

Project DEMAR and Students Academic Performance in the Introduction to the Philosophy of the Human Person

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ABSTRACT

The function of education in creating people and society is crucial, and its efficiency depends greatly on the quality of instructional materials used in the teaching-learning process. This study explored the impact of the Project DEMAR Module on the academic performance of Grade 12 students in the Introduction to the Philosophy of the Human Person at Tran National High School during the 2024-2025 school year. The research employed a quasi-experimental design, utilizing pretest and posttest scores to measure the effects of the intervention. The Project DEMAR Module, focused on the introduction to the philosophy of the human person (IPHP), was highly regarded by experts, affirming its high quality in terms of content and delivery. Results indicated that both the control and experimental groups had low mastery levels in the pretest. However, the experimental group, exposed to the module, showed significant improvement in their posttest scores, while the control group had a slight increase. Statistical analysis confirmed a significant difference between the posttest scores of both groups, with the experimental group outperforming the control group. The learning gains in the experimental group were notably higher, further indicating the module's effectiveness. These findings suggest that the Project DEMAR Module positively influenced students' academic performance, particularly in teaching relevant content on Introduction to the Philosophy of Human Person. The study emphasizes the module's potential to enhance student learning outcomes and calls for continuous refinement based on feedback to further improve its educational impact.

Keywords: Academic Performance, Intervention, Learning Enhancement, Project DEMAR, Supplementary Learning Material

INTRODUCTION

The function of education in creating people and society is crucial, and its efficiency depends greatly on the quality of instructional materials used in the teaching-learning process. There is an increasing awareness worldwide about the need for creative and efficient educational resources that actively involve students and improve their academic achievements. The growing focus on student-centered methodologies and the use of technology in education underscores the significance of meticulously crafted teaching materials.

The impact of specialized modules, including philosophy courses, in the United States on students' overall academic success and retention rates is evident. It revealed the positive association between participation in specialized modules and academic success (Johnson & Lee, 2019). However, no literature specifically delves into the effectiveness of specialized learning materials like Project DEMAR on students' performance in philosophy courses, such as Introduction to the Philosophy of Human Person.

The educational environment in the Philippines has undergone continuous modifications to cater to the changing requirements of learners. An area that has received much focus is incorporating specialist topics, such as the Introduction to the Philosophy of the Human Person (IPHP), into the curriculum. The IPHP has a distinct place in the curriculum, intending to cultivate analytical thinking, moral deliberation, and a more profound comprehension of human essence and existence (DepEd, 2013). However, a lack of literature or related studies

anchored on DepEd shows the utilization of specialized learning materials like Project Demar and its effectiveness on students' academic performance in the IPHP.

Introducing educational resources that facilitate learning, such as Project Developed and Enhanced Materials for Activity Reinforcement (DEMAR), offers a means to tackle these difficulties. Project DEMAR aims to enhance conventional teaching approaches by integrating multimedia components, interactive activities, and practical applications to facilitate comprehension and captivate learners while dealing with complex philosophical issues. Although these efforts align with the wider global trends in educational innovation, their precise influence on student's academic performance in the IPHP course needs further examination.

The education literature frequently highlights the significance of culturally responsive teaching methods and integrating student's cultural histories into the curriculum (Gay, 2017). However, regarding the philosophy of education, limited investigation has been done on how localized and contextualized learning materials could boost student involvement, comprehension, and academic attainment while studying the subject Introduction to the Philosophy of the Human Person.

In addition, the effectiveness of philosophical research tends to disregard the varied cultural, social, and historical settings in which philosophical theories emerge and develop. Due to their strong ties with specific cultures, histories, and societal movements, educational materials must address these intricacies comprehensively so as not to impede students' understanding or appreciation of this discipline (Nussbaum, 2017). However, there is a lack of studies on crafting learning resources that cater to various student backgrounds and contextualize philosophical concepts within broader social frameworks.

Hence, this research sought to address these disparities by presenting actual data on Project DEMAR's efficacy in improving students' academic performance in the philosophy field. The results provided useful insights into the educational situation in the Philippines.

This study is anchored on the Constructivist Learning Theory. This theory is rooted in the work of Vygotsky (1978), which emphasizes the social and collaborative nature of learning. In the context of "Project DEMAR," the framework of constructivism suggests that the development of learning materials should encourage interaction, discussion, and reflection among learners. By incorporating collaborative elements and encouraging learners to construct their understanding of the philosophy of the human person, the instructional materials can leverage social interaction to enhance comprehension. This approach aligns with Vygotsky's Zone of Proximal Development (ZPD), promoting challenging and achievable learning with appropriate support.

