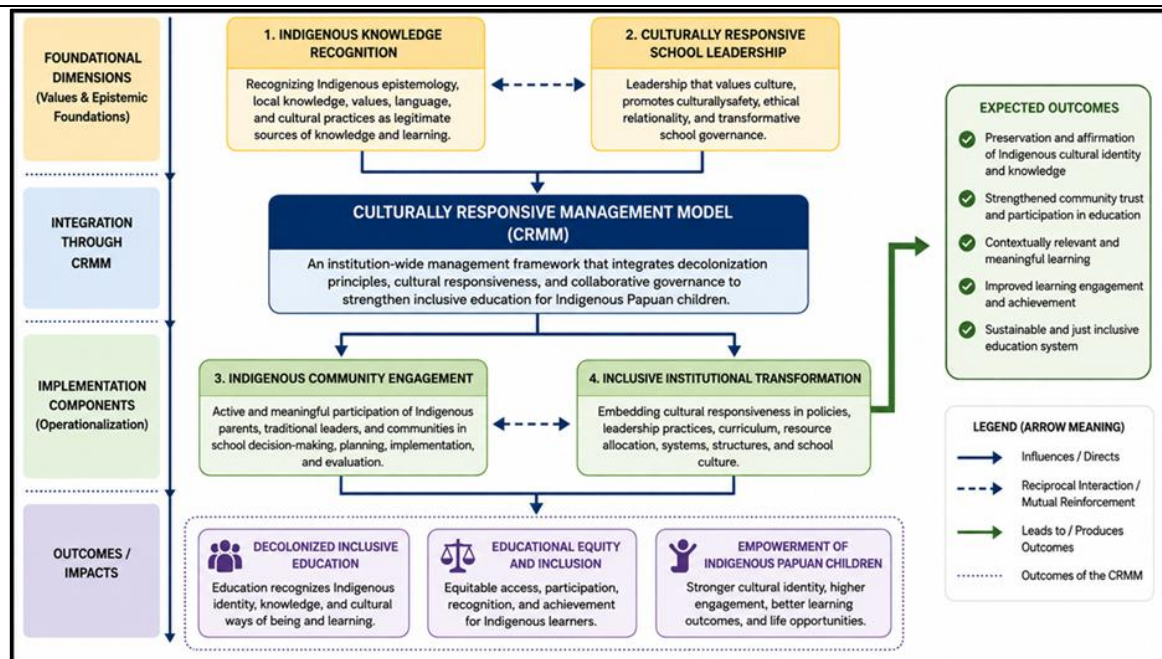


Figure 1. CRMM for Decolonizing Inclusive Education in Indigenous Papua Contexts

This figure presents the CRMM as an institution-wide framework that integrates Indigenous knowledge recognition, culturally responsive school-interconnected components reinforce decolonized and culturally responsive educational practices, promoting educational equity, meaningful participation, and the empowerment of Indigenous Papuan children. The model ultimately aims to preserve Indigenous cultural identity and knowledge, strengthen community trust and participation, enhance learning engagement and achievement, and support a sustainable and just inclusive education system.

Table 3. Implementation Mechanism of the CRMM in Culture-Based Inclusive Education

Mechanism Dimensions	Empirical Field Findings	Analytical Interpretation	Contribution to the CRMM Model
Recognition (Cultural Recognition)	Schools are beginning to recognize the importance of local languages, traditional values, community history, and traditional knowledge as part of students' identities. However, this recognition remains largely informal and has not yet been fully incorporated into school policies and practices.	Inclusive education requires a paradigm shift from an approach oriented primarily toward standardized academic achievement to one that recognizes the epistemological diversity of Indigenous communities.	Positioning Indigenous knowledge, cultural identity, and local values as legitimate components of the educational process and as a foundation for culturally responsive school governance.
Integration (Cultural Integration)	Schools are beginning to develop contextual learning practices through the integration of local cultural values into curriculum content and teaching strategies.	Cultural integration increases the contextual relevance of learning by connecting academic knowledge with students' everyday experiences, cultural environments, and the life practices of Indigenous communities.	Establishing culturally responsive learning environments by integrating local knowledge, cultural values, examples, and community contexts into curriculum content and classroom learning activities.

