Realizations on Modular Distance Learning (MDL) among Public Secondary Schools of Cabarroguis, Quirino

Dr. Anne Grace D. Pascual*1, Dr. Richard C. Subia² ^{1, 2} Quirino General High School, Philippines *Corresponding Author email: annegrace0313@gmail.com

Received: 11 January 2024 **Revised**: 27 February 2024 Accepted: 01 March 2024

Available Online: 01 March 2024

Volume III (2024), Issue 1, P-ISSN – 2984-7567; E-ISSN - 2945-3577

Abstract

Aim: This study examined the implementation of Modular Distance Learning (MDL) in Cabarroquis District public secondary schools, focusing on the experiences of 92 junior high school and 39 senior high school teachers.

Methodology: A mixed-method approach was used to compare teachers' experiences in implementing MDL. It is a combination of quantitative descriptive research and phenomenology to assess the profile, realization, and effectiveness of the learning method, as well as to determine the challenges faced by the respondents.

Results: The study found that Junior High School teachers are more committed to modular distance learning than Senior High School teachers. JHS teachers are more convinced of MDL's effectiveness, while SHS teachers are more faithful to implementing MDL. However, JHS teachers faced more challenges in implementing MDL. There were no significant differences between the perceived experiences of junior and senior high school teachers due to similar circumstances experienced in the locality. MDL helped achieve learning continuity during the pandemic-affected school year, but faced challenges like time constraints, limited resources, and excessive activities for each learning competency.

Conclusion: Teachers should develop an assessment scheme for efficient evaluation of modules, re-evaluate modules, and submit feedback to Department of Education channels for quality assurance.

Keywords: Modular Distance Learning, Teachers' Experiences, Learning Continuity

INTRODUCTION

Education is an indispensable pillar of the society. In this regard, the Department of Education (DepEd) must always take measures to uphold the quality of education delivered in the country, despite the challenges that may arise. In 2020, the Philippines was not spared from the countries struck by the coronavirus disease (COVID-19). Due to this health crisis, a widespread lockdown was imposed which led to the temporary physical closure of all schools. This caused a huge impact on the education sector (Jamon et al., 2021). To cope with the problem, the DepEd set guidelines on management of COVID-19 situation and implemented policies on classroom assessment (DepEd, 2020). It also streamlined the K to 12 curriculum through the Basic Education Learning Continuity Plan (BE-LCP). In this strategy, the durable competencies were prioritized, and the remote learning challenges were alleviated.

Despite the fact that developing an intervention program for instruction that would not impede the students' pursuit of education during the pandemic was the main challenge faced by the basic, higher, and graduate education systems (Malipot, 2021), the DepEd was still able to come up with a commendable response to the said educational adversity. In line with the BE-LCP, the distance learning modality was adapted. In this learning delivery modality, the teacher and the learners are geographically separated from one another and only interact through modules, online platforms, and television or radio (Quinones, 2020). The aforementioned channels paved the way for the three main types of distance learning modality, specifically: Modular Distance Learning (MDL), Online Distance Learning (ODL), and TV or Radio-Based Instruction (TBI or RBI). To select the best type of distance learning modality to be implemented, the DepEd conducted a survey. Results showed that 8.9 million parents favored modular distance learning (Bernardo, 2020). With this, MDL was chosen and it was anticipated that 13 million or 59% out of 22 million public school learners would learn through modular distance learning (Magsambo, 2020). Modular distance learning

308

Educational Research Center Inc. SEC Reg. No. 2024020137294-00

Sta. Ana, Pampanga, Philippines





iJOINED ETCOR 1701NED P - ISSN 2984-7567 E - ISSN 2945-3577



UN The Exigency

P-ISSN 2984-7842 RUN# E - ISSN 1908-3181

provided the learners with equitable access to quality and relevant education during the COVID-19 pandemic (Talimodao & Madrigal, 2021). It is also student-centered and self-paced and can be used in almost all subjects, including natural science, particularly biology and medical education, and even mathematics (Serrano & Farrin, 2022). To make its implementation successful, it required resources such as learner's materials, textbooks, activity sheets, and study guides which would allow the students to learn at their own pace. In developing these materials, research on learning styles and learner-centered curriculum were conducted. Specifically, some of the primary considerations were (1) the development of effective learning tactics, self-evaluation techniques, and negotiating techniques among students, and (2) the provision of authentic experiences among learners to enable them to put their knowledge into application.