Another theory that supports this study is the Multimedia Learning Theory. As Mayer (2009) proposed, Multimedia Learning Theory focuses on how the presentation of information using multiple modalities can influence learning outcomes. In the context of "Project DEMAR," incorporating multimedia elements such as visuals, videos, and interactive components into the learning materials can be guided by Mayer's principles. Effective use of multimedia can enhance learners' engagement and retention of philosophical concepts related to the human person. By aligning instructional design with multimedia learning principles, the project can capitalize on the cognitive benefits of dual-channel information processing, improving overall learning outcomes.

Furthermore, this study is anchored on the Cognitive Load Theory (CLT). This theory provides a framework for understanding the cognitive demands imposed on learners during the learning process. Sweller (1988) proposed that effective instructional materials should manage the cognitive load to enhance learning. In the context of "Project DEMAR," which focuses on learning enhancement in the introduction to the Philosophy of the Human Person, applying CLT could involve designing the learning materials to minimize extraneous cognitive load and optimize intrinsic cognitive load. This framework can guide the development of instructional materials that align with learners' cognitive capacities, ultimately improving their understanding and retention of philosophical concepts. In this study, the independent variable includes Project DEMAR, and it was evaluated based on the following indicators: (1) content, (2) mechanics, (3) organization, and (4) overall package. These indicators are based on the SKSU evaluation instrument for instructional materials. At the same time, the dependent variable

is the academic performance of Grade 12 students in the introduction to the Philosophy of the Human Person, specifically in their pretest and posttest.

METHODOLOGY

Research Design

The research is quantitative, specifically a quasi-experimental design, to determine the effects of Project DEMAR on the academic performance of Grade 12 students in the Introduction to the Philosophy of the Human Person at Tran National High School and Purikay National High School during the school year 2024-2025.

The quasi-experimental design allows for comparing the academic performance of Grade 12 students who receive the Project DEMAR intervention with a control group that does not. This comparison is essential for establishing a causal relationship between the intervention and academic outcomes (Cook & Campbell, 1979).

Research Respondents

The researcher assessed all forty-six officially enrolled Grade 12 Academic Strand students at Tran National High School and Purikay National High School during the 2024-2025 academic year. Among these, 23 students from Tran NHS were designated as the control group, while the students from Purikay NHS participated in Project DEMAR. The total population of Grade 12 Academic Strand students at Tran NHS was relatively small, consisting of only 23 students.

Similarly, 23 students from Purikay NHS took part in the study. Researchers often include the entire population in cases involving small populations rather than employ sampling methods (Babbie, 2016). This approach ensures that every individual in the population has an equal opportunity to be included in the study, thereby enhancing the reliability and validity of the findings.

Also, when the population was relatively homogenous in terms of characteristics or conditions relevant to the study, sampling the entire population enhanced the internal validity of the research (Creswell & Creswell, 2017). In this case, including all Grade 12 Academic Strand students ensured that the study's findings were directly applicable to this specific group. Moreover, six (6) AB Philosophy graduates evaluated the Project DEMAR in terms of its content, mechanics, organization, and overall package.

Data Gathering Instruments

The research methodology outlined in the statement involved a sequential process for evaluating and implementing the Project DEMAR Module, followed by assessing its impact on Grade 12 Academic Strand students' academic performance.

The first step involved using an evaluation tool adopted from Sultan Kudarat State University-Instructional Materials Development Committee (IMDC) to validate the Project DEMAR Module. This process was crucial for ensuring that the educational material was reliable, accurate, and aligned with the learning objectives of the IPHP course. Validation tools included expert reviews, educator feedback, and alignment checks with curriculum standards. The researcher aimed to enhance the module's quality and effectiveness in facilitating learning by subjecting it to rigorous validation.

Once the Project DEMAR Module was successfully validated, it was implemented in the experiment during the classes of Grade 12 students. This phase involved integrating the module into the regular classroom instruction. The validated module was expected to serve as a supplemental educational resource, enriching the learning experience and providing students with additional resources or reading materials, and incorporate individual assignments or reflective journals to grasp the philosophical concepts introduced in the course. The experiment aimed to observe how using the validated DEMAR Module influenced students' engagement and understanding during the learning process.

The researcher used a pretest and posttest approach to measure the impact of the Project DEMAR Module on students' academic performance. The pretest was administered before the experiment began to establish a baseline understanding of students' knowledge of the subject matter. Following the implementation of the Project DEMAR Module, a posttest was conducted to assess any changes in students' academic performance. Comparing the pretest and posttest results helped gauge the effectiveness of the educational intervention.

This research methodology followed a logical sequence: validate the DEMAR Module, implement it in the experiment, and assess its impact on academic performance using pretest and posttest measurements. This approach ensured a systematic and evidence-based evaluation of the Project DEMAR Module's influence on the learning outcomes of Grade 12 academic track students in the Introduction to the Philosophy of Human Person course.

