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Te Hautaka Mātauranga o Waikato

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Integration of Ifugao Indigenous Knowledge Systems and Practices (IKSPs) in teaching Philippine studies in multicultural classrooms

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Abstract

Elements of culture and indigenous knowledge are integral to instruction and foundational to meaningful learning experiences. Using an embedded mixed-method design, this study examined instructional strategies and their extent of usage in integrating Ifugao indigenous knowledge systems and practice (IKSPs) in the teaching of Philippine Studies at the Ifugao State University-Potia Campus. Equally, the difficulties of the 24 Philippine Studies teachers experienced in integrating Ifugao culture and IKSPs were investigated via interviews. Results showed that behavioural and attitudinal teaching strategies were employed primarily in integrating Ifugao IKSPs while output-driven and project-based teaching strategies were used to a lesser extent. Qualitative data analysis revealed that felt problems and predicaments encountered primarily encompassed pedagogical and instructional skills, classroom management, and teachers' attitudes towards cultural differences. Implications of this study include the need for collaboration between and among teachers, educational managers, and community stakeholders to craft responsive interventions to capacitate teachers about the principles of culturally responsive instruction in the University.

Keywords

Integration, Ifugao indigenous knowledge systems and practices, instructional strategies

Introduction

Culture and its elements are essentially integral and inseparable from pedagogical processes (Demmert & Towner, 2003; Gay, 2010; Young, 2010). Currently, the United Nations Sustainable Development Goals for 2030 – Goal No. 4 (UNDP, n.d) recognises the role of equitable and quality education in promoting and preserving culture and indigenous knowledge and correspondingly has prospective educational targets for global learning institutions in providing accessible quality learning for vulnerable and indigenous groups. In the Philippines, the Commission on Higher Education of the Philippines issued the CHED Memorandum Order No. 02, s. 2019, mandating all Philippine state colleges and universities integrate and incorporate themes, concepts, and elements of Indigenous Knowledge Systems and Practices (IKSPs) into all history and heritage-related studies. Technically, IKSPs are referred to as "systems, institutions, mechanisms, and technologies encompassing an inimitable body of

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(pp. 104–120)

knowledge constantly evolved across generations to encapsulate dynamics of interrelationships among indigenous peoples, their ecology, habitations, and resource ecosystems" (National Commission on Indigenous Peoples – Administrative Order 01, s. 1998). IKSPs comprise socio-political, socio-cultural, and socio-economic domains of interactions, and even spiritual experience, which are direct outcomes interwoven in their unique life experiences and adaptive mechanisms as they interact in their socio-cultural niches, and with their environment, and spaces. Through the effect of CHED Memorandum Order No. 02, s. 2019, Indigenous Knowledge Systems and Practices was a discrete course in the Ifugao State University (IFSU) curricula as a required subject. Hence, all those teaching Philippine Studies needed to reconsider their instructional praxis by creating intersections between course content and key themes and elements of IKSPs to guarantee safe, affirming, and culturally responsive teaching-learning experiences.

This paper draws on data generated via interviews with teachers from IFSU who taught Philippine Studies. The IFSU is situated in the Cordillera Administrative Region (CAR), a region that comprises 33 percent of the Philippines' indigenous people's population (UNDP, 2013). It is one of the satellite campuses of the IFSU adhering to the value of cultural sensitivity as integral to the University's thrust and trifocal function. Students enrolled in the campus come from eight ethnolinguistic communities in the Eastern Cordillera, Philippines namely: T'wali Ifugao, Ayangan Ifugao, Maducayan/Majukayong, Ykalinga, Ilocano, Ybanag, Balangao, and Ga'dang making IFSU-Potia a highly culturally diverse campus.

Statement of the Problem

The concept of IKSPs in the context of IFSU is relatively narrow in terms of its scope, focusing primarily on the material and non-material elements of the Ifugao culture. For example, a required course referred to as Institutional Course – Indigenous Knowledge Systems and Practices (IKSPs), included as a separate and discrete course in the University curricula offered for all students, highlights only the rudimentary elements of Ifugao culture and knowledge system practices (KSPs) and does not necessarily covering the IKSPs of students who come from different ethnolinguistic and indigenous groups in the Cordillera region. This practice of the University possibly attenuates the promotion of institutional core values such as cultural sensitivity, belongingness, and cultural understanding among culturally and linguistically diverse students. Correspondingly, teachers often have confused and misguided understandings of the concept of integration of IKSPs during class instruction as mandated by CHED Memorandum No. 2, s. 2019. Based on the results of an evaluation and analysis of their submitted course syllabi and learning plan, it is evident that teachers mistakenly equate the concept of inclusion with the concept of integration. In this context, inclusion refers to the insertion of Ifugao IKSPs as a discrete course in the University curricula, while the concept of integration aims to establish connections between the Ifugao IKSPs and the topics in Philippine Studies and other fields of study. Additionally, of the 24 Philippine Studies teachers, 20 are graduates of a teacher education programme and four are non-graduates of teacher education. In terms of ethnicity, 13 are non-Ifugaos, 10 are from other ethnolinguistic groups, and only one is an Ifugao. This suggests that the Philippine Studies teachers have profound knowledge about instructional strategies to facilitate the teaching-learning process but more limited knowledge about students' culture, especially Ifugao IKSPs, due to them being non-Ifugaos. Situations like this inevitably incite problems, given evidence that promoting and sustaining culturally responsive teaching (CRT) is largely anchored to the interplay between teachers' knowledge and awareness about students' culture and IKSPs and their competence in identifying and utilizing appropriate teaching methods congruent to students' culture and experiences (Karatas, 2020; Gay, 2018; Ladson-Billings, 2014; Villegas & Lucas, 2007).

