**IMPLEMENTATION OF INDIGENOUS PEOPLES KNOWLEDGE (IPEK) IN LOWER CALANASAN DISTRICT, PHILIPPINES**

**ABSTRACT**

**Purpose**: The study aimed to assess the implementation of the Indigenous People Education (IPEd) Program and its relationship to the learners’ scholastic achievement at the District of Lower Calanasan, Division of Apayao, school year 2021-2022.

**Methods**: The study looked into the personal profiles of the respondents in terms of age, sex, civil status, faculty rank, length of teaching service in years, and their highest educational attainment, These personal profiles of respondents will be tested through the Pearson r, if there’s a bearing with their perceptions on the level of implementation of the IPED Program along the seven indicators namely: Pedagogy and Methodology, Indigenous Knowledge Systems, Curriculum Content and Planning, Language of Instruction, Teacher Training, Instructional Materials, and Assessment and Evaluation. The null hypothesis was either rejected or accepted at .05 level of significance.

**Results**: The study found out that majority of the teachers in Lower Calanasan, Apayao are female whose age is in their mid-30s. The majority of the teachers are married who hold a Bachelor’s Degree with a Teacher I position. The said teachers have an average year of experience in teaching for over 10 years as of writing.

Digging deeper to the Level of Implementation of IPED, the teachers indicated that they were able to implement the Pedagogy and Methodology, Indigenous Knowledge Systems, Teacher training, Instructional materials, and the Assessment and Evaluation to a “great extent”.

Meanwhile, only Language of Instruction and Curriculum Content and pallning tallied a descriptive value of “to a very great extent”. In terms of the Best practices of the teachers in implementing the IPED Program, the teachers indicated the strategy on “Translating modules of K to 12 into the Isnag dialect to make a more contextualized lesson”. When it comes to perceiving the benefits of the IPED Program, the teachers strongly agree that the said program, has a significant effect on the learners. Specifically, the study found out that the IPED program is helpful in making the IP learners have become active in class activities.

On the other hand, the students were found out to have achieved a very satisfactory mark in their core subjects during the School year 2021-2022. However, it can be noticed that the marks of the students are near the demarcation of the Satisfactory range.

**Conclusions**: Finally, the study found out that the level of implementation of the IPED Program particularly the indicators such as Pedagogy and Methodology; and Curriculum Content and Planning are both significantly related to the learners’ level of performance in their core subjects.

**KEYWORDS**  
*Indigenous People, Pedagogy and Methodology, Indigenous Knowledge Systems, Curriculum Content and Planning, Language of Instruction, Teacher Training, Instructional Materials, and Assessment and Evaluation.*

1. **INTRODUCTION**

One vision of Department of Education (DepEd) is to make the school curriculum responsive and relevant to learners' diverse nature and culture. The implementation of the Indigenous Peoples Education Program (IPEdP) responds to addressing learners' diversified nature and culture. This educational strategy is practiced in schools where most learners are members of the indigenous group or minority group. These people speak their dialect with peculiar terms, which every learner should know. Teachers integrate concepts and ideas known to the indigenous people in the community, thus making their teaching more realistic and practical.

Contextualization of the curriculum is much needed to enrich the content of lessons in the different learning areas. Such a strategy hurls a significant challenge to teachers, especially those whose native tongue is entirely different from the learners. Usually, teachers conduct research, interview older people, or consult knowledgeable adults about the community's existing practices, beliefs, customs, and traditions to enrich their daily instructions. In this way, learning is made easy, exciting, and meaningful to learners. They enjoy interacting with their teachers, classmates, and friends. Also, they show interest during class discussions. They feel they are one with the group and the sense of belongingness surfaces. The learners feel accepted and respected, a good indicator that learning is fun. This situation makes school work for the learners’ light and easy. This makes the holding power of the schools strong. Rarely do the learners drop out; hence, the zero drop-out rate is easy to attain.

It was stated in a study that in managing IP Education, the major shortcoming is the rare reflection on realities of indigenous livelihoods or traditional education system in formal school systems. Based on the national curricula assessment, indigenous peoples' history, cultures, and languages tend to be disregarded; textbooks and other academic materials primarily reflect mainstream society's values, norms, and traditions. Formal school education is provided in the national language, and the languages of indigenous peoples and their traditional knowledge and skills – are ignored or devalued. School terms and daily schedules do not consider indigenous peoples' livelihood, for example, pastoralism and nomadism. The axiomatic method of imparting instruction and classroom management clash with those commonly practiced in the students' homes or communities. Most non-indigenous teachers, especially the untrained ones, are not prepared to teach in indigenous communities because they lack cultural training and understanding of indigenous peoples' values and way of life; They do not know what they are teaching.

The implementation of the IPEd Program is in support of the Mother Tongue Based and Multi-Lingual Education (MTB-MLE) Program of the DepEd, which aims to build a good foundation in such a way that it starts where the learners are and from what they already knew proceeding from the known to the unknown.

The researcher is interested in investigating the implementation of the IPEd Program in the District of Lower Calanasan, Province of Apayao because most of the learners in the said district come from indigenous families. Furthermore, the researcher wants to know other schools' best practices regarding IPEd Program implementation to improve his teaching strategies to implement the program effectively.

