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Students' Acceptability of Modular Distance Learning and their Academic Performance

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Abstract

Aim: This study determined the level of acceptability of modular distance learning and the academic performance level of senior high school students in Libmanan District.
Methodology: This study used quantitative descriptive-evaluative correlational method. Furthermore, a modified survey questionnaire was used to obtain the needed data. There were 466 senior high school students who served as respondents from the nine secondary schools in Libmanan District.
Results: The level of acceptability of students on the modular distance learning program along the following elements are: study environment (2.90) which was interpreted as "high"; technological elements (2.71) which was interpreted as "high"; independent learning (2.74) which was interpreted as "high""; parental support (2.49) which was interpreted as "low"; and self-learning modules (2.75) which was interpreted as "high". The performance level of students across different learning areas during the implementation of modular distance learning is 87.28 which was interpreted as "very satisfactory." In terms of the significant differences among the acceptability level of the different elements in areas of modular distance learning across school, it was found that there are no significant differences on the different schools (F= 0.5957, $F_{.05}$=2.27) and five areas (F-comp=2.2688, $F_{.05}$=2.69). In terms of the significant differences among the academic performance of the different learning areas of modular distance learning across school, it was found that there are no significant differences in the different subjects (F-comp=7.2383, $F_{.05}$ =2.261). Furthermore, it was also found that there is significant difference between the performance of the students in the nine schools (f=6.1230, $F_{.05}$ =2.674). In terms of the relationship between the acceptability level and the academic performance of the students, it was found that: Physical science (r=0.8953); Statistics and probability (r=0.6330); Pagbasa at Pagsusuri ng Maikling Teksto tungo sa Pananaliksik (r=0.7279); and Reading and Writing (r=0.3619) was significant to the level of acceptability of Modular Distance Learning along its five areas. On the other hand, Physical Education (r=0.2376) was not significant to the acceptability level of Modular Distance Learning along its five areas.
Conclusion: It was found that the level of acceptability on MDL among SHS students was "highly accepted" in study environment, technological elements, independent learning, and self-learning modules but has low acceptability in terms of parental support. In terms of the overall academic performance level of the students, it was found that all of the subject areas were interpreted as "Very Satisfactory": Physical Science; Statistics and Probability, Pagbasa at Pagsusuri ng Maikling Teksto Tungo sa Pananaliksik, Reading and Writing; and Physical Education. Furthermore, it was observed that there has no significant differences in the acceptability levels of different elements of MDL across schools and five areas. There were also no significant differences in the academic performance of the different learning areas of modular distance learning across schools. Lastly, it was concluded that the five subject areas were significantly related to the level of acceptability of the MDL and was significant to Physical Science, Statistics and probability, Pagbasa at Pagsusuri, and Reading and Writing, however, not significant to Physical Education and Health.

Keywords: Modular Distance Learning, Self-Learning Modules, Students' performance, level of acceptability

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INTRODUCTION

Distance learning was already exhausted for its intended purpose even before the pandemic (Alferez, et al., 2023), and it became more helpful to the Department of Education (DepEd), especially for the continuity of basic education among learners. One of the forms of distance learning is Modular Distance Learning (MDL). It is one of the learning modalities adopted by the DepEd to help learners continue their basic education, especially during the pandemic (Muńoz & Sanchez, 2023; Salendab, 2023; Sanchez, 2020a; Sanchez, Sanchez & Sanchez, 2023). Self-Learning Module is a material used to substitute the face-to-face approach. It is also considered a distance learning approach because students can work independently at their convenience with their lessons while away from school (Salendab, 2021; Salendab & Akmad, 2023).

According to the International Commission on the Futures of Education by UNESCO (2020), future societies may provide and encourage learning in various settings outside of formal school, both planned and unplanned. Education is expected to happen not only in the classrooms but in different spaces that can be an avenue for more educational opportunities in any form due to culture, work, social media, and digital. Schools are essential in the education of learners, and to effect profound change, the organizing principles of the future school should center on inclusion and collaboration (Amihan & Sanchez, 2023; Carvajal & Sanchez, 2023; Salendab & Cogo, 2022). Schools design like curriculum design, organization and learning activities must evolve.

Education is a basic right of every child. This was strengthened through the UN Convention on the Rights of the Child. According to Martinez (2016), one of the major concerns is that State Parties should ensure that various forms of secondary education are available and accessible to all children. However, some still fail to acquire education, like basic education. Worldwide, more than 120 million children and adolescents cannot continue their studies, and global progress in education has "left behind" millions of children and young people. More children and adolescents are at risk of dropping out, and many in school are subjected to unsuitable learning conditions.

In a report, 4 million Filipino students could not enroll for the school year 2020-2021. Also, 2017 Philippine Statistics Authority (PSA) data shows that, 9 percent or 3.53 million of the estimated 39.2 Filipinos aged 6 to 24 were considered OSYs or Out of School Youth. The PSA data indicated that the most common reasons among OSYs for not attending school were marriage or family matters, lack of personal interest, and high cost of education or financial concerns (Philippine News Agency, 2021).

To respond to the call to provide quality, accessible and relevant learning to all children, the Department of Education also, through (DepEd Order No. 54 s. 2012) which is the policy guidelines on the implementation of Alternative Delivery Modes (ADMs) was offered. And with (DepEd Order No. 21 s. 2019), the policy guidelines on the K to 12 Basic Education program, the Flexible Learning Options which are the Alternative Delivery Modes (ADM) and the Alternative Learning System (ALS) was offered. A policy guideline for providing learning resources (DepEd Order No. 18 s. 2020), the Self Learning Modules or SLMs are one of the learning resources considered to be the" ideal learning resource" in remote learning.

The modular distance learning approach, using Self-Learning Modules, was adopted in secondary schools in the Libmanan district from the school year 2020-2021 and 2021-2022, respectively, considering the locality and context of learners. The senior high school students were one of those who studied under MDL. When the MDL was implemented, different views and opinions surfaced from parents, educators and students. And various studies were done on its implementation, effectiveness, problems, difficulties and challenges encountered, and of course, its benefits to the students. However, one concern is its acceptability and effect on senior high school students. Was the MDL approach acceptable for teaching and learning among senior high school students? Is it time to adapt MDL as a teaching method in high school?

The senior high school students under the modular distance learning approach may have varied experiences during its two school years of implementation. So it is the purpose of this study to visualize the acceptability of MDL among senior high school students in the Libmanan district. This study sought to understand how students perceive the MDL as it was implemented for the past two school years and to inquire carefully whether it has to be reimplemented and if it may be reimplemented, to suggest possible interventions and improvement in its implementation in the future to better serve and cater the need of those who cannot afford to attend the daily reporting in schools.

Education to be inclusive may be given to those willing to continue their secondary education. However, they do not have available time like that of the regular students going to school daily for varied reasons that may hinder them from attending school. With all these considerations, this study is conceived. This study is focused on

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determining the level of acceptability to modular distance learning through the experiences of senior high school students in modular distance learning and its relationship with the academic performance among senior high school students in Libmanan, Camarines Sur.

Research Questions

The study determined the level of acceptability of modular distance learning and the academic performance of senior high school students in the Libmanan district.