Website: https://etcor.org

Through this learning set-up, the students were given the autonomy to organize their learning opportunities around a well-defined topic, including instructions, objectives, teaching activities, and evaluation using criteriareferenced measurement. They were taught to be responsible of their own learning (Malipot, 2020; Saavedra, 2020) and their diversified needs were fulfilled (Abude, 2021). Aside from the academic advantages, this mode of learning also promoted the health and safety of both teachers and students as the provision of individualized instruction was through self-learning modules (SLMs) in print or digital formats. Due to its numerous benefits, MDL was the most widely used learning delivery method in the country at the time of pandemic (Roque, 2022). Meanwhile, although MDL taught the students to become responsible of their own learning, it is undeniable that they still need assistance from their teachers. As such, they may reach out to their teachers via e-mail, telephone, text message/instant messaging among others (Dangle & Sumaoang, 2020). This only shows that the role that the teachers play as a guide or a facilitator was still equally important. Teachers must still regularly monitor the students and assist them in overcoming their learning difficulties by assessing their learning requirements, offering necessary interventions, and providing resources which are accessible to students such as those from the internet (Martineau et al., 2020).

In addition, teachers must be careful in developing the modules and selecting its contents. They must ensure that the contents of the modules are contextualized or localized for better learning among students. As shown in Madrazo and Rio's study in 2020, contextualized learning modules on conic sections were more effective in bridging BSEd Mathematics students' learning gaps in Calculus with Analytic Geometry. Similarly, the research of Malgapo (2021) showed that a personally developed Physics instructional module effectively enhances students' understanding of lessons and topics, enabling them to complete tasks easily. MDL truly has a lot of advantages. However, despite its nature as presented in the foregoing paragraphs, there are still challenges involved with this approach (Isnani, 2019). Based on the findings of the study of Boholano et al. (2022), MDL was challenging for both teachers and students. The retrieval of modules was demanding for the teachers, while students need teachers' quidance and facilitation of learning for them to learn during this pandemic. Aside from that, the resources for the students and teachers were also minimal. The other challenges were also influenced by the learners' characteristics, teacher mediation and learner support, and distance learning theory on instructional design and delivery, among others (Meredith, 2019). In fact, Oz and Orak (2018) found out in their study that students did not learn better with modules because the evaluation questions in the learning packages were not adequate.

Nonetheless, the Learners' Tracking Tools data revealed that 35.76% of secondary level learners attended synchronous sessions for online distance learning, while 64.24% never joined any. This means that MDL is still essential and undeniably appropriate for reaching out to last-mile learners, including out-of-school youth, working students, economically challenged students, and those in remote areas without internet access. In view of the context of the implementation of MDL, this study examined and provided a comprehensive analysis of the impact of modular instruction on teaching and learning scenarios in the K to 12 curriculum during the pandemic.

Objectives

This study determined the implementation of Modular Distance Learning (MDL) in Cabarroguis District public secondary schools, focusing on the experiences of 92 junior high school and 39 senior high school teachers.