Mechanism Dimensions	Empirical Field Findings	Analytical Interpretation	Contribution to the CRMM Model
Collaboration (Institutional Collaboration)	Schools are beginning to involve parents, traditional leaders, and local communities in school activities and educational processes. However, collaborative practices have not yet fully developed into formal school governance mechanisms.	Culture-based inclusive education requires a shift in the position of Indigenous communities from policy objects to strategic partners in educational decision-making.	Developing collaborative governance among schools, families, Indigenous communities, and government institutions as an inclusive education ecosystem.
Empowerment (Student Empowerment)	The recognition of students' cultural identities is indicated to create a more supportive learning environment in which students can express aspects of their cultural background and participate in learning activities. However, evidence of increased self-confidence remains indicative and requires further systematic assessment.	Valuing cultural identity can provide an important foundation for strengthening students' engagement, sense of belonging, and participation in the school environment.	Producing an educational approach that extends beyond academic achievement by strengthening students' cultural identity, participation, agency, and potential.

Table 3 illustrates the four interconnected mechanisms of the CRMM: recognition, integration, collaboration, and empowerment. The findings indicate that schools have begun to recognize and integrate Indigenous cultural knowledge into educational practices, while collaboration with families and Indigenous communities is gradually developing. In the empowerment dimension, the recognition of students' cultural identities is indicated to create a more supportive learning environment and encourage greater participation, although evidence of increased self-confidence remains indicative and requires further systematic assessment. Overall, these mechanisms demonstrate how CRMM connects cultural recognition with contextual learning, collaborative governance, and the strengthening of Indigenous students' identity and agency.

Table 4. Dimensions and Mechanisms of the CRMM

Model Components	Main Focus	Transformation Mechanism	Outcome
Decolonizing Education	Overcoming the dominance of a single educational paradigm through the recognition of Indigenous epistemology.	Reconstruction of perspectives on Indigenous knowledge.	Epistemic equality.
Cultural Recognition	Integration of cultural values, language, and local knowledge into education.	Recognition of cultural identity as a source of learning.	A stronger sense of belonging to the school.
Culturally Responsive School Management	Changes in school governance based on cultural sensitivity.	Inclusive leadership, contextual school policies, and participatory decision-making.	Institutional transformation.
Indigenous Community Collaboration	Involvement of Indigenous communities as strategic partners in education.	Collaboration among schools, families, and traditional leaders.	Strengthening of the educational ecosystem.

Model Components	Main Focus	Transformation Mechanism	Outcome
Empowerment of Indigenous Children	Development of students' academic capacity and cultural identity.	Socially and culturally relevant education.	Inclusive education with equity.

The research results produced a CRMM, which explains that decolonization of education is the initial foundation in building inclusive, culturally responsive education governance. This model demonstrates that recognition of indigenous epistemologies and identities (cultural recognition) is a key mechanism enabling the transformation of school management through culturally responsive leadership, participatory decision-making, and the integration of local knowledge. Furthermore, collaboration between schools and indigenous communities strengthens institutional capacity in creating inclusive learning environments, resulting in the empowerment of indigenous Papuan children through increased cultural identity, learning engagement, and educational equality.

