

# Supplementary Learning Resource on the Isnag's Lapat System for Junior High School Social Studies

Reyma Grace E. Batara<sup>1</sup>, Jasper Kim M. Rabago<sup>2</sup>

Department of Education, Mariano Marcos State University, Laoag City, Ilocos Norte, Philippines

DOI: <https://doi.org/10.47772/IJRISS.2026.100900009>

Received: 10 September 2026; Accepted: 15 September 2026; Published: 28 September 2026

## ABSTRACT

Araling Panlipunan (AP) plays an important role in developing students' understanding of history, culture, and civic responsibility. In recent years, the Department of Education (DepEd) has encouraged the integration of Indigenous Knowledge Systems and Practices (IKSPs) in teaching to make learning more meaningful and culturally responsive. One indigenous practice that reflects environmental stewardship is the Lapat system of the Isnag people in Apayao, a customary practice that regulates the use of natural resources to promote conservation and community responsibility. Integrating such indigenous systems into classroom instruction can help learners appreciate local traditions while understanding sustainable environmental practices.

This study aimed to explore the cultural beliefs and values embedded in the Lapat system and examine the experiences of AP 10 teachers in incorporating this indigenous practice into their lessons. Furthermore, the study developed contextualized learning materials that can support the integration of the Lapat system in AP instruction.

The study employed a qualitative research design using interviews with selected Isnag cultural bearers and AP teachers in Pudtol, Apayao. The data gathered were analyzed through thematic analysis to identify recurring ideas and experiences related to the implementation of the Lapat system in teaching.

Findings revealed that the Lapat system embodies important values such as respect for nature, communal responsibility, discipline, and sustainable resource management. Teachers recognized the importance of integrating indigenous practices in their lessons; however, they also reported challenges such as limited instructional materials, insufficient training, and difficulties aligning indigenous knowledge with the prescribed curriculum. Based on these findings, contextualized learning materials were developed to assist teachers in effectively integrating the Lapat system into AP 10 lessons.

The study highlights the importance of incorporating indigenous knowledge into formal education to promote cultural preservation, environmental awareness, and culturally responsive teaching. Strengthening instructional resources and support for teachers can enhance the integration of indigenous practices like the Lapat system in the AP curriculum.

**Keywords:** Araling Panlipunan, cultural beliefs, Isnag, Lapat system, values

## INTRODUCTION

Araling Panlipunan 10 (AP 10) is a subject offered under the Junior High School curriculum of the Philippine K to 12 Basic Education Curriculum. In AP 10, students learn about current issues both national and international, including those related to the environment, human rights, and governance. As per the Department of Education (DepEd, 2016), the objective of AP 10 is to instill critical thinking in the learner. This is to ensure that the learner knows his role in society, realizes the connection between local and global issues, and becomes an active citizen in the world of today.

The inclusion of indigenous knowledge, systems and practices (IKSP) in AP is crucial for ensuring that there is a comprehensive and authentic curriculum that is culturally sensitive and historically correct. Research studies have found that indigenous knowledge offers a sustainable way of looking at environmental protection and social solidarity in ways that current modern Western models fail to provide (Akinyemi & Adejumo, 2018). The inclusion of IKSP is required in the Philippines through Indigenous Peoples Education (IPEd) because this approach ensures that education becomes culture-responsive and recognizes the indigenous knowledge of the people (DepEd, 2011). Literature shows that by being exposed to indigenous perspectives in education, Filipino students become conscious of their cultural identity and understand the contribution of diverse Filipinos to nation building.

Another instance of an indigenous approach to resource management is the Lapat system of the Isnags in the Apayao province, which constitutes a rather complex tradition and reflects indigenous environmentalism. As noted in research, Lapat is an activity in which a particular piece of land or a body of water is deemed sacred after the death of a tribal individual or when ecological regeneration is necessary (Gallego, 2017). This approach is based on customary law and is embedded in the spiritual connection between the Isnags and their ancestral lands. Since the Lapat system limits the harvesting of plant and animal life, this traditional approach has ensured that biodiversity in the region has been preserved over the years, thus showing how indigenous norms work better than legal approaches imposed by states (Malabrigo, 2021).

