

# Evaluating the Impact of Education Under the Tree: An Assessment and Monitoring Approach

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## ABSTRACT

This study evaluated, assessed, and monitored the projects implemented under the Education Under the Tree program of Guimaras State University, designed to address the needs of the Indigenous Peoples (IPs) in Sitio Serum, San Nicolas, Buenavista, Guimaras. Using a descriptive survey method and self-developed assessment tools, the program engaged 30 IP respondents. Results of the needs assessment highlighted tutorial classes, values formation, and cultural preservation as the top priorities. Pre- and post-assessment surveys revealed significant improvements in knowledge, particularly in sanitation, values education, cultural preservation, and family orientation. Service delivery was rated very good to excellent, demonstrating effective facilitation and community participation. Overall, Education Under the Tree successfully strengthened the literacy, cultural identity, and empowerment of the IP community, underscoring the importance of sustaining and expanding similar initiatives across Guimaras.

**Keywords:** extension program, indigenous people, evaluation, education strategies, training, support service

## INTRODUCTION

The concept of evaluating education "under the tree," particularly within natural environments, necessitates a thorough assessment of pedagogical approaches and their impacts on various student outcomes. Studies demonstrate that nature-based education significantly enhances students' emotional, social, and cognitive development. For instance, the inclusion of natural environments as integral educational settings—often referred to as "the third educator"—has been shown to facilitate better learning outcomes, foster creativity, and improve problem-solving skills in young learners (Torquati & Ernst, 2013; Berris & Miller, 2011). This connection between nature and education highlights the unique contributions that outdoor environments can make to children's holistic development, demonstrating crucial links between physical surroundings and learning experiences (Sunassee & Bokhoree, 2021; Stern et al., 2013).

In light of these findings, it is essential to establish robust assessment and monitoring frameworks that cater to diverse educational contexts, particularly those that utilize nature extensively. Effective assessment tools must extend beyond traditional metrics of attendance and academic performance to encompass students' emotional well-being and their sense of belonging in educational settings (Mezzanotte & Calvel, 2023). Studies advocate for a multifaceted approach to evaluate the effectiveness of educational programs in natural environments, considering subjective student perceptions alongside objective measures of educational outcomes (Ah1 & Kahriman-Pamuk, 2021; Iwasaki, 2022).

Guimaras is an island province in the Philippines located in the Western Visayas region. Its capital is Jordan. The province is situated in the Panay Gulf, between the islands of Panay and Negros. To the northwest is the

province of Iloilo, and to the southeast is Negros Occidental. The whole island is part of the Metro Iloilo–Guimaras, one of the twelve metropolitan areas of the Philippines.

In Buenavista, where the Sitio Serum is located, the place is the home of the IPs known as "ATI". These IPs have their lifestyle, culture, and beliefs that need to be respected. This is the reason why there is a need to preserve the cultural heritage as part of valuing the school of living traditions. The Guimaras State University has initiated a program called "Education Under the Tree", which aims to educate, preserve, and empower the IP community in Buenavista, Guimaras. The project was now fully implemented, and it is necessary to conduct an evaluation, assessment, and monitoring of the different projects implemented under the program to provide more initiative that could help IP in their development.

### **Objectives of the Study**

1. To conduct a needs assessment survey in the specified priority areas to implement.
2. To evaluate the knowledge of the respondents before the implementation of the program.
3. To evaluate the knowledge of the respondents after the implementation of the program.
4. To assist in the delivery of the extension services to GSU.

### **Significance of the Study**

The result of this investigation is beneficial as baseline data on the impact of the extension project of Guimaras State University.

## **METHODOLOGY**

The study utilized a descriptive survey method with the use of a self-made assessment and evaluation guide based on the different projects implemented. The instrument used was subjected to a face validation technique, also known as validation by jury opinion. This will require that the test instrument be presented to a jury of experts for their opinion as to whether or not the instrument could gather the needed data as intended.