There are numerous studies about CRT that include the integration of cultures of IKSPs in instruction (Gay, 2013; Karatas, 2020; Robinson, 2020). The integration IKSPs in teaching has been shown to result in functionally responsive and relevant learning experiences that enable students to acquire theoretical knowledge and support them to understand their purposes as individual members of their cultural milieu (Aronson & Laughter, 2016; Soylu et. al., 2020). Examining the corpora of these research studies about CRT, there is a trivial focus and limited findings on interactive teaching strategies

employed in integrating culture and IKSPs in actual instruction in multicultural and culturally heterogenous settings (Bryd, 2016; Carbonneau et al., 2022). Existing studies mainly concentrate on the integration of IKSPs in teaching natural sciences and mathematics as a form of decolonisation and liberation in homogenous ethnolinguistic elementary and high school class contexts (Bishop & Vass, 2020; Aikenhead, 2000; Dapar & Alejandro, 2020). To fill these identified research lacunae, this research investigated the integration of Ifugao IKSPs in teaching Philippine Studies in an uncolonised and heterogenous ethnolinguistic tertiary class context in the Eastern Cordillera, Philippines.

Specifically, this study explored the instructional strategies employed by the Philippine Studies teachers in integrating Ifugao culture and IKSPs, their extent of usage, and the problems encountered in teaching multicultural classes in the IFSU-Potia Campus. Contextually, the central object of this study is to explore the integration of elements of Ifugao IKSPs in teaching Philippine Studies and not necessarily the IKSPs of other indigenous communities in the Cordillera region.

Method

This study utilised embedded mixed methods research which employed both quantitative and qualitative designs in exploring the instructional strategies used by 24 teachers at the IFSU-Potia Campus in integrating Ifugao IKSPs when teaching Philippine Studies and the extent of their use. Creswell and Plano Clark (2018) opined that the embedded design is one in which one data set provides a supportive, secondary role in a study based primarily on the other data type. All 24 Philippine Studies teachers were purposively invited as participants in this study. Data retrieved from the IFSU Human Resource Development Office showed that of the 24 teachers, 13 were technically considered non-Ifugaos (T'wali and Ayangan) (out-group), 10 were from other ethnolinguistic groups in the region, and one was an Ifugao (T'wali). Moreover, 20 out of the 24 teachers were graduates of a teacher education programme and four were graduates of humanities and social sciences-related programmes.

The first phase of this study involved data gathering about the profile characteristics of the Philippine Studies teachers, their instructional strategies in Ifugao IKSP integration, the extent of usage of the teaching strategies in Ifugao IKSP integration, and their experiences in integrating Ifugao IKSPs using the questionnaire called Instructional Strategies and Techniques in Integrating IKSP in Teaching Philippine Studies. The instrument was validated using content validity by four experts: the Dean of the College of Education; the Dean of the College of Criminology; and two certified IKSP trainers since IKSPs and their integration into instruction were the focus of the study. Also, a reliability test using Cronbach's Alpha was calculated with a result of .98, signifying high reliability.

The Philippine Studies teachers were asked to answer the printed questionnaires containing four main parts, namely: a) Profile characteristics – used to gather their profile characteristics; b) Instructional strategies in Ifugao IKSP integration – used to gather data on the teaching strategies in Ifugao IKSP integration; c) Extent of usage of the instructional strategies in Ifugao IKSP integration – used to gather how frequently they employ the instructional strategies in Ifugao IKSP integration in teaching their lessons; and d) Semi-structured written interview – used to gather data on teachers' experiences in integrating Ifugao IKSP in teaching Philippine Studies. Quantitative data on Philippine Studies teachers' profile characteristics, instructional strategies, and their extent of usage in Ifugao IKSP integration were analysed using descriptive statistics.

After the quantitative data analysis, triangulation and corroboration of the results of the quantitative data was made through employing qualitative techniques. Here, the responses of the 24 Philippine Studies teachers in the semi-structured written interviews about their experiences and difficulties in integrating Ifugao IKSPs in teaching Philippine Studies were verified through formal interviews and focus group discussions with them after the questionnaires were retrieved. This provided them with an avenue to clarify their responses and supplemental questions were asked about their instructional strategies, experiences, and felt problems in Ifugao IKSP integration.

Within the questionnaire, course subjects were categorised based on the interdisciplinarity of their content; hence, there were two clusters constituting Philippine Studies: a) Philippine history and heritage studies which primarily comprised Readings in the Philippine History; Life and Works of Rizal; and b)

IC – Indigenous Knowledge Systems and Practices. In describing the instructional strategies and their extent of usage in integrating Ifugao IKSPs, a Likert scale was used as shown in Table 1.

Table 1. Likert Scale on the Instructional Strategies and their Extent of Usage in Integrating Ifugao IKSPs in Philippine Studies

Rating	Mean Score Range	Interpretation
1	1.00-1.80	Never
2	1.81-2.60	Rarely
3	2.61-3.40	Sometimes
4	3.41-4.20	Often
5	4.21-5.00	Always

Qualitative responses gleaned from the interviews and focus groups were analysed and interpreted using Creswell's (2012) model of qualitative data analysis. In doing this, transcripts of teachers' responses were scrutinised and grouped thematically. After this clustering of the responses, coding and categorisation were undertaken to frame ideas leading to the structuring of qualitative inferences. Themes and constructs were formulated based on the coded data then comparatively examined, and their distinct attributes were carefully identified. This served as the basis of the interpretive explanation of themes that emerged from the analysis and the extrapolation of key assertions of the study.