Specifically, it sought to answer the following questions:

1. What is the level of acceptability of students in the modular distance learning program along the following elements:
    a. Study environment
    b. Technological aspect
    c. Independent learning
    d. Parental Support
    e. Self- Learning Modules
2. What is the academic performance level of students across the different learning areas?
3. Are there significant differences in the acceptability levels of the modular distance learning program across elements and among schools?
4. Are there significant differences in the academic performance of students across learning areas and among schools?
5. Is there a significant relationship between the acceptability levels of modular distance learning and the academic performance of students?
6. What intervention program may be proposed based on the results of the study?

Hypotheses

The study entitled "Students' Level of Acceptability on modular distance learning and their academic performance" has the following hypotheses:

1. There are significant differences among the areas of acceptability level of the different elements of modular distance learning and schools;
2. There are significant differences in the academic performance of students among schools and across the learning areas; and
3. A significant relationship exists between the level of acceptability of modular distance learning and the student's academic performance.

METHODS

Research Design

This study is a quantitative research using the descriptive-evaluative correlational method. The descriptive method was used to determine the level of acceptability to modular distance learning along the elements of study environment, technological elements, independent learning, parental support and the Self-Learning Modules, and students' academic performance. Furthermore, the evaluative method was used to analyze and evaluate the relationship between the five (5) areas of the acceptability of Modular Distance Learning (MDL) to the academic performance of the students and the differences in the perception of the respondents to the five (5) areas of the acceptability of MDL and the academic rating of the students in the five (5) learning areas (subjects), and correlational method to see the relationships and differences of the overall acceptability of the nine (9) schools to the MDL and students' academic performance.

Population and Sampling

The study's respondents were chosen from one section per strand and per school with heterogeneous grouping. The respondents were 294 students from GAS and 172 students from TVL, with a total of 466 grade 12 senior high school students from the nine secondary schools in the Libmanan district under the Academic Tracks taking up General Academic Strand and Technical-Vocational and Livelihood Track.

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Instrument

To determine the level of acceptability to modular distance learning, a modified survey questionnaire was utilized. The instrument focused on the experiences of senior high school students during their modular distance learning using the self-learning modules. The variables have been adapted from different related studies. They are a) the study environment, b) technological elements, c) independent learning, d) parental support, and e) Self-Learning Modules. A total of 55 questions for the five areas using the 4-point Likert scale. The scale was interpreted as 1 – strongly disagree, 2 – disagree, 3 – agree and 4 – strongly agree. The questionnaire was checked and content validated by experts, two senior high school teachers in public secondary schools, and the research adviser and statistician. The validity and reliability were computed and checked using the Cronbach alpha and it was checked and approved by the research adviser and statistician.

Data Collection

A letter requesting to conduct the survey was submitted and approved by the Dean of the Graduate School. Then, upon its approval, the researcher prepared the letter to conduct and gather data addressed to the Schools Division Superintendent of the Division of Camarines Sur and the school head and principal of the nine secondary schools of Libmanan district offering both Academic Track under GAS strand and TVL track. After the approval, the researcher personally does the gathering of data. The researcher went to the respective schools and personally handed the letter requesting to conduct the study to the school principal and OIC. The conduct of the survey was administered afterward. The survey was then administered to the grade 12 students. The informed consent document was given first to the concerned students, and then it was followed by the distribution of the questionnaires. The students' academic performance was retrieved from the class advisers through the School Form or SF10 or SF9, which the advisers presented. The completed questionnaire was collected for analysis and interpretation.

Treatment of Data

Mean was used to determine the level of acceptability to modular distance learning along study environment, technological elements, independent learning, parental support, self-learning modules and students' academic performance level across the different learning areas.

A two-way analysis of variance was carried out to determine whether significant differences exist between the five areas and the nine secondary schools and if there were no significant differences in students' performance among the learning areas across schools. Duncan's Multiple Range Test (DMRT) was used in this study to determine which learning subjects had significant differences. Pearson r was used to determine the relationship between the acceptability level and students' academic performance.

Ethical Considerations

The researcher ensured that ethics in research were observed and followed for the confidentiality and protection of the respondents and institutions involved in the study.

RESULTS and DISCUSSION

Level of Acceptability to Modular Distance Learning

Table 1

Summary Table on Level of Acceptability on Modular Distance Learning

Areas	Mean per Schools									Mean	Inter
	A	B	C	D	E	F	G	H	I		
Study environment	2.95	2.91	2.99	2.75	3.07	2.66	2.99	2.85	3.01	2.90	High
Technological elements	2.60	2.77	2.73	2.72	2.79	2.57	2.72	2.70	2.83	2.71	High
Independent learning	2.75	2.77	2.95	2.54	2.96	2.48	2.62	2.76	2.78	2.74	High
Parental support	2.68	2.33	2.65	2.34	2.56	2.39	2.46	2.47	2.50	2.49	Low
Self-learning modules	2.83	2.85	2.86	2.54	2.95	3.59	2.56	2.71	2.87	2.75	High
Mean	2.76	2.73	2.84	2.87	2.58	2.74	2.67	2.70	2.80	2.72	-
Interpretation	High	High	High	High	High	High	High	High	High	High	

Legend: 1.00 – 1.75 (Very low); 1.76 – 2.50 (Low); 2.51 – 3.25 (High); 3.26 – 4.00 (Very High).

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Table 1 presents the summary of the level of acceptability to modular distance learning of senior high school students from the nine secondary schools in the Libmanan district along the five areas: (a) study environment; (b) technological elements; (c) independent learning; (d) parental support; and (e) self-learning modules.

Data shows that in terms of the overall level of acceptability of Modular Distance Learning (MDL), the two highest-rated schools are: School D (2.87) which was interpreted as "high,"; and School C (2.84), which was also interpreted "high." On the contrary, it was it was also found that the two schools that scored the lowest were School G (2.67) which was interpreted as "high,"; and School E (2.58), which was interpreted as "high". It also shows that in terms of individual areas, the two areas that have the highest scores are: the area of study environment (2.90); and self-learning modules (2.75), which were both interpreted as "high." However, it was also found that the two areas that have the lowest score are: technological elements (2.71) which was interpreted as "high,"; and parental support (2.49), which was interpreted as "low."

Modular distance learning has been a subject of interest for many educational institutions as it provides an alternative learning mode for students and educators (Salendab & Dapitan, 2021a; Salendab & Sanchez, 2023; Sanchez & Sarmiento, 2020; Sanchez, et al., 2022). The data presented in the study indicates that while modular distance learning is generally acceptable across different areas and among schools, specific areas require attention and improvement. The study highlights the importance of study environments and self-learning modules in modular distance learning. High scores in these areas indicate that students can learn effectively in a conducive learning environment and are equipped with the necessary tools and resources to facilitate their learning. Educational institutions should continue to prioritize developing and improving these areas to ensure that students can maximize their learning experience (Salendab & Dapitan, 2021b; Salendab & Laguda, 2023).

On the other hand, the low scores in technological elements and parental support emphasize the challenges that students face in utilizing technology and receiving support from their parents. As modular distance learning heavily relies on technology, educational institutions should provide adequate support and training to ensure students can use these tools effectively. Regarding parental support, educational institutions should work closely with parents to provide the necessary support and guidance to reinforce and complement the learning process at home. Furthermore, the study also highlights the importance of addressing the different needs and challenges students face across diverse areas. Educational institutions should be mindful of students' varying needs in different areas and provide customized solutions to ensure that students can learn effectively. Lastly, the data presented in the study highlights the importance of continuous improvement and innovation in modular distance learning. Educational institutions should continue to prioritize developing areas identified as critical while also addressing the unique needs of students across diverse areas. This will ensure that students receive a holistic and effective learning experience through modular distance learning.

