Instructional Competence of Non-Indigenous People Teachers on the Integration of Indigenous Knowledge Systems and Practices: Bridging Blaan Cultures

Jekerie P. Camba*[1], Marites B. Java, EdD[2]
[1, 2] Sultan Kudarat State University, Philippines
*Corresponding Author email: *jekeriecamba@sksu.edu.ph*

Abstract

Aim: This study explored the instructional competence, challenges, and strategies of non-Indigenous People teachers in integrating Indigenous Knowledge Systems and Practices (IKSPs) in their instructional practices.

Methodology: A convergent parallel mixed-methods design was employed, wherein quantitative and qualitative data were collected simultaneously, analyzed separately, and then integrated.

Results:. The quantitative results highlighted insufficient training and professional development, which is reflected in the qualitative findings. These results revealed a moderately high IKSPs integration and a satisfactory rating of instructional competence, with significant relationship between these variables. However, qualitative results highlighted non-Indigenous People teachers lack of knowledge and training, lack of relevant resources, curriculum alignment, language challenges, fear of misrepresentation, and time constraints. Hence, non-Indigenous People teachers emphasized comprehensive training and professional development, provision of resources, collaboration with IPs and IP Educators, time management and strategic planning, and support and policy development to address the challenges and enhance the moderately high and satisfactory rating.

Conclusion: Non-Indigenous People teachers integrated IKSPs on a moderately high level and a satisfactory rating in instructional competence. Thus, there is a significant relationship between these variables confirming that higher level of IKSP integration correlates with higher instructional competence. Additionally, the lack of knowledge and training, lack of resources, language and communication challenges, fear of misrepresentation, time constraints, and curriculum alignment were key challenges encountered in IKSPs integration. Hence, comprehensive professional training and development, provision of accessible, flexible, and inclusive resources, collaboration, time management and strategic planning, and support and policy development were the suggested strategies to address the challenges encountered.

Keywords: non-Indigenous People teachers, instructional competence, integration, Indigenous knowledge systems and Practices, IPEd program, convergent parallel mixed-methods, statistical analysis, thematic analysis.

INTRODUCTION

The United Nations Sustainable Development Goal (SDG) 4 emphasizes the importance of inclusive and equitable quality education, calling for the preservation and integration of indigenous cultures and knowledge systems within educational frameworks (Smith et al., 2020). Despite this, the integration of Indigenous Knowledge Systems and Practices within educational frameworks remains an ongoing challenge worldwide. In the Philippines, a nation renowned for its cultural diversity, indigenous communities represent a crucial part of the national identity.

In the Philippines, the government has recognized the importance of integrating indigenous knowledge into education through various legal frameworks. Republic Act No. 8371, known as the Indigenous Peoples' Rights Act of 1997, mandates the recognition and promotion of the rights of indigenous peoples including their right to education that respects their cultural identity. This commitment to cultural inclusivity is enshrined in the Department of Education's Indigenous Peoples Education (IPEd) Program, as outlined in DepEd Order No. 32, s. 2015. A program
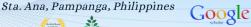
seeks to contextualize and localize education by integrating indigenous cultural themes, practices, and knowledge into the curriculum, ensuring that learners from Indigenous communities experience culturally relevant instruction.

Despite these initiatives, many non-Indigenous People teachers face challenges in fully integrating IKSPs into their teaching practices due to limited exposure to indigenous cultures and insufficient training (Calderon et al., 2021). Teachers' instructional competence in embedding IKSPs within the curriculum are crucial for the success of the IPEd Program, as they directly impact students' cultural engagement, academic performance, and sense of belonging (Martin et al., 2021).

Considering this, the researchers were most interested in understanding the current level of instructional competence of non-Indigenous People teachers on the integration of Indigenous Knowledge Systems and Practices (IKSPs). Moreover, this study endeavors to significantly contribute to the preservation and promotion of indigenous cultures within the Philippines educational framework and to ensure that all learners, regardless of their cultural background, have access to an education that is respectful, inclusive, and empowering.