During the assessment, the respondents will rate in an assessment form with a scale of 1-5 in pre-self-assessment, post-assessment, and in rating the service delivery of the university. A rating of 1 means poor; 2 means fair; 3 means good; 4 means very good; and 5 means excellent interpretations.

The study was conducted with 30 IP respondents in sitio Serum, San Nicolas, Buenavista, Guimaras, who have been the beneficiaries of the extension program of the institution, which was conducted in the year 2022. The data collected were properly verified and validated to ensure the reliability and authenticity of information.

## **RESULTS AND DISCUSSIONS**

### **Need Assessment**

The training needs of the Indigenous People (IP) respondents in Buenavista, Guimaras, as presented in Figure 1, reveal a clear priority for certain types of training services. A significant number of respondents (30) expressed the need for tutorial classes, indicating a strong demand for educational support, likely in basic academic subjects such as literacy and numeracy. Similarly, values formation was equally prioritized, with 30 respondents identifying it as essential, highlighting a desire for programs that focus on ethical development and moral education. The need for preservation of indigenous culture was also rated highly by 30 respondents, reflecting the community's strong commitment to safeguarding their traditions and heritage.

In contrast, interest in arts and crafts and plant propagation was relatively low, with only 5 and 3 respondents, respectively, expressing a need for these skills. This suggests that while these areas may hold some value, they are not as critical for the majority of the respondents.

The data imply that training programs should focus primarily on educational support, values formation, and cultural preservation, while the lower demand for arts and crafts and plant propagation suggests these areas might benefit from further investigation or integration with livelihood opportunities to increase engagement.

As concluded by Rashid et.al. (2025), conducting a comprehensive TNA enables programs to align with the unique cultural and contextual realities of Indigenous populations.