Data Gathering Procedure

The research began after permission was granted by the SKSU Graduate School Dean. The researcher planned to investigate various approaches to address the study issue successfully. Firstly, a formal request letter was drafted and sent to the Sultan Kudarat Schools Division Superintendent, asking permission to conduct research during official hours at Tran National High School.

An additional correspondence was sent to the principal and senior high school coordinator. This letter sought authority to engage a module and use his official time for the trial. Furthermore, the principal was consulted for the scheduling of lectures, dissemination of surveys, and implementation of assessments during school hours.

The module exam was an initial assessment to evaluate the student's readiness for the final examination. Afterward, the researcher began the experiment by delivering pretests to the control and experimental groups. To ensure uniformity, the K to 12 Assessment Tool (adapted from DepEd, DO 31, s. 2020) was used for both the pre-and post-tests.

After collecting the required forms and data, an analysis and assessment were conducted to obtain the results. The specified method, shown in Figure 3, utilizing a waterfall approach, provided clear and sequential guidance for the stages to be followed. Ultimately, the gathered data was subjected to thorough analysis, compilation, and interpretation to provide dependable outcomes, findings, and suggestions.

Throughout the data-gathering process, the researcher adhered to KARUGASIK, the official research journal of SKSU, and the protocols and other considerations in conducting research.

Statistical Treatment

The collected data was compiled, organized, evaluated, and analyzed upon the study's conclusion. The issue statement in Chapter 1 applied the subsequent statistical approaches.

Initially, the mean was used to ascertain the average module score as evaluated by the experts and the participants in their pretest and posttest. Additionally, a t-test was employed to determine whether there was a statistically significant difference in the scores between the students' pretest and posttest performance after utilizing the Project DEMAR Module.

Assembling, tabulating, assessing, and interpreting gathered data was fundamental in conducting research (Field, 2013). Following data collection, analysis methods were utilized to derive insights and conclusions. Statistical techniques such as calculating the mean and employing the T-test were crucial, particularly in comparing data between groups and assessing the significance of observed differences (Hair et al., 2019). The five-point Likert scale was used to measure the degree of relevance of the Project DEMAR Module in teaching the Introduction to the Philosophy of Human Person, as evaluated by the expert.

RESULTS AND ANALYSIS

This chapter presents the analysis and interpretation of the data relevant to the study.

Quality of the Project DEMAR Module in teaching the IPHP

Tables 1 to 4 present the evaluation of the Project DEMAR Module in teaching The Introduction to the Philosophy of the Human Person (IPHP) as assessed by experts. The module was evaluated based on four key criteria: Content, mechanics, organization, and overall package.

These aspects determine the module's effectiveness in delivering culturally relevant and structured learning experiences for the learners. The evaluation provides insights into the module's strengths and areas for improvement, ensuring its alignment with educational standards and the needs of Indigenous communities.

The evaluation of the Project DEMAR Module in teaching the IPHP in terms of content reveals an overall mean of 4.50 (SD = 0.55), indicating a Very High Extent of quality. The result suggests that the module is well-structured, effectively designed, and adheres to educational standards.

Table 1. Quality of the Project DEMAR Module in Teaching the IPHP in Terms of Content

INDICATORS		Mean Rating	SD	Qualitative Description
1.	Coverage of the lesson	4.50	0.55	Very High Extent
2.	Appropriateness of the activities/exercises	4.33	0.52	Very High Extent
3.	Appropriateness of the language used	4.50	0.55	Very High Extent
4.	Content is appropriate to the target age level	4.50	0.84	Very High Extent
5.	Content is culture-sensitive	4.50	0.55	Very High Extent
6	Content is gender sensitive	4.83	0.41	Very High Extent
7	Exercises are following the Filipino Values	4.67	0.52	Very High Extent
8	Illustration and content are by ethical standards	4.50	0.84	Very High Extent
9	Explanations are self-explanatory	4.17	0.75	High Extent
10	Instructions are clear	4.50	0.61	Very High Extent
Mean		4.50	0.55	Very High Extent

Among the indicators, content sensitivity to gender received the highest rating ($M = 4.83$, $SD = 0.41$), demonstrating the module's strong commitment to inclusivity and equitable representation. Similarly, exercises aligning with Filipino values ($M = 4.67$, $SD = 0.52$) and clear instructions ($M = 4.50$, $SD = 0.61$) reflect the module's effectiveness in promoting ethical, culturally responsive learning experiences. Additionally, the coverage of the lesson, language appropriateness, and age relevance ($M = 4.50$, $SD = 0.55$ - 0.84) affirm the module's suitability for its intended learners. Despite these strengths, the criterion for self-explanatory explanations received the lowest score ($M = 4.17$, $SD = 0.75$), though still rated at a High Extent level. The result suggests room for improvement in simplifying content so learners can have better independent comprehension.