Specifically, it sought answers to the following questions: What is the profile of the respondents in terms of:

- (a) age,
- (b) gender,
- (c) civil status,
- (d) highest educational attainment,
- (e) present position,
- (f) key stage level assignment,

309

: https://etcor.org : https://www.facebook.com/EmbracingTheCultureOfResearch : https://twitter.com/ETCOR_research : https://tinyurl.com/YouTubeETCOR : embracingthecultureofresearch@etcor.org : 0939-202-9035

Educational Research Center Inc. Sta. Ana, Pampanga, Philippines





1701NED P - ISSN 2984-7567 E - ISSN 2945-3577

RUN # E - ISSN 1908-3181

RUN The Exigency P-ISSN 2984-7842







Website: https://etcor.org

- (g) length of years in service, and
- (h) in-service trainings/ seminars attended relative to function?
- What is the extent of realization of the objectives of modular distance learning by the respondents?
- How effective is modular distance learning in terms of its structural component?
- To what extent is modular distance learning implemented by the respondents?
- 5. Is there a significant difference between the perceptions of JHS teachers and SHS teachers as regard their experiences in the implementation of modular distance learning?
- What are the challenges encountered by the respondents in the implementation of modular distance learning?

METHODS

Research Design

This study utilized a combination of qualitative and quantitative research design to evaluate the implementation of modular distance learning in public secondary schools in Cabarroguis District, Quirino. The research employed a descriptive study design to determine the profile, extent of realization of the modular learning and its effectiveness to learning and the phenomenological approach to identify challenges faced by respondents in implementing modular distance learning in their schools. The study aimed to provide a comprehensive understanding of the MDL situation in Cabarroguis District. Creswell (2007) defines phenomenological studies as descriptions of lived experiences of a concept or phenomenon, such as learning a second language in a school system, focusing on the meaning experienced by participants.

Population and Sampling

The researchers utilized purposive sampling, a non-probability technique, to select 131 public secondary teachers in Cabarroguis District for the survey and 10 participants for the Focus Group Discussion. Two participants were taken from the different teaching positions. The participants were taken based on their teaching experiences, location of stations (metro cabarroguis and barrio schools) during the pandemic. These teachers used modular distance learning as learning delivery during the pandemic. The study utilized maximum variation sampling, including both junior and senior high school levels, to capture a wide range of perspectives.

Instruments

Survey Questionnaire. The researchers utilized an online-survey questionnaire adapted from the study of Lagat (2020) to determine the needed data. Some items were modified to include statements on the extent of implementation of MDL. A checklist on the challenges that teachers may have encountered during implementation was also provided.

The questionnaire consisted of two parts. The first part was for the personal information of the respondents and the second part was the data of the respondents' perceptions on the realization of objectives of MDL, effect of modular distance learning along structural component, extent of implementation of modular distance learning, and checklist on the challenges that teachers may have encountered during implementation.

In rating the extent of realization of the objectives of modular distance learning, the following scale was used:

Point	Scale	Qualitative Description
5	4.21 - 5.00	Fully Realized (FR)
4	3.41 - 4.20	Realized (R)
3	2.61 - 3.40	Moderately Realized (MR)
2	1.81 - 2.60	Slightly Realized (SR)
1	1.00 - 1.80	Least Realized (LR)

In rating the extent of effect of modular distance learning as to its following structural component, the following scale was used:

•		
Point	Scale	Qualitative Description
5	4.21-5.00	Very Effective (VF)

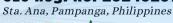
310



Educational Research Center Inc.



1701NED P - ISSN 2984-7567 E - ISSN 2945-3577







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

4	3.41-4.20	Effective (E)
3	2.61-3.40	Moderately Effective (ME)
2	1.81-2.60	Slightly Effective (SE)
1	1.00-1.80	Least Effective (LE)

In measuring the extent of implementation of modular distance learning for the new normal by the respondents, the following scale was used:

Point	Scale	Qualitative Description		
5	4.21-5.00	Fully Implemented (FI)		
4	3.41-4.20	Implemented (I)		
3	2.61-3.40	Moderately Implemented (MI)		
2	1.81-2.60	Slightly Implemented (SI)		
1	1.00-1.80	Least Implemented (LI)		

Semi- Structured Interview Guide. The researchers used a semi-structured interview to selected respondents on a face-to-face session of the Focus Group Discussion to learn about the experiences and challenges the participants had encountered on the implementation of modular distance learning. The interview guide is focused on determing the experiences of teachers during the implementation and the experiences they had encountered during the pandemic. The validation of the guide questions underwent three phases: first validator is focused on checking the content, the second phase focused on the ethical standards of questions ensuring to avoid biases and the third is focused on the grammar and language being used. Filipino translation of the interviwed guide were also provided and validated by the experts.