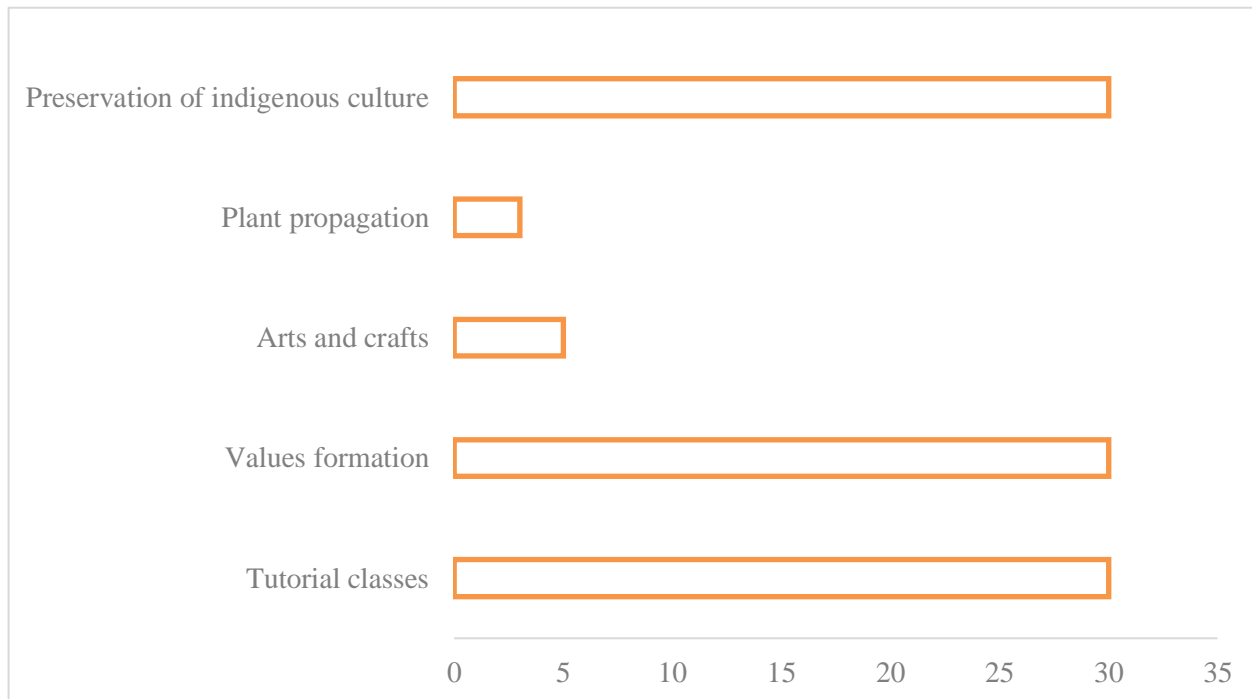


Figure 1. Training needs of the respondents.

### Pre-self-assessment

The pre-self-assessment data of Indigenous People (IP) respondents highlight several areas that can inform an Education Under a Tree extension program. In the area of sanitation and personal hygiene, many respondents rated it as Poor or Fair, indicating that this is an area in need of immediate attention. The program could focus on promoting basic hygiene practices and providing access to clean water and sanitation facilities. Values education and GMRC & IP showed more balanced ratings, but many still felt it was only Fair, suggesting the need for culturally tailored education that reinforces moral values, good manners, and respect for Indigenous traditions.

Cultural preservation through schools received mostly Fair and Good ratings, demonstrating an opportunity for the program to integrate cultural lessons and traditional knowledge into the curriculum, creating a more inclusive and relevant learning environment. Family orientation and gender roles were rated higher, but the program could still promote further understanding of evolving gender roles in Indigenous societies.

This implies that the Education Under a Tree program should not only focus on academics but also address practical issues like sanitation, while incorporating values education, cultural preservation, and gender awareness into the curriculum, ensuring that education is both holistic and rooted in the community's needs.

Rees & Shepherd (2005) supported that pre-self-assessment allows participants to engage in introspective evaluation of their existing knowledge and skills, which sets a baseline for their learning journey. This reflective practice has been shown to deepen learning experiences and promote self-awareness among participants. For instance, McLeod et al. (2008) stressed that self-assessment encourages individuals to pinpoint specific areas where they require further development, thus enabling targeted educational interventions that can lead to improved outcomes.