Even though policies dictate that the curriculum be localized, there is a notable difference between what the intended curriculum should be and what is being used by the teachers. On a macro scale, textbooks at the national level usually create an assimilated view of Filipino culture without considering the distinct cultural features of certain ethnicities. Teachers in Cordillera Administrative Region (CAR) are faced with challenges brought about by a shortage of learning materials relating to their students' environment (Wa-is & Bua-ay, 2021). Thus, there is an existing cultural disconnect where indigenous students hardly find elements of their culture in educational activities, while non-indigenous students fail to learn the relevant information that can help them understand society and the environment.

With this, the need to produce contextualized and localized teaching aids becomes imperative when it comes to enhancing student engagement and performance in AP subject areas. This is because place-based education, where learning occurs in the context of the local environment, makes learning more relevant to the student (Semken & Freeman, 2008). Learning through the use of such materials becomes easier and more effective as the concepts learned are translated into practical experiences of the learner's culture.

This study is expected to benefit learners, teachers, school heads, curriculum developers, and indigenous cultural communities by providing culturally responsive and localized instructional materials grounded in the Isnags' Lapat system. The study specifically focused on the development of AP 10 learning materials related to environmental conservation, indigenous knowledge, and sustainable development in selected communities in Apayao. Through interviews, focus group discussions, document analysis, and thematic analysis, the research documented indigenous ecological practices and translated them into pedagogical resources aligned with the AP curriculum. While the study is limited to the context of the Isnag community and selected AP 10 teachers, it aims to provide a localized model of instructional material development that may serve as a reference for future culturally responsive educational initiatives.

In this regard, this study aimed at addressing the lack of local educational materials by recording and translating indigenous knowledge through pedagogical means. This research focused on developing instructional materials based on the use of the Isnags' Lapat system in discussing sustainable development and conservation. Through its integration into AP 10, it is hoped that the project could contribute to making learning about culture an essential part of the curriculum, as well as providing educators with a tangible way of teaching IPEd lessons. It is expected that such efforts would demonstrate that indigenous systems can still offer practical solutions to contemporary problems, thus ensuring their appreciation in the school setting.

This study aimed to develop learning materials on Isnags' Lapat System for Araling Panlipunan (AP) 10.

Specifically, this study sought answers to the following questions:

1. What are the cultural beliefs and values embedded in the Lapat System?
2. What are the experiences of teachers in incorporating the Lapat System into their lessons?
3. What learning materials for AP 10 can be developed on the Lapat System?

## METHODS

### Pedagogical Setting & Participants

This study was conducted in the Municipality of Pudtol, Apayao, located in CAR of Northern Luzon, Philippines. Within this municipality resides the Isnag indigenous community, which maintains traditional customs that shape their social interactions, cultural identity, and responsibility toward the environment. One significant traditional custom is the Lapat System, a practice that the community follows to ensure the appropriate usage and conservation of natural resources.

This study involved two groups of participants, namely the key informants and the teachers. The key informants provided cultural knowledge and deeper insights regarding the Lapat System, including its underlying beliefs, values, and significance in the Isnag community. Likewise, the teacher participants relayed their experiences in the classroom, their instructional methods, and the difficulties they faced when trying to incorporate indigenous frameworks into the AP 10 curriculum.

The first group consisted of six key informants, who were recognized as culture bearers from the Isnag community of Pudtol, Apayao. These individuals possessed substantial knowledge about the Lapat System and its role in the traditional practices of the community. They were chosen through purposive sampling, a non-random sampling method frequently utilized in qualitative studies to identify individuals with pertinent knowledge and experience. The criteria for inclusion mandated that the key informants be recognized in the community as elders or culture bearers who uphold the Lapat tradition and are willing to share their insights and experience. The second group was composed of four teachers handling AP 10. Similar to the first group, these teachers were selected through purposive sampling due to their direct role in teaching subjects pertaining to culture, society, and environmental matters within the curriculum. The criteria for inclusion specified that the teachers should possess a minimum of one year of experience teaching AP 10 and have previously made attempts, whether formally or informally, to integrate indigenous knowledge or cultural traditions into their lessons.