This study was presented at the University Agency In-House Review and its content and processes were reviewed before its implementation. Approval for the conduct of the study was sought through letters of communication addressed to the Campus Executive Director and College Deans of the IFSU-Potia Campus. The principle of informed consent was strictly observed in consonance with ethical considerations before proceeding to data collection. Individual letters addressed to the teachers were attached to the research questionnaire to provide them with background about the research and inform them of the importance of their participation in the study. Teachers were given up to two weeks to provide their answers.

Findings

A. Instructional Strategies in Integrating Ifugao IKSPs in Teaching Philippine Studies

Table 2 shows the overall extent of Ifugao IKSPs integration in Philippine Studies courses using different instructional strategies. The overall result indicated that the Philippine Studies teachers in this study occasionally integrate Ifugao IKSPs in teaching their lessons as they reported a general mean of 3.26 interpreted as *'Sometimes'*. Interestingly, the teachers reported that they regularly integrate key concepts of Ifugao culture and IKSPs through embodying exemplar life values which are worth emulating (Item 6) and democratising instruction through sustaining a caring learning environment (Item 7).

Table 2. Instructional Strategies and Their Extent of Usage in the Integration of Ifugao IKSPs in Philippine History and Heritage Studies

Items	Mean	Qualitative Interpretation
As to my experience in integrating IKSPs during instruction, I…		
1. Purposefully tell the students that IKSPs will be regularly integrated into the lessons.	3.31	Sometimes
2. Purposively discuss with my students that I am a committed and proud Ifugao; hence, it is important to integrate IKSPs into the lessons.	3.46	Often
3. Intentionally explain to the students the importance of integrating Ifugao IKSPs into the lessons.	3.08	Sometimes
4. Design instructional materials with Ifugao IKSPs.	2.85	Sometimes
5. Prepare visual materials featuring Ifugao IKSPs e.g., a local history timeline, indigenous crafts, and materials.	3.46	Often
6. Treat all students with respect, utmost care, and impartiality regardless of their indigenous origin, ethnicity, religion, beliefs, and convictions.	4.92	Always
7. Build positive relationships between me and my students from all ethnic groups.	4.85	Always
8. Employ analogy techniques between lesson concepts and the themes of Ifugao IKSPs during instruction.	3.38	Sometimes
9. Share relevant stories, worldviews, and experiences of great Ifugao folks and personalities related to my course.	3.62	Often
10. Relate stories and experiences of the early Ifugaos to the content of the course.	3.38	Sometimes
11. Provide contextual examples of the lesson citing Ifugao IKSPs	3.00	Sometimes
12. Conscientiously demonstrate life reflecting admirable Ifugao values in all my actions during instruction.	3.85	Often
13. Foster love and passion in teaching lessons imbibed by integrating Ifugao IKSPs.	3.69	Often
14. Make use of Ifugao literature and other indigenous texts as complementary materials in teaching lessons.	2.69	Sometimes
15. Thoroughly incorporate Ifugao IKSP themes with the topics and lessons during instruction.	3.08	Sometimes
16. Explain and clarify controversial issues in the lesson by relating them to Ifugao IKSPs.	2.92	Sometimes
17. Require my students to keep a journal of personal reflections related to the lesson with a focus on the IKSP application.	2.69	Sometimes
18. Speak/talk to students using the Ifugao language.	3.08	Sometimes
19. Provide engaging Ifugao IKSP-related activities for the students to which they can apply the concepts of the lesson.	3.54	Often
20. Engage my students in social service-learning activities that embody Ifugao values.	3.31	Sometimes
21. Let the students create and publish projects that feature IKSPs, like t-shirts, mugs, etc., with IKSP quotes.	2.15	Rarely
Overall mean	**3.26**	**Sometimes**

Respectively, the Philippine Studies teachers frequently employ teaching strategies such as informational techniques (Item 2), IKSP-decorative/visual teaching techniques (Item 5), storytelling or narrative (Item 9), demonstrating an exemplary attitude and passion towards students (Item 12), and use practical activities (Item 19). Teachers indicated that they sporadically employ instructional strategies such as intentional or deliberative integration of Ifugao culture and IKSPs (Item 1), graphical and decorative techniques (Item 4), making comparisons and contrasts and story-based techniques (Item 8), providing contextual illustrations and concrete situations (Item 11), literary and reflective (e.g., journalising) (Items 14 and 17), topical, thematic integration, and linguistic strategies (e.g., using local dialect to speak to students) (Items 15 and 18), clarificatory techniques as placed in Item 16, and civic participation and social engagement (Item 20).

Furthermore, project-based learning activities (Item 21) were least utilised by the teachers in this study.

To triangulate the quantitative results, qualitative data elicited from written interviews was analysed (see Table 3).

