

Indigenous People Education (IPEd) Program on Learners' Engagement and Cultural Identity Development in Geographically Isolated and Disadvantaged Areas (GIDA)

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ABSTRACT

This study examined the implementation of the Indigenous People Education (IPEd) Program and its prediction of learners' engagement and cultural identity development in geographically isolated and disadvantaged schools in Lake Sebu East District 1, Schools Division of South Cotabato. A quantitative descriptive-correlational design and complete enumeration were used, involving five school administrators, 55 teachers, and 143 Grade 6 learners ($N = 203$). Data were collected through researcher-adapted questionnaires validated by six experts and pilot-tested in comparable Indigenous schools. Means, standard deviations, and multiple linear regression were used for analysis. The IPEd Program was implemented at a Very High level ($M = 4.34$, $SD = 0.82$), led by learning resources ($M =$

4.38) and community participation ($M = 4.35$). Learner engagement was Very High ($M = 4.51$, $SD = 0.70$), with behavioral engagement rated highest, while cultural identity development was also Very High ($M = 4.48$, $SD = 0.74$), led by cultural pride and values. The IPEd dimensions collectively predicted learner engagement (adjusted $R^2 = .52$) and cultural identity development (adjusted $R^2 = .47$). Community participation was the strongest predictor of engagement ($\beta = .453$, $p < .001$), whereas learning resources had the strongest standardized effect on cultural identity development ($\beta = .327$, $p < .001$). Instructional strategies and learning resources were significant in both models, while curriculum integration was not independently significant. The findings indicate that culturally relevant content becomes most influential when supported by authentic materials, responsive pedagogy, and sustained participation of elders, culture bearers, families, and communities.

Keywords: Indigenous Peoples Education, learner engagement, cultural identity development, culturally responsive education, community participation, geographically isolated and disadvantaged areas

INTRODUCTION

Education for Indigenous learners becomes more meaningful when it recognizes community knowledge, language, values, history, and ways of learning. Culturally responsive education strengthens inclusion by connecting formal competencies with learners' cultural experiences and by treating Indigenous knowledge as a legitimate foundation for teaching and identity formation (Gay, 2018; UNESCO, 2021).

In the Philippines, the Department of Education institutionalized the Indigenous Peoples Education Program through DepEd Order No. 62, s. 2011 and later adopted the Indigenous Peoples Education Curriculum Framework through DepEd Order No. 32, s. 2015. These policies promote rights-based, culture-responsive

education through Indigenous Knowledge Systems and Practices, contextualized pedagogy, local learning resources, and participation of elders and culture bearers (Department of Education, 2011, 2015).

Implementation remains especially important in geographically isolated and disadvantaged areas, where limited access to contextualized materials, professional development, infrastructure, and community services may intensify educational inequities. Studies of Philippine IPed implementation describe progress in curriculum localization and community engagement but also identify uneven teacher preparation, resource limitations, and the risk of reducing culture to occasional activities rather than sustained educational practice (Miole, 2024; Verdida et al., 2024).

The present study was informed by three complementary theories. Culturally Responsive Teaching Theory explains how culturally grounded curriculum and pedagogy improve relevance and participation (Gay, 2018). Self-Determination Theory proposes that autonomy, competence, and relatedness sustain motivation and engagement (Ryan & Deci, 2000). Ethnic Identity Development Theory explains how cultural exploration, belonging, pride, and participation contribute to identity formation (Phinney, 1990).

Although IPed research has often described implementation practices, fewer quantitative studies have examined whether distinct program components predict both learner engagement and cultural identity development in GIDA schools. This study assessed curriculum integration, instructional strategies, learning resources, and community participation; described cognitive, behavioral, and emotional engagement and four cultural-identity domains; and determined which IPed components predicted the two learner outcomes.