It was supported by UNICEF (2020), which emphasizes that key considerations were given to benefit from the new learning modality, like, the value and use of mobile phones, for they are often the only way of reaching students who do not have internet, TV, or Radio. Moreover, students are comfortable with printed and paper-based learning materials. So printed learning materials should be carefully designed considering the nature of the students themselves.

Furthermore, according to Regoniel (2021) that modular distance learning must be based on the Essential Learning Competencies (MELCS). Self-paced learning modules can educate learners by providing carefully written guideposts that instruct the learner on how to proceed. In addition, the learning module's contents must also adhere to a specific learning model that ensures effective instructions.

Also, according to Malaya (2020), modular distance learning must incorporate individualized instruction, allowing learners to use self-learning modules in print or digital format/electronic copy, whichever is appropriate for the learner.

According to Fontanos et al. (2020), flexible learning options provide a variety of teaching-learning processes and methods, considering the resources, technologies, and potential learning partners available.

Boté-Vericad (2021) also claimed that one of the challenges in integrating technology into the implementation of modular distance learning is the unequal access to the internet for the students. Technology, considering internet connection and equipment, is an important element in implementing modular distance learning.

The implication was also supported by the article of the World Bank Group (2022), which emphasizes that in order the remote learning to be successful, we must allow for meaningful two-way interaction between students and teachers; such interactions can be enabled by using appropriate technology for the local context. Parental involvement has also played an equalizing role in mitigating some of the limitations of remote learning.

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However, according to an article by Admin (2021), many students struggle to implement modular distance learning, which requires a lot of reading and writing. Emphasizing further that extracurricular activities, learning in the arts, dance, and music, as well as formative activities such as meditation, reflection, and peer sharing, are also being lost in this teaching-learning method.

Sareen (2019) found that self-learning modules are effective in acquiring process skills and are more effective as a teaching method than traditional or lecture method.

According to the study by Argallon et al. (2022) on students' perception of modular distance learning, it found out that students agreed on using modular distance learning as a teaching method.

Castillo (2021) also reported that the students perceived that the supplementary learning materials in content, objectives, topics, and activities were highly acceptable. It only shows that MELC-based supplementary materials are effective in MDL.

Furthermore, it was found in the study of Tria et al. (2022) that the students perceived the implementation of modular distance learning as very satisfactory in the areas of content and flexibility. A satisfactory rating was then given to learning materials, learning outcomes, communication with teachers, support services, learning environment at home, and academic achievements regarding competencies learned.

Talimadao & Madrigal (2021) also emphasized that modular distance learning has provided students access to relevant and quality education during the pandemic. It is further emphasized that it is advantageous and must be considered re-implementing in the succeeding school years as a distance learning modality and as a supplementary modality to face-to-face learning as in Modified In-School Off-School Approach (MISOSA) or as the need arises.

Finally, the theory of diffusion of innovation (Diffusion of Innovation theory, 2022) means that acceptability is through the adoption of a new idea or experience or what was referred to as innovation and dissemination of the results and benefits. The acceptability of MDL is due to its effects and benefits to the students: its flexibility, independence in learning, and academic performance.

Table 2
Academic performance level of students across different Learning Areas

Subject areas	Mean per Schools									Ave.	Interpretation
	A	B	C	D	E	F	G	H	I		
Physical Science	90.21	88.39	87.41	88.40	85.04	90.38	85.86	88.74	85.75	87.91	VS
Statistics and Probability	85.70	86.04	83.50	88.75	85.85	90.81	84.91	84.96	84.94	86.16	VS
Pagbasa at Pagsusuri	88.50	87.91	85.47	88.91	88.37	89.38	89.84	86.82	84.33	87.77	VS
Reading and writing	85.78	89.04	87.78	88.18	87.00	87.83	83.59	85.95	82.48	86.40	VS
Physical education	85.70	89.91	85.00	88.88	88.00	89.71	90.88	86.41	88.84	88.15	VS
Average	87.25	88.51	86.64	88.25	88.11	88.31	88.16	86.66	85.55	87.28	VS

Legend: 90 – 100 (Outstanding), 85 – 89 (Very satisfactory), 80 – 84 (Satisfactory), 75 – 79 (Fairly satisfactory), Below 75 (Did not meet expectations)

Table 2 presents the academic performance level of students during the modular distance learning across different learning areas such as Physical Science, Statistics and Probability, Pagbasa at Pagsusuri ng Maikling Teksto Tungo sa Pananaliksik, Reading and Writing, and Physical Education. Furthermore, the two subjects that received the highest averages were Physical Education (88.15) which was interpreted as "very satisfactory," and Physical Science (87.91) which was also interpreted as "very satisfactory." On the contrary, the subjects that received the lowest averages were Statistics and Probability (86.16), which was interpreted as "very satisfactory," and Reading and Writing (86.40), which was also interpreted as "very satisfactory." In addition, the two schools which have the highest average rating are School B (88.51) and School F (88.31), while School C (86.64) and School I (85.55) received the lowest averages. The data also shows that the overall average mean is 87.28, interpreted as "very

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satisfactory." This description is according to DepEd Order no. 8, s. 2015, the Policy guidelines on classroom assessment for the k to 12 Basic Education Program.

The data presented in Table 2 provides insights into the academic performance level of students during the modular distance learning program across different learning areas. The data highlights the schools and subjects receiving the highest and lowest averages and the average mean. These findings have several implications regarding the effectiveness of the distance learning program. The fact that the highest averages were obtained in Physical Education and Physical Science subjects suggests that these subjects are better suited for a distance learning program than other subjects. This could be because these subjects are more hands-on and practical, and, therefore, the students could understand the concepts better through real-life examples and applications. However, the subjects of Reading and Writing and Statistics and Probability had the lowest averages. This suggests that a distance learning program may be less effective in teaching these subjects. These subjects may require more interaction between the teacher and the students and more opportunities for feedback and clarification. Schools with the highest mean on performance show that these schools benefited the most from MDL, which may be because of the schools' implementation, especially regarding delivery and assessment of the program. This calls for school administrators to review their strategies and means of delivering the MDL approach.

According to Arjona (2022), implementing modular distance learning in Physical Education positively impacted the students' grades. Indicating that modular distance learning through self-learning modules help students learn as seen in their academic performance.

The implication was supported by the study of Ibyatova et al. (2018) which claimed that modular approach in an English subject effectively improves students' knowledge and enhances the student's understanding and critical thinking.

According to the findings of the study of Cogomoc (2022), students exposed to self-learning modules performed better in the specified English units than those exposed to traditional methods of instruction. This is because, these self-learning modules have been enhanced with features such as self-explanatory, self-contained, self-directed, self-motivating, and self-evaluating abilities that aid in meeting the needs of all types of learners.

Lumapanet (2022) found that the student's academic performance was very satisfactory in English during the implementation of modular distance learning. It only means that the student's academic performance and achievement have improved using the self-learning modules.

Arada et al. (2022) also emphasized that the use of modular distance learning in the subject Statistics and Probability revealed that there was a significant change and improvement in the problem-solving skills of the students along with analysis, estimation and approximation, hypothesis testing, and applied Math brought by the use of modular distance learning, which means that the said approach was effective.

The overall average mean of 87.28, which was interpreted as "very satisfactory", suggests that the distance learning program successfully achieved the learning outcomes for the students. This indicates that the students could learn and understand the concepts as intended by the curriculum.