Table 3. Qualitative Themes of the Instructional Strategies Used by the Philippine Studies Teachers in Integrating Ifugao IKSPs

Qualitative Responses	*Codes*	*Themes*	*Interpretation of Themes*
▪ Student engagement ▪ Research-based activities ▪ Exposing students to experience indigenous practices ▪ Culminating IKSP-activities	Experiential/ immersion/ simulations	Constructivist teaching	Teachers consider different student-centred instructional strategies culturally appropriate and relevant in incorporating elements of Ifugao IKSPs in teaching Philippine Studies.
▪ Research activities ▪ Socratic method	Inquiry-based		
▪ Integration of culture to lesson content	Culture-based topic/lessons	Contextualised teaching	
▪ Use of vernacular language	Linguistic strategy		
▪ Portfolio	Independent-reflective strategy	Self-directed learning	

Qualitative analysis of the responses during interviews and focus group discussions revealed that they utilise appropriate teaching strategies in integrating Ifugao IKSPs, including experiential and immersion activities, inquiry-based tasks, contextualised teaching through inclusion of culture-based topics, and independent and self-directed learning. This corroborates and triangulates the results of their quantitative responses (Table 2) about their instructional strategies and the extent of integration of Ifugao IKSPs in lessons. For example, responses in Table 2 reveal that the teachers frequently employ purposely contextualised teaching strategies such as the use of visual materials featuring Ifugao culture and IKSPs, relating lesson content and topics to Ifugao culture and IKSPs through providing concrete examples and storytelling, and IKSP-related practical activities. These strategies were frequently described by teachers in the interviews along with self-directed and reflective strategies and with the use of the native language—that is using the Ifugao T'wali and Ayangan language in explaining and illustrating concepts of the lesson to convey clearer understanding.

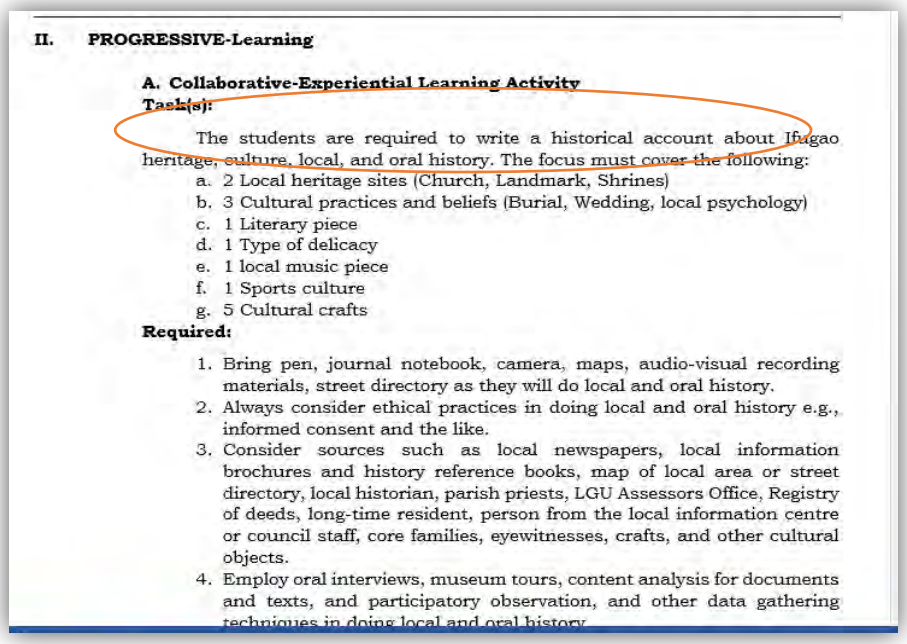
The teachers shared and attested that:

T1: "Immersion. teachers who are non-Ifugaos may already be able to speak and understand the language. The faculty at College of Education (COE) has merged with the adopted community through extension initiatives. This serves as an illustration of Ifugao culture as a whole."

T2: "I use techniques that are experiential or community-based. I take my students to historical locations of cultural value as well as to cultural heritage sites."

A clear manifestation of utilising community-based instructional strategies was shared by one of the teachers who usually integrates Ifugao IKSPs through museum tours, community visits, and writing a local history account featuring vibrant Ifugao culture and IKSPs. A picture of a sample activity is shown below to validate this assertion.

Figure 1. *Sample Instructional Task for Students Featuring Ifugao IKSPs*



II. PROGRESSIVE-Learning

A. Collaborative-Experiential Learning Activity

Task(s):

The students are required to write a historical account about Ifugao heritage, culture, local, and oral history. The focus must cover the following:

a. 2 Local heritage sites (Church, Landmark, Shrines)
b. 3 Cultural practices and beliefs (Burial, Wedding, local psychology)
c. 1 Literary piece
d. 1 Type of delicacy
e. 1 local music piece
f. 1 Sports culture
g. 5 Cultural crafts

Required:

1. Bring pen, journal notebook, camera, maps, audio-visual recording materials, street directory as they will do local and oral history.
2. Always consider ethical practices in doing local and oral history e.g., informed consent and the like.
3. Consider sources such as local newspapers, local information brochures and history reference books, map of local area or street directory, local historian, parish priests, LGU Assessors Office, Registry of deeds, long-time resident, person from the local information centre or council staff, core families, eyewitnesses, crafts, and other cultural objects.
4. Employ oral interviews, museum tours, content analysis for documents and texts, and participatory observation, and other data gathering techniques in doing local and oral history

Equally, performance-based strategies showcasing the different Ifugao dances, festivals, rice wine production, and other activities were employed by the teachers in integrating Ifugao IKSPs. One teacher opined that:

T9: "Putting on cultural performances that highlight my pupils' knowledge of various ethnic dances and food preservation techniques. A specific example of such activity would be a theatre drama production."