These findings align with Tomlinson (2021), who emphasized that well-structured instructional materials enhance student engagement and comprehension when culturally and developmentally appropriate. Similarly, Reyes and Santiago (2020) highlighted that gender-sensitive and values-based content fosters inclusivity and ethical reasoning, particularly in philosophy and humanities education.

The Project DEMAR Module demonstrates strong educational quality, effectively incorporating mechanics supporting diverse learners. However, refining explanations for enhanced learner autonomy could further improve its effectiveness.

Table 2 entails the evaluation of the Project DEMAR Module in teaching Introduction to the Philosophy of the Human Person (IPHP) in terms of mechanics, reveals an overall Very High Extent rating ($M = 4.37$, $SD = 0.55$), indicating that the module is well-structured and user-friendly for learners. The highest-rated indicators include font size readability ($M = 4.83$, $SD = 0.41$), ensuring accessibility for diverse learners, and clear instructions per activity ($M = 4.67$, $SD = 0.52$), which supports ease of navigation through the module. Similarly, the step-by-step procedure ($M = 4.50$, $SD = 0.55$) and consideration of individual differences ($M = 4.50$, $SD = 0.55$) further enhance the module's effectiveness in accommodating various learning paces and styles.

Table 2. Quality of the Project DEMAR Module in Teaching the IPHP in Terms of Mechanics

INDICATORS		Mean Rating	SD	Qualitative Description
1.	General Instructions is user-friendly	4.17	0.75	High Extent
2.	Examples are coherent	4.17	0.41	High Extent
3.	Font size is readable	4.83	0.41	Very High Extent
4.	Step-by-step procedure is in order	4.50	0.55	Very High Extent
5.	Arrangement of parts	4.33	0.52	Very High Extent
6	Clarity of image/pictures/graphs	4.33	0.52	Very High Extent
7	Individual differences are considered per activity	4.50	0.55	Very High Extent
8	Weakness of target users is considered	3.83	0.75	High Extent
9	Development of one's creativity and critical thinking (assets) are emphasized	4.33	0.52	Very High Extent
10	Clear Instructions per activity	4.67	0.52	Very High Extent
Mean		4.37	0.55	Very High Extent

Additionally, the arrangement of parts ($M = 4.33$, $SD = 0.52$) and clarity of images, pictures, and graphs ($M = 4.33$, $SD = 0.52$) contribute to the module's coherence and visual appeal. However, the indicator on considering target users' weaknesses ($M = 3.83$, $SD = 0.75$) received the lowest rating, suggesting a need for further enhancement in addressing learners' challenges.

These findings align with the study of Hernandez and Gonzalez (2020), which emphasized that well-organized instructional materials with clear mechanics improve student engagement and comprehension. Similarly, Lopez et al. (2021) highlighted that effective module design, particularly clarity and structure, significantly enhances students' critical thinking and creativity. Given these insights, continuous refinement of the module, particularly in supporting struggling learners, is essential to optimize its effectiveness further.

Table 3 Quality of the Project DEMAR Module in Teaching the IPHP in Terms of **Organization**

INDICATORS		Mean Rating	SD	Qualitative Description
1.	Sequence of Topics (Simple to Complex)	4.50	0.55	Very High Extent
2.	Order of the presentation of the lesson	4.50	0.55	Very High Extent
3.	Arrangement of the basic parts	4.50	0.55	Very High Extent
4.	Illustrations Used	4.50	0.55	Very High Extent

5.	Spacing of every part	4.33	0.52	Very High Extent
6	Harmony of font styles	4.33	0.52	Very High Extent
7	Uniformity of the layout	4.67	0.52	Very High Extent
8	Technical Description (Objective per lesson)	4.50	0.55	Very High Extent
9	Technical term used	4.33	0.52	Very High Extent
10	Concepts of every lesson	4.50	0.55	Very High Extent
Mean		4.47	0.54	Very High Extent

The data in Table 3 reveal that the Project DEMAR Module in teaching the Introduction to the Philosophy of the Human Person was rated at a Very High Extent in terms of organization, with an overall mean of 4.47 (SD = 0.54). This indicates that the module's structure is well-organized, ensuring logical sequencing, clarity, and coherence in lesson presentation.

Among the indicators, the uniformity of the layout received the highest rating ($M = 4.67$, $SD = 0.52$), emphasizing the module's consistent visual structure, which contributes to readability and user engagement. Similarly, the sequence of topics, order of lesson presentation, arrangement of basic parts, and illustrations received high ratings ($M = 4.50$, $SD = 0.55$), signifying that lessons progress smoothly from simple to complex concepts. The result aligns with Merrill's (2020) First Principles of Instruction, emphasizing that well-structured learning materials facilitate deeper understanding and knowledge retention.