However, it is important to note that the interpretation of "very satisfactory" may not necessarily mean that all the students have achieved a high level of mastery in the subject, that there may be variations in the level of understanding among the students even within the "very satisfactory" range.

Briones et al. (2021) state that numerous factors can influence a student's academic performance. These are the parenting styles, students' characteristics, internet connectivity level, and motivation. It was also found that the students' academic performance can be improved or harmed by their environment (Sanchez, 2022; Sanchez, 2020b; Sanchez, 2023a; Sanchez, 2023b). Students should be able to balance their time between studies and extracurricular activities.

Findings in the study of Bacomo et al. (2022) showed that the students' attitude and performance towards self-learning modules have positive regard for the self-learning modules. Students were also observed to be enthusiastic about learning with little supervision.

Elger (2006) further confirms the result of the Theory of Performance. Various factors, such as context, level of knowledge, level of skills and identity, personal factors and fixed factors cause the students' performance. And as students perform, there are valuable outcomes. In MDL, the students' academic performance is the students standing or quality of performance.

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The Significant Differences among the Acceptability Level of the Different Elements of Modular Distance Learning and Students Performance across Schools and Different Learning Areas.

To test the differences in level of acceptability among different schools and the different areas of the level of acceptability of modular distance learning, a two-way Analysis of Variance (ANOVA), one of this study's statistical treatments was used.

Table 3
Test of Differences on the Acceptability Level Among Areas and Across Schools

Squares of variation	Degrees of freedom	Sum of squares	Mean squares	F-comp	$F_{.05}$	Statistical Significance
Areas	8	0.5209	0.6651	0.5957	2.27	Not significant
Schools	4	0.9919	0.2479	2.2688	2.69	Not Significant
Error	32	3.4963	0.1093			
Total	44	5.0091				

Legend: .05 Level of Significance

Gleaned in Table 3 is the test of differences in the nine (9) secondary schools and the five (5) different areas of the acceptability of modular distance learning (study environment, technological elements, independent learning, parental support and self-learning modules). Furthermore, it was also shown in Table 9 that there were no significant differences between the nine secondary schools (f-comp=0.5957, $F_{.05}$=2.27) and the five areas (f-comp=2.2688, $F_{.05}$=2.69).

The findings from Table 3 show that there were no significant differences between the nine secondary schools and the five areas of acceptability of modular distance learning. The results may imply that the implementation of modular distance learning has been uniformly accepted across all the schools and areas included in the study. This could be a positive implication, as it suggests that the schools and areas have adapted well to the modular distance learning approach, and that the technology and support provided have been effective.

Another possible reason for the lack of significant differences could be attributed to the homogeneity of the sample. The schools and areas included in the study may have had similar student demographics, socio-economic backgrounds, and educational levels. This homogeneity may have contributed to the similar levels of acceptability of modular distance learning across the different schools and areas.

Moreover, the absence of significant differences between the schools and areas may indicate that the modular distance learning approach is equally effective across all schools and areas. This could be interpreted as a positive implication, suggesting that the approach may be easily transferable to other schools and areas with similar characteristics. It also implies that the modular distance learning approach may be a suitable alternative to traditional classroom-based learning, particularly when students cannot attend school physically due to health or safety concerns or other reasons.

Lastly, the findings from Table 3 indicate no significant differences in the acceptability of modular distance learning across the different schools and areas included in the study. While this could be interpreted positively as an indication of the effectiveness and adaptability of the approach, it also highlights the need for further research and analysis to fully understand the implications of the results. Ultimately, it is essential to conclude that the modular distance learning system needs constant evaluation and feedback to ensure that it is effective and adaptable to the various contexts it serves.

It was supported by the study of Argallon et al. (2022), which concluded that there were no significant differences between the perceived effects of modular distance learning on students based on gender. However, the results changed when the respondents were categorized based on grade level.

According to Fontanos et al. (2020) that DepEd has experienced offering a variety of learning delivery options to meet the needs of different learners while taking into account their context and capabilities.

Furthermore, according to Cagomoc (2022), the self-learning modules provided immediate feedback on their performance, contributing to maintaining a high level of interest and sufficient motivation for the students.

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Finally, the acceptability was because there is the need and maybe it is the time to adapt to the new learning approach (Sanchez, 2020c); as the Diffusion of Innovation theory explains, people adopt a new idea, habit or product as part of a social system and as a result of dissemination. The acceptability was because of student's traits, their needs, values and experiences and the students have seen and benefited from the outcomes of MDL.

Significant Difference between Acceptability Levels with the Academic Performance of Students

Table 4
Difference Among Learning Areas Across Schools

Squares of variation	Degrees of freedom	Sum of squares	Mean squares	F-comp	$F_{.05}$	Statistical Significance
Areas	4	30.14	7.5350	6.1230	2.674	Not significant
Schools	8	71.26	8.9075	7.2383	2.261	Highly Significant
Error	32	39.38	1.2383			
Total	44	140.28				

Legend: .05 Level of significance

Gleaned in Table 4 is the test of differences in the academic performance of the students in the five (5) subject areas (Physical science, statistics and probability, Pagbasa at Pagsusuri ng Maikling Teksto Tungo sa Pananaliksik, Reading and Writing, and Physical Education) of the nine (9) secondary schools. Furthermore, it was also shown that in terms of the student's academic performance in the different areas, it has no significant differences (f-comp=6.1230, $f_{,05}$= =2.674). However, it was found that there is a high significant difference between the students' performance in the different schools (f-comp=7.2383, $f_{,05}$=2.261).

The findings in Table 4 suggest several implications related to the academic performance of students in secondary schools. First, the academic performance of students in five subject areas across nine secondary schools suggests that there is no significant difference in performance across the areas, but there is a significant difference between schools. This implies that factors beyond the school environment, such as individual abilities or teaching in specific subjects, may play a larger role in student achievement than differences between schools. The lack of significant differences in performance across different subject areas suggests that the curriculum might be well-balanced, effectively addressing the different areas of study. This implies that students receive a comprehensive education that prepares them for various aspects of their academic and future life.

Second, the high significant difference in performance between schools raises important questions about the quality of education and resources available in each institution. The differences could suggest disparities in funding, ultimately leading to unequal opportunities for their students. The findings highlight the need for policymakers to address these disparities and ensure that all schools have equal access to resources and education.

Third, the results imply that teacher quality and teaching methods may significantly influence student performance. The lack of significant differences in student performance across subject areas suggests that it is not the content affecting student outcomes, but rather how that content is being presented and taught to them. Thus, schools and education policymakers must prioritize teacher recruitment, training, and development programs to ensure that all teachers have the skills needed to effectively teach various subjects.

Fourth, the findings suggest that assessment methods may need to be improved to accurately measure student performance. The lack of significant differences in subject areas may be due to the current assessment methods not effectively measuring the mastery of the different subjects. Schools and education policymakers may need to re-evaluate the current assessment methods and develop more comprehensive metrics that account for the complexity of the different subjects.

Finally, the results shed light on the need for further research to explore why there are significant differences in performance between schools. Additional studies can help identify specific factors contributing to these disparities, such as students' socioeconomic status or the quality of school leadership. This information helps policymakers better understand the problem and enables them to design targeted interventions to address these challenges in specific school settings.