Contextual discussions citing concrete and relevant situations drawn from Ifugao IKSPs to explain concepts of the lesson to convey better understanding were likewise utilised by the teachers in which they confirmed that:

T6: "Integrative and student-focused conversation. This means that I describe the main ideas of the courses and lay out the learning plans and activities using the cultural practices of my students as the primary reference. The students themselves, not I, are the ones who discuss their culture related to the lesson."

T7: "Ifugao IKSP is sometimes discussed in providing examples, especially in situational discussions."

Dialectal and communicative strategies, such as using the local dialect of students, are used as a medium of instruction in explaining lesson concepts during class discussions

> T3: "To convey comprehension in communication, I used indigenous language, local language, national language, and international language structures."
> T4: "Linguistic techniques include allowing my students to translate certain topics into their language."

Equally, portfolio or output-based learning was utilised by the teachers in integrating Ifugao IKSPs. One teacher testified that:

> T10: "Writing composition, poems, essays, and creative pieces of literature to which the IKSPs and cultural practices of the students are made reference and integrated therein."

These findings are consistent with existing studies which indicate the necessity of employing interactive and culture-based teaching strategies in teaching history and heritage studies. Interactive CRT strategies which involve providing practical tasks and using linguistic techniques in teaching history and heritage studies have been shown to result in positive student outcomes (Singh, 2013; Tañase, 2020; Linan-Thompson et. al., 2018). In addition, others have found linguistic strategies are effective in integrating culture and in conveying a better understanding of the concepts of the lesson and to reaffirm ethnic identity and cultural appreciation to be effective (Catbagan-Aplaten, 2016; Ocampo-Tan & Roberto, 2019; Banes & Dela Cruz, 2021).

B. Problems and Difficulties of the Teachers in Integrating Ifugao IKSPs in Teaching Philippine Studies

Exploring the felt problems and difficulties of the Philippine Studies teachers in integrating Ifugao IKSPs into instructional delivery recognises their classroom experiences and has the potential to yield rich implications to revisit policies on IKSP integration and the crafting of culturally responsive interventions to improve the integration of Ifugao IKSPs in teaching Philippine Studies. The qualitative responses of the Philippine Studies teachers, as shown in Table 4, revealed that despite their utilisation of culture-based teaching strategies in integrating Ifugao culture and IKSPs, they still encounter problems and challenges which affect their instructional delivery. The coded themes and categories about the felt problems and difficulties of the Philippine Studies teachers in integrating Ifugao IKSPs were as follows:

Table 4. Problems of the Philippine Studies Teachers in Integrating Ifugao IKSPs in Teaching Their Lessons

Codes	Categories	Themes	Themes interpretation
▪ Lack of knowledge of IKSPs ▪ New to the subject	▪ Pedagogical content knowledge	Instructional/ pedagogical skills	Teachers' instructional competence and pedagogical skills are determinants of quality culturally relevant and IKSP-driven instruction.
▪ Lack of instructional materials ▪ Limited IKSP-related concepts ▪ Irrelevance of Ifugao IKSPs to subject-matter content	▪ Instructional materials and resources		
▪ Teaching methods and activities	▪ Instructional strategies and methods		
▪ Inadequate knowledge regarding integrating IKSPs in making syllabi	▪ Instructional design and planning		
▪ Time	▪ Adversities	Classroom management skills	Teachers' management skills determine the effectiveness of culturally relevant instruction.
▪ Belief of being unable to effectively facilitate multicultural class	▪ Low self-efficacy		
▪ Disinterested in talking about culture ▪ No appreciation ▪ Low regard for IKSPs	▪ Culturally insensitive	Teacher's attitude and behaviour towards cultural differences	Teachers' behavioural attributes in facilitating culturally relevant instruction precede the achievement of desired outcomes and a culturally affirming learning environment.
▪ Unfamiliar and not proficient in using the local dialect	▪ Language barriers		
▪ Non-Ifugao/ Non-indigenous people	▪ Out-group		

Theme 1: Instructional Skills

Pedagogical Content Knowledge and Teaching Strategies

The Philippine Studies teachers fairly affirmed that they encountered problems in integrating Ifugao IKSPs in terms of pedagogical content knowledge and the different instructional strategies that could be used. During the interview, they shared that their challenges are associated with their instructional skills and pedagogical content-knowledge which include them being neophyte to Ifugao culture and IKSPs, having access to inadequate instructional materials, lacking knowledge for incorporating Ifugao IKSPs in course syllabi and learning plans, and a limited knowledge of interactive culture-based tasks. Furthermore, they indicated that they had low self-efficacy in managing culturally diverse classes and

in dealing with the students due to being unconversant with the Ifugao IKSPs and language due to being an out-group. Challenge was also associated with the lack of professional development opportunities provided for them about the fundamentals of CRT.

The teachers testified that:

> T1: "IKSP integration into curricular content and teaching as a whole is trivialized in my class because I lack knowledge of pedagogical processes. I am unable to organize and structure curriculum or content that is sensitive to cultural differences."
> T2: "Lack of understanding regarding IKSP[s], culture-based learning outcomes, and how to include IKSP[s] into facilitating instruction."
> T4: "I don't know much about the methods utilized in IKSP integration. Additionally, I lack the knowledge necessary to create instructional materials that incorporate IKSP themes and principles"
> T5: "Lack of understanding on IKSP[s], culture-based learning outcomes, and incorporating IKSP[s] into facilitating instruction."
> T6: "Little knowledge because I'm not an education science degree holder."
> T7: "I am afraid to include IKSP[s] because I worry that I will give false or misleading information that will incriminate the students."