### Design of the Study

The study employed a descriptive qualitative research design that sought to explore and document the experiences of Grade 10 AP teachers in integrating the Isnag Lapat System into their teaching practice. This design was considered most appropriate for describing experiences, perceptions, and beliefs regarding integration of local knowledge within formal education. Instead of testing a hypothesis, it was meant to generate deep understanding of the opinions of the teachers and problems associated with such an approach, and use them as building blocks in designing a culturally-based learning material.

Through qualitative techniques like key informant interviews and focus group discussions, the study intended to document the cultural values and beliefs embodied in the Isnag Lapat System, as well as difficulties faced by teachers in integrating the system into their lessons in AP. Analysis of findings was made using thematic analysis, and the results of such analysis directly informed the development of the proposed learning materials.

This design fits well with the study's objective of dealing with an educational deficiency in the real world via context-related research. This design also reflects the tenets of the Sociocultural Learning Theory by Vygotsky, where learning takes place through social interactions and cultural instruments, as well as the Cultural Capital Theory by Bourdieu, where the transmission of indigenous knowledge systems within formal settings like schools has significance. Finally, the qualitative approach allowed for the creation of a

learning tool that is educationally sound and culturally relevant.

### **Data collection & analysis**

The study employed a qualitative approach in gathering and analyzing data to develop culturally responsive learning materials based on the Isnag Lapat System for AP 10 instruction. Data collection was conducted in two major stages involving two groups of participants: Isnag tribal elders and Grade 10 AP teachers. Prior to data gathering, approval from the concerned institutional authorities was secured, and community protocols were strictly observed, particularly in engaging with indigenous elders. Informed consent was obtained from all participants to ensure ethical conduct throughout the research process.

The first stage involved in-depth individual interviews with purposively selected Isnag tribal leaders and elders from Apayao who possessed substantial knowledge and experience regarding the Lapat System. Through a semi-structured interview guide, participants shared information on the history, beliefs, values, and practices associated with the indigenous system. Interviews were conducted using the participants' preferred language, with translation assistance when necessary, and were audio-recorded with consent for accurate transcription and analysis.

The second stage focused on Grade 10 AP teachers who had experience integrating indigenous knowledge into classroom instruction. Using another semi-structured interview guide, the researcher gathered data on the teachers' instructional practices, challenges, and support needs related to incorporating the Lapat System in teaching. Most interviews were conducted face-to-face in schools, while others were facilitated through online or telephone platforms when necessary. Each interview lasted approximately 30 to 45 minutes.

The collected data underwent transcription and thematic analysis to identify recurring ideas, patterns, and insights relevant to the study. Initial coding was conducted to categorize significant concepts emerging from the narratives of both elders and teachers. These codes were later organized into broader themes related to cultural values, indigenous belief systems, instructional challenges, and contextualized learning material development. The analysis was guided by sociocultural and cultural capital perspectives, emphasizing the role of indigenous knowledge in culturally responsive education. Findings from the analysis served as the foundation for the development of localized instructional materials that are culturally authentic, pedagogically relevant, and aligned with the goals of AP 10 instruction.

## **RESULTS**

### **Pedagogical Setting & Participants**

This study was conducted in the Municipality of Pudtol, Apayao, situated in CAR of Northern Luzon, Philippines. The area is home to the Isnag indigenous community, which continues to preserve traditional practices that influence their cultural identity, social relationships, and environmental stewardship. One of these practices is the Lapat System, an indigenous resource management practice that promotes the proper use and conservation of natural resources. The locale was selected because the Lapat System remains actively practiced and valued within the community.

The study involved two groups of participants: key informants and Grade 10 AP teachers. The key informants provided in-depth cultural knowledge regarding the beliefs, values, and significance of the Lapat System in the Isnag community. Meanwhile, the teacher participants shared their classroom experiences, teaching strategies, and challenges encountered in integrating indigenous knowledge into the AP 10 curriculum.

The first group consisted of six Isnag elders and culture bearers selected through purposive sampling based on their expertise and active involvement in preserving the Lapat tradition. The second group included four AP 10 teachers who had at least one year of teaching experience and prior exposure to integrating indigenous concepts and practices into classroom instruction.

## Cultural Beliefs and Values Embedded in Isnags' Lapat System

In this section, the cultural beliefs and values ingrained within the Isnag Lapat System are brought out as indicated by the responses of the key informants. The Lapat System is the worldview of the native Isnag community, which combines spiritual beliefs and ancestral traditions and environmental stewardship that guide the behavior and social relationships of the community. These beliefs affect the manner in which the community controls the utilization of natural resources and upholds peace in the community.