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The Philippine educational system adheres to DepEd Order number 8, s. 2015, the Policy guidelines on classroom assessment for the k to 12 Basic Education Program on assessment and grading system. The order stressed that assessment is an integral part of the curriculum for it measures students' progress and adjusts the teaching instruction. The grading scale and their description were as follows: 90-100 Outstanding, 85-89 Very Satisfactory, 80-84 Satisfactory, and 75-79 Fairly Satisfactory and below 75 did not meet expectations which are failed.

According to the study of Said et al. (2018), academic performance can be best checked or judged in different ways according to the mental level of students like observations, tests, and examinations. Observations usually check the primary level student's academic performance. While examinations and tests are the best way to check academic performance or understanding in high classes. These written tests or examinations are known as home exams because they are conducted by school administration.

Ivanova (2021) stated that learning performance is associated with behavioral activities in the educational environment aimed at improving knowledge and skills. It is a critical criterion for student progress and the formation of final student outcomes. Activities should lead to learning optimization in terms of time duration, educational task organization, content presentation, and management to achieve better learning performance. Learning activities emphasize self-reliance, self-regulation, and socially oriented and group-driven learning.

Malipot (2021) claimed that implementing modular distance learning for the school year 2020-2021 did not give better learning. This was caused by the lack of teaching and learning resources and the ill-designed distance learning. Other reasons are the failure of students to submit school requirements. Most students learned less and were dissatisfied with the amount of learning under the modular learning modality.

Finally, according to the study by Santillan and Labaria (2021) students have various experiences and perceptions of modular distance learning. Even though, it was revealed that most of the students attained very satisfactory academic performance.

Table 5
Test of Significant Difference of Means Between Schools

Schools	Means	Statistical Significance
A	87.718	c
B	88.258	b
C	85.832	e
D	88.684	b
E	86.852	d
F	89.622	a
G	87.016	d
H	86.576	d
I	85.55	e
Mean	87.66	AB

Note: Means having the same letter in a column is not significantly different (5%)

The findings from Table 5, which displays the differences between paired means, have some significant implications. The results suggest that School F, School D and School B stand out from the nine schools in terms of the average academic performance of their students across five learning areas, namely Physical Science, Statistics and Probability, Pagbasa at Pagsusuri ng Maikling Teksto Tungo sa Pananaliksik, Reading and Writing, and Physical Education.

The schools F, D and B may have better academic performance because of the students' population and location. These schools may have provided sufficient learning resources, and teachers and students may have time for consultation and dialogue. Students may also have more time for studies and there are fewer distractions.

It could be seen that School C and School I have the lowest academic performance among the schools. One possible reason for the low performance of students at Schools C and I could be due to the cultural and socio-economic barriers and other practices that can influence the educational outcomes of students. For example, these schools might have a lesser emphasis on prioritizing academic excellence, or they may have lesser resources, such as books, facilities, and equipment, to support their students' learning.

Another potential explanation for the difference in academic performance levels could be the variation in teaching quality, practices, and pedagogy within each school. Schools C and I may employ less effective teaching

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methods or unclear objectives and instructions. It may also be that these schools have a lower percentage and number of experienced and qualified teachers who can provide more individualized and personalized instruction.

Further, the difference in results could be due to the variation in the student population at each school. Schools C and I may have a more heterogeneous student population, which would impact academic performance. These schools may experience disruption such as internet connection during the dissemination of instructions and students may lack devices and data to access educational information. Additionally, they may have a higher proportion of less.

In conclusion, this report provides important insights into students' academic performance in different schools regarding five learning areas. The differences in performance levels may be due to various factors, such as socio-economic barriers, teaching quality, and student population and demographics. Understanding these differences can help educational leaders make informed decisions about addressing the gaps in educational achievement and supporting all students. Personalized learning can prove to be a great approach to filling these gaps. The table further shows that in the subjects Statistics and Probability, Reading and Writing, and Physical Education, the student's grades are not significantly different, this implies that students have met the required competencies in this subject. These subjects may be easier considering the tasks, lessons, and activities. While in subjects Physical Science and Pagbasa at Pagsusuri ng Maikling Teksto Tungo sa Pananaliksik are different.

Moreover, this report highlights the need for further research to explore the reasons behind the variation in academic achievement between schools. This research could entail investigating teaching methods, assessing the quality of learning resources, and examining the cultural and socio-economic factors that impact student performance. With such research, educators can develop strategies to support struggling students and improve the overall academic performance of schools and students. Ultimately, the findings of this report demonstrate the importance of monitoring and analyzing educational outcomes to develop evidence-based policies to improve the quality of education in our schools.

According to the study by Regoniel (2021) emphasizes that feedback mechanisms help teachers monitor student achievement and identify students who need additional interventions. Self-paced learning modules can educate learners by providing carefully written guideposts that instruct the learner on how to proceed. The module's contents adhere to a specific learning model that ensures effective instruction.

Also, according to the World Bank Group (2022), technology availability is a necessary but insufficient condition for effective remote learning and teachers play an important role regardless of the learning modality or available technology. Support for developing digital and pedagogical tools for effective teaching in remote and in-person settings is needed. Remote learning to be successful must allow for meaningful two-way interaction between students and teachers; such interactions can be enabled by using the most appropriate technology for the local context.

Furthermore, according to Brew et al. (2021), the students' academic performance tells or measures the educational success. But academic performance is affected by many factors like truancy, parental level of education and income, availability and accessibility of textbooks, libraries, practical laboratories, meals provision and teachers.

According to Jou et al. (2022) that students' backgrounds, experiences, behavior and interactions with instructors were the factors that had a significant influence on the student's performance in modular distance learning. That student performance, comprehension, and academic achievements aligned with their perceived effectiveness.

Jimenez (2021) also emphasizes that learning resources as significant in teaching and learning students. Challenges were poor internet connectivity, printing of materials and miscommunication. Errors and mistakes in the learning materials were also observed. However, these challenges create a new opportunity to improve the delivery and service to teachers to learners.

De Claro (2021) also reported that students' greatest challenge is time management. Most students struggled to complete the assignments on time, with their SLMs, and didn't submit their outputs. Some students even quit school altogether as a result of MDL-SLM challenges.

According to Culajara (2022), students' challenges were performing different tasks and meeting the objectives and required competencies. The hindrances on learning performances in Physical Education in MDL were overthinking grades and minimal engagement due to lack of equipment, learning materials, distraction at home and unstable internet connection. Students coping mechanisms developed skills and abilities at home to answer the modules.

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Significant Relationship of Acceptability Level with Academic Performance

Table 6
Relationship of Acceptability Level with Performance of Students

Dependent variables	R-values	r^2	Statistical significance
Physical science	0.8953	0.8016	Significant
Statistics and probability	0.6330	0.4007	Significant
Pagbasa at pagsusuri ng Maikling Teksto tungo sa pananaliksik	0.7279	0.5298	Significant
Reading and writing	0.3619	0.1310	Significant
Physical Education	0.2376	0.0564	Not significant

Legend: .05 Level of Significance

Shown in Table 6 is the relationship between the acceptability level of modular distance learning with the student's academic performance in the five subject areas. Using Pearson Product Moment Correlation, one of the statistical tools of this study, found that: Physical Science (r=0.8953); Statistics and probability (r=0.6330); Pagbasa at Pagsusuri ng Maikling Teksto tungo sa Pananaliksik (r=0.7279); and Reading and Writing (r=0.3619) was significant to the level of acceptability of Modular Distance Learning along its five areas. On the other hand, it was also found that Physical education (r=0.2376) was not significant to the acceptability level of Modular Distance Learning along its five areas.