Moreover, content spacing ($M = 4.33$, $SD = 0.52$) and harmony of font styles ($M = 4.33$, $SD = 0.52$) were also rated very high, demonstrating the module's adherence to effective design principles and ensuring ease of reading and comprehension. Mayer's Cognitive Theory of Multimedia Learning (2021) reinforces the importance of well-organized instructional materials, highlighting that clear and structured content reduces cognitive load, improving learners' ability to absorb and apply knowledge effectively.

The results suggest that the Project DEMAR Module is well-structured and visually cohesive, contributing to an efficient and engaging learning experience. However, continuous refinement based on expert feedback and student reception can enhance usability and effectiveness.

Table 4 Quality of the Project DEMAR Module in Teaching the IPHP in terms of **Overall package**

INDICATORS		Mean Rating	SD	Qualitative Description
1.	Styles of letter of fonts	4.67	0.52	Very High Extent
2.	Appropriateness of binding techniques used	5.00	0.00	Very High Extent
3.	Paper sized used	5.00	0.00	Very High Extent
4.	Paper quality used	4.83	0.41	Very High Extent
5.	Color combinations	5.00	0.00	Very High Extent
6	Durability	5.00	0.00	Very High Extent
7	Handiness	4.50	0.55	Very High Extent
8	Appropriateness of cover design	4.00	0.89	Very High Extent
9	Usability	4.50	0.55	Very High Extent

10	Labels and Captions	4.50	0.55	Very High Extent
Mean		4.70	0.35	Very High Extent

The evaluation of the Project DEMAR Module in teaching the Introduction to the Philosophy of Human Person (IPHP) in terms of its overall package received a Very High Extent rating across all indicators, with a mean score of 4.70 (SD = 0.35). This suggests that the module is highly quality, effectively designed, and appropriate for instructional use.

Among the highest-rated indicators, binding techniques, paper size, color combinations, and durability all received a perfect mean score of 5.00 (SD = 0.00), indicating unanimous expert approval. The result highlights the module's structural integrity and aesthetic appeal, contributing to its longevity and ease of use. The paper quality (M = 4.83, SD = 0.41) was also highly rated, ensuring readability and durability, essential for long-term use in educational settings.

Meanwhile, handiness, usability, and labels/captions received a mean score of 4.50 (SD = 0.55), emphasizing the module's practicality and accessibility for both learners and educators. The lowest-rated aspect was the appropriateness of cover design (M = 4.00, SD = 0.89), suggesting a potential area for improvement to better align the module's visual appeal with its educational content.

The results align with Tomlinson (2018), who emphasized that high-quality instructional materials must be visually appealing, durable, and user-friendly to enhance student engagement and learning outcomes. Similarly, Shulman (2020) highlighted that a well-structured module with clear formatting, appropriate binding, and high readability increases learner motivation and retention.

Overall, the findings indicate that the Project DEMAR Module meets high-quality standards. Only minor refinements are needed in cover design and user-friendliness to enhance further its effectiveness in teaching IPHP.

The findings in Table 5 indicate that the Project DEMAR Module's teaching of the Introduction to the Philosophy of the Human Person (IPHP) is of Very High Quality across all evaluated components. The overall mean score of 4.51 (SD = 0.51) suggests that experts highly regard the module's content, mechanics, organization, and overall package, affirming its effectiveness in delivering culturally relevant education.

Table 5. Summary of the Quality of Project DEMAR

Components		Mean Rating	SD	Qualitative Description
1.	Content	4.50	0.61	Very High Extent
2.	Mechanics	4.37	0.55	Very High Extent
3.	Organization	4.47	0.54	Very High Extent
4.	Overall Package	4.70	0.35	Very High Extent
Overall Mean		4.51	0.51	Very High Extent

Among the components, the overall package received the highest rating (M = 4.70, SD = 0.35), highlighting the module's well-structured and comprehensive design, which aligns with best practices in instructional material development. According to Tomlinson (2019), well-organized educational resources improve students' engagement and knowledge retention by ensuring clarity and coherence in content delivery.

Similarly, the module's content received a high rating ($M = 4.50$, $SD = 0.61$), reflecting its strong alignment with Indigenous knowledge systems and health practices. The result aligns with the study by Gay (2020), which emphasized that culturally responsive curriculum materials significantly enhance learning outcomes by making lessons more relatable and meaningful.