Instructional Materials and Resources

Knowledge and competence in designing culture-based instructional materials and resources and their availability were among the problems experienced by the teachers. They shared their difficulties in this area, mentioning the following:

> T7: "Absence of culture-based studies and references related to the subject."
> T8: "One challenge in incorporating IKSP[s] in the subjects I teach is the limited or non-availability of culturally appropriate references."
> T13: "Lack of time to do research and fieldwork to obtain IKSP resources from primary sources."

In the case of IFSU-Potia Campus, there are insufficient culture-based teaching materials like modules, books, and references. For instance, there is only one book titled *Ifugao Indigenous Knowledge Systems* available for the course called IC – Indigenous Knowledge Systems and Practices. However, this book is heavily content-based and focuses on the rudiments of Ifugao culture and IKSPs. The book lacks information on concrete and practical pedagogical applications in integrating Ifugao IKSPs into lessons across disciplines of the curriculum, including Philippine Studies, which incites difficulty among the teachers.

Theme 2: Management Skills

Low Self-efficacy in a Multicultural Class

Having low self-efficacy in facilitating multicultural classes was also found to be a pressing problem encountered by the teachers, as explained by the following two teachers:

> T16: "Addressing the cultural diversity in class because the students come from different ethnic groups which have different cultural practices."
> T18: "Integrating all aspects in all of the lessons; language barriers, among others. Students come from various provinces thus, the language is not only Ifugao."

Theme 3: Teachers' Attitude Towards Cultural Differences

Culturally Insensitive

Teachers also revealed that they were unwilling to learn the elements of the culture of the Ifugaos primarily because they were uninterested and/or had low regard for it. This was affirmed by one of the teachers who stated:

> T17: "I'm sorry but I am not that fond of talking about other's culture. Also, I cannot see the necessity of incorporating Ifugao IKSP[s] into my lessons."

This felt problem needs to be taken into paramount consideration due to the intentional unwillingness of the teacher to learn the fundamentals of CRT which trivialises the promotion of cultural sensitivity in the University.

Out-group

Similarly, being a non-Ifugao or non-IP member was regarded as a reason why the Philippine Studies teachers find difficulties in integrating Ifugao IKSPs in teaching Philippine Studies using native and indigenous language. They revealed that they lack familiarity with the indigenous language of the students used in integrating concepts of Ifugao IKSPs in Philippine Studies lessons. During the interview, they attested that there are key concepts in Philippine Studies, such as Philippine customs and culture, elements of culture, heroism, nationalism and patriotism, worldviews, and the like, that can be best understood when explained using the students' native or indigenous language or the language that is equally known to students and teachers during class discussions. However, the Philippine Studies teachers shared that they are not proficient in using the native and indigenous language of the students due to differences of ethnocultural affiliation. The teachers shared their experience about this:

> T19: "Vocabulary, lack of familiarity in the indigenous language."
> T21: "I'm not from the locality, so I'm still in the process of learning their language and culture. It's hard to use their terminologies in elaborating concepts."

This problem encountered by the teachers stimulated their ingenuity rather than a factor hindering them from becoming effective culturally responsive teachers. When they were asked how they cope with these problems, they shared that they encourage their culturally and linguistically diverse students to translate the concepts in Philippine Studies using their native and indigenous language, explain their meaning in the context of their culture and IKSPs, and provide concrete examples and applications in their cultural contexts. This linguistic strategy employed by the teachers through optimising students' participation is indispensable in contextualising the key concepts in Philippine Studies within the students' cultural context.

The relatability of language practised by the Philippine Studies teachers is crucial in conveying a clear understanding of key concepts of lessons. This is a commendable strategy employed by the teachers as a manifestation of their positive attitude and exemplifying their ingenuity in creating meaningful intersections between the key concepts of Philippine Studies and the students' culture and IKSPs despite their encountered difficulties and problems.

Discussion

Based on the overall results of the study, there is a moderate extent of integration of Ifugao IKSPs in teaching Philippine Studies through the utilisation of different instructional strategies. The teachers attested that they employ an eclectic teaching approach — that is they use multiple and various appropriate teaching strategies in integrating Ifugao culture and IKSPs to a varied extent and situations. For example, during her interview, one teacher confirmed that she utilises storytelling, community-based activities, simulations, and reporting in teaching Customs and IKSPs of the Ifugaos as one of the

special topics in Philippine Studies. Furthermore, it was revealed that exemplary teaching strategies such as demonstrating admirable values, epitomising a favourable attitude, showing utmost respect, and impartiality towards students regardless of their cultural practices and ethnolinguistic and indigenous groups were those most employed by the teachers. In this way, students can find a safe and inclusive learning environment and affirming and meaningful learning experiences. This finding can be explained and associated with the fact that two of the six institutional core values of IFSU include *integrity,* which primarily pertains to the adherence of teachers and students to moral and ethical values, and *cultural sensitivity,* which refers to the unwavering commitment of teachers to preserve the rich cultural heritage of the province in all their endeavours. This finding aligns with that of Rychly and Graves (2012), who demonstrated that teachers must exemplify care and empathy to all students irrespective of their ethnicity, thus ensuring their academic success and well-being.