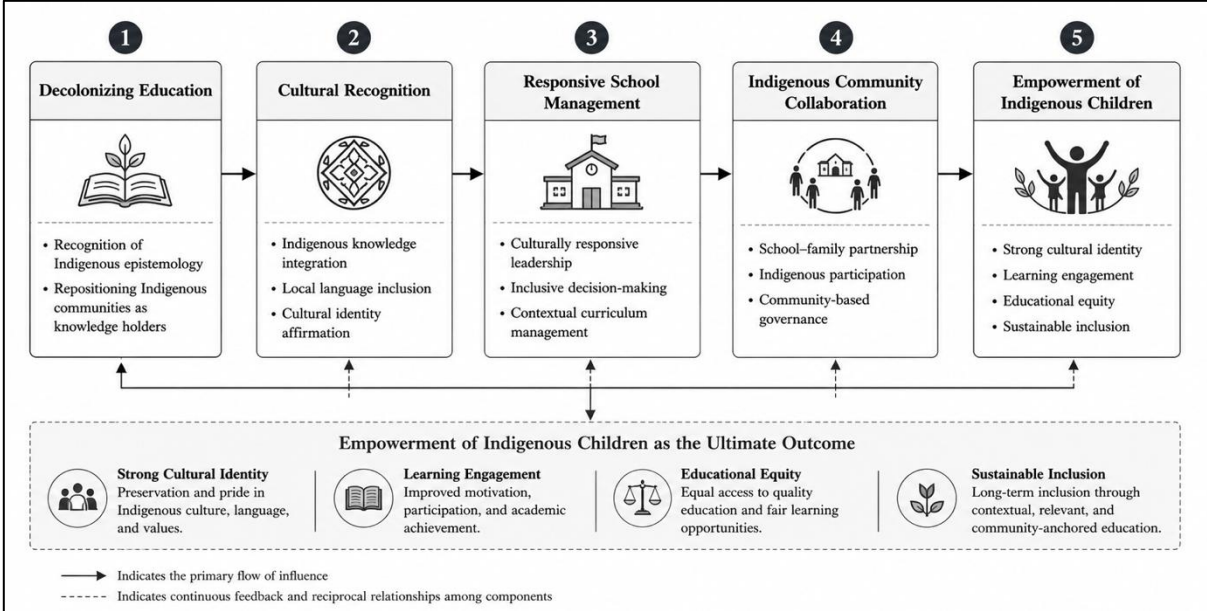


Figure 2. Conceptual Framework for Decolonizing Inclusive Education through Responsive School Management

The conceptual framework illustrates a sequential process in which decolonizing education serves as the foundational approach for recognizing Indigenous epistemology and repositioning Indigenous communities as legitimate knowledge holders within the education system. This foundation strengthens cultural recognition through the integration of Indigenous knowledge, local languages, and cultural identity into educational practices. These principles are operationalized through responsive school management, characterized by culturally responsive leadership, inclusive decision-making, and contextual curriculum management. The framework further emphasizes Indigenous community collaboration by fostering school-family partnerships, Indigenous participation, and community-based governance. The interaction of these components is expected to empower Indigenous children by strengthening cultural identity, enhancing learning engagement, promoting educational equity, and ensuring sustainable inclusion. Collectively, the framework demonstrates that decolonizing education requires an integrated management approach that aligns educational governance with Indigenous knowledge systems and community participation to achieve culturally responsive and equitable inclusive education.

The fundamental problem in implementing inclusive education for indigenous Papuan children is not solely related to limited access to educational services, but also relates to the structural mismatch between the formal education system and the value systems, knowledge, and cultural identities of indigenous communities (Brigg, 2016). To date, the discourse on inclusive education has been developed primarily through the perspective of equal opportunity, emphasizing expanded access, increased school participation, and the provision of services for vulnerable groups (Yang et al., 2025). The context of indigenous communities demonstrates that educational inclusion has a broader dimension, namely the ability of educational institutions to recognize the diversity of epistemologies, cultural practices, and social experiences of students (Omodan, 2025). Inclusive education cannot be interpreted simply as the integration of indigenous students into the existing school system, but must be understood as a transformational process that respects the identity, knowledge, and cultural values inherent in their communities (Ajani, 2025).

The perspective of decolonizing education provides a more comprehensive analytical framework for understanding these complexities by shifting the paradigm of inclusive education from an access-based approach to a recognition-based approach. This approach positions local culture and indigenous knowledge as fundamental elements in educational planning, management, and practice (Druker-Ibanez & Caceres-Jensen, 2022). In the context of Papuan indigenous communities, the integration of local knowledge serves not merely as a complement to learning materials but as a mechanism for building a more equal relationship between academic knowledge and community knowledge (knowledge dialogue). Thus, decolonizing education encourages a shift in perspective, viewing indigenous communities not as groups that need to be adapted to the dominant education system, but as knowledge holders who have a vital contribution to shaping contextual and sustainable educational practices (Nganga et al., 2025).

An inclusive education approach that fails to consider cultural context has the potential to result in subtle forms of exclusion, where students have administratively gained access to education but have not yet fully experienced social acceptance, cultural recognition, and involvement in the learning process. This situation demonstrates the gap between formal inclusion and substantive inclusion (Mor Barak et al., 2022). Indigenous children can be present in the school environment but still experience isolation if their language, cultural values, social practices, and community knowledge systems are not given space in school governance (da Silva et al., 2024). The transformation of inclusive education requires a paradigm shift in education management from a uniform approach to one that is responsive to cultural diversity through strengthening school leadership, institutional policies, and collaboration with indigenous communities (Hajisoteriou & Sorkos, 2023).

In the context of Papuan indigenous education, the success of inclusive education needs to be understood through broader indicators than simply academic achievement or increased school participation. An inclusive education system must be able to build a sense of belonging, strengthen cultural identity, and create empowering spaces for students to develop without losing their connection to their home communities. This perspective emphasizes that decolonization of education is not an attempt to replace the national education system, but rather a process of institutional reconstruction to create a more equitable relationship between formal education standards and the local values of indigenous communities (Bogale & Alhur, 2026). The CRMM approach offers a new perspective on inclusive education through the integration of cultural recognition, transformation of school governance, and empowerment of indigenous children as the primary subjects of educational development.