**2. LITERATURE REVIEW AND RESEARCH METHODS**

This chapter presented the research design, locale of the study, respondents of the study, research procedure, data gathering instrument, and statistical treatment of data.

**2.1. Study Design**

The researcher conducted internet and library research. After downloading copies of related unpublished theses and dissertations, including research journals, he found out that the most appropriate design to be employed in his study is the descriptive-correlational design. It is descriptive because it investigates the present implementation of the IPEd Program in the District of Calanasan, Division of Apayao.

On the other hand, the study employed correlational technique, as it will investigate the relationship of the independent variables with the dependent variables. It will also investigate a significant relationship between the respondents' perceptions and best practices with their profiles and the learners' scholastic achievement.

**2.2 Participants**

The teacher- respondents to the questionnaire are fifty (50) public school teachers coming from the six (6) public elementary and three (3) high schools in the District of Calanasan. Total enumeration of all teachers shall be considered. To avoid too much exposure to individuals, the questionnaire shall be distributed through the School Heads and the retrieval shall be done in same process. This is done so that the fear of getting infected from the corona-virus this pandemic time shall be minimized.

**2.3. Instrumentation**

The main tool to gather relevant data is is questionnaire adopted from the study of **Pandi and Halili** **(2021).**

The questionnaire has five parts. The first part of the said questionnaire elicited their Socio-Demographic Variable of Respondents namely: Age, sex, civil status, teaching position, years in teaching, and highest educational attainment.

The second part of the questionnaire was adopted from the study of **Villaplaza, (2021)** entitled: Level of Implementation of Indigenous Peoples Education Program in Agusan Del Sur, Philippines. The said questionnaire was segmented into seven indicators namely: Pedagogy and Methodology; Indigenous Knowledge Systems; Curriculum Content and Planning; Language of Instruction; Teacher Training; Instructional Materials; and Assessment and Evaluation.

On the other hand, Part III elicited the best practices of teachers in implementing the IPED Program in their respective schools. Part IV described the benefits of the IPED learners in the IPED program in the lenses of teachers.

Finally, the teachers indicated the problems encountered and their solutions to these problems that are connected to the implementation of the IPED Program.

**2.4. Data Collection Procedure**

Prior to the conduct of the study, a study permit was secured from the Office of the Schools Division Superintendent of Apayao, indicating the researcher’s desire to gather the research data from the teacher-respondents. With the help of the District Supervisor and School Heads, the questionnaires were distributed to and retrieved from the respondents.

The gathered data was tabulated, organized, analyzed and interpreted using appropriate statistical tools, as basis for the formulation of valid conclusions and recommendations offered. Suggestions and corrections of the panelists during the proposal and final defenses were reflected in the final copy.

**2.5. Data Analysis**

Descriptive statistics was employed to analyze and interpret the data gathered. To describe the personal profiles of the respondents including their perceptions, frequency count, percentage, mean, weighted mean and average weighted means and the corresponding verbal descriptions was used. To describe the relationship of the teachers’ personal profiles with their perceptions, the Pearson Product Moment Coefficient of Correlation, in short Pearson correlation coefficient (r) was used.

The 5-point Likert Scales was used to determine the weighted means, average weighted and the over-all average weighted means of the respondents’ perceptions.

1. **List 1 : Level of Implementation of the IPED Program**

|  |  |
| --- | --- |
| **Range** | **Verbal Description** |
| 4.21-5.00 | Very Great Extent |
| 3.41-4.20 | Great Extent |
| 2.61-3.40 | Undecided |
| 1.81-2.60 | Minimal Extent |
| 1.00-1.80 | Very Minimal Extent |

**2. list 2 : Benefits of the IPED Program**

|  |  |
| --- | --- |
| **Range** | **Verbal Description** |
| 4.21-5.00 | Strongly Agree |
| 3.41-4.20 | Agree |
| 2.61-3.40 | Undecided |
| 1.81-2.60 | Disagree |
| 1.00-1.80 | Strongly Disagree |

**2.6. Ethical Considerations**

Ethical approval for the study was obtained from the Institutional Review Board of the Graduate School. Participation was voluntary, and participants were informed of their right to withdraw at any time without penalty. Respondents’ responses will be kept confidential.

2.results and discussion

This chapter presented the results of this study and their interpretation as basis for conclusions and recommendations.

**Teachers’ Profile Variables**

Table 1 shows the frequency and percentage distribution of teachers in terms of their Profile variables. A close disparity was shown in the table, as 38 percent of the teachers belong to the age range of 31-40 years old; 36 percent of the teachers are ages 23-30 years old. 1 or 24 percent of the teachers belong to the age range of 41-50 years old, while only one teacher belongs to the 51 years old-above club. The teachers tallied an age mean of 35.76 years old with an equal difference of 3.54 years’ old which means that the teachers are in their mid-30’s. This implies that the teachers are within the 21st century age wherein ideas are free flowing and novel.

In terms of sex, the study found out that Lower Calanasan District is Female dominated as it comprised 70 percent of the respondent-population. The other 30 percent was demarcated by their male counterparts.

Shown in the same table is the Civil status of teachers, wherein 68 percent of the teachers were found out to be married. 13 or 26 percent of the teachers are still single, while three of the teachers were already separated. This finding means that the teachers are gauged with additional support system in their homes with the presence of their family.