Objectives

This study aimed to determine the instructional competence of non-Indigenous People teachers on the integration of Indigenous Knowledge Systems and Practices (IKSPs): Bridging Blaan Cultures.

Specifically, sought to answer the following questions:

1. What is the level of non-Indigenous People teachers' integration of Indigenous Knowledge Systems and Practices (IKSPs) in:
    2.1 Lesson Planning;
    2.2 Lesson Delivery; and
    2.3 Assessment Procedures?
2. What is the instructional competence of non-Indigenous People teachers' in terms of:
    3.1 Teaching methods;
    3.2; Classroom management
    3.3 Mastery of Subject Matter; and
    3.4 Content relevance and integration?
3. Is there a significant relationship between non-Indigenous People teachers' integration of IKSPs and instructional competence?
4. What are the challenges encountered by the non-Indigenous People teachers in integrating Indigenous Knowledge Systems and Practices (IKSPs) in their instructional practices?
5. What are the strategies employed by the non-IP teachers to address the challenges encountered in integrating Indigenous Knowledge Systems and Practices (IKSPs) in their instructional practices??

Hypothesis

The null hypothesis below was tested at a significance level of 0.05:
1. There is a significant relationship between non-IP teachers' integration of IKSPs and instructional competence.

METHODS

Research Design

This study employed a convergent parallel design, a mixed-methods approach in which quantitative and qualitative data were collected simultaneousl, analyzed separately, and then integrated .

In this approach, the researchers conducted the quantitative and qualitative elements concurrently in the same phase of the research process, weighed methods equally, analyzed them independently, and interpreted the results together (Creswell & Plano Clark, 2017).

Population and Sampling

The study was conducted in eight (8) elementary IPEd (Indigenous People's Education) implementing schools in Columbio I and II District and Lutayan District II, Department of Education (DepEd) Division of Sultan Kudarat, during the school year 2024-2025 with 50 non-Indigenous People teachers as respondents.

The study employed a total enumeration sampling for both the quantitative and qualitative phases, wherein all 50 non-Indigenous People (IP) teachers in IPED implementing schools in the municipalities of Columbio and

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Lutayan, Sultan Kudarat served as the respondents. This approach aligns with the convergent parallel mixed-methods design, which allows the simultaneous collection of quantitative and qualitative data from the same group of respondents.

Profile of the Respondents

Table 1 presents the demographic profile of the respondents, comprising ethnicity, length of service, highest educational attainment, and attended IPEd trainings or seminars.

Table 1. Profile of the Respondents

PROFILE	Frequency (n=50)	Percent (100.00)
Ethnicity		
Hiligaynon	19	38.00
Ilocano	18	36.00
Maguindanaon	9	18.00
Cebuano	4	8.00
Length of Service		
1-3	6	12.00
4-6	3	6.00
7-9	9	18.00
10 or more	32	64.00
Highest Educational Attainment		
Bachelor's Degree	22	22.00
Master's Degree (ongoing)	9	9.00
Master's Degree	19	19.00
Attended IPEd Trainings/Seminars		
Yes	23	46.00
No	27	54.00

Table 1 revealed a diverse ethnic composition of non-IP teachers, with 19 Hiligaynon (38%), 18 Ilocano (36%), 9 Maguindanaon (18%), 4 Cebuano (8%). In terms of the length of service, a substantial 32 non-IP teachers (64%) have been in the service for seven or more (10 or more) years, while 9 non-IP teachers (18%) have served between five to seven (7-9) years, 6 non-IP teachers (12%) between one to three (1-3) years, and 3 non-IP teachers (6%) between three to five (4-6) years. Regarding educational attainment, the majority of the non-IP teachers (44%) possess a bachelor's degree, 9 non-IP teachers (18%) are currently pursuing a master's degree, and 19 non-IP teachers (38%) have completed a master's degree. Furthermore, findings suggested that a significant number of non-IP teachers have not participated in any trainings or seminars on IPEd or IKSPs contextualization which highlights an alarming absence of opportunities for professional development especially for non-IP teachers in IPEd implementing schools.