The findings in Table 6 indicate a significant relationship between the acceptability level of modular distance learning and the academic performance of students in four subject areas, namely Physical Science, Statistics and Probability, Pagbasa at Pagsusuri ng Maikling Teksto tungo sa Pananaliksik, and Reading and Writing. The correlation coefficients for these subject areas suggest a strong positive relationship with acceptability level. This implies that students with a higher level of acceptability towards modular distance learning tend to perform better academically in these subjects.

The high correlation coefficient for physical science (r=0.8953) implies that the subject area is particularly suited to modular distance learning. This could be because the subject matter is more theoretical than hands-on. In contrast, the lower correlation coefficient for physical education (r=0.2376) indicates that this subject area may not be as suitable for modular distance learning. Since physical education is more practical and hands-on, students might need more face-to-face interaction, facilities and resources for better performance.

The correlation coefficient for statistics and probability (r=0.6330) suggests a moderate positive relationship with the acceptability level. It might be the case that students can grasp these concepts better through the self-paced learning environment provided by modular distance learning. Pagbasa at Pagsusuri ng Maikling Teksto tungo sa Pananaliksik and Reading and Writing also have high correlation coefficients (r=0.7279 and r=0.3619, respectively) which could be attributed to the flexibility and individualized learning approach of modular distance learning.

The acceptability of MDL is affected by the academic performance in the subjects Physical Science, Statistics and Probability, Pagbasa at Pagsusuri ng maikling Teksto Tungo sa Pananaliksik, Reading and Writing and Physical Education and Health. Physical Science obtained an r^2 value of 0.8016 this finding means that the degree of contribution to the acceptability of MDL is 80.16% of student's academic performance is accounted for students acceptability. Statistics and Probability obtained an r^2 value of 0.4007 the results suggest that 40.07% of students' performance is attributed to MDL's acceptability. Pagbasa at Pagsusuri obtained an r^2 0.5298 which is 52.98% of the students' performance contributed to acceptability of MDL. Reading and Writing obtained an r^2 value of 0.1310, the results further suggest that acceptability is 13.10% total variation and Physical Education and Health obtained an r^2 value of 0.0564 means that the 05.64% of the students' performance is attributed to students acceptability. To conclude, the students level of acceptability to MDL is affected by the student's academic

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performance. The findings revealed that the degree of contribution to the level of acceptability on MDL on the academic performance is the higher the acceptability, the higher the academic performance.

The findings also suggest that the level of acceptability of modular distance learning may vary across subject areas. Some students might prefer face-to-face instruction for certain subjects, while others may be more comfortable with the self-paced and flexible nature of modular distance learning. Further research could investigate the factors that influence the level of acceptability of modular distance learning across different subject areas.

In conclusion, the findings highlight the importance of considering the subject area when implementing modular distance learning approaches. While it may be suitable for some subjects, others may require more face-to-face interaction for better performance. Understanding the relationship between acceptability level and performance can help educators and policymakers make informed decisions on optimizing the use of modular distance learning in different subject areas.

The implication was contradicted by Arjona (2022), which strongly argued that Physical Education subject positively impacted the students' grade performance using Self-Learning Modules. So modular distance learning through the Self-learning modules does help students in their learning as seen in their academic performance.

According to Bacomo et al. (2022), there was a positive correlation between students' attitudes and performance, which means that the more the students study through their SLMs, the better their performance is.

Aksan (2021), in the study on the challenges encountered by senior high school students under modular distance learning and its effect on the students' performance in Mathematics, most senior high school students agreed on using the modular distance learning approach, students encountered little challenges in such learning approach and it has positive effects on students' academic performance.

According to the findings of the study of Cagomoc, (2022), students exposed to self-learning modules performed better in the specified English units than those exposed to the traditional method of instruction. Knowledge gained through Self Learning Modules helps students develop self-study habits and self-confidence and become independent thinkers. Self-Learning Modules provide learners with an effective learning environment in which to learn. These include answering all possible queries, confusions, and questions that may come into the learner's mind during learning. These also, provide students with immediate feedback on their performance. These also contribute to maintaining a high level of interest and sufficient motivation for the students. These Self-Learning Modules have been enhanced with features such as self-explanatory, self-contained, self-directed, self-motivating, and self-evaluating abilities that aid in meeting the needs of all types of learners.

However, the previous researchers' claims and the implication were contradicted by the study of Dargo & Dimas (2018) which claimed that the effect of modular distance learning on the learners' academic performance decreased significantly.

Conclusions

The results of the study suggest that overall, students on the modular distance learning program have a high level of acceptability for the study environment, technological elements, independent learning, and self-learning modules. However, the level of acceptability for parental support was identified as low. Data revealed that the performance level of students across different learning areas during the implementation of modular distance learning is 87.28 which was interpreted as "very satisfactory." From the study findings, it can also be concluded that there is no significant difference in the acceptability level of different elements of modular distance learning across schools and five areas. There are also no significant differences among the academic performance of the different learning areas of modular distance learning across schools. However, there is a significant difference in the performance of the students in the nine schools. And there is a significant correlation between the acceptability level and the academic performance of students in Physical Science, Statistics and Probability, Pagbasa at Pagsusuri ng Maikling Teksto tungo sa Pananaliksik, and Reading and Writing. However, there is no significant relationship between the acceptability level and the academic performance of students in Physical Education.

Recommendations

An intervention program on modular distance learning was proposed. It is composed of training and seminars for the students, for the teachers and parents on MDL to help improve the quality of learning and teaching processes.

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REFERENCES

Admin, A. (2021, December 6). Realities of modular learning in the uplands: Keeping hope alive amid the pandemic. Apu Palamguwan Cultural Education Center. *Apu Palamguwan Cultural Education Center.* https://apupalamguwancenter.essc.org.ph/?p=3552.

Aksan, J. A. (2021). Effect of modular distance learning approach to academic performance in mathematics of students in Mindanao State University-Sulu Senior High School amidst covid-19 pandemic. *Open Access Indonesia Journal of Social Sciences*, *4*(2), 407–430. https://doi.org/10.37275/oaijss.v4i2.64.

Alferez, B. J. A. L., Siraji, A. D., Labaria, J. G. C., Yusop, R. J., Maglente, S., & Salendab, F. A. (2023). Examining Learner Independence in the Online Classroom for Improved Learning Outcomes. *Journal for ReAttach Therapy and Developmental Diversities*, 6(8s), 419-427.

Amihan, S. R., & Sanchez, R. D. (2023). Connecting Workplace Literacy Gaps through Innovative Academe-Industry Collaboration. *International Journal of Open-access, Interdisciplinary and New Educational Discoveries of ETCOR Educational Research Center (iJOINED ETCOR),* 2(2), 515-528.

Arada, M.V., Avila, E.B., Balares, J.R., De Leon, N.C., Quiaño, M.A., Somobay, G.C., Suarilla, J.C., Dela Vega, M.P., (2022). The use of modular distance learning in relation to the problem-solving skills in statistics and probability of grade 11 students. *International Journal of Business, Law and Education 2*(4)*, 97-105. https://www.researchgate.net/publication/368267991_The_Use_of_Modular_Distance_Learning__in_Relation_to_the_Problem_Solving_Skills_in_Statistics_and_Probability_of_grade_11_Students.*

Argallon, L.D., Loreño, J.R.O., Paham, H. C., & Bacatan, J. R. (2022). Perceived effects of modular distance learning on the students in Aumbay Elementary School. *International Journal of Research and Innovation in Social Science 6* (9) 496-506. https://www.rsisinternational.org/journals/ijriss/Digital-Library/volume-6-issue-9/496-506.pdf.