In terms of Plantilla position, the teachers of Lower Calanasan District were found out to be in the entry level plantilla (Teacher I). It comprised about 44 percent of the respondent population, while 30 percent of the teachers are Teacher II; nine of the teachers are Teacher III, while only three teachers are in the Master Teacher position. This finding highlights the need for teachers to seek professional development with majority of them, stuck in the Teacher I position.

The Highest Educational Attainment of the teachers is also presented in the table wherein over 50 percent of the respondents hold a Bachelor’s Degree; 12 or 24 percent of them have Master’s Degree; while only two teachers have a Doctorate Degree. The current findings are in connivance with the findings delineated in the teachers’ plantilla position. It can now be explained that because there is dismal number of teachers who have a Master’s Degree, teachers are wedged in the first level plantilla.

Finally, the teachers in Lower Calanasan were found out to have served in the teaching platform for about 10 years with their Mean length in service of 10.38 years with an equal gap of 4.72 years. This finding means that the teachers are considered Highly proficient in the teaching field, for they have served at least 10 years in the academe.

**Table 1. Frequency and Percentage Distribution of Teachers in terms of their Profile Variables**

|  |  |  |
| --- | --- | --- |
|  | **Frequency**  **(n=50)** | **Percentage** |
| **Age** |  |  |
| 23-30 | 18 | 36 |
| 31-40 | 19 | 38 |
| 41-50 | 12 | 24 |
| 51-above | 1 | 2 |
|  | **Mean=35.76** | **SD=3.54** |
|  |  |  |
| **Sex** |  |  |
| Male | 15 | 30 |
| Female | 35 | 70 |
|  |  |  |
| **Civil Status** |  |  |
| Single | 13 | 26 |
| Married | 34 | 68 |
| Separated | 3 | 6 |
|  |  |  |
| **Plantilla Position** |  |  |
| Teacher 1 | 22 | 44 |
| Teacher 2 | 15 | 30 |
| Teacher 3 | 9 | 18 |
| Master Teacher 1 | 4 | 8 |
|  |  |  |
| **Highest Educational Attainment** |  |  |
| Bachelor’s Degree | 28 | 56 |
| With Master’s Units | 4 | 8 |
| Master’s Degree | 12 | 24 |
| With Doctorate Units | 3 | 6 |
| Doctorate Degree | 2 | 4 |
|  |  |  |
| **Length in Service** |  |  |
| 1-5 years | 6 | 12 |
| 6-10 years | 5 | 10 |
| 11-15 years | 21 | 42 |
| 16-20 years | 7 | 14 |
| 21-above | 9 | 18 |
|  | **Mean= 10.38 years** | **SD= 4.72** |

**Level of Implementation of IPED**

**Pedagogy and Methodology**

The perception of teachers on the level of implementation of the IPED Program along Pedagogy and Methodology ,the teacher accrued a category mean of 4.16 which has a descriptive value of “great extent”. This finding means that the teachers perceive that the they are able to employ the intended principles, pedagogy and management strategies used in IPED instruction to a great extent.

The results of the study are being backed by the responses of the teachers specifically when it comes to seeing education as a connected entity to the IPED environment (4.20); Indigenous community members, parents and elders are consulted and involved regarding what their students should, and want to learn- and when and how-as a basis for identifying pedagogical principles (4.16); Both formal and non-formal, as well as traditional and modern, teaching methods are used, based on the study of traditional teaching methods in the community like excursions, to learn about the cultural significance of places (4.10). Education is seen where methods are used by parents to teach their children how to prepare food or keep house are incorporated in the school (3.98); The situation of indigenous communities is the starting point for developing the potential of learners (3.84); and that Indigenous community members, parents, and elders are consulted and involved regarding what their learners should learn- and when and how- as the basis for identifying teaching methods at the start of the program (3.74).

Surfaced in the findings of the study are the efforts of the teachers in making the IPED curriculum, a shared liability and responsibility of the school and the community where the indigenous learners belong. Upon this assertion, it could be implicitly said that the teachers are maintaining and supplementing efforts to make the curriculum and instruction more appropriate to the Indigenous learners.

In addition, this is consistent with the DepEd's mission of contextualizing, indigenizing, and localizing teachings and instructional resources, such as stories, novels, and the like, in order to provide learners with hands-on experience. **Baniwa (2006)** make**s** a connection between an understanding of indigenous education and a concept of the life cycle, which is defined by communitarian learning acts. The fundamental principles that emerge from this social coexistence are moral and spiritual, and are based on communal activity in harmony with nature.

**Indigenous Knowledge Systems**

The perception of teachers on the level of implementation of the IPED Program along Indigenous Knowledge Systems, the teacher tallied a category mean of 3.96 which has a descriptive value of “great extent”. This finding means that the teachers perceive that the they are able to employ the different values and cultural systems delimited in the indigenous community where they belong.

The foregoing findings of the study is consistent with responses of the teachers specifically in the Identification and incorporation of relevant local cultural knowledge with the participation and informed consent of indigenous communities and elders in the planning of programs (4.18); active participation of students and community members who serve to develop a curriculum founded on indigenous people’s cultural identity (4.10); active participation of students and community members who serve to develop a curriculum founded on indigenous people’s cultural history (4.02); Identification and incorporation of relevant local cultural knowledge with the participation and informed consent of indigenous communities and elders in the design of curricula (3.66); Identification and incorporation of relevant local cultural knowledge with the participation and informed consent of indigenous communities and elders in the selection of teaching methods (3.58); Non-verbal education materials are produced by indigenous teachers (3.52); and when it comes to stories, diaries, textbooks, etc., are produced by indigenous teachers (3.46).