Instruments

This study utilized researcher-made instruments for assessing the instructional competence, challenges, and strategies of non-Indigenous People teachers on the integration of Indigenous Knowledge Systems and Practices (IKSPs) into their instructional practices. A structured survey questionnaire was used to gather quantitative data, while a set of open-ended questions was employed to collect qualitative insights from the same group of respondents.

Prior to use, the instruments underwent validation through 5-panel validity test. The panel of validators included a Chief Education Supervisor, an IPED Focal Person, a National Commission on Indigenous Peoples (NCIP) Administrative Officer, Assistant Professor, and Principal. Subsequently, pilot testing was done to fine-tune the survey for better reliability and validity

Data Collection

The researchers followed a systematic approach to ensure an accurate and efficient data collection study. The study focused on analyzing the instructional competence, challenges, and strategies of non-Indigenous People teachers on the integration of Indigenous Knowledge Systems and Practices into their instructional practices using both quantitative and qualitative methods.

Initially, a formal letter requesting permission to conduct the study was submitted to the Graduate School Dean and the Superintendent of the Department of Education (DepEd) Division for approval. Additional permission was sought from the DepEd Columbio I, Columbio II, and Lutayan III District Public School Supervisors and the respective School Principals. The study adhered to ethical research standards, ensuring informed consent from participants and maintaining data confidentiality.

After securing the necessary approvals, the researchers identified the target respondents and administered the structured survey questionnaire (quantitative) and a set of open ended questions (qualitative) to the same group of 50 non-Indigenous People teachers. The survey instrument underwent content validation by experts and was pilot tested to ensure its reliability and relevance.

A detailed timeline was established to outline the duration of each phase, from obtaining the permissions to actual administration of the surveys. The timeline also considered the time needed for data analysis and report writing. A waterfall diagram representing the research procedure was observed to visually represent the data collection process.

Treatment of Data

Mean and standard deviation was used to describe the central tendency and variability of responses regarding non-Indigenous People teachers IKSPs integration (SOP1) and Instructional competence (SOP2). The Pearson Correlation Coefficient was used to determine the relationship (SOP3) between these variables (Creswell & Creswell, 2017).The significance level was set at .05.

Further, Braun and Clarke's (2022) thematic analysis method was used to analyze qualitative data on the challenges encountered (SOP4) and strategies employed (SOP5) by non-IP teachers in integrating IKSPs into their instructional practices.

Ethical Considerations

The research is conducted in a fair and just manner such as informed consent or permission, data protection and security, and secrecy were given utmost priority. Informed consent ensured that participants fully understood the purpose, risks, and benefits of the study. Respecting confidentiality involves safeguarding participants' information to ensure their privacy and trust in the research process (Amihan, et al. 2023; Carvajal & Sanchez, 2024; Sanchez & Sarmiento, 2020). Adhering to these principles enhances the credibility and integrity of the study while respecting the rights and welfare of participants. The withholding of non-Indigenous People teachers' names is a crucial step in ensuring data privacy and confidentiality. This is particularly significant in the Philippine, where Data Privacy Act (DPA) of 2012 protects individuals' personal information from unauthorized disclosure. Hence, the findings were communicated responsibly, ensuring participants were granted access to results, an endeavor that substantiates objectivity and bolsters the avoidance of biases during data analysis.

RESULTS and DISCUSSION

Table 2 presents the results of the data gathered on the level of non-IP teachers' integrations of Indigenous Knowledge Systems and Practices.

Table 2. Level of non-IP teachers' integrations of IKSPs

Integration of IKSPs in the following. areas:	Mean	SD	Description	Interpretations
1. Lesson Planning	3.49	.51	Moderately High	The teacher integrates IKSP occasionally (from time to time) during lesson planning, lesson delivery, and assessment procedures

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2. Lesson Delivery	3.49	.47	Moderately High	The teacher integrates IKSP occasionally (from time to time) during lesson planning, lesson delivery, and assessment procedures
3. Assessment Procedures	3.49	.46	Moderately High	The teacher integrates IKSP occasionally (from time to time) during lesson planning, lesson delivery, and assessment procedures
Overall Mean & SD	**3.49**	**.48**	Moderately High	The teacher integrates IKSP occasionally (from time to time) during lesson planning, lesson delivery, and assessment procedures

Table 2 summarizes the overall assessment of non-IP teachers' integration of IKSPs in lesson planning, lesson delivery, and assessment procedures with an overall mean of 3.49, indicates that non-IP teachers integrate IKSPs from time to time during lesson planning, lesson delivery, and assessment procedures.