Data Collection

The researchers used an online survey questionnaire adapted from the study of Lagat (2021) study to gather data on the extent of implementation of modular distance learning (MDL) and the challenges faced by teachers. The questionnaire included personal information and data on respondents' perceptions of MDL's objectives, its effect on the structural component, and its implementation extent. This should be discussed in the instrument part.

The researchers gathered 10 teachers comprised of 2 teachers per teaching position, who were asked questions about their perceptions, opinions, and experiences on modular distance learning delivery. The course of the discussion was planned in advance and the researchers, who took turns as moderators, relied on an outline or quide to ensure that all topics of interest were covered. Participants were actively encouraged to not only express their own opinions, but also respond to other members and questions posed by the researchers. During the course of discussions, the researchers strove to create a non-intimidating environment so that participants would feel free to talk openly and give honest opinions.

An online survey was used to gather the realizations and effectiveness of the MDL. The checklist also provided to identify challenges faced by teachers during implementation 92 JHS and 39 SHs teachers were ask about the perceptions, opinions, and experiences on MDL delivery.

The researchers used a semi-structured interview with selected respondents during a Focus Group Discussion to understand their challenges in implementing MDL, ensuring a non-intimidating environment. Moreover, the 10 participants were invited to have a dialogue through Focus Group Discussion to gain more insights and shared the challenges and experiences following the IATF guidelines.

Data Analysis

For the quantitative data gathered in this study, frequency and percentage Distribution were used to present the profile of the respondents and challenges they have encountered. On the other hand, weighted mean was used to identify the realization of the objectives of modular distance learning, effect of modular distance learning along structural component, and extent of implementation of modular distance learning. Additionally, T-test was utilized to determine if there is a significant difference between the perceptions of JHS teachers and SHS teachers as regard their experiences in the implementation of modular distance learning. Microsoft excel were used to analyzed the descriptive data presented above.

Reflexive thematic analysis were used to analyze the experiences and challenges met. This approach involves using general or specific research questions on people's experiences, opinions, perceptions, and illustrations of a given phenomena. It also follows the Clarke and Braun (2006) approach wherein it is an iterative process

: https://etcor.org : https://www.facebook.com/EmbracingTheCultureOfResearch : https://twitter.com/ETCOR_research : https://tinyurl.com/YouTubeETCOR : embracingthecultureofresearch@etcor.org : 0939-202-9035

consisting of six steps: familiarizing with data, generating codes, identifying themes, reviewing themes, defining and naming themes, and locating exemplars.

Ethical Considerations

Respondents were informed about the study's purpose and the collected information. Researchers followed DepEd Order No. 16, s. 2017, and followed the Schools Division Research Committee's processes. They sought respondents' approval, educated them on research aims, and assured privacy of collected information.