The findings of the study were strongly backed by village elders, who approve to every educational endeavor undertaken by the teachers within the school. IKSPs are indigenous knowledge culture practices; these are traditions that have emerged over years of exploration and are passed down orally from generation to generation.

According to the respondents' perspectives, the IPEd implementing schools adhered to the DepEd mandate that the curriculum is culture-specific and embodies fundamental core ideas such as responsibility for indigenous ancestral domains, IP skills, IP culture knowledge, love and pride in their culture, and basic functional literacy skills.

**Curriculum Content and Planning**

Evidently, the perception of teachers on the level of Implementation of IPED Program along Curriculum Content and Planning. As shown, the teachers, to a great extent, perceives that the Curriculum Content and Planning have gradually integrate indigenous and Western ways of knowing (4.18); are place and culture-based (4.14); are designed with the active involvement of indigenous communities (4.08); gradually integrate indigenous and Western forms of knowledge (4.06).

On the other hand, the teachers perceive that they promote positive attitudes to indigenous cultures among the non-indigenous population, to promote understanding, tolerance and solidarity between different cultural groups (4.62); promote positive attitudes to indigenous languages to promote understanding, tolerance and solidarity between different cultural groups (4.50); include the use of local flora (4.42); include seasonal environment curricula (4.38); include the use of local fauna (4.36); and reflect the interrelation of subjects to a “very great extent”.

Overall, the teachers accumulated a category mean of 4.31 with a descriptive value of “very great extent” which means that the teachers were able to surpass their level of target in implementing the instruction encompassed in the Curriculum. The study highlights the inclusion of the flaura and fauna and seasonal environment curricula in the IPED Curricula.

**Language of Instruction**

The perception of teachers on the level of implementation of the IPED program along Language of Instruction. As presented, the teachers perceive that they have implemented the Language of Instruction to a very great extent with a category mean of 4.27.

In specifics, the teacher believes to a great extent in teaching and learning indigenous knowledge and curricula through the use of locally researched and produced material in indigenous languages (4.74); Teaching and learning of and through the mother tongue moving on to learning other languages in a culturally appropriate and gradual way, according to learners’ capacities and needs (4.54); Learning other languages as a bases for cross-cultural understanding and tolerance. (4.22); and in recognizing that language is not only a tool for communication and knowledge but also a fundamental element of cultural identity (4.22).

This further implies that teachers recognize the vitality of the first language of learners in the development of the learners’ second language through the integration of this language to the lessons of their learners. Supporting this, **The Educator (2016)**, an online magazine based in Australia, revealed that improving language skills can have profound academic and social benefits for children, both in early childhood and later in life. As cited by **Kavanagh (2006)** language and culture are at the heart of everything a school does, and their inclusion in the education process must be seen as a requirement, not an option.

**Teacher Training**

The perception of teachers on the level of implementation of IPED Program along Teacher training revealed that the teachers, to a great extent, involve native speakers of indigenous languages as teachers ; are trained in teacher-training programs organized in cooperation with indigenous people’s organizations and communities (4.16); trained in teacher-training facilities organized in cooperation with indigenous people’s organizations and communities (4.10); Teaching and learning of and through the mother tongue in early schooling and literacy instruction (4.08); and in Teaching and learning indigenous knowledge and curricula through indigenous language and produced material in indigenous languages (3.90);

As a group, the teachers tallied a category mean of 3.87 with a descriptive value of Great Extent which means that the teachers are well-equipped with the methods, strategies and pedagogies in employing the IPED Program because of their well-rounded training regarding the said program. In connivance with the current findings of the study, **Vermunt (2014)**, highquality teacher learning influences student-learning outcomes as a result. Teachers must learn cognitive and metacognitive learning processes in order to meet learning outcomes in the form of changed beliefs about their practice or, even better, change in behavior.

Also, **Meneses, (2013)** contends that the quality of teachers is an important factor to consider in evaluating the learners’ survival in school. Teachers whose personality is persistent, preserving, reliable, tolerant, determined and enthusiastic can contribute significantly to the academic performance of learners.

**Instructional Materials**

The perception of teachers on the level of implementation of the IPED Program along Instructional Materials, the teachers have tremendous training when it comes to Instructional materials development that is consistent with the standards and principles in an IPED Classroom. The teachers, as a group, indicated a category mean of 4.06 with a descriptive value of Great Extent.

In the consolidated response, it can be noticed that the teachers got the highest weighted mean on “material based on respect for the cultural values and specific relationship with nature of indigenous communities”. This further means that the teachers are continuously indigenize and/or localize the instructional materials in their lessons. As a corroboration of the foregoing findings, **AusAID (2012)** integrated educational programs to basic education through indigenization or localisation in order for pupils to quickly adapt to the program and formal education. For instance, reading and supplemental materials have been translated into youth-friendly languages. Additionally, teachers have been educated to develop curricula and instructional materials. The acquisition of school facilities and supplies (such as audio-visual and laboratory equipment) has undoubtedly aided student learning.