Equally, research has shown teachers must reflect on their actions, cultural beliefs, and worldviews, shun forms of bias and discrimination against students, foster respect and tolerance for cultural differences, and exemplify a positive attitude worthy of emulation, as these are integrally influential to their attitude, thus affecting their instructional behaviour, which contributes to students' persistence, quality of learning, attainment of positive learning outcomes, and realising authentic and affirming learning experience (Zhang & Wang, 2016; Izquierdo, 2018; Karatas, 2020).

Interestingly, the Philippine Studies teachers employed other culturally relevant strategies, such as research-based tasks, community engagement, and performance-based activities like dances, sports, museum tours, and textual analysis. This is a laudable ingenuity and shows the creativity of the teachers to facilitate culture-based instruction despite their felt problems and difficulties. This finding can be associated with the mandate to the University to institutionalise outcomes-based education and principles, and to the directive of the Commission on Higher Education through CHED Memorandum Order No. 02, s. 2019 mandating Philippine universities to integrate indigenous peoples' education and indigenous knowledge systems and practices in teaching history and heritage studies and allied courses. This education policy resulted to the revision of existing curriculum, recalibration of course syllabi and learning plans, and revolutionising instructional praxis to realise CRT.

However, there is a vivid variation in the teaching strategies used by the teachers in integrating Ifugao IKSPs in teaching Philippine Studies. Interactive and inquiry-based strategies were frequently used in integrating Ifugao IKSPs, which mainly include their material culture. Specific activities related to these strategies as applied in teaching Philippine Studies in IFSU-Potia include conducting cultural and indigenous research and organising school-based cultural conferences. The students, especially those who have subjects related to IKSPs and Philippine Studies, are required to write a historical account about their ethnolinguistic groups employing the methodology of local and oral history which focuses on their heritage sites, such as churches, shrines, and landmarks; indigenous beliefs and practices, like burials, weddings, child rearing, environmental conservation and stewardship, spirituality and religion; analysing an indigenous literary piece; indigenous governance; indigenous crafts, food culture, music and dances; ethnic attire; and indigenous games. After evaluating their historical account, they are tasked to report their output in a classroom-based symposium where students and teachers of Philippine Studies are highly encouraged to attend the activity. Moreover, school-based indigenous people's programmes were organised where the elements of students' culture and IKSPs are showcased through exhibits and music and dance performances with the use of indigenous musical instruments such as *gongs* and wearing of ethnic clothing. Additionally, contested activities during the celebration of the indigenous people's programme include indigenous sports and games, such as *guyudan* (tug of war), *hanggol* (arm wrestling), *hinnukting* (wrestling), *akkad* (race); and other indigenous practices, such as *mundikhaw* (woodcutting), *munbayoh* (rice grinding), and *munlagim* (chicken butchering). These activities realise meaningful learning experiences of the students because their culture and IKSPs were placed at the centre of instruction, which equally results in a more profound appreciation of cultural diversity and their rich cultural heritage. Research has shown that employing student-centred and innovative teaching strategies, like cooperative learning, group work, simulations, and games that incite active, engaging, and pragmatic teaching-learning experiences, can make instruction relevant and can develop students' exceptional abilities resulting in positive learning outcomes (Izquierdo, 2018; Tanase, 2020).

Correspondingly, the moderate integration of Ifugao IKSPs in teaching Philippine Studies using problem-based methods, linguistic strategies, and contextual illustration strategies can be justifiably attributed to three factors: a) teachers' level of knowledge of Ifugao culture, b) teachers' knowledge and competence on pedagogical principles used in facilitating CRT, and (c) teachers' attitude towards cultural diversity and CRT. Relevant to teachers' level of knowledge about Ifugao culture and IKSPs, 13 of the teachers are non-Ifugaos and 11 are from other ethnolinguistic groups in the region which are technically considered as out-groups to the Ifugao ethnolinguistic group; hence, they are neophytes or foreign to the elements of Ifugao IKSPs. Teachers' lack of cognisance of Ifugao culture and IKSPs results in unsuccessful functionally relevant culture-based instruction and low self-efficacy of the teachers to efficiently manage multicultural classes. For example, the Philippine Studies teachers acknowledged during the interview that they lack knowledge about indigenous worldviews, native language, indigenous governance and administration of justice, family history, indigenous folklore and mythology, and indigenous literary works on which these elements of students' culture IKSPs are related to most of the key concepts and themes in Philippine Studies. Hence, this problem trivialises the necessity and importance of creating intersections between key concepts of the lessons and the students' IKSPs which results in ineffective and nonmeaningful teaching-learning in culturally and linguistically diverse classes. Notably, research showed that teachers' awareness, knowledge, and understanding of students' culture are equally pivotal in planning and executing CRT that is valuable to students (Jia & Nasri, 2019; Kieran & Anderson, 2018; Samuels, 2018, Robinson, 2020). Additionally, since epistemic learning is central to instruction, core knowledge to be imparted to students should be from their customs and indigenous traditions that can be tailored into the subject-matter content towards improving comprehension and understanding of concepts of lessons and sustaining meaningful multidisciplinary collaboration (Wilson, 2020, Tsindoli et al., 2018; Manojan, 2018; Mandikonza, 2019).