Instructional Competence

The table below presents the results of the data gathered on the Instructional Competence of non-IP teachers in integrating Indigenous Knowledge Systems and Practices.

Table 3. Instructional Competence of non-IP teachers

Instructional Competence in the following areas:	Mean	SD	Description	Interpretations
1. Teaching Methods	3.44	.54	Satisfactory	The teacher occasionally demonstrates IKSPs but may need further development in some areas.
2. Classroom Management	3.49	.51	Satisfactory	The teacher occasionally demonstrates IKSPs but may need further development in some areas.
3. Mastery of the Subject matter	3.44	.54	Satisfactory	The teacher occasionally demonstrates IKSPs but may need further development in some areas.
4. Content Relevant and Integration	3.46	.53	Satisfactory	The teacher occasionally demonstrates IKSPs but may need further development in some areas.
Overall Mean	**3.46**	**.53**	**Satisfactory**	The teacher occasionally demonstrates IKSPs but may need further development in some areas.

Table 3 presents the instructional competence of non-IP teachers based on four key areas: teaching methods, classroom management, mastery of the subject matter, and content relevance and integration. The overall mean score of 3.40 falls within the satisfactory category indicating that non-Indigenous People teachers occasionally demonstrate competence in these instructional areas but need further development.

Relationship between IKSPs Integration and Instructional Competence

The table below presents the relationship between non-IP teachers' integration of IKSPs and their instructional competence. The correlation analysis examines how lesson planning, lesson delivery, and assessment procedures influenced various aspects of instructional competence, including teaching methods, classroom management, mastery of the subject matter, and content relevance and integration.

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Table 4. Relationship between IKSPs Integration and Instructional Competence

Instructional Competence:	Pearson Correlation (r)			Interpretation	p-value (Sig. 2-tailed)	Interpretation
	IKSPs Integration:					
	Lesson Planning	Lesson Delivery	Assessment procedures			
Teaching Methods	.722	.783	.785	strong	.01	Significant
Classroom Management	.669	.791	.697	strong	.01	Significant
Mastery of the Subject matter	.691	.742	.721	strong	.01	Significant
Content Relevance and Integration	.659	.741	.707	strong	.01	Significant

α=0.05, Correlation is significant at the 0.01 level (2-tailed)

The Pearson correlation coefficients between IKSPs integration and instructional competence suggest a strong positive relationship, signifying that higher level of IKSPs integration corresponds to higher instructional competence. The p-values (Sig.= 0.01) confirmed that these relationships are statistically significant at the 0.01 level (2-tailed), reinforcing the reliability of the results.

Regarding lesson planning and instructional competence, the findings aligned with Krepf and König (2022), who found that effective lesson planning positively influences instructional competence.

For lesson delivery and instructional competence, the findings aligned with Muñiz (2019), who emphasized the importance of effective instructional delivery in enhancing culturally responsive education.

In terms of assessment procedures and instructional competence, the findings aligned with Andrade (2019), who noted that effective assessment practices help educators determine students' learning progress and adjust their teaching strategies accordingly to meet diverse learning needs.

Presentation of Qualitative Findings

This section presents the Bridging Blaan Cultures, which in the context of this study, it refers to the process of integrating Blaans' Indigenous Knowledge Systems and Practices (IKSPs) into the instructional practices of teachers teaching in an Indigenous Peoples Education (IPEd) implementing schools. This Covers the qualitative findings of the study regarding the challenges encountered and strategies employed by non-Indigenous People teachers in integrating Indigenous Knowledge Systems and Practices (IKSPs) in lesson planning, lesson deliver, and assessment procedures. The relevant themes were generated through a rigorous thematic analysis, which involved identifying significant statements, formulating initial themes, clustering related themes, and determining the overarching themes.