**Assessment and Evaluation**

On the perception of teachers on the level of implementation of the IPED Program along Assessment and Evaluation, it was revealed that the teachers as a group, tallied a category mean of 3.88 with a descriptive value of Great Extent.

Specifically, the teachers got the highest weighted mean when it comes to Teaching methods and practices (in terms of cultural responsiveness and effectiveness in promoting student growth, vis-à-vis the national curriculum): through interviewing students (4.28). This conclusion indicates that teachers were successful in assessing and evaluating students' cultural knowledge, practical skills, and comprehension, as well as their capacity to apply them in a variety of circumstances. This is accomplished by observation, practical evaluation, comparing children' performance at home and in school, and, when and where appropriate, standardized and non-standardized exams. The comments of the teachers also demonstrate that the curriculum as a whole (in terms of indigenous culture and language integration) is obviously evaluated through committees.

In fact, **Nakata, (2007)** underlines the need of developing curriculum and assessment that take into account the experiences and skills of Indigenous students. This demonstrates that the school's quarterly School Monitoring and Evaluation (SMEA) demonstrates a high degree of implementation in the assessment and evaluation of programs.

**Best Practices in Implementing the IPED Program**

On the best practices of teachers in implementing the Indigenous People’s Education Program. The top five responses were elicited based from the consolidated responses of the teachers of Lower Calanasan. According to teachers, they consider the strategy on Translating modules of K to 12 into the Isnag dialect to make a more contextualized lessons as the best practice they have adopted during the initial run of the said program. This strategy was followed by Integrating indigenous games assessing regularly participation in physical activities based on the Philippine physical activity pyramid; Using indigenous materials in teaching; Integration of IP values in the lesson; and Using Isnag stories and proverbs as lesson spring boards.

Among the responses of the teachers, it can be inferred that materials in aid of the instruction is considered vital in the IPED Classroom, and program as a whole. **Montaner, (2020)**, in his study entitled: Implementation of Indigenous Peoples Education Program in the Ayta Magbukun Tribe of Bataan, Philippines highlighted that Instructional Materials development are significantly related to the success of the implementation of the IPED Program in the said IP Community. It has been regarded that through well-crafted, well-analyzed, and contextualized materials, learners will be able to comprehend and full understand the prime context of lessons in their core subjects.

**Perception on the Benefits of the IPED Program**

On the perception of teachers on the benefits of the IPED Program, the teachers strongly agree that there are benefits of the IPED Program in wide array of contexts. This is reflected from the category mean of 4.411 and a descriptive value of “strongly agree”.

Specifically, the teachers contended that because of the IPED program, IP learners have become active in class activities (4.86); IP learners are more confident to recite in class (4.72); and that these learners are more proud of their own culture (4.56). Among these three highest tallied weighted mean, it can be inferred that the teachers observed that there was an improvement when it comes to students’ participation attributed to the implementation of the IPED Program. This happens because, learners are gauged to answer and express themselves through a language they are most comfortable of utilizing.

**Learners’ Grade Point Average in their Core Subjects**

Table 2 shows the distribution of the learners in terms of their Grade Point Average during the School year 2021-2022 in the different Core Subjects integrated in the IPED Program. As shown, majority (23 or 46 percent) of the learners have grades ranging from 85-89 while 17 or 34 percent have grades ranging from 80-84, while only four of the total respondent population got an outstanding mark or grades from 90-above. The overall mean of 85.62 indicates that the learners in the different Public schools of Lower Calanasa for the School Year 2020-2021 have a very satisfactory performance in their Core Subjects namely: English, Mathematics, Filipino, and Science.

**Table 2. Distribution of Learners in Terms of GPA in their Core Subjects**

|  |  |  |
| --- | --- | --- |
| **Grade** | **Frequency (n=50)** | **Percentage** |
| 90 – above (Outstanding) | 4 | 8 |
| 85 – 89 (Very Satisfactory) | 23 | 46 |
| 80 – 84 (Satisfactory) | 17 | 34 |
| 75 – 79 (Fairly Satisfactory) | 6 | 12 |
| **Mean** | **85.62** |  |
| **S.D.** | **4.22** |  |

**Relationship between the Learners’ GPA and the Level of Implementation of IPED Program**

The study hypothesized that there is no significant relationship between the learners’ Grade Point Average and the level of Implementation of the IPED Program through its seven indicators. Based on the results of the correlation test, the computed coefficients for teachers’ perception on the level of implementation of the IPED Program along Pedagogy and Methodology and Curriculum Content and Planning are significantly related to learners’ performance as reckoned by their associated probabilities less than 0.05. In this regard, the null hypothesis is rejected.

The table reflects a significant relationship between the Grade Point Average of the learners in their core subjects with the level of implementation of the IPED Program along Pedagogy and Methodology as reckoned in the computed r-value of -0.5621 and a probability of 0.0280. This finding means that if the Pedagogy and Methodology utilized by the teachers are cooperative, interactive and reflexive teaching-learning process is promoted, based on all aspects of knowledge, the higher the level of performance of learners in their core subjects. Also, as emphasized in the study, the teachers indicated that one of the strategies employed by the teacher is the contextualization and indigenization of materials and instruction in the IPED Classroom.