RESULTS AND DISCUSSION

Profile of the Respondents based on their Age, Gender, Civil Status, Highest Educational Attainment, Present Position, Key Stage Level Assignment, Length of Service and In-service Trainings

Table 1. Respondents as to Age

Particulars	JHS Te	eachers	SHS Teachers	
	f	%	f	%
21-25 years old	7	7.61	4	10.26
26-30 years old	8	8.69	6	15.39
31-35 years old	21	22.83	11	28.21
36-40 years old	18	19.57	8	20.51
41-45 years old	13	14.13	5	12.82
46-50 years old	11	11.96	3	7.69
51-55years old	7	7.61	2	5.13
56-60 years old	5	5.44	0	0.00
61-65 years old	2	2.17	0	0.00
Total	92	100.00	39	100.00

Out of 92 Junior High School teacher-respondents, 71.61% identified as 21-25 years old, 8.69% as 26-30, 21.83% as 31-35, 19.57% as 36-40, 14.13% as 41-45, and 11.96% as 51-55. For 56-60 and 61-65 years old, 5.44% and 2.17% of respondents, respectively, belonged to these age brackets. The table further reveals that majority of the respondents are within the 31-35 years age bracket. This is a good indication that they are more or less experienced and seasoned as far as dealing with life is concerned and it may be an advantage in the field of teaching and classroom management.

Out of 39 Senior High School teachers, 10.26 percent are 21-25 years old, 15.39 percent are between 26-30 years old, 11.21 percent are 31-35 years old, 20.51 percent are between 36-40 years old, and 12.82 percent are 41-45 years old. Three teachers are 46-50 years old, while two are 51-55 years old. Most senior high school teachers are experienced and seasoned in curriculum and instruction, similar to their JHS counterparts.

Table 2. Respondents as to Gender

	JHS Teachers		SHS Teachers			
Particulars	f	%	f	%		
Male	25	27.17	14	35.89		
Female	67	72.83	25	64.10		
Total	92	100.00	39	100.00		

The table shows that 67.83% of JHS teachers are female, while 25.17% are male. Additionally, 64.10% of SHS teachers are female, while 47.89% are male. This indicates that more females are entering the teaching profession, consistent with previous research showing that the female group outnumbers the male group in the field.

Table 3. Respondents as to Civil Status

- abic of the bottle act of the other						
Particulars	JHS Teachers	SHS Teachers				









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



Sta. Ana, Pampanga, Philippines

	f	%	f	%
Single	28	30.44	11	28.21
Married	62	67.39	27	69.23
Widow/er	2	2.17	1	2.56
Total	92	100.00	39	100.00

The table reveals that 62.7% of JHS teacher-respondents are married, while 28.4% are single and 2.1% are widow/er. In contrast, 27.9% of SHS teachers are married, and 28.1% are married. Married individuals are more emotionally stable, responsible, and mature in teaching and managing tasks, attributed to their experiences in holding key roles in their families.

Table 4. Teacher-Respondents as to Highest Educational Attainment

	JHS Teachers		SHS Teachers	
Particulars	f	%	f	%
Bachelor's Degree	59	64.13	25	64.10
Master's Degree	31	33.69	12	30.77
Doctorate Degree	2	2.17	2	5.13
Total	92	100.00	39	100.00

The table shows that 59.31% of JHS teacher-respondents are Bachelor's Degree graduates, 33.69% are Master's Degree graduates, and 2.17%) are doctorate degree graduates. In contrast, 25.10% of SHS respondents are Bachelor's Degree graduates, 30.77% hold Master's degrees, and 5.13% are doctorate degree graduates. These results indicate that some teachers have pursued post-graduate degrees to enhance their skills and capabilities.

Table 5. Respondents as to Key Stage Level Assignment

Particulars		Participants		
		f	%	
JHS Teacher		92	70.23	
SHS Teacher		39	29.77	
	Total	131	100.00	

The table shows that 92.2% of respondents are junior high school teachers, while 29.7% are teaching at the SHS level. The majority are junior high school teachers, with varying key stage assignments and curriculum and instruction encounters shaping their teaching experiences.