The mechanics component, which evaluates grammar, language use, and instructional clarity, also received a Very High Extent Rating ($M = 4.37$, $SD = 0.55$), indicating that the module adheres to high linguistic and instructional standards. Additionally, the module's organization ($M = 4.47$, $SD = 0.54$) suggests that its logical sequencing and structure facilitate ease of understanding, ensuring learners can effectively engage with the material.

These results demonstrate that Project DEMAR is a well-developed instructional material that meets high-quality educational standards. However, continuous refinement, incorporating teacher and student feedback, will enhance its effectiveness in teaching the Introduction to the Philosophy of the Human Person.

Table 6. Level of the Student's Academic Performance in their Pre-test and Post-test

Groups	Pre-test			Post-test		
	MPS	SD	Qualitative Description	MPS	SD	Qualitative Description
Control	27.57%	3.64	Low Mastery	33.65%	3.31	Low Mastery
Experimental	28.26%	2.82	Low Mastery	40.35%	5.10	Average Mastery

Table 6 presents students' academic performance in the control and experimental groups based on their pre-test and post-test results. The Mean Percentage Score (MPS) and Standard Deviation (SD) indicate the student's level of mastery before and after the intervention.

In the pre-test, both groups exhibited Low Mastery, with the control group scoring 27.57% ($SD = 3.64$) and the experimental group achieving 28.84% ($SD = 2.37$). The result suggests that students in both groups had a limited understanding of the subject matter before the intervention. However, in the post-test, the control group slightly improved, increasing to 33.65% ($SD = 3.31$) while remaining in the Low Mastery category. In contrast, the experimental group significantly increased to 40.35% ($SD = 5.10$), attaining Average Mastery. The result indicates that the intervention applied to the experimental group positively impacted students' academic performance.

These findings align with García and Cain's (2021) study, which emphasized that contextualized instructional materials significantly enhance student learning outcomes by making content more relatable and engaging. Similarly, Flores and Savage (2020) found that integrating culturally responsive teaching strategies improves comprehension and retention among students from diverse backgrounds. The notable improvement in the experimental group suggests that Project DEMAR effectively supports learning by incorporating culturally relevant elements, which may have contributed to better academic performance.

Overall, the results highlight the importance of innovative, culturally responsive educational interventions in improving student mastery. Future research should explore long-term impacts and potential refinements to enhance student learning outcomes.

Table 7. Level of the student's academic performance in their final grades in the Introduction to the Philosophy of Human Person

Groups	Final Grades	SD	Description
Control	79%	16.34	Fairly Satisfactory
Experimental	82%	14.56	Satisfactory

Table 7 compares students' final IPHP grades, comparing the control and experimental groups. The control group obtained an average final grade of 79% with a standard deviation of 16.34, which falls under the Fairly Satisfactory category. Meanwhile, the experimental group achieved a higher average final grade of 82% with a lower standard deviation of 14.56, classified as Satisfactory.

The results suggest that the experimental group outperformed the control group, indicating the effectiveness of the intervention used in the study. The experimental group's higher mean score and lower standard deviation demonstrate improved academic performance and consistency in students' learning outcomes. The result supports previous findings by Tan et al. (2021), who emphasized that well-structured instructional materials significantly enhance student comprehension and engagement, leading to improved performance.

Furthermore, the findings align with García & Molina (2020), who found that interactive and culturally relevant teaching approaches lead to higher retention rates and deeper student understanding. The satisfactory performance of the experimental group may be attributed to the integration of meaningful learning experiences that align with students' cultural backgrounds and cognitive development.

Overall, the study highlights the importance of innovative instructional strategies in enhancing student learning. The improvement in academic performance among the experimental group signifies the need for continuous development of effective teaching methodologies, particularly in subjects like philosophy, where critical thinking and contextual understanding are essential.

Table 8. Results of t-test Analysis between the Posttest and Pre-test Scores of the Control Group

Tests	Mean	SD	df	t-stat	p-value
Posttest	16.82	3.31	22	3.41	0.0025
Pretest	13.69	3.54			

The T-test analysis comparing the pretest and posttest scores of the control group revealed a statistically significant improvement in student performance after the intervention. The mean posttest score ($M = 16.82$, $SD = 3.31$) was notably higher than the mean pretest score ($M = 13.69$, $SD = 3.54$). The t-value ($t = 3.41$, $df = 22$) and p-value ($p = 0.0025$) indicate a highly significant difference, confirming that the intervention had a meaningful impact on student learning.

These findings align with previous research emphasizing the effectiveness of structured instructional approaches in enhancing student learning outcomes. According to Hattie (2019), interventions that involve explicit teaching strategies significantly improve student performance, particularly when they provide clear learning objectives and scaffolded instruction. Additionally, Clark and Mayer (2021) highlight that interactive and well-structured learning modules contribute to better knowledge retention and conceptual understanding. The notable improvement in posttest scores suggests that the applied teaching strategies effectively fostered deeper comprehension of the Introduction to the Philosophy of the Human Person (IPHP).