Literature Review

Indigenous Peoples Education and Culturally Responsive Pedagogy

IPed represents a shift from assimilation-oriented schooling toward an educational interface in which Indigenous and mainstream knowledge systems can coexist. Culturally responsive schooling requires more than inserting Indigenous examples into conventional lessons; it calls for curriculum, assessment, language, and classroom relationships to be grounded in community realities and educational sovereignty (Canaza-Cabrera, 2020; McCarty & Lee, 2021).

Curriculum integration is meaningful when local history, ecological knowledge, language, stories, and cultural practices are embedded across competencies and validated by the community. Culturally sustaining pedagogy extends this principle by helping learners maintain and develop their cultural and linguistic identities while gaining access to academic knowledge (Paris & Alim, 2020).

Philippine evidence shows that IPed implementation improves when teachers receive sustained preparation and when elders and culture bearers participate in curriculum decisions, instruction, and resource validation. However, limited culturally validated materials and uneven institutional support continue to constrain consistency in remote schools (Bacala & Ponce, 2023; Esparrago-Kalidas, 2023).

Learner Engagement in Culture-Based Education

Learner engagement is multidimensional. Behavioral engagement concerns participation, attendance, task completion, and adherence to classroom expectations; emotional engagement includes interest, enjoyment, belonging, and positive feelings; and cognitive engagement involves persistence, strategic learning, reflection, and deeper processing (Appleton et al., 2020; Fredricks et al., 2019).

Culturally relevant learning can strengthen all three dimensions because learners encounter content that reflects their lives and communities. When students recognize their language, cultural experiences, and community knowledge in school activities, they are more likely to participate, sustain effort, communicate confidently, and connect new learning with prior understanding (Castagno, 2021; Ladson-Billings, 2021).

Engagement is also relational. The presence of elders, culturally knowledgeable teachers, and supportive peers can satisfy learners' need for relatedness, while meaningful tasks can strengthen competence and autonomy. Self-Determination Theory therefore provides a basis for expecting community participation and responsive instruction to predict learner engagement (Ryan & Deci, 2000).

Cultural Identity Development

Cultural identity develops through knowledge of group history and traditions, a sense of belonging and pride, and active participation in cultural practices. Phinney (1990) emphasized that identity is formed through exploration and commitment rather than through passive awareness alone. In Indigenous education, this process is strengthened when schooling validates learners' cultural communities and creates opportunities to learn from elders and culture bearers.

Culturally grounded resources can reinforce identity by representing Indigenous languages, values, ecological knowledge, narratives, and material culture accurately. Learning resources developed or validated with community's help prevent misrepresentation and enable learners to connect classroom concepts with lived experience (Dizon, 2020; Smith, 2021).

Active participation is equally important. Indigenous learners develop stronger cultural identity when education includes storytelling, community activities, traditional arts, environmental knowledge, and other forms of intergenerational learning. These practices position learners not only as recipients of cultural information but also as participants in cultural continuity (Brayboy et al., 2019; UNESCO, 2021).

Community Participation, Resources, and Program Outcomes

Community participation is a central feature of IPed because cultural accuracy cannot be ensured solely through school-based expertise. Elders, parents, culture bearers, and local leaders contribute knowledge, validate materials, support language use, and connect learning with community practices. Their participation can also strengthen trust and local ownership of the program (Bacala & Ponce, 2023).

Learning resources and instructional strategies translate curriculum intentions into actual experience. Even a formally contextualized curriculum may have limited effect when teachers lack suitable materials, culturally responsive methods, or opportunities for experiential learning. This distinction supports examining the independent contributions of curriculum integration, instruction, resources, and participation rather than treating IPed implementation as a single undifferentiated construct.

The reviewed literature indicates that IPed outcomes emerge from the interaction of policy, pedagogy, materials, and community relationships. The present study tested this proposition quantitatively by estimating how the four implementation dimensions jointly and independently predicted learner engagement and cultural identity development in Lake Sebu GIDA schools.