Table 1 shows the cultural beliefs and values that are embedded in the Isnag Lapat System based on sentences of the key informants. The table presents the determined themes, codes, and representative statements that explain the beliefs and values that are used to implement and follow the Lapat System.

**Table 1. Cultural beliefs and values embedded in Isnags' Lapat System.**

| Cultural Beliefs and Values | Themes                                                | Codes                                                  | Particulars                                                                                                                                                                                       |
|-----------------------------|-------------------------------------------------------|--------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Cultural Beliefs            | Supdina as the Ethical Foundation of the Lapat System | Indigenous ethics, moral discipline, pillars of belief | Actually, ang Lapat System kasi ay rooted sa SUPDINA... adda tallo a pillars – Annaw, Aliyaw, Ngilin. (The Lapat System is rooted in Supdina which has three pillars – Annaw, Aliyaw, and Ngilin) |
|                             |                                                       | Relationship with nature                               | Ti Annaw ket relationship towards the natural laws. (Annaw refers to the relationship with natural laws.)                                                                                         |
|                             |                                                       | Relationship with people                               | Ti Aliyaw ket towards other people. (Aliyaw refers to the relationship with other people.)                                                                                                        |
|                             |                                                       | Sacred vows and sanctions                              | Ti Ngilin ket vows...nu ma-violate adda sanction nga Awat. (Ngilin refers to vows, and if violated there are sanctions called Awat.)                                                              |
|                             | Ancestral Heritage and Spiritual Connection           | Ancestral inheritance                                  | Namulagatan mi aytoy a sistema ken natawid mi kadagiti ancestors mi. (This system was inherited from our ancestors.)                                                                              |
|                             |                                                       | Spiritual mediation                                    | Ti Lapat ket Aganitu dagitay Durarait. (The Lapat involves Aganitu through the Durarait who communicate with the spirits.)                                                                        |
|                             |                                                       | Belief in ancestral guidance                           | It is always between the living and the dead.                                                                                                                                                     |
|                             | Sacredness of Nature                                  | Nature as sacred                                       | Nature is sacred, entrusted by the Creator and guarded by ancestral spirits. (as stated by informant)                                                                                             |
|                             |                                                       | Environment respect                                    | Forests, rivers, and wildlife are living gifts that must be respected.                                                                                                                            |
|                             |                                                       | Spiritual punishment                                   | Even if no one sees, the spirits will punish violators.                                                                                                                                           |
|                             | Environmental Regeneration through Lapat              | Environmental recovery                                 | Doon sa pinag Lapat...hindi natin namamalayan na nagreregenerate ang environment.” (During the Lapat period the environment regenerates without people realizing it.                              |
|                             |                                                       | Flora and fauna recovery                               | Nagbi-breed rin ang flora at fauna. (Flora and fauna are able to reproduce.)                                                                                                                      |
|                             |                                                       | Indigenous environmental                               | The Lapat has helped preserve forests and rivers.                                                                                                                                                 |

|        |                                |                                 |                                                                                                                                                                       |
|--------|--------------------------------|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|        |                                | protection                      |                                                                                                                                                                       |
| Values | Respect                        | Respect for mourning families   | Respeto sa mga nagmo-mourn...haan ka a basta basta nga serken ti Lapat. (Respect is shown to those who are mourning, and one should not casually enter a Lapat area.) |
|        |                                | Respect for sacred areas        | One must not casually violate or enter a Lapat area.                                                                                                                  |
|        |                                | Respect for beliefs and customs | Respect also kadaytoy tradition ken pammati. (Respect must also be shown to this tradition and belief.)                                                               |
|        | Cooperation and Responsibility | Collective responsibility       | Ma strengthen ti respeto ken cooperation ti community gapu ti Lapat. (The Lapat strengthens respect and cooperation within the community.)                            |
|        |                                | Community responsibility        | Responsibilidad ti tumunggal indibidwal nga mangtaginayon to Lapat. (The Lapat strengthens respect and cooperation within the community.)                             |
|        | Justice and Discipline         | Sanctions for violations        | Adda kasupapak na ti pinaglabsing kadaytoy pagannurutan ti Lapat.<br><br>(There are corresponding consequences for violations of the Lapat rules.)                    |
|        |                                | Customary law enforcement       | Violators are required to pay Awat.                                                                                                                                   |
|        | Harmony and Unity              | Community peace                 | Kasapulan nga mairespeto ti Lapat tapno mamentenar ti peace ken unity. (The Lapat must be respected to maintain peace and unity in the community.)                    |