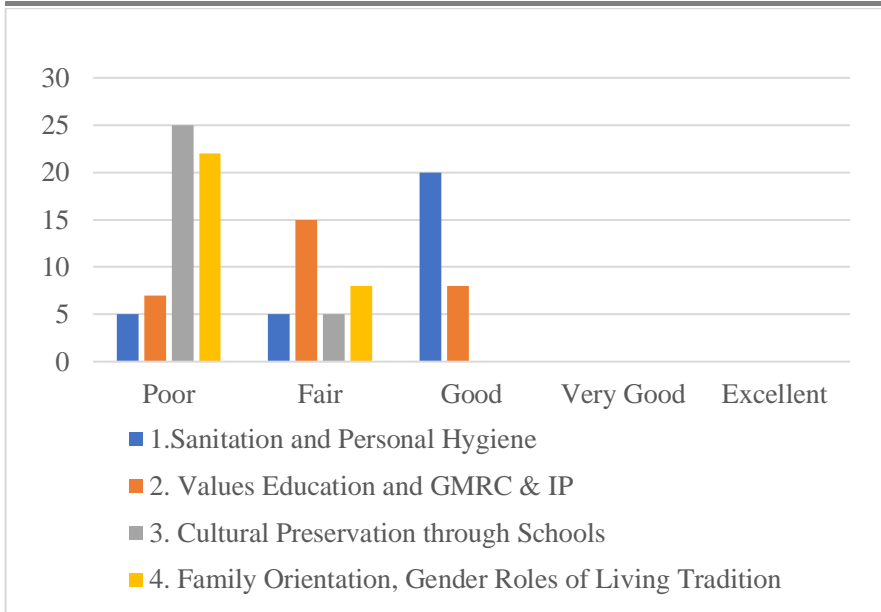


Figure 2. Pre-self-assessment on the knowledge and skills

### Post-assessment

The post-assessment data show a significant improvement in the knowledge and skills of Indigenous People (IP) respondents across all categories compared to the pre-assessment. In the area of Sanitation and Personal Hygiene, 80% of respondents rated their skills as Very Good, and 20% marked it as Excellent, reflecting the success of hygiene-related educational programs. Values Education and GMRC & IP also saw improvement, with 66.7% of respondents rating their knowledge as Very Good and 33.7% as Excellent, indicating that efforts to teach good manners, right conduct, and Indigenous values have had a positive impact. Cultural Preservation through Schools showed a 70% rating in the Very Good category and 30% in Excellent, marking a notable shift from the pre-assessment, where cultural education needed more focus. Lastly, Family Orientation and Gender Roles of Living Tradition saw 76.7% of respondents rating their understanding as Very Good and 23.3% as Excellent, indicating stronger awareness of family dynamics and gender roles. These results suggest that the educational interventions have effectively raised awareness and enhanced knowledge in these key areas, empowering the community and providing a foundation for continued growth in health, cultural preservation, and social development.

Several studies have noted that extension programs generally receive high satisfaction ratings, indicating a positive reaction to educational initiatives. PranitaSari and Trianah (2020) reported that respondents expressed high satisfaction with various aspects of the extension program, including materials and facilitators, affirming the perceived quality of education delivered.

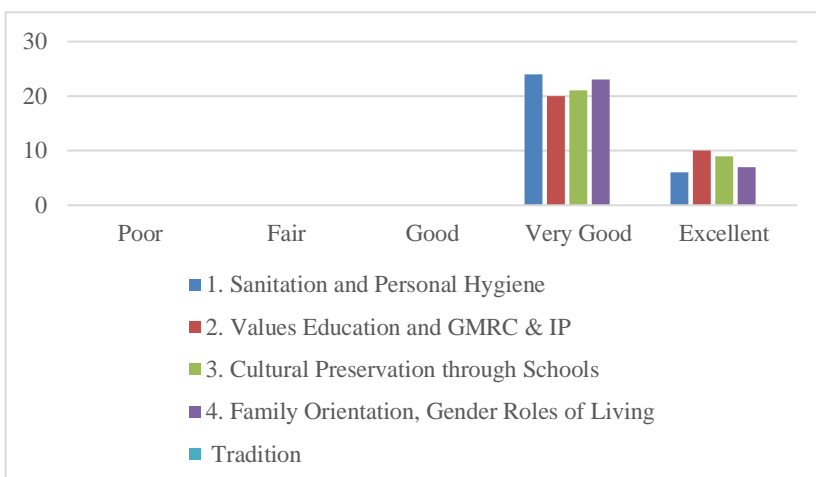


Figure 3. Post-Assessment on the knowledge and skills.

## Service Delivery of GSU

The data from the delivery of extension services by GSU shows generally positive feedback across various categories, with areas such as Family Orientation and Gender Roles receiving the highest satisfaction, marked as Very Good and Excellent by most respondents. Food and Venue also garnered mostly Very Good ratings, with some Excellent marks for food, though the venue still had a few Good and Fair ratings, indicating room for improvement. Cultural Preservation and Values Education and GMRC & IP were rated as Very Good and Good, with only a few instances of Excellent, suggesting that while these programs were appreciated, they could benefit from further refinement to fully meet participants' expectations. Participants/Group, Facilitation, and Accommodation received mixed ratings, with some respondents marking these categories as Fair, pointing to potential areas for improvement in service delivery.

The overall implication is that while GSU's extension services are largely effective and appreciated, efforts should be made to enhance areas like venue, accommodation, facilitation, and cultural preservation to elevate the program to a consistently Excellent standard. According to Hamasalih & Layeeq (2023), effective program management is critical for ensuring that resources are utilized efficiently and that the programs can adapt to the evolving needs of the respondent.