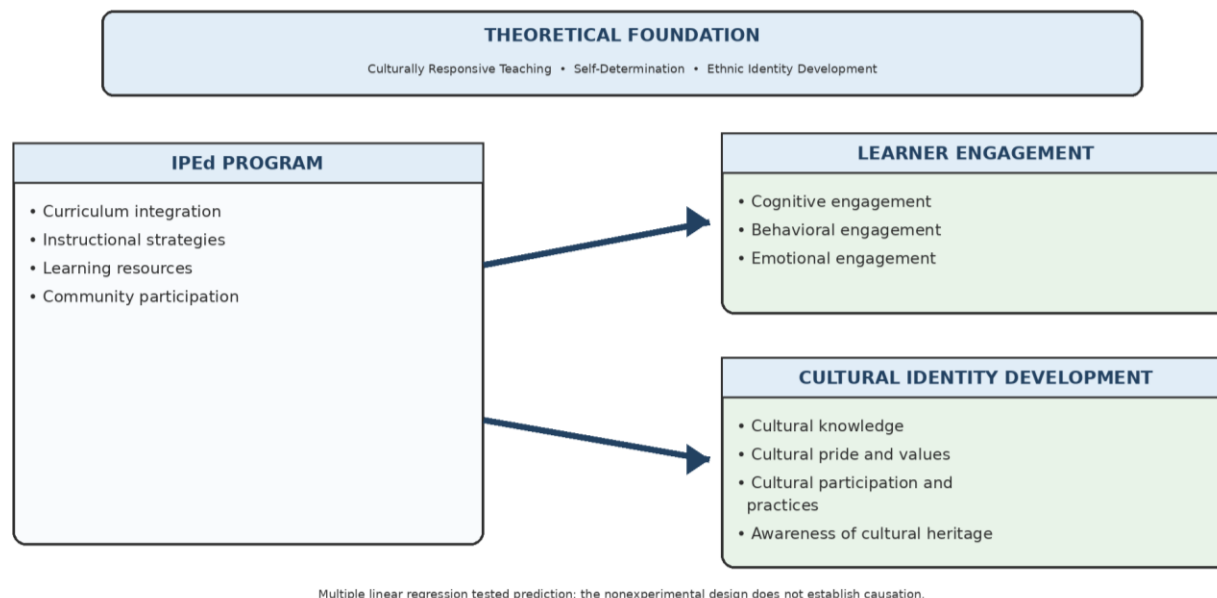


Figure 1. *Conceptual framework of the study*

METHODS

Research Design

The study employed a quantitative descriptive-correlational design. The descriptive component measured the extent of IPed implementation, learner engagement, and cultural identity development. The correlational component used multiple linear regression to determine the collective and independent predictive contributions of curriculum integration, instructional strategies, learning resources, and community participation. Because the variables were not manipulated, the design supports predictive association but not causal inference (Creswell & Creswell, 2023).

Research Locale

The study was conducted in Lake Sebu East District 1, Schools Division of South Cotabato, during School Year 2025–2026. The participating GIDA schools were Klubi Elementary School, Lemlunay Elementary School, Tablo Elementary School, Ubo Elementary School, and Tbung Elementary School. These schools were selected because they actively implemented the IPed Program and served Indigenous communities.