**Table 1. (Continued.)**

| Cultural Beliefs and Values | Themes                          | Codes                 | Particulars                                                                                                                                 |
|-----------------------------|---------------------------------|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
|                             |                                 | Conflict resolution   | Issues are resolved through Umoman by the elders.                                                                                           |
|                             | Transmission of Cultural Values | Cultural Preservation | Kayat dagiti elders nga maisurat dagitoy tapno haan a mapukaw. (The elders want these traditions to be written so they will not disappear.) |
|                             |                                 | Youth education       | These traditions must be taught to the younger generation.                                                                                  |
|                             |                                 | Cultural continuity   | Schools and activities can help pass these traditions to the next generations                                                               |

The results are divided into two large dimensions, Cultural Beliefs and Cultural Values. The themes identified under the cultural beliefs are Supdina as the ethical foundation of the Lapat System, ancestral heritage and spiritual connection, sacredness of nature, and environmental regeneration through the Lapat practice. Meanwhile, the cultural values that are portrayed in the Lapat System are respect, cooperation and responsibility, justice and discipline, harmony and unity, and the transmission of cultural values to younger generations.

The findings reveal that the Isnag Lapat System is deeply rooted in the indigenous ethical framework known as Supdina, which governs the moral, spiritual, and social conduct of the community. Supdina is composed of three interconnected pillars: Annaw, which emphasizes harmony with nature; Aliyaw, which promotes proper relationships with others; and Ngilin, which refers to sacred vows and spiritual obligations.

Violations of these principles result in customary sanctions known as Awat. The findings indicate that the Lapat System is not merely a traditional environmental policy but a culturally embedded system of governance grounded in ethics, spirituality, and communal responsibility.

The study further highlights the strong ancestral and spiritual connection associated with the Lapat System. Informants emphasized that the practice has been inherited from previous generations and remains closely tied to spirituality and ancestral guidance. The role of the Durarait, a spiritual medium who communicates with ancestral spirits, demonstrates the interconnectedness of the physical and spiritual worlds within Isnag culture. These beliefs reinforce the community's adherence to traditional practices and environmental responsibilities.

Another major theme identified in the findings is the sacredness of nature. Forests, rivers, and wildlife are regarded as sacred gifts entrusted to the community and protected by ancestral spirits. As a result, violations of the Lapat are believed to bring not only social consequences but also spiritual repercussions. Informants also stressed that the Lapat System contributes significantly to environmental regeneration by temporarily restricting human activities in certain areas, allowing ecosystems, flora, and fauna to recover naturally.

In addition, the study identified several core values promoted by the Lapat System, including respect, cooperation, responsibility, justice, discipline, harmony, and unity. These values encourage collective accountability and peaceful relationships within the community. The findings also reveal concerns regarding the declining interest of younger generations in traditional practices due to the influence of modern technology and social media. Consequently, community elders emphasized the importance of education and documentation in preserving and transmitting indigenous cultural values and traditions to future generations.

### Teachers' Experiences in Incorporating Isnags' Lapat System into Their Lessons

This section presents the personal experiences of the AP 10 teachers in their efforts to integrate the Isnags' Lapat System into the formal secondary curriculum, especially the junior high school, as shown in Table 2. These personal experiences give a critical perspective on the pedagogical shift from indigenous oral traditions to classroom instruction. The section encompasses a range of personal experiences from the 'aha moments' of cultural awakening for students as well as the technical and conceptual difficulties that teachers must consider to merge traditional ecological knowledge with the DepEd guidelines.