The development of the CRMM demonstrates that the success of inclusive education for indigenous Papuan children is largely determined by the school's institutional capacity to design a management system that aligns with the social and cultural context of the students. The implementation of inclusive education has focused more on technical aspects of learning, such as curriculum adaptation, pedagogical strategies, and teacher competency development (Navas-Bonilla et al., 2025). While these aspects play a crucial role, a classroom-centric approach has not fully addressed the structural issues that impact the educational success of indigenous children. An educational management perspective demonstrates that schools are social organizations with strategic authority in building institutional culture, establishing policy direction, and creating learning environments that enable cultural diversity to be effectively recognized (Clinciu, 2023).

Unlike the conventional paradigm that positions teachers and curriculum as the primary instruments of educational change, the CRMM model places institutional transformation as the primary foundation for building sustainable, inclusive education. This change occurs through strengthening culturally sensitive school leadership, developing internal policies that accommodate indigenous values, implementing participatory decision-making mechanisms, and establishing collaborative relationships between schools and local communities. Within this framework, the principal acts not only as an educational administrator but also as a cultural change agent capable of bridging the demands of national policy with the socio-cultural needs of indigenous communities (Erstad et al., 2025). This strategic role enables schools to develop into educational spaces that not only transmit academic knowledge but also nurture cultural identity and strengthen community engagement (Shula, 2026).

The CRMM conceptualization reinforces the view that inclusive education is a process of institutional transformation involving changes in structure, organizational culture, and patterns of relationships between educational actors. Inclusion cannot be achieved simply through the presence of students from indigenous groups in schools, but requires fundamental changes in the way educational institutions understand diversity, distribute authority, and build social legitimacy. This approach demonstrates that educational barriers for indigenous children do not always exist at the individual level, but often arise from institutional designs that are not yet responsive to cultural diversity. The transformation of inclusive education needs to be directed at creating a school ecosystem that allows for the negotiation, recognition, and integration of various forms of knowledge in the educational process (Ackah-Jnr, 2026). CRMM contributes by integrating three main perspectives: inclusive education, decolonizing education, and culturally responsive leadership, which have previously developed largely separately. The integration of these three perspectives produces a conceptual framework that explains that inclusive education for indigenous communities requires a balance between fulfilling the right to education, recognizing local knowledge systems, and the capacity of school leadership to manage cultural diversity. Thus, CRMM not only offers an alternative management approach for elementary schools in Papuan indigenous communities, but also broadens the global discourse on inclusive education by incorporating cultural, epistemological, and governance dimensions as essential elements in creating equitable and sustainable education.

The development of the CRMM demonstrates that recognizing local knowledge is a fundamental element in building equitable, inclusive education for indigenous Papuan children. Indigenous knowledge has often been positioned as a complementary element in the learning process, while the formal education system still tends to give greater legitimacy to academic knowledge derived from the dominant educational paradigm (Shabalala, 2025). This approach has the potential to create epistemological inequality because it ignores historical experiences, social practices, and

knowledge systems that have developed within indigenous communities. The integration of local knowledge into educational governance is not merely related to the addition of cultural content to the curriculum, but also a process of reconstructing educational perspectives by recognizing the diversity of knowledge sources as the foundation of learning (Ramli et al., 2025). In the context of indigenous Papuan communities, local knowledge plays a strategic role in building a more equal relationship between schools and communities. The integration of cultural languages, community history, social values, ecological practices, and the collective experiences of indigenous communities into the educational environment enables students to gain learning experiences that are more relevant to the realities of their lives (Jaiswal, 2025). This approach strengthens the connection between students' cultural identities and the learning process, so that schools are no longer perceived as separate from community life. The relationship between academic knowledge and local knowledge that is dialogical (knowledge dialogue) creates a more inclusive educational space because both forms of knowledge are positioned as complementary sources of learning.