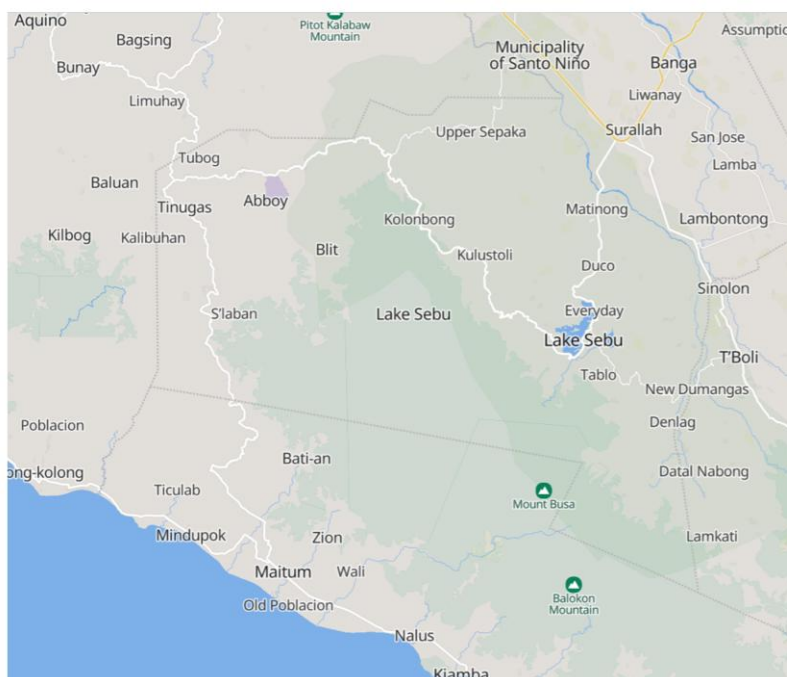


Figure 2. Map of Lake Sebu and the study locale reproduced from the source manuscript

Participants and Sampling Technique

The study involved 203 respondents: five school administrators, 55 teachers, and 143 Grade 6 learners. Complete enumeration was used because the eligible population was manageable and directly involved in IPed implementation or participation. Administrators and teachers were required to have at least one school year of IPed involvement, while learners were limited to Grade 6. The source reports aggregate results and does not present separate inferential analyses by respondent group.

Table 1. *Distribution of respondents by school*

School	Teachers	School Heads	Grade 6 Learners	Total
Klubi ES	12	1	68	81
Lemlunay ES	8	1	24	33
Tablo ES	10	1	28	39
Ubo ES	18	1	7	26
Tbong ES	7	1	16	24
Total	55	5	143	203

Research Instrument

A structured, researcher-adapted questionnaire measured three variable groups using a five-point scale. Part I assessed IPed implementation through curriculum integration, instructional strategies, learning resources, and community participation. Part II assessed cognitive, behavioral, and emotional engagement. Part III assessed cultural knowledge, cultural pride and values, cultural participation and practices, and awareness of cultural heritage. The instrument was anchored in DepEd IPed policies, student-engagement literature, and cultural-identity theory.

Validation and Reliability

Six experts in IPed, educational measurement, and culture-based pedagogy reviewed the instrument for clarity, cultural sensitivity, and construct alignment. A pilot test was conducted with teachers in comparable Indigenous schools, and Cronbach's alpha was used to evaluate internal consistency. The source manuscript does not report the numerical alpha coefficients; consequently, no reliability value is claimed in this article.

Data Gathering Procedure

Approval was sought from the Graduate School Dean, the Schools Division Superintendent, the district supervisor, and participating school heads. The questionnaire was administered face-to-face or online according to accessibility. Completed responses were retrieved, checked, encoded, and prepared for analysis. The survey instructions assured respondents that their answers would be treated anonymously and confidentially.

Data Analysis

Means and standard deviations summarized IPed implementation, learner engagement, and cultural identity development. Multiple linear regression determined whether the four IPed dimensions collectively and independently predicted engagement and cultural identity. A .05 significance level was used. The source regression notes contain a typographical conflict by stating $p > .05$ even though the model narratives and predictor p-values indicate significant models; the article follows the detailed coefficients and narrative interpretation.

Ethical Consideration

The study followed the institutional permission process described in the source and protected respondent anonymity and confidentiality. Participation occurred through approved school channels, and findings were presented in aggregate form. The source manuscript does not provide a formal ethics-review approval number or detailed consent procedures for minor learners; therefore, no ethics code or unreported procedure is asserted. These details should be documented before journal submission when required by the publisher.

RESULTS AND DISCUSSION

Implementation of the Indigenous People Education Program

Table 2. *Summary of IPed Program implementation*

IPed Dimension	Mean	SD	Interpretation	Rank
Learning resources	4.38	0.78	Very High	1
Community participation	4.35	0.83	Very High	2
Curriculum integration	4.33	0.84	Very High	3
Instructional strategies	4.30	0.82	Very High	4
Overall	4.34	0.82	Very High	

IPed implementation was rated Very High overall ($M = 4.34$, $SD = 0.82$). Learning resources ranked first ($M = 4.38$), indicating extensive use of culturally contextualized materials, Indigenous Knowledge Systems and Practices, local-language references, and community-informed resources. Community participation ranked second ($M = 4.35$), reflecting support for cultural events, participation of elders and culture bearers, and consultation with Indigenous stakeholders.