**Table 2. Teachers' experiences in incorporating Isnags' Lapat system into their lessons.**

| Themes                                           | Codes                                                                | Particulars                                                             |
|--------------------------------------------------|----------------------------------------------------------------------|-------------------------------------------------------------------------|
| Implementing Contextualized Teaching Practices   | Integration, contextualization, storytelling, inquiry-based learning | Use of local examples, cultural connections, and interactive strategies |
| Encountering Challenges in Lesson Implementation | Lack of materials, limited knowledge, curriculum constraints         | Difficulty in providing in-depth and accurate discussion                |
| Promoting Student Engagement                     | Active participation, sharing experiences, interest                  | Students relate lessons to personal and community experiences           |
| Identifying Needs for Support                    | Training, instructional materials, community involvement             | Need for institutional and resource support                             |

The findings reveal that teachers actively implement contextualized teaching practices by integrating the Lapat System into AP 10 lessons related to environmental conservation, indigenous practices, and sustainable development. Teachers connect the Lapat System to real-life environmental issues and use it as a springboard for discussions to make lessons more meaningful and engaging for learners. They also employ learner-centered strategies such as storytelling, inquiry-based learning, presentations, interviews with elders, and community-based activities to encourage active participation and experiential learning. These practices reflect the principles of contextualized teaching and learning, emphasizing the importance of connecting

instruction to the lived experiences and cultural backgrounds of students.

The study further shows that teachers emphasize the deeper cultural meanings embedded in the Lapat System, including respect, spirituality, unity, sustainability, and preservation of indigenous identity. Teachers recognize the importance of integrating these cultural values into instruction to strengthen students' sense of belonging and appreciation for indigenous traditions. However, despite teachers' initiative and willingness to integrate indigenous knowledge, the findings reveal several challenges in lesson implementation. Major concerns include the broad AP 10 curriculum, lack of curriculum-aligned instructional materials, limited teacher knowledge regarding the Lapat System, language barriers, and insufficient institutional support. Teachers often rely on improvised resources, community interviews, and limited online materials due to the absence of comprehensive learning resources.

The findings also indicate that students generally demonstrate positive engagement and respect toward lessons about the Lapat System. Learners actively participate in discussions, role-playing, presentations, and inquiry-based activities that allow them to relate indigenous practices to their own experiences and communities. Nevertheless, teachers observed that while students are familiar with the Lapat System, many still possess only surface-level understanding of its deeper cultural significance. This highlights the need for more structured and contextualized learning experiences to deepen students' comprehension of indigenous knowledge systems.

Lastly, the study identifies the need for stronger institutional and community support to sustain the integration of the Lapat System into AP 10 instruction. Teachers emphasized the importance of curriculum-based instructional materials, multimedia resources, professional development seminars, and collaboration with indigenous elders and organizations such as the NCIP. They also highlighted the value of culturally responsive and performance-based assessments that promote critical thinking, creativity, and real-world application. Overall, the findings suggest that while teachers are committed to integrating indigenous knowledge into education, long-term success depends on systematic support, culturally grounded instructional resources, and continuous collaboration among educators, policymakers, and indigenous communities.

### **Learning Materials on the Isnags' Lapat System for Araling Panlipunan 10**

The study developed contextualized learning materials for AP 10 based on the cultural beliefs and values embedded in the Isnag Lapat System. These instructional materials were designed to promote indigenous knowledge systems within discussions of environmental issues and sustainability in the curriculum. Through the materials, learners are expected to understand the Lapat System as an indigenous environmental management practice that reflects the Isnags' cultural traditions, ethical principles, and environmental conservation practices. The materials also aim to help students appreciate how indigenous systems contribute to environmental protection and social responsibility while preserving cultural identity.

The development of the learning materials was grounded on the findings gathered from key informants and AP teachers. The narratives of Isnag elders and community leaders served as the primary basis for the content, particularly regarding traditional practices, cultural beliefs, ethical values, and environmental responsibilities connected to the Lapat System. Likewise, the perspectives and teaching experiences of AP 10 teachers guided the instructional design to ensure that the materials were relevant, learner-centered, and appropriate for Grade 10 students. The materials were also aligned with the Most Essential Learning Competencies (MELCs) in AP 10, especially competencies related to environmental issues, cooperation, discipline, and community involvement in addressing environmental challenges.