Arjona, J. F. (2022). Modular distance learning in teaching sports to the students' performance of Cavinti Integrated National High School. *International Journal of Research Publications. 103* (1) 351-365. Doi:10.47119/IJRP1001031620223419. https://ijrp.org/paper-detail/3284.

Bacomo, A.C, Daculap, L.P., Ocampo, M.O., Paguia, C.D., Pentang, J.T., & Bautista, R.M. (2022). Modular learning efficiency: learner's attitude and performance towards self-learning modules. *IOER International Multidisciplinary Research Journal*, *4*(2). https://philarchive.org/archive/BACMLE.

Boté-Vericad, J.-J. (2021). Challenges for the educational system during lockdowns: A possible new framework for teaching and learning for the near future. *Education for Information*, *37*(1), 149–153. https://doi.org/10.3233/efi-200008.

Briones, S.F., Dagamac, R.R., David, J.D., & Landerio, C.B. (2022) Factors affecting the students' scholastic Performance: A survey study . *Indonesian Journal of Educational Research and Technology 2* (1) 97-102 . https://doi.org/10.17509/ijert.v2i2.41394

Cagomoc, R.S. (2022). Effectiveness and acceptability of textbook instruction paired with locally-developed quality-assured MELC-based learning activity sheets for modular instruction. *International Journal of Scientific Research Updates*, *3*(2), 021–026. https://doi.org/10.53430/ijsru.2022.3.2.0035.

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The Exigency P - ISSN 2984-7842 E - ISSN 1908-3181

Carvajal, A. L. P., & Sanchez, R. D. (2023). Strategic Considerations, Challenges, and Opportunities in Establishing the International Journal of Open-access, Interdisciplinary, and New Educational Discoveries (iJOINED). *International Journal of Open-access, Interdisciplinary and New Educational Discoveries of ETCOR Educational Research Center (iJOINED ETCOR),* 2(2), 539-546.

Castillo, J.A. (2021). Acceptability and effectiveness of MELC-based supplementary learning materials in physical education 9. *EPRA International Journal of Research and Development 6(6)* 242-253. https://doi.org/10.36713/epra7331.

Cos, F. L., & Ranillo, M. (2021). Factors affecting distance learning of Carrascal National High School, division of Surigao del Sur. *Journal of Innovations in Teaching and Learning*, *1*(2), 62–68. https://doi.org/10.12691/jitl-1-2-1.

Dargo, J. M., & Dimas, M. (2021). Modular distance learning: It's effect in the academic performance of learners in the new normal. *Journal of Education, Teaching and Learning*, *6*(2), 204. https://doi.org/10.26737/jetl.v6i2.2672.

Department of Education. (2012). DO 54, s. 2012. Policy guidelines on the implementation of alternative delivery modes (ADMs). https://www.deped.gov.ph/2012/06/15/do-54-s-2012-policy- guidelines-on-the implementation-of-alternative-delivery-modes-adms/.

Department of Education. (2015). Policy guidelines on classroom assessment for the K to 12 basic education program (D.O. No. 8 s. 2015). https://www.deped.gov.ph/wp- content/uploads/2015/04/DO_s2015_08.pdf

Department of Education. (2019). DO_021, s. 2019. Policy guidelines on the K TO 12 basic education program. https://www.deped.gov.ph/wpcontent/uploads/2019/08/DO_s2019_021.pdf.

Department of Education. (2020). DO_018, s. 2020. Policy guidelines for the provision of learning resources in the implementation of the basic education learning continuity plan. https://www.deped.gov.ph/wpcontent/uploads/2020/08/DO_s2020_018.pdf.

Diffusion of Innovation Theory. (2022). Bu.edu.2022. https://sphweb.bumc.bu.edu/otlt/mph-modules/sb/behavioralchangetheories/behavioralchangetheories4.html?fbclid=iw AR2Mt4MHnpCy0yssRYuzyl4Yvp.

Elger, D. (2006). *Faculty guidebook theory of performance*. https://www.webpages.uidaho.edu/ele/scholars/Results/Workshops/Facilitators_Institute/Theory%20of%20 Performance.pdf.

Fontanos, N., Gonzales, J., Lucasan, K. & Ocampo, D.S. (2020). Revisiting flexible learning options (FLOs) in basic education in the Philippines: Implications for senior high school (SHS). https://www.researchgate.net/publication/344436141_Revisiting_Flexible_Learni ng_Options_FLOs_in_Basic_Education_in_the_Philippines_Implications_for_Senior_High_School_SHS.

Guiamalon, T., Alon, S.S., & Camsa, S. U. (2021). Teachers issues and concerns on the use of modular learning modality. *IJASOS International E-Journal of Advances in Social Sciences 7(20),* 457-469. https://www.researchgate.net/publication/354207460_Teachers_Issues_and_Concerns_on_the_use_of_Mod ular_Learning_Modality.

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The Exigency P - ISSN 2984-7842 E - ISSN 1908-3181

Hernandez, L. (2021). Strengths and challenges of distance learning modalities in the new normal: Basis for intervention program. *Journal of Humanities and Social Sciences*, *3*(2), 80–87. https://doi.org/10.36079/lamintang.jhass0302.241.

Ibyatova, L., Oparina, K. & Rakova, E. (2018). Modular approach to teaching and learning English grammar in technical universities. *Society. Integration. Education. Proceedings of the International Scientific Conference. Vol.1 pp.139-148*. https://www.researchgate.net/publication/325368627_MODULAR_APPROACH_TO_TEACHING_AND_LEARNING_ENGLISH_GRAMMAR_IN_TECHNICAL_UNIVERSITIES.

Ivanova, M. (2021). Self-assessment activities as factor for driving the learning performance. *AIP Conference Proceedings 2333,(1)*. https://doi.org/10.1063/5.0041755.

Jou, Y.-T., Mariñas, K. A., & Saflor, C. S. (2022). Assessing cognitive factors of modular distance learning of K-12 students amidst the covid-19 pandemic towards academic achievements and satisfaction. *Behavioral Sciences*, *12*(7), 200. https://doi.org/10.3390/bs12070200.

Lumapenet, H.T. (2023). Effectiveness of self-learning modules on students' learning in English amidst pandemic. *Res Militaris. 12(2),* 949-953. https://www.researchgate.net/publication/36842538_Effectiveness_of_Self_Learning_Modules_on_Students_Learning_in_English_Amidst_Pandemic.

Malaya, B. (2020). Modular distance learning: Here's what you need to know. https://www.whatalife.ph/modular- distance-learning-heres-what-you-need-to-know/.

Malipot, M.H. (2021). Distance learning resulted in "dismal" learning outcomes--survey. Manila Bulletin. https://mb.com.ph./2021/07/16.

Martínez, E. (2016). The Education Deficit. https://www.hrw.org/report/2016/06/10/education-deficit/failures-protect-and-fulfill-right-education-through-global.

Muńoz, M. C., & Sanchez, R. D. (2023). Exploring Fernandino Teens TV as a supplementary learning delivery modality: Opportunities and challenges from the lens of select learners. *International Journal of Open-access, Interdisciplinary and New Educational Discoveries of ETCOR Educational Research Center (iJOINED ETCOR)*, 2(1), 358-374.