Curriculum integration obtained $M = 4.33$. The highest detailed indicator was the incorporation of IKSP into relevant learning competencies ($M = 4.54$), while ancestral-domain exposure and field-based contextualized learning received the lowest item mean ($M = 4.10$). The pattern shows that culture was strongly represented in formal lessons but experiential activities remained comparatively less frequent. This distinction is consistent with research showing that authentic IPed implementation requires community-validated materials and sustained experiential pedagogy, not only curriculum references (McCarty & Lee, 2021; Verdida et al., 2024).

Learner Engagement

Table 3. *Summary of learner engagement*

Engagement Dimension	Mean	SD	Interpretation	Rank
Behavioral engagement	4.60	0.63	Very High	1
Emotional engagement	4.48	0.68	Very High	2
Cognitive engagement	4.45	0.78	Very High	3
Overall	4.51	0.70	Very High	

Note. The source summary table reports the values shown above, while the detailed domain tables report cognitive $M = 4.52$, behavioral $M = 4.61$, and emotional $M = 4.52$.

Learner engagement was Very High overall ($M = 4.51$, $SD = 0.70$). Behavioral engagement ranked highest, indicating consistent participation, task completion, attentiveness, collaboration, and adherence to classroom routines. The detailed behavioral table showed attention and focus as the strongest item ($M = 4.65$), while peer collaboration, although still Very High, was relatively lower ($M = 4.57$).

Emotional and cognitive engagement were also Very High. Culturally relevant activities generated strong motivation, belonging, curiosity, connection of new knowledge with prior experience, and active information seeking. These results support engagement models that distinguish visible participation from emotional investment and strategic thinking (Appleton et al., 2020; Fredricks et al., 2019). They also illustrate how culturally relevant tasks can support competence, relatedness, and meaningful participation (Ryan & Deci, 2000).

Cultural Identity Development

Table 4. *Summary of learners' cultural identity development*

Cultural-Identity Dimension	Mean	SD	Interpretation	Rank
Cultural pride and values	4.52	0.70	Very High	1
Cultural participation and practices	4.49	0.72	Very High	2
Awareness of cultural heritage	4.46	0.75	Very High	3
Cultural knowledge	4.45	0.77	Very High	4
Overall	4.48	0.74	Very High	

Cultural identity development was Very High overall ($M = 4.48$, $SD = 0.74$). Cultural pride and values ranked first ($M = 4.52$), showing strong respect for community norms, pride in Indigenous language and heritage, and recognition of the importance of cultural preservation. Cultural participation and practices followed ($M = 4.49$), reflecting collaboration with elders, application of cultural knowledge, participation in rituals and festivals, and engagement in traditional arts and skills.

Awareness of cultural heritage and cultural knowledge were also Very High. Learners understood community history, beliefs, rituals, values, cultural symbols, the role of elders, and the significance of IKSP. The results are consistent with ethnic-identity theory, which emphasizes that belonging and commitment are strengthened through both knowledge and active participation (Phinney, 1990). They also support decolonizing approaches that position community knowledge and participation as integral to schooling rather than supplemental content (Canaza-Cabrera, 2020; Smith, 2021).

IPed Program as Predictor of Learner Engagement

Table 5. *Regression coefficients for learner engagement*

IPed Predictor	β	SE	t	p	Decision
Curriculum integration	.049	.055	0.707	.480	Not significant
Instructional strategies	.187	.057	2.796	.006	Significant
Learning resources	.187	.066	2.444	.015	Significant
Community participation	.453	.055	6.569	< .001	Significant

The IPed dimensions collectively predicted learner engagement, explaining approximately 52% of its variance after adjustment. Community participation was the strongest independent predictor ($\beta = .453$, $p < .001$), followed by instructional strategies ($\beta = .187$, $p = .006$) and learning resources ($\beta = .187$, $p = .015$). Curriculum integration was not independently significant ($\beta = .049$, $p = .480$).