Table 6. Respondents as to Present Position

	JHS Teachers		SHS Teachers	
Particulars	f	%	f	%
Teacher I	21	22.83	8	20.51
Teacher II	4	4.35	9	23.08
Teacher III	57	61.96	14	35.90
Master Teacher I	9	9.78	8	20.51
Master Teacher II	1	1.09	0	0.00
Total	92	100.00	39	100.00

As to present position, the table above reveals that out of the 92 JHS teacher respondents, 57 or 61.96 percent are Teacher III, 21 or 22.83 percent are Teacher I, 9 or 9.78 percent are Master Teacher I, 4 or 4.35 percent are Teacher II, while 1 respondent is a Master Teacher II. The table further shows that majority of the JHS



icational Research Center Inc.





IJOINED ETCOR 1701NED P - ISSN 2984-7567 E - ISSN 2945-3577

E - ISSN 1908-3181

The Exigency P - ISSN 2984-7842



Website: https://etcor.org

teacher respondents are Teacher III, followed by Teacher I, and Master Teacher I, respectively. This suggests that

the JHS teacher-respondents of this study are currently holding different teaching positions. On the other hand, 14 or 35.90 percent of the SHS teacher-respondents are Teacher III and 9 or 23.08 percent are Teacher II. Both Teacher I and Master Teacher I have 8 respondents while no response was seen on Master Teacher II position. The table further reflects that majority of the SHS teachers are holding Teacher III positions.

Table 7. Respondents as to Length of Years in Service

5	JHS Teachers		SHS Teachers	
Particulars	f	%	f	%
1-5 years	8	8.69	8	20.51
6-10 years	7	7.61	14	35.90
11-15 years	29	31.52	17	43.59
16-20 years	20	21.74	0	0.00
21-25 years	16	17.39	0	0.00
26-30 years	9	9.78	0	0.00
31 years and above	3	3.26	0	0.00
Total	92	100.00	39	100.00

Table 7 reveals that 29 or 31.52 percent of the JHS teacher-respondents have already been in service for 11-15 years, 20 or 21.74 percent are now teaching for 16-20 years, 16 or 17.39 percent for 21-25 years, 9 or 9.78 percent for 26-30 years, 8 or 8.69 percent for 1-5 years, 7 or 7.61 percent for 6-10 years, while 3 or 3.26 percent claimed to have been teaching for 31 years and above.

On the other hand, 17 or 43.59 percent of the SHS teachers have been in service for 11-15 years, 14 or 35.90 percent for 6-10 years, and 8 or 20.51 percent for 1-5 years. No response was noted for 16-20 years, 21-25 years, 26-30 years, and 31 years and above.

Majority of both JHS and SHS teacher-respondents have 11-15 years of teaching experiences. The table further reveals that teachers from both JHS and SHS levels have varying length of years in service which attribute to the differences in their teaching experiences.

Table 8, Respondents as to Level of In-Service Trainings/Seminars Attended Relative to Functions

	<u> </u>				
	JHS Te	eachers	SHS Teachers		
Particulars*	f	f Rank		Rank	
International	36	5	18	5	
National	24	6	7	6	
Regional	54	4	24	4	
Division	92	1.3	39	1.3	
District	92	1.3	39	1.3	
School	92	1.3	39	1.3	
Total	92	100.00	39	100.00	

^{*}Frequency of Mentions

It is evident from the table that all the JHS teacher-respondents have attended in-service trainings and seminars in the school, district, and division levels. Only 54 attended trainings and seminars in the regional level while 36 participated in the national level. Meanwhile, 24 participants joined international trainings and seminars.

For SHS teachers, all of them have attended In-service trainings and seminars in school, district, and division levels while 24 attended the regional level, and 18 in the international level. Only 7 out of 39 teachers partook in national trainings and seminars.

Results suggest that the teachers from both JHS and SHS levels are keeping themselves abreast with the trends in teaching and instruction by attending seminars and trainings at various levels.