Table 5. Relevant Themes on the Challenges Encountered in Integrating IKSPs

Lesson Planning	Lesson Delivery	Assessment Procedures
1. Lack of Knowledge and Training	1. Lack of Knowledge and Training	1. Limited Understanding and Training
2. Lack of Resources and Materials	2. Limited Resources and Indigenous Representation	2. Lack of Culturally Relevant and Standardized Assessment Tools
3. Language and Contextualization Challenges	3. Language Barriers	3. Language and Communication Challenges
4. Time Constraints	4. Fear of Misrepresentation	4. Fear of Misrepresentation
5. Curriculum Alignment		

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Table 6. Relevant Themes on the Strategies Addressing Challenges Encountered in Integrating IKSPs

Lesson Planning	Lesson Delivery	Assessment Procedures
1. Comprehensive Training and Professional Development	1. Training and Professional Development	1. Training and Professional Development
2. Provision of Learning Resources and Materials	2. Access to Teaching Resources and Materials	2. Flexible and Inclusive Assessment Approaches
3. Time Management and Strategic Planning	3. Use of Culturally Relevant Teaching Strategies	3. Culturally Responsive Assessment Methods
4. Collaboration with IP Educators and Indigenous Communities	4. Collaboration with IP Educators and Indigenous Communities	4. Collaboration with IP Educators and Indigenous Communities
5. Support and Policy Development		

Integration of QUAN and QUAL Findings

The insufficient training identified in the quantitative findings was echoed in the qualitative findings. The quantitative findings revealed moderately high level of IKSPs integration and a satisfactory rating of instructional competence. This score/rating further explained by the qualitative findings indicating non-Indigenous People teachers lack knowledge and training, lack of resources, language and communication challenges, fear of misrepresentation, time constraints, and curriculum alignment. Moreover, quantitative findings showed significant relationships between IKSPs integration and instructional competence, signifying that higher level of IKSPs integration corresponds to higher instructional competence. Hence, non-IP teachers also highlighted comprehensive training and professional development, provision of accessible, flexible, and inclusive resources, time management and strategic planning, and support and policy development and implementation to address the challenges encountered in integrating IKSPs and increase the moderately high level of integration and satisfactory rating of instructional competence of non-Indigenous People teachers.

Conclusions

The respondents were composed of diverse ethnicities, with many having extensive teaching experience. Notably, half of them had not attended any IPEd-related training, indicating a gap in professional development. They integrate IKSPs on a moderately high level and a satisfactory rating across all areas in instructional competence. Thus, there is a significant relationship between these variables, confirming that higher level of IKSP integration correlates with higher instructional competence.

However, the lack of knowledge and training, lack of resources, language and communication challenges, fear of misrepresentation, time constraints, and curriculum alignment were key challenges encountered IKSPs integration. Hence, comprehensive professional training and development, provision of accessible, flexible, and inclusive resources, collaboration, time management and strategic planning, and support and policy development were the suggested strategies to address the challenges encountered in IKSPs Integration.
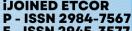
Recommendations

Based on the study's findings and conclusions, the following recommendations were made:
1. Establish continuous seminar-workshop, mentorship, and partnership program between non-Indigenous People teachers, IP teachers, and Indigenous knowledge holders and practitioners to ensure that IKSP integration remains accurate, respectful, and meaningful.
2. Creation and Circulation of Culturally Relevant Teaching and Resources to support IKSP integration in teaching and learning process.
3. Strengthen national and local education policies that mandate the integration of IKSPs in teaching and learning process.
4. Continuous monitoring, evaluation, and feedback mechanisms involving teachers, Indigenous communities, and policymakers to assess the effectiveness of IKSP integration and provide continuous feedback for improvement.