Secondly, teachers' knowledge and competence about pedagogical principles influence their capability in integrating Ifugao culture and IKSPs in teaching Philippine Studies. Of the 24 Philippine Studies teachers, 20 were graduates of teacher education programmes and four were non-graduates of teacher education; hence, their degree programmes are not vertically aligned with the nature of teaching and instruction. The Philippine Studies teachers' knowledge about instruction and pedagogy greatly focuses on the general principles of teaching-learning and not necessarily on the principles of teaching culturally and linguistically diverse classes, since teacher education curriculum in the Philippines does not include a separate course on the foundations of multicultural education. This is consistent with the position of Ladson-Billings (1995a) and Gay (2010) who argued that since culture and indigenous knowledge are essentially integral to the teaching-learning process, teachers must necessarily possess a comprehensive understanding of principles of culture-based teaching. Teachers must employ appropriate teaching-learning strategies and culture-driven pedagogical approaches in praxis to realise functionally meaningful instruction and create avenues of promoting cultural responsiveness in a multicultural class (Anuik & Gillies, 2012; Pledger, 2018; Samuels, 2018). Consequently, the success of facilitating culturally responsive instruction greatly depends on the interplay between teachers' instructional knowledge in integrating culture and indigenous knowledge and processes of instruction.

Third, the success of integrating Ifugao culture and IKSPs is germane to teachers' attitudes towards cultural diversity. As revealed, one of the Philippine Studies teachers asserted that integrating Ifugao culture and IKSPs in teaching the key concepts of the lessons is unnecessary. When the teacher was asked about her reason, she revealed that topics concerning culture and IKSPs are not related to her area of specialisation; hence, this affects her attitude towards cultural diversity and her self-efficacy in facilitating culturally and linguistically diverse students. Being unwilling and uninterested in exploring one's culture and its integration into classroom instruction results in ramifications that include teachers' prejudices, biases, and discrimination towards students. Interestingly, other Philippine Studies teachers, despite the problems encountered, demonstrated a positive attitude of willingness to learn and explore more about Ifugao IKSPs and the culture of other ethnolinguistic groups in the region. They exemplified their ingenuity in integrating students' culture in teaching their lessons by employing interactive and culturally appropriate teaching strategies to realise meaningful teaching-learning. Research has shown that when teachers are knowledgeable about students' culture and they possess high self-efficacy, they exert greater effort and are consistently persistent and resilient (Pajares, 1996), making instruction more

responsive to students' needs (Hoy & Spero, 2005) that results in positive relationships and connection between and among culturally diverse students (Cruz et al., 2019). Additionally, teachers possessing a high degree of cultural responsiveness in multicultural contexts demonstrated more elaborate self-esteem in facilitating culturally diverse students (Civitillo, 2019), capitalising on the cultural diversity and positive attributes of the students in creating cultural sensitivity (Glock et al., 2019), and have high motivation and low prejudiced attitudes towards culturally diverse students (Glock, 2016; Glock et al., 2018; Glock & Bohmer, 2018). The success of facilitating culturally responsive instruction greatly depends on the interplay between teachers' knowledge on students' culture, competence in integrating culture and indigenous knowledge in instructional processes, and their attitude towards culturally diverse students and the importance of CRT.

Conclusions and Recommendations

Key findings strongly imply that holistic interplay and the interlocking relationship between and among pedagogical content knowledge; being culturally conversant; and possessing instructional knowledge, skills, and competence are crucial to the integration of Ifugao culture and IKSPs in teaching Philippine Studies. This is indispensable to successfully realise culturally responsive instruction and meaningful learning experiences in Philippine Studies classes. The moderate and trivial extent of integration of Ifugao IKSPs themes and concepts and the quality of CRT in facilitating Philippine Studies instruction are greatly influenced by factors such as the vertical typology of earned degree programme, teaching assignment, teacher's efficacy, and ethnicity. Mandating teachers to integrate Ifugao culture and IKSPs in their instructional praxis in teaching Philippine Studies while overlooking and disregarding such factors ensures considerable problems and repercussions in executing culture-driven instruction. Behavioural strategies such as exemplifying favourable values, establishing positive relationships, and fostering mutual respect between and among the teachers and students are the most employed strategies in integrating Ifugao IKSPs during instruction. Furthermore, I have shown that the teachers foster ingenuity in integrating Ifugao IKSPs in teaching Philippine Studies despite their problems and difficulties by exploring and utilising other interactive and eclectic teaching strategies.

This study contributes to the existing literature on culture-based teaching-learning, specifically on exploring novel and interactive instructional strategies in integrating culture and indigenous knowledge in teaching history and heritage studies in culturally heterogeneous class contexts. Also, this study identified felt problems, difficulties, and predicaments of teachers in facilitating culture-based instruction in multicultural classes, which are least explored in the existing studies about CRT.

Support from education agencies, like providing intensive capacity-building programmes and other avenues and opportunities for learning, must be taken into paramount consideration to capacitate teachers in terms of their competence in designing and developing course syllabi, highlighting the elements of culture and indigenous knowledge systems and practices, and improving their instructional knowledge and skills, specifically on selecting CRT strategies with primal integration of students' culture and IKSPs in teaching history and heritage studies.

Limitations of this study include the generalisability of results due to the small sample size, limited qualitative responses of the teachers in the written interview, limited time, and the scope of the study, which mainly included Philippine Studies teachers and the integration of Ifugao culture and IKSPs in teaching Philippine Studies. Future studies, using other qualitative methods, need to be conducted expanding the integration of culture and IKSPs of other ethnolinguistic groups in the region in teaching an array of disciplines in the curriculum, such as the natural sciences, agriculture-related courses, and ICT-related programmes, to deepen and broaden perspectives and applications of culture-based teaching.

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