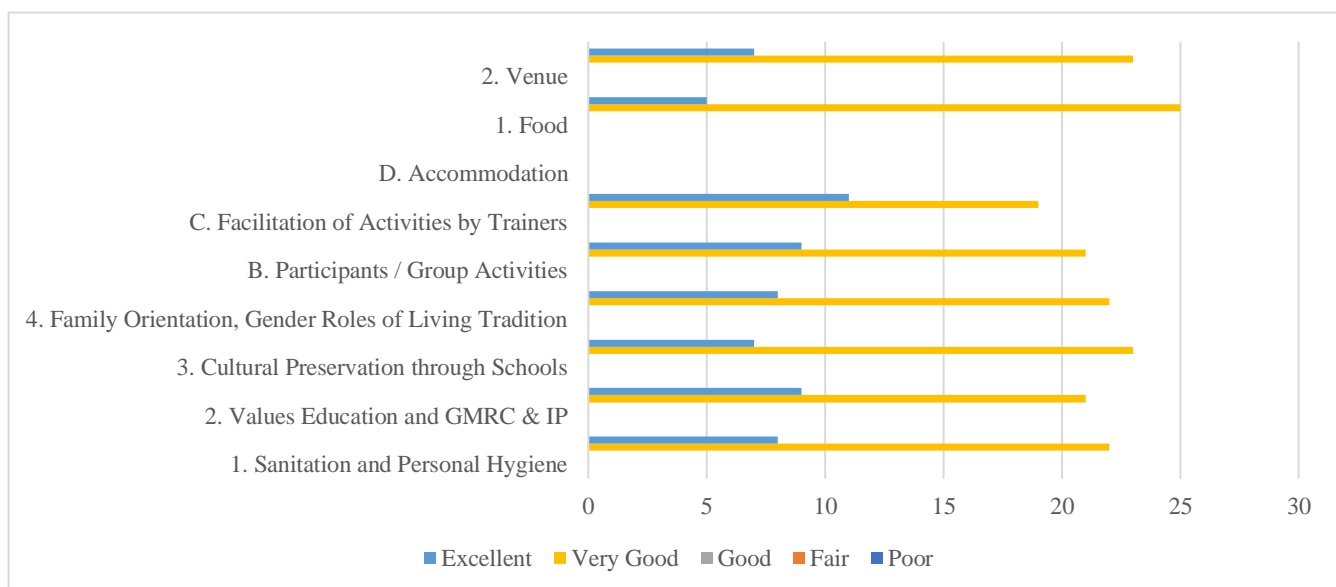


Figure 4. Evaluation of the Service Delivery of the GSU.

## CONCLUSIONS

The Education Under the Tree program has proven to be highly successful in addressing the needs of the Indigenous People (IP) community in Sitio Serum, Guimaras. The program focused on critical areas such as tutorial classes, values development, and the preservation of Indigenous culture, which were identified as the primary needs through a needs assessment survey. The results of the pre- and post-assessment surveys show significant improvements in the IP community's knowledge and skills, particularly in sanitation and personal hygiene, values education, cultural preservation, and family orientation. The implementation of the program was completed within the allocated time frame, despite some challenges posed by health protocols. The program has made a profound impact, strengthening, educating, and empowering the community.

To ensure the continued success and sustainability of the Education Under the Tree program, it is recommended that Guimaras State College expand its efforts to reach a broader population of IPs throughout the island. The focus should be on enhancing and maintaining the core areas of tutorial classes, values education, and cultural preservation while incorporating new initiatives that cater to evolving needs, such as arts and crafts or agricultural training. Additionally, efforts to improve infrastructure, particularly venues and accommodation, should be prioritized to ensure a more comfortable learning environment. Continuous

monitoring and evaluation of the program's impact should also be conducted to track progress and adjust strategies accordingly. It is crucial to provide more attention and resources to further empower the IP community in Guimarães, fostering a more inclusive and culturally rich education system.

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