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5. Develop long-term institutional plans to sustain IKSP integration in education, ensuring that Indigenous perspectives remain a fundamental part of the teaching-learning process.
6. Explore best practices in IKSPs integration in teaching and learning process and the relevance of Indigenous People Education in this evolving, technology-driven world.

By implementing these recommendations, non-Indigenous People teachers will be better equipped to integrate IKSPs into their instructional practices and can contribute to a more inclusive, equitable, and culturally responsive educational system.

REFERENCES

Amihan, S. R., Sanchez, R. D., & Carvajal, A. L. P. (2023). Sustained quality assurance: Future-proofing the teachers for an ASEAN higher education common space. *International Journal of Open-access, Interdisciplinary and New Educational Discoveries of ETCOR Educational Research Center (iJOINED ETCOR)*, 2(4), 276-286. https://etcor.org/storage/iJOINED/Vol.%20II(4),%20276-286.pdf

Andrade, H. L. (2019, August). A critical review of research on student self-assessment. *Frontiers in Education, 4*, 87. https://doi.org/10.3389/feduc.2019.00087

Braun, V., & Clarke, V. (2022). Toward good practice in thematic analysis: Avoiding common problems and be(com)ing a knowing researcher. *International Journal of Transgender Health, 24*(1), 1–6. https://doi.org/10.1080/26895269.2022.2129597

Calderon, D., Lees, A., Waite, R. S., & Wilson, C. (2021). 'Crossing the bridge': Land education teacher professional development. In H. P. Widener & A. M. Gomez (Eds.), *Non-linear perspectives on teacher development* (Vol. 47, pp. 152–166). Routledge. https://doi.org/10.1080/19415257.2021.1891957

Carvajal, A. L. P., & Sanchez, R. D. (2024). Probing the Leadership Qualities of Local Chief Executives (LCEs) in Creating Competitive Creative Communities: Basis for Leadership Framework and Development Plan. *International Journal of Open-access, Interdisciplinary and New Educational Discoveries of ETCOR Educational Research Center (iJOINED ETCOR)*, 3(1), 380-400. https://etcor.org/storage/iJOINED/Vol.%20III(1),%20380-400.pdf

Creswell, J. W., & Plano Clark, V. L. (2017). *Designing and conducting mixed methods research* (3rd ed.). Sage. https://toc.library.ethz.ch/objects/pdf/z01_978-1-4129-7517-9_01.pdf

Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage. https://books.google.com/books?id=335ZDwAAQBAJ

Department of Education. (2015). *DepEd Order No. 32, s. 2015: Adopting the Indigenous Peoples Education Curriculum Framework*. https://www.deped.gov.ph/wp-content/uploads/2015/07/DO_s2015_32.pdf

Krepf, M., & König, J. (2022). Structuring lessons as an aspect of pre-service teachers' planning competence: A scaling-up analysis. *Zeitschrift für Erziehungswissenschaft, 25*(4), 917–946. https://doi.org/10.1007/s11618-022-01125-9

Martin, A. J., Ginns, P., Anderson, M., Gibson, R., & Bishop, M. (2021). Motivation and engagement among Indigenous (Aboriginal Australian) and non-Indigenous students. *Educational Psychology, 41*(4), 424–445. https://doi.org/10.1080/01443410.2021.1879994

Muñiz, J. (2019). *Culturally responsive teaching: A 50-state survey of teaching standards*. New America. https://files.eric.ed.gov/fulltext/ED594599.pdf

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Republic of the Philippines. (1997). *Republic Act No. 8371: The Indigenous Peoples' Rights Act of 1997*.
https://ncip.gov.ph/wp-content/uploads/2020/03/IPRA-LAW.pdf

Sanchez, R., & Sarmiento, P. J. (2020). Learning together hand-in-hand: An assessment of students' immersion program in a schools division. *International Journal of Research Studies in Education,* 9(1), 85-97.

Smith, N. M., Hoal, K. E. O., & Thompson, J. F. (2020). Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. In A. D. Broadbent & G. L. Brundtland (Eds.), *Mining, materials, and the sustainable development goals (SDGs)* (pp. 29–38). CRC Press.
https://doi.org/10.1201/9780367814960-4

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