The result indicates that the presence of Indigenous content in curriculum documents was not sufficient by itself when pedagogy, materials, and community participation were considered simultaneously. Engagement was more strongly associated with lived, relational, and participatory dimensions of IPed. This finding reinforces culturally responsive and self-determination perspectives: learners engage when instruction is meaningful, relationships affirm belonging, and community knowledge is actively experienced (Gay, 2018; Ryan & Deci, 2000).

IPed Program as Predictor of Cultural Identity Development

Table 6. *Regression coefficients for cultural identity development*

IPed Predictor	β	SE	t	p	Decision
Curriculum integration	-.007	.060	-0.099	.921	Not significant
Instructional strategies	.192	.062	2.721	.007	Significant
Learning resources	.327	.072	4.054	< .001	Significant
Community participation	.308	.060	4.235	< .001	Significant

The four IPed dimensions collectively predicted cultural identity development, explaining approximately 47% of the variance after adjustment. Learning resources had the strongest standardized effect ($\beta = .327, p < .001$), followed by community participation ($\beta = .308, p < .001$) and instructional strategies ($\beta = .192, p = .007$). Curriculum integration was not independently significant ($\beta = -.007, p = .921$).

Culturally authentic materials and community participation therefore appeared especially important for strengthening knowledge, pride, belonging, and participation. Resources make Indigenous language, narratives, symbols, and knowledge visible in everyday learning, while elders and culture bearers connect classroom content with living traditions. The non-significant curriculum coefficient again suggests that formal inclusion becomes meaningful when translated through validated resources, responsive instruction, and sustained community relationships (Bacala & Ponce, 2023; Dizon, 2020).

CONCLUSION

The IPed Program was implemented at a Very High level in the participating GIDA schools. Learning resources and community participation were the strongest reported dimensions, indicating that culture-based education was supported through contextualized materials, IKSP integration, and school-community relationships. Learners likewise demonstrated Very High behavioral, emotional, and cognitive engagement and Very High cultural identity development.

Multiple regression showed that IPed implementation had substantial predictive relationships with both outcomes. Community participation was the strongest predictor of learner engagement, while learning resources had the strongest standardized effect on cultural identity development. Instructional strategies and learning resources or community participation were significant in both models, whereas curriculum integration was not independently significant. These findings indicate that cultural content produces stronger learner outcomes when it is enacted through authentic resources, responsive teaching, and meaningful community participation.

The study provides local evidence for strengthening IPed implementation in Lake Sebu GIDA schools. However, its nonexperimental design, aggregate self-reported data, source-table inconsistencies, absence of numerical reliability coefficients, and unresolved regression degrees of freedom limit causal and statistical interpretation. Verification of the original analysis output is necessary before final journal submission.

Recommendation

Teachers should sustain curriculum integration while increasing inquiry-based, cooperative, experiential, and community-based learning. Greater attention should be given to ancestral-domain discussions, field-based activities, learner self-expression, higher-order thinking, and peer collaboration. Culturally validated resources should be continuously developed with elders, culture bearers, and local-language experts.

School leaders should formalize partnerships with Indigenous communities, provide logistical support for cultural immersion and community participation, and include IPed priorities in school planning, resource allocation, teacher development, and monitoring. Professional learning should focus on culturally responsive pedagogy, resource development, ethical use of Indigenous knowledge, and authentic community consultation.

The Department of Education should strengthen technical assistance, resource production, teacher preparation, and outcome-focused monitoring in GIDA schools. Future studies should verify the statistical outputs, report complete reliability evidence, distinguish administrator, teacher, and learner responses, include qualitative community perspectives, and use longitudinal or intervention designs to examine changes in engagement and cultural identity over time.

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