Philippine News Agency. (2021). Growing number of out-of-school youth "cause of concern." https://www.pna.gov.ph/articles/1129909.

Regoniel, P.A. (2021). Modular Learning: 8 Tips for Effective Online Teaching. https://simplyeducate.me/2021/06/22/modular-learning/.

Said, M.A., Idris, M., & Hussain, S. (2018). Relationship between social behaviour and academic performance of students at secondary level in Khyber Pakhtunkhwa. *Pakistan Journal of Distance & Online Learning* 4(1) 153–170. https://files.eric.ed.gov/fulltext/EJ1267252.pdf.

Salendab, F. A. (2021). Effectiveness of Performance-Based Assessment Tools (PBATs) and the Students' Academic Performance. *Turkish Journal of Computer and Mathematics Education (TURCOMAT),* 12(10), 6919-6928.

Salendab, F. A. (2023). Proposed Instructional Scheme in the New Normal Education: Basis for Pedagogical

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Strategies/Practices. *Psychology and Education: A Multidisciplinary Journal,* 6(8), 712-719. https://doi.org/10.5281/zenodo.7502764

Salendab, F. A., & Akmad, S. P. (2023). A Personal Narrative Experience of Teachers Teaching Purposive Communication During the New Normal Education. *International Journal of Multidisciplinary: Applied Business and Education Research*, 4(5), 1590-1601. https://doi.org/10.11594/ijmaber.04.05.20

Salendab, F. A., & Cogo, D. A. (2022). Implementation of Alternative Learning System: Basis for Policy Review and Recommendation. *Journal of Positive School Psychology*, 5457-5467.

Salendab, F. A., & Dapitan, Y. C. (2021). School Heads' Administrative Supervision: Its Relation to the Program Accreditation of Private Higher Education Institutions (PHEIs) in Region XII. *Turkish Journal of Computer and Mathematics Education*, 12(13), 194-202.

Salendab, F. A., & Dapitan, Y. C. (2021). Performance of Private Higher Education Institutions and the School Heads' Supervision in South Central Min-danao. *Psychology and Education*, 58(3), 3980-3997.

Salendab, F. A., & Laguda, J. L. (2023). Learning Purposive Communication: A Personal Narrative Experience of Non-Teacher Education Students. *International Journal of Multidisciplinary: Applied Business and Education Research*, 4(5), 1682-1696.

Salendab, F. A., & Sanchez, R. D. (2023). Graduates Tracer Study: The Employability Status of Bachelor of Elementary Education (BEED) of Sultan Kudarat State University – Kalamansig Campus. *International Journal of Open-access, Interdisciplinary and New Educational Discoveries of ETCOR Educational Research Center (iJOINED ETCOR)*, 2(2), 642-655

Sanchez, A. M. P. (2022). HR practitioners' perceptions on boosting employees' loyalty and commitment: Inputs for a 21st century-responsive human resource system. *International Journal of Open-access, Interdisciplinary and New Educational Discoveries of ETCOR Educational Research Center (iJOINED ETCOR)*, 1(4), 89-102.

Sanchez, R. D. (2020, December 27). "Preserving the Honor of the 'Honoris Causa': Revisiting the Guidelines on the Conferment of Honorary Degrees". SunStar Pampanga. Retrieved from https://www.pressreader.com/philippines/sunstar-pampanga/20201227/281608128045257

Sanchez, R. D. (2020, December 28). Parent-Teacher Collaboration in the Time of Pandemic. SunStar Pampanga. Retrieved from https://www.pressreader.com/philippines/sunstar-pampanga/20201228/281608128046465

Sanchez, R. D. (2020, December 29). Three Qualities of a Successful Leader. SunStar Pampanga. Retrieved from https://www.pressreader.com/philippines/sunstar-pampanga/20201229

Sanchez, R. (2023). Utilization of the daily lesson logs: An evaluation employing the CIPP model. *International Journal of Open-access, Interdisciplinary and New Educational Discoveries of ETCOR Educational Research Center (iJOINED ETCOR),* 2(1), 199-215.

Sanchez, R. D. (2023). Unveiling the moral-theological foundations of the nullity of marriage due to psychological incapacity. *International Journal of Open-access, Interdisciplinary and New Educational Discoveries of ETCOR Educational Research Center (iJOINED ETCOR),* 2(1), 397-404.

Sanchez, R., & Sarmiento, P. J. (2020). Learning together hand-in-hand: An assessment of students' immersion program in a schools division. *International Journal of Research Studies in Education,* 9(1), 85-97.

Sanchez, R. D., Sanchez, A. M. P., & Sanchez, J. J. D. (2023). Delving into the Integration of Research Subjects in the Junior High School Curriculum from the Learners' Point of View. *International Journal of Open-access,*

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The Exigency P - ISSN 2984-7842 E - ISSN 1908-3181

Interdisciplinary and New Educational Discoveries of ETCOR Educational Research Center (iJOINED ETCOR), 2(1), 432-442.

Sanchez, R., Sarmiento, P. J., Pangilinan, A., Guinto, N., Sanchez, A. M., & Sanchez, J. J. (2022). In the name of authentic public service: A descriptive phenomenological study on the lives of Filipino teachers in select coastal villages. *International Journal of Open-access, Interdisciplinary and New Educational Discoveries of ETCOR Educational Research Center (iJOINED ETCOR),* 1(1), 35-44.

Santillan, S.C. & Labaria, J.C. (2021). Student experiences on modular learning amidst pandemic: A survey design. *European Journal of Research Development and Sustainability (EJRDS) 2* (7) 109-113. https://scholarzest.com/index.php/ejrds/article/view/1096/932.

Sareen, S. (2019). Effectiveness of Self Learning Modules on Process Skills in Science in Relation to Study Habits of Class IX Students. *International Journal of360⁰ ManagementReview, 7(*special issue),62-65. https://www.ij360mr.com/docs/vol7/spcl/19.pdf.

Talimodao, A. J. S., & Madrigal, D. V. (2021). Printed Modular Distance Learning in Philippine Public Elementary Schools in Time of COVID-19 Pandemic: Quality, Implementation, and Challenges. *Philippine Social Science Journal*, *4*(3), 19–29. https://doi.org/10.52006/main.v4i3.391.

Tria, J. Z., Tugano, M. S., & Tonio, J. Z. (2022). Modular learning amidst covid-19 pandemic: Satisfaction among students in a higher education institution. *International Journal of Professional Development, Learners and Learning*, *4* (2), 1-8. https://doi.org/10.30935/ijpdll/12075.

United Nations Educational, Scientific, and Cultural Organization. (2021) REIMAGINING OUR FUTURES TOGETHER- A new social contract for education . https://unesdoc.unesco.org/ark:/48223/pf0000379707.locale=en.

UNICEF. (2020). Guidance on distance learning modalities to reach all children and youth during school closures Focusing on low-and no-tech modalities to reach the most marginalized. https://www.unicef.org/rosa/media/7996/file/Guidance%20Continuity%20of%20Learning%20during%20COVID19%20%20Reaching%20All%20Children_UNICEF%20ROSA.pdf.

World Bank Group. (2022). Remote Learning during COVID-19: Lessons from Today, Principles for Tomorrow. https://www.worldbank.org/en/topic/edutech/brief/how-countries-are-using-edtech-to-support-remote learning-during-the-covid-19-pandemic.