The instructional materials consisted of three tri-fold learning brochures, each focusing on a specific aspect of the Lapat System. The first brochure introduced the Lapat System as an indigenous environmental management practice and discussed its significance in conserving natural resources. The second brochure highlighted the cultural beliefs underlying the system, particularly the ethical framework known as Supdina and its principles of Annaw, Aliyaw, and Ngilin, including spiritual beliefs and ancestral traditions. The

third brochure focused on the cultural values reflected in the Lapat System, such as respect, cooperation, responsibility, justice, and community harmony. Each brochure contained learning objectives, key concepts, discussions, reflective questions, assessments, and QR codes for additional learning resources.

The findings further reveal that the learning materials emphasized contextualized and culturally responsive instruction. By integrating indigenous knowledge into AP lessons, the materials encouraged meaningful learning, critical thinking, and stronger student engagement. Reflective activities and quizzes enabled learners to connect cultural traditions with environmental responsibility, while QR codes provided additional opportunities for exploration and independent learning. The materials were also revised based on evaluation feedback to improve clarity, organization, consistency, and instructional value, ensuring their effectiveness as culturally grounded educational resources.

## DISCUSSION

The findings of the study demonstrate that the Isnag Lapat System is not merely a traditional environmental practice but a deeply rooted indigenous knowledge system grounded in cultural beliefs, ethical principles, and community values. The identified framework of Supdina, together with its guiding principles of Annaw, Aliyaw, and Ngilin, reflects how the Isnags maintain harmonious relationships with nature, the community, and the spiritual world. These findings support the idea that indigenous environmental systems are closely linked to moral responsibility, spirituality, and cultural identity. The sacredness of nature and the influence of ancestral traditions further reveal that environmental conservation within indigenous communities is deeply embedded in their worldview and daily practices rather than being solely rule-based.

The study also highlights that the Lapat System promotes values such as respect, cooperation, responsibility, justice, and community harmony. These values strengthen collective accountability among community members and encourage sustainable management of natural resources. Such findings affirm sociocultural perspectives that emphasize the role of culture and shared practices in shaping human behavior and learning. The integration of these indigenous values into classroom instruction allows learners to connect environmental concepts with real-life cultural experiences, making learning more relevant and meaningful.

Furthermore, the findings reveal that teachers recognize the educational value of integrating indigenous knowledge systems into AP 10 instruction. Teachers viewed the Lapat System as an effective contextualized teaching resource that helps learners understand environmental issues through culturally grounded examples. The use of storytelling, inquiry-based learning, and community participation reflects learner-centered and experiential approaches that enhance student engagement and cultural appreciation. However, the findings also reveal significant challenges, including limited instructional materials, insufficient teacher preparation, lack of institutional support, and limited access to culturally appropriate resources. These concerns indicate the need for stronger support systems to ensure the effective implementation of indigenous knowledge integration in schools.

Lastly, the development of contextualized learning materials based on the Lapat System demonstrates the potential of culturally responsive instructional resources in promoting environmental awareness and indigenous cultural appreciation. The tri-fold brochures developed in the study provide structured and accessible learning materials aligned with the AP 10 curriculum. Overall, the findings suggest that integrating indigenous knowledge systems into education contributes not only to meaningful learning experiences but also to the preservation and recognition of indigenous culture and environmental stewardship.

## CONCLUSION

Based on the findings of the study, it can be concluded that the Isnag Lapat System embodies a rich indigenous knowledge system that integrates cultural beliefs, ethical principles, spirituality, and environmental stewardship. The principles of Supdina, together with the values of respect, cooperation, responsibility, justice, and harmony, shape the way the Isnag community interacts with nature and with one

another. These findings affirm that indigenous systems are not merely traditional customs but meaningful frameworks that guide sustainable environmental practices and preserve community identity.

The study further concludes that integrating indigenous knowledge systems such as the Lapat System into AP 10 instruction enhances the contextualization of learning. Teachers recognize that culturally grounded examples help students better understand environmental issues while strengthening their appreciation of local traditions and indigenous practices. Through contextualized and learner-centered approaches, students become more engaged and develop greater awareness of environmental responsibility and cultural heritage. However, despite teachers' willingness to integrate indigenous knowledge into instruction, challenges related to limited instructional materials, insufficient training, and lack of institutional support continue to hinder effective implementation.