This perspective reinforces the concept of epistemic justice in education, namely the recognition that every community has the capacity to produce, store, and transmit knowledge that has social and academic value (Cummings et al., 2025). Within this framework, indigenous communities are no longer positioned as groups merely receiving educational interventions, but as epistemic actors who contribute to shaping educational practices. Recognition of indigenous knowledge is crucial because the process of educational marginalization often occurs not only through limited access, but also through neglect of how a community understands the world, learns, and transfers values to the next generation. Thus, decolonization of education needs to be understood as a process of expanding the space for legitimate knowledge, not as an attempt to replace modern education with traditional systems (Seats, 2022). The implementation of these decolonization principles depends heavily on the capacity of school leadership to translate the values of cultural inclusivity into institutional practices. The principal holds a strategic position because he acts as a liaison between national education policies, the needs of students, and the aspirations of indigenous communities. Culturally responsive leadership enables schools to develop policies that are more sensitive to local contexts, such as strengthening the use of cultural languages, involving traditional leaders in the educational process, developing community-based school programs, and creating a learning environment that respects student identity (Brown et al., 2022). From this perspective, the principal not only performs administrative functions but also acts as a driver of social and cultural change within the educational institution.

The effectiveness of school leadership in the context of indigenous communities cannot be measured solely by the ability to manage resources, implement regulations, or achieve administrative performance indicators. Another important dimension is the ability to build social legitimacy, trust, and collaborative relationships with local communities. Culturally responsive leadership enables the formation of an educational ecosystem that involves schools, families, traditional leaders, and the community as strategic partners in supporting student development. This relationship pattern indicates that the success of inclusive education requires a shift from a hierarchical governance model to a collaborative governance model that recognizes the presence of various actors in the educational process (Chu et al., 2023). The integration of local knowledge and the strengthening of culturally responsive leadership are two key mechanisms in building a sustainable inclusive education system for indigenous Papuan children. These two aspects broaden the understanding of inclusive education by demonstrating that educational success depends not only on the provision of equitable services but also on the ability of educational institutions to create spaces for cultural recognition, epistemic

justice, and community participation. Through CRMM, this study makes a theoretical contribution by linking the dimensions of knowledge, leadership, and educational governance within an integrative framework. The framework offers a new perspective that inclusive educational transformation for indigenous communities must be built through cultural recognition, contextual leadership, and collaborative relationships that enable indigenous children to develop academically without losing their social and cultural identities.

Collaboration between schools and indigenous communities is a fundamental mechanism for building sustainable, inclusive education for Papuan children. Research findings indicate that indigenous communities need to be positioned as co-producers of education, strategic actors who play an active role in the planning, implementation, and evaluation of education, rather than simply beneficiaries of education policies. The involvement of indigenous leaders, families, and local communities strengthens the relevance of education because schools no longer exist as separate institutions from the social environment but rather become an integral part of the community's cultural ecosystem. This perspective demonstrates that the empowerment of indigenous children cannot be separated from strengthening the capacity of the community, which serves as the primary supporting environment in their education process (Gawo & Tafesse, 2024). Thus, collaborative relationships between schools and indigenous communities are a crucial foundation for ensuring the sustainability of inclusive education practices that respect cultural identity and local needs.

This research contributes to the development of inclusive education literature through the development of the CRMM, which integrates the principles of educational decolonization, culturally responsive leadership, collaborative governance, and indigenous community empowerment. This model broadens the understanding that inclusive education is not only related to the provision of educational access and services, but also includes institutional transformation that ensures recognition of cultural diversity and epistemic justice. Practically, the CRMM provides an implementation framework for elementary schools in building culturally responsive educational governance, for local governments in designing education policies based on local contexts, and for indigenous communities in strengthening their role as strategic partners in education. Therefore, this model offers an alternative approach to building an education system that is not only administratively inclusive, but also culturally just, socially relevant, and institutionally sustainable.

CONCLUSION

This research developed the Culturally Responsive Management Model (CRMM) as an inclusive education management framework for empowering Indigenous Papuan children through a decolonizing approach. The model addresses challenges that extend beyond access and educational services by emphasizing the integration of cultural identity, Indigenous knowledge, and community values into school governance. CRMM integrates Indigenous knowledge recognition, culturally responsive leadership, Indigenous community engagement, and institutional transformation into a process of recognition, collaboration, and empowerment, enabling schools to develop more inclusive, contextual, and culturally equitable learning environments. The study contributes to inclusive education scholarship by extending the focus from educational access toward epistemic justice and institutional transformation, while providing a practical framework for schools, local governments, and Indigenous communities. However, the model was developed within a specific Indigenous Papuan elementary-school context, which may limit its direct applicability to other cultural, institutional, and geographical settings. Future research should therefore test and validate CRMM

across diverse Indigenous communities and educational contexts, including through comparative and longitudinal studies, to assess its transferability and effectiveness in strengthening inclusive education outcomes.

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