As referenced to this, According to **Abejuela (n.d.),** the existence of the **Republic Act 8371** or the **Indigenous Peoples’ Rights Act (IPRA)** ordains the legal framework which gives emphasis to the right to education among the IPs. IPRA serves as the legal basis for the education of IPs both formal and non-formal education. The formal sector comprises the three levels: elementary (K to Grade 6), secondary (Grade 7-Grade 12) and tertiary. Each school works towards the development of appropriate programs and projects related to the curricula with ***appropriate teaching materials and resources.***

More specifically, **Watkins and Mortimore, (2014)** in their study asserted that Pedagogy can improve the overall quality of teaching by **making the student more receptive during lessons**. As a result, this enhances the student's level of participation and contribution during the learning process. A well-developed pedagogy helps impart education to students using a range of learning styles.

Furthermore, reflected in the same table is the significant relationship that exists between the level of performance of learners in their Core Subjects and the level of implementation of the IPEd Program along Curriculum Content and Planning as reckoned by the value of r 0.7003 and a probability of 0.0454. This finding means that if the content of the curriculum is relevant and developmentally appropriate with the level of cognition possessed by the Indigenous students, the higher chance, that the students will get a high mark in their core subjects. This is reflected on the responses of the teachers regarding the use of local flora and fauna and culture-based curriculum.

4. Conclusion

Based on the foregoing results of the study, the study concludes that the way the teachers implement the IPED Program has a significant effect on the Level of Performance of their students in the Core subjects. It can also be inferred from the results that the teachers in Lower Calanasan were able to employ the principles and conventions delimited in the IPED Framework across all indicators. Finally, the very satisfactory mark of the learners, can still be improved if the Pedagogy and Methodology will be improved into its full potential.

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Competing interests

The authors declare that there are no financial or personal relationships with other people or organizations that could inappropriately influence or bias the work presented in this study. all authors have disclosed any potential conflicts of interest, and no competing interests exist.

Authors’ Contributions

Maynard B. Aldaydesigned the study, wrote the protocol, and drafted the initial manuscript. Dr. Babylyn A. Lumabas, provided guidance on the research design, performed the statistical analysis, managed the analyses of the study, and contributed to the revision of the manuscript. All authors read and approved the final manuscript.

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Appendix A

**QUESTIONNAIRE**

**Dear Respondent;**

Please answer and accomplish the needed data in the questionnaire very carefully and honestly. Rest assured your answers will be treated with greatest confidentiality.

Thank you very much.

**MAYNARD B. ALDAY**

*Researcher*

**Part I – Personal Information of the Teachers**

**I. Personal Background**

**Name (optional): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Age: \_\_\_\_\_\_\_\_**

**Sex:** ( ) Male ( ) Female

**Civil Status:**

( ) Single ( ) Married ( ) Separated ( ) Widow/er

**Plantilla Position**

( ) Teacher I

( ) Teacher II

( ) Teacher III

( ) Master Teacher I

( ) Master Teacher II

( ) Master Teacher III

( ) Master Teacher IV

**Length of teaching service in year/s: \_\_\_\_\_\_\_\_**

**Highest Educational Attainment:**

( ) Doctoral Degree

( ) Master’s Degree

( ) Bachelor’s Degree

( ) College Level

( ) TESDA Graduate

( ) High School Graduate

( ) High School Level

( ) Elementary Graduate

( ) Elementary Level

**Performance rating for S.Y 2019-2020:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Performance rating for S. Y 2018-2019:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Part II - Implementation of the IPEd**

1. Directions: The following statements depict the ways and practices of teachers in their implementation of Indigenous Peoples Education (IPEd) in schools. Read through each of the statements and determine to the extent each practice is implemented in your own classes, by checking the numerical codes and their meaning below:

1 = Poor

2 = Fair

3 = Satisfactory

4 = Very Satisfactory

5 = Outstanding

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Statements** | **1** | **2** | **3** | **4** | **5** |
| **Pedagogy and Methodology** |  |  |  |  |  |
| 1. Education is seen as connected to all aspects of life, the well-being of learners. |  |  |  |  |  |
| 2. Education is seen as connected to the environment. |  |  |  |  |  |
| 3. Education is seen where methods are used by parents to teach their children how to prepare food or keep house are incorporated in the school. |  |  |  |  |  |
| 4. The situation of indigenous communities is the starting point for developing the potential of learners. |  |  |  |  |  |
| 5. The situation of indigenous communities is the starting point for developing their own views, values, priorities, and aspirations. |  |  |  |  |  |
| 6. Indigenous community members, parents and elders are consulted and involved regarding what their students should, and want to learn- and when and how-as a basis for identifying pedagogical principles. |  |  |  |  |  |
| 7. Indigenous community members, parents, and elders are consulted and involved regarding what their learners should learn- and when and how- as the basis for identifying teaching methods at the start of the program. |  |  |  |  |  |
| 8. Both formal and non-formal, as well as traditional and modern teaching methods are used, based on the study of traditional teaching methods at home. |  |  |  |  |  |
| 9. Both formal and non-formal, as well as traditional and modern, teaching methods are used, based on the study of traditional teaching methods in the community like excursions, to learn about the cultural significance of places. |  |  |  |  |  |
| 10. Both formal and non-formal, as well as traditional and modern, teaching methods are used, based on the study of traditional teaching methods in participation in ceremonies with family members, to learn about rituals, associate songs, dances, astrological observations, etc. |  |  |  |  |  |
| 11. A co-operative, interactive and reflexive teaching-learning process is promoted, based on all aspects of knowledge. |  |  |  |  |  |
| 12. A co-operative, interactive and reflexive teaching-learning process is promoted, based on the experience of learners. |  |  |  |  |  |
|  |  |  |  |  |  |
| **Indigenous Knowledge Systems** |  |  |  |  |  |
| 1. Respect for, and recognition of ownership of indigenous communities as holders of indigenous knowledge. |  |  |  |  |  |
| 2. Respect for, and recognition of ownership of indigenous communities as holders for their specific ways of generating and transmitting knowledge. |  |  |  |  |  |
| 3. Identification and incorporation of relevant local cultural knowledge with the participation and informed consent of indigenous communities and elders in the planning of programs. |  |  |  |  |  |
| 4. Identification and incorporation of relevant local cultural knowledge with the participation and informed consent of indigenous communities and elders in the selection of teaching methods. |  |  |  |  |  |
| 5. Identification and incorporation of relevant local cultural knowledge with the participation and informed consent of indigenous communities and elders in the design of curricula. |  |  |  |  |  |
| 6. Identification and incorporation of relevant local cultural knowledge with the participation and informed consent of indigenous communities and elders in the production of educational material. |  |  |  |  |  |
| 7. Stories, diaries, textbooks, etc., are produced by indigenous teachers. |  |  |  |  |  |
| 8. Non-verbal education materials are produced by indigenous teachers. |  |  |  |  |  |
| 9. The active participation of students and community members who serve to develop a curriculum founded on indigenous people’s cultural identity. |  |  |  |  |  |
| 10. The active participation of students and community members who serve to develop a curriculum founded on indigenous people’s cultural history. |  |  |  |  |  |
|  |  |  |  |  |  |
| **Curriculum Content and Planning** |  |  |  |  |  |
| 1. are designed with the active involvement of indigenous communities |  |  |  |  |  |
| 2. gradually integrate indigenous and Western forms of knowledge |  |  |  |  |  |
| 3. gradually integrate indigenous and Western ways of knowing |  |  |  |  |  |
| 4. are place and culture-based |  |  |  |  |  |
| 5. include seasonal environment curricula |  |  |  |  |  |
| 6. include the use of local flora |  |  |  |  |  |
| 7. include the use of local fauna |  |  |  |  |  |
| 8. reflect the interrelation of subjects |  |  |  |  |  |
| 9. also promote positive attitudes to indigenous languages to promote understanding, tolerance and solidarity between different cultural groups. |  |  |  |  |  |
| 10. also promote positive attitudes to indigenous cultures among the non-indigenous population, to promote understanding, tolerance and solidarity between different cultural groups. |  |  |  |  |  |
|  |  |  |  |  |  |
| **Language of Instruction** |  |  |  |  |  |
| 1. Recognizing that language is not only a tool for communication and knowledge but also a fundamental element of cultural identity. |  |  |  |  |  |
| 2. Teaching and learning indigenous knowledge and curricula through indigenous language and produced material in indigenous languages. |  |  |  |  |  |
| 3. Teaching and learning indigenous knowledge and curricula through the use of locally researched and produced material in indigenous languages. |  |  |  |  |  |
| 4. Teaching and learning of and through the mother tongue in early schooling and literacy instruction. |  |  |  |  |  |
| 5. Teaching and learning of and through the mother tongue moving on to learning other languages in a culturally appropriate and gradual way, according to learners’ capacities and needs. |  |  |  |  |  |
| 6. Involving native speakers of indigenous languages as teachers. |  |  |  |  |  |
| 7. Learning other languages as a bases for cross-cultural understanding and tolerance. |  |  |  |  |  |
|  |  |  |  |  |  |
| **Teacher Training** |  |  |  |  |  |
| 1. familiar with indigenous culture as well as the national culture |  |  |  |  |  |
| 2. familiar with indigenous culture as well as the national language |  |  |  |  |  |
| 3. respectful to indigenous concepts and values regarding education |  |  |  |  |  |
| 4. respectful to indigenous concepts and values who engage in an interactive process with indigenous communities and students |  |  |  |  |  |
| 5. using and creating responsive and experiential teaching methods in cooperation and consultation with indigenous community |  |  |  |  |  |
| 6. using and creating responsive and experiential teaching materials in cooperation and consultation with indigenous community |  |  |  |  |  |
| 7. trained in bilingual teaching methods |  |  |  |  |  |
| 8. trained in language-training methodologies |  |  |  |  |  |