Moreover, the development of contextualized learning materials based on the Lapat System demonstrates the importance of culturally responsive educational resources in promoting meaningful and inclusive learning experiences. The tri-fold brochures developed in the study provide structured, curriculum-aligned, and culturally relevant materials that can support classroom discussions on environmental conservation and indigenous knowledge systems. These materials serve not only as instructional tools but also as instruments for preserving and transmitting indigenous cultural traditions to younger generations.

Overall, the study concludes that indigenous knowledge systems have significant educational value and can contribute to culturally responsive and sustainable education. The integration of the Lapat System into AP 10 highlights the importance of connecting formal education with local culture and community practices. Through stronger collaboration among educators, indigenous communities, and educational institutions, indigenous knowledge systems may continue to be preserved, appreciated, and utilized in promoting environmental awareness and cultural understanding among learners.

## ACKNOWLEDGMENTS

The researcher extends sincere gratitude to all individuals and institutions who contributed to the completion of this study. Special appreciation is given to Dr. Jasper Kim M. Rabago for his invaluable guidance, encouragement, and expertise throughout the conduct of the research. The researcher also acknowledges Prof. Romeo A. Abucay, Prof. Rodel B. Reyes, Dr. Ryan Samuel V. Ramos, and Asst. Prof. III Dian Antonette N. Reantillo for their constructive suggestions and support that enhanced the quality of this work. Gratitude is likewise extended to Dr. Doreen D. Domingo, dean of MMSU -GS and Dr. Winicel May C. Ancheta, GS secretary for their encouragement and assistance to graduate students.

The researcher expresses heartfelt appreciation to the Isneg community of Pudtol, Apayao, especially Hon. Edaño T. Patayan and the Local Government Unit of Pudtol, for sharing their indigenous knowledge and supporting the preservation of indigenous cultural practices. Sincere thanks are also extended to the Schools Division officials, school heads, and teacher-participants whose cooperation and insights contributed significantly to the completion of the study.

Deepest gratitude is given to the researcher's family, relatives, friends, and classmates for their unwavering love, prayers, encouragement, and moral support throughout this academic journey. Above all, the researcher offers humble thanks to the Almighty God for His guidance, strength, wisdom, and countless blessings that made this work possible.

## BioData

Reyma Grace E. Batara is a Teacher VI at Mataguisi Comprehensive National High School. She is currently pursuing her Master of Arts in Education and has teaching experience in Araling Panlipunan. Her research interests include indigenous knowledge systems, culturally responsive teaching, environmental education, and contextualized instructional materials development in the Philippines.

Dr. Jasper Kim M. Rabago is the Program Coordinator of the MAEd Humanities and Language Literature

program at MMSU – GS. He is actively engaged in graduate instruction, research, and curriculum development in the fields of social psychology and social studies education. His research interests include humanities instruction, culturally responsive education, instructional material development, and innovative approaches in social psychology and social studies teaching.

## REFERENCES

1. Akinyemi, A., & Adejumo, O. (2018). Indigenous knowledge systems and environmental sustainability in Africa. *Journal of Indigenous Studies*, 12(2), 45–59.
2. Department of Education. (2011). *Indigenous Peoples Education curriculum framework*. Department of Education, Republic of the Philippines.
3. Department of Education. (2016). *K to 12 curriculum guide: Araling Panlipunan Grade 10*. Department of Education, Republic of the Philippines.
4. Gallego, M. A. (2017). The Lapat system: Indigenous environmental governance among the Isnags of Apayao. *Philippine Journal of Indigenous Studies*, 9(1), 33–47.
5. Malabrigo, P. L. (2021). Traditional ecological knowledge and biodiversity conservation among indigenous peoples in Northern Luzon. *Asia-Pacific Social Science Review*, 21(3), 88–102.
6. Semken, S., & Freeman, C. B. (2008). Sense of place in the practice and assessment of place-based science teaching. *Science Education*, 92(6), 1042–1057. <https://doi.org/10.1002/sce.20279>
7. Wa-is, J., & Bua-ay, C. (2021). Challenges in contextualizing indigenous knowledge in the K to 12 curriculum in the Cordillera Administrative Region. *International Journal of Multidisciplinary Research and Analysis*, 4(9), 1452–1460.