Furthermore, the results emphasize the importance of continuous instructional support and culturally relevant pedagogy in education. The significant increase in scores reflects the role of contextualized learning materials and active engagement strategies in improving academic performance, as suggested by Gay (2020). Ensuring teaching methodologies align with students' cultural backgrounds can lead to more meaningful learning experiences.

Table 9. Results of t-test Analysis between the Posttest and Pre-test Scores of the Experimental Group

Tests	Mean	SD	df	t-stat	p-value
Posttest	19.87	5.10	22	4.66	0.0001
Pretest	14.43	2.82			

The results of the t-test analysis between the post-test and pretest scores of the experimental group revealed a statistically significant difference, with a t-statistic of 4.66 and a p-value of 0.0001. The result suggests that the intervention positively impacted the experimental group's performance, as indicated by the increase in the mean posttest score (19.87) compared to the pretest score (14.43). The standard deviations for both the pretest (2.82) and posttest (5.10) suggest that while there was variability in the individual scores, the intervention still led to a measurable improvement in the overall performance of the group.

The significant improvement in the post-test scores aligns with findings from other studies that emphasize the effectiveness of targeted interventions in enhancing learning outcomes. For instance, research by Garcia and Rodriguez (2021) found that structured educational interventions significantly improved students' academic performance, particularly when integrating culturally relevant content. Similarly, a study by Smith et al. (2020) demonstrated that tailored educational programs, particularly those focused on culturally responsive teaching, yielded notable improvements in academic achievement and student engagement. These findings further support the conclusion that the intervention in this study effectively contributed to improved learning outcomes among the participants.

Table 10. Results of t-test Analysis between the Learning Gains of the Experimental and Control Group

Groups	Mean	SD	df	t-stat	p-value
Exp Group	6.04	4.89	22	2.12	0.0395
Con Group	3.13	4.38			

The results from the t-test analysis comparing the learning gains of the Experimental and Control groups show a significant difference, with the experimental group exhibiting a higher mean score ($M = 6.04$, $SD = 4.89$) compared to the control group ($M = 3.13$, $SD = 4.38$). The calculated t-statistic of 2.12 and a p-value of 0.0395 indicate that the observed difference in learning gains is statistically significant, suggesting that the experimental intervention positively affected student performance.

These findings are consistent with previous research highlighting the effectiveness of innovative teaching methods in enhancing student outcomes. For instance, a study by Alvarez et al. (2021) found that using culturally relevant and context-based teaching interventions significantly improved learners' academic achievement, particularly in settings with diverse cultural backgrounds. Similarly, Gonzales et al. (2022) emphasized that integrating community-based approaches and culturally responsive teaching strategies led to greater student engagement and improved learning outcomes. The current study supports these findings, showing that targeted interventions tailored to the specific needs of Indigenous students contribute significantly to enhancing their educational performance.

DISCUSSION

This chapter presents the summary, conclusions, and recommendations of the study.

Summary

The function of education in creating people and society is crucial, and its efficiency depends greatly on the quality of instructional materials used in the teaching-learning process. The research is quantitative, specifically a quasi-experimental design, to determine the effects of Project DEMAR on the academic performance of Grade 12 students in the IPHP at Tran NHS as the control group and Purikay National High School as the experimental group during the school year 2024-2025.

This research was conducted at Tran National High School and Purikay National High School, Sultan Kudarat Division, during the school year 2024-2025. Mean was used to ascertain the average score of the module as evaluated by the experts and of the participants in their pretest and posttest. A T-test was employed to determine whether there was a statistically significant difference in the scores between the students' pretest and post-test

performance after utilizing the Project DEMAR Module. Based on the results, the Project DEMAR Module in teaching the IPHP was of very high quality across all evaluated components. Content experts highly regard the module's content, mechanics, organization, and overall package, affirming its effectiveness in delivering culturally relevant education. These Project DEMAR is a well-developed instructional material that meets high-quality educational standards.

Further, in the pre-test, both groups exhibited Low Mastery, with the control group scoring 27.57% (SD = 3.64) and the experimental group achieving 28.26% (SD = 4.26). Before the intervention, students in both groups had a limited understanding of the subject matter. However, in the post-test, the control group slightly improved, increasing to 33.65% (SD = 3.31) while remaining in the Low Mastery category. In contrast, the experimental group reached 40.35% (SD = 4.47), attaining Average Mastery. The intervention applied to the experimental group positively impacted students' academic performance.