| 9. open to continuous assessment of their work |  |  |  |  |  |
| 10. open to continuous assessment of their teaching practices |  |  |  |  |  |
| 11. trained in teacher-training programs organized in cooperation with indigenous people’s organizations and communities |  |  |  |  |  |
| 12. trained in teacher-training facilities organized in cooperation with indigenous people’s organizations and communities |  |  |  |  |  |
| 13. selected in consultation with indigenous communities |  |  |  |  |  |
|  |  |  |  |  |  |
| **Instructional Materials** |  |  |  |  |  |
| ***The school makes use of and produces innovative and culturally adequate teaching material based on indigenous and Western educational concepts, including:*** |  |  |  |  |  |
| 1. material based on respect for the cultural values and specific relationship with nature of indigenous communities |  |  |  |  |  |
| 2. visual, sensual and practical materials for non-verbal communication |  |  |  |  |  |
| 3. material in indigenous languages and incorporating indigenous knowledge produced with the participation and consent of indigenous communities, teachers, and learners |  |  |  |  |  |
| 4. material that promotes an interactive teaching-learning process |  |  |  |  |  |
| 5. material that provides an accurate picture and fair information on indigenous cultures and ways of life |  |  |  |  |  |
|  |  |  |  |  |  |
| **Assessment and Evaluation** |  |  |  |  |  |
| 1. Learning outcomes (in terms of students’ cultural knowledge, practical skills and understanding and their ability to use these in different contexts) through observation, practical assessment, linking students’ performance at home with that in schools, standardized and norm-based tests, when and where appropriate. |  |  |  |  |  |
| 2. Teaching methods and practices (in terms of cultural responsiveness and effectiveness in promoting student growth, vis-à-vis the national curriculum): through self-assessment. |  |  |  |  |  |
| 3. Teaching methods and practices (in terms of cultural responsiveness and effectiveness in promoting student growth, vis-à-vis the national curriculum): through participatory research by educators. |  |  |  |  |  |
| 4. Teaching methods and practices (in terms of cultural responsiveness and effectiveness in promoting student growth, vis-à-vis the national curriculum): through observation and review by elders and parents. |  |  |  |  |  |
| 5. Teaching methods and practices (in terms of cultural responsiveness and effectiveness in promoting student growth, vis-à-vis the national curriculum): through observation and review by parents. |  |  |  |  |  |
| 6. Teaching methods and practices (in terms of cultural responsiveness and effectiveness in promoting student growth, vis-à-vis the national curriculum): through interviewing students. |  |  |  |  |  |
| 7. Teaching methods and practices (in terms of cultural responsiveness and effectiveness in promoting student growth, vis-à-vis the national curriculum): through comparing their learning activities in school. |  |  |  |  |  |
| 8. Teachers’ performance (in terms of their ability to utilize different instruction strategies and to provide multiple learning opportunities for students, as well as their competence in regard local and national languages, and their cultural knowledge): through self-assessment. |  |  |  |  |  |
| 9. Teachers’ performance (in terms of their ability to utilize different instruction strategies and to provide multiple learning opportunities for students, as well as their competence in regard local and national languages, and their cultural knowledge): through participatory research by teachers themselves. |  |  |  |  |  |
| 10. Teachers’ performance (in terms of their ability to utilize different instruction strategies and to provide multiple learning opportunities for students, as well as their competence in regard local and national languages, and their cultural knowledge): through the involvement of indigenous communities in selecting, advising and assessing teachers. |  |  |  |  |  |
| 11. Teachers’ performance (in terms of their ability to utilize different instruction strategies and to provide multiple learning opportunities for students, as well as their competence in regard local and national languages, and their cultural knowledge): through the provision of opportunities for teachers to expand their cultural knowledge. |  |  |  |  |  |
| 12. Teachers’ performance (in terms of their ability to utilize different instruction strategies and to provide multiple learning opportunities for students, as well as their competence in regard local and national languages, and their cultural knowledge): through the provision of opportunities for teachers to expand their pedagogical skills. |  |  |  |  |  |
| 13. Curriculum (in terms of content, priorities, timing and the interrelation of subjects, based on national as well as cultural standards) through continuous review and redefinition by all educational actors. |  |  |  |  |  |
| 14. Materials (in terms of their accuracy and appropriateness, in relation to the local cultural context and the natural environment): through establishing of review committees in the creation and review of textbooks and other curriculum materials. |  |  |  |  |  |
| 15. Materials (in terms of their accuracy and appropriateness, in relation to the local cultural context and the natural environment): using multiple levels and perspectives in the creation and review of textbooks and other curriculum materials. |  |  |  |  |  |
| 16. Programs as a whole (in terms of the incorporation of indigenous culture and language): through meetings. |  |  |  |  |  |
| 17. Programs as a whole (in terms of the incorporation of indigenous culture and language): through committees. |  |  |  |  |  |
| 18. Programs as a whole (in terms of the incorporation of indigenous culture and language): through informal events to plan, review and redefine programs. |  |  |  |  |  |

Part III. Kindly list three (3) of your best practices in implementing IPEd in your school.

1.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_2.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Part IV - Benefits Derived by IPEd learners

Directions: The following are anticipated effects of IPEd on learners. Kindly check those benefits that you observe among learners. You can check as many as they apply to you.

\_\_\_\_\_\_ IP Learners are more proud of their own culture.

\_\_\_\_\_\_ Non-IP learners are more respectful of classmates belonging to the indigenous groups in the community

\_\_\_\_\_\_ IP learners are more confident to recite in class

\_\_\_\_\_\_ IP learners have become active in class activities.

\_\_\_\_\_\_ IP learners have improved their interpersonal relationships.

\_\_\_\_\_\_ Non-IP learners are more accepting of the differences of IP learners with them

\_\_\_\_\_\_ Others, specify \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_