Also, the experimental group outperformed the control group, indicating the effectiveness of the intervention used in the study. The experimental group's higher mean score and lower standard deviation demonstrate improved academic performance and consistency in students' learning outcomes. The t-test analysis comparing the pretest and posttest scores of the control group revealed a statistically significant improvement in student performance after the intervention. The mean posttest score ($M = 16.82$, $SD = 3.31$) was notably higher than the mean pretest score ($M = 13.69$, $SD = 3.54$). The t-value ($t = 4.41$, $df = 22$) and p-value ($p = 0.0025$) indicated a highly significant difference, confirming that the intervention had a meaningful impact on student learning.

Moreover, the results of the t-test analysis between the post-test and pretest scores of the experimental group revealed a statistically significant difference, with a t-statistic of 4.66 and a p-value of 0.0001. The intervention positively impacted the experimental group's performance, as indicated by the increase in the mean posttest score (19.87) compared to the pretest score (14.43). The standard deviations for both the pretest (2.82) and posttest (5.10) suggest that while there was variability in the individual scores, the intervention still led to a measurable improvement in the overall performance of the group.

Finally, the results from the t-test analysis comparing the learning gains of the experimental and control groups show a significant difference, with the experimental group exhibiting a higher mean score ($M = 6.04$, $SD = 4.89$) compared to the control group ($M = 3.13$, $SD = 4.38$). The calculated t-statistic of 2.12 and a p-value of 0.040 indicate that the observed difference in learning gains is statistically significant, suggesting that the experimental intervention positively affected student performance.

CONCLUSIONS

In the light of the findings of this study, the following conclusions were drawn:

The high-quality ratings of the Project DEMAR Module indicate that it effectively delivers relevant education in the Introduction to the Philosophy of the Human Person class, meeting high educational standards. Continuous refinement based on feedback will further improve its effectiveness in teaching the subject.

The significant improvement in the experimental group's post-test performance compared to the control group highlights the intervention's positive effect on student learning and indicates its potential for enhancing academic performance in IPHP.

The statistical analyses, including t-tests, confirm that the control and experimental groups showed significant improvements in their post-test scores, with the experimental group achieving a higher mean gain. It emphasizes the intervention's success in improving student outcomes.

The experimental group's consistent improvement and lower standard deviation suggest that the intervention had a uniform and positive impact on students' learning, contributing to more reliable academic progress than the control group.

RECOMMENDATIONS

In the light of the findings and conclusion of the research study, the following are recommended:

1. For the Department of Education (DepEd). To enhance student engagement and learning outcome, DepEd should consider integrating Project DEMAR across more schools. This approach aligns with the need for teaching materials that reflect students' backgrounds, thereby enhancing engagement and learning outcomes. Additionally, prioritizing ongoing professional development programs for teachers is essential. Focusing on the integration of the Philosophy of the Human Person into the curriculum ensures that educators are well-equipped to deliver content effectively, fostering a deeper understanding among students.
2. For Curriculum Developers. Continuous refinement and adaptation of modules like Project DEMAR are crucial. Incorporating feedback from both teachers and students ensures that the material evolves according to changing student needs and cultural contexts. Emphasizing interactive and participatory, such as project-based learning and field activities, can further enhance students' engagement and understanding of the Introduction to the Philosophy of the Human Person.
3. For the Teachers. Educators may consider adopting Project DEMAR or similar culturally responsive materials to bridge the gap between students' backgrounds and academics, thereby improving learning outcomes. However, it is important to offer a balance between interactive methods and more traditional learning approaches to cater to various learning styles. Teachers can provide additional resources, such as structured reading materials or summaries, for students who need more clarity on philosophical concepts. Incorporating individual assignments or reflective journal could also help students who are less comfortable in group discussions engage with material at their own pace. Additionally, fostering an inclusive environment where all students feel encouraged to participate can help avoid unequal involvement, perhaps through small group work or peer mentoring. Regular feedback can also ensure that all students are on track with their undersnading.
4. For Students and Parents. Actively participating in the educational process can significantly enhance learning outcomes. Parents may encourage their children to engage discussions at home, fostering a connection between their personal experiences and academic content. Students are encouraged to voice their thoughts and feedback regarding the curriculum, as this can help educators understand diverse perspectives and adapt teaching methods accordingly. Building a supportive home environment that values education and open dialogue can empower students to take ownership of their learning journey, ultimately leading to improved academic performance.
5. For Future Researchers. Exploring additional culturally responsive teaching methods and materials in various subject areas can provide valuable insights. Comparing the efficacy of the different interventions across various regions could help establish best practices in integrating culturally responsive teaching materials into mainstream education. Conducting longitudinal studies to assess the long-term impacts of responsive teaching materials like Project DEMAR on students' overall academic performance would provide insights into the lasting benefits of such approaches in fostering inclusive education.

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