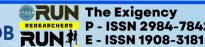


iJOINED ETCOR 1707NED P - ISSN 2984-7567 E - ISSN 2945-3577

P - ISSN 2984-7842

The Exigency





Extent of Realization of the MDL (Modular Distance Learning)

Table 9. Extent of Realization of the Objectives of Modular Distance Learning

Table 9. Extent of Realization of the Object			Teachers		SHS Teachers		
Particulars	Particulars		QD	Rank	Wt. Mean	QD	Rank
 Modular Distance Learning allows le use self-learning modules in print format and provides self-paced, learning opportunities. 	or digital	5.00	FR	1.3	5.00	FR	1.3
 Modular Distance Learning expands education in conjunction to distance as learners study from the comfort homes due to the ongoing of quarantines. 	e learning s of their	5.00	FR	1.3	5.00	FR	1.3
It aims to help learners reflect and their learning.	reassess	4.05	R	5	4.15	R	5
 It teaches independent study among or in case of struggling learners, ca aid of parents or para-teachers. 	•	4.72	FR	4	4.49	FR	4
 Modular Distance Learning ensures continuity during school closure in term and supports a successful an transition back to school in the me long-term. 	the short- d smooth	5.00	FR	1.3	5.00	FR	1.3
Average Weighted Mean		4.75	Fully R	ealized	4.73	Fully R	ealized

The study reveals that Junior High School teachers fully realized four out of five objectives of modular distance learning. Three of these objectives were: allowing learners to use self-learning modules in print or digital format, providing self-paced, flexible learning opportunities, expanding access to education during community quarantines, and ensuring learning continuity during school closure. The teachers also recognized that modular distance learning teaches independent study among learners and can be accessed by parents or para-teachers. The teachers also rated the objective of helping learners reflect and reassess their learning as the least realized.

Senior high school teachers also realized that modular distance learning allows learners to use self-learning modules in print or digital format, provides self-paced, flexible learning opportunities, and ensures learning continuity during school closure. They also recognized that modular distance learning teaches independent study among learners and can be accessed by parents or para-teachers. The teachers also recognized the importance of helping learners reflect and reassess their learning.

Table 10. Extent of Effect of Modular Distance Learning as to its Structural Component

Table 10. Excert of Effect of Floadial Distance Learning as to its structural component								
Particulars	JHS	JHS Teachers			SHS Teachers			
Particulars	Wt. Mean	QD	Rank	Wt. Mean	QD	Rank		
Instructions on how to use the module a clear, useful, and well-explained.	are 4.67	VE	7	4.23	VE	8		
The purpose and aims of the module are state clearly; they define well the anticipate learning outcomes		VE	5	4.87	VE	4.5		

315

: https://etcor.org : https://www.facebook.com/EmbracingTheCultureOfResearch : https://twitter.com/ETCOR_research : https://tinyurl.com/YouTubeETCOR : embracingthecultureofresearch@etcor.org : 0939-202-9035

Thank you for embracing the culture of research with us!

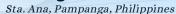




iJOINED ETCOR 1701NED P - ISSN 2984-7567 E - ISSN 2945-3577



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





Average Weighted Mean







3.	The module provides list of pre-requisite skills to allow for advance preparation work for the module itself.	4.65	VE	8	4.41	VE	7
4.	The objectives of the module as a whole are listed at the beginning and activities within the module have specific objectives as well.	4.98	VE	3	4.87	VE	4.5
5.	A diagnostic pre-test is included at the start of any topic to check whether learners have the necessary background to understand the module.	5.00	VE	1.5	5.00	VE	1.5
6.	The module contains sequenced instructional activities that form the core of the module and set out the input-practice tasks-feedback sequence for each activity.	4.96	VE	4	4.97	VE	3
7.	The module has post-tests that are used for checking learners' final mastery of the objectives.	5.00	VE	1.5	5.00	VE	1.5
8.	Spaces for learners' feedback or reinforcement are made available at the end of the module for learners to write their reflection or responses.	4.84	VE	6	4.79	VE	6

As to the perceptions of JHS teacher-respondents on the extent of effect of modular distance learning as to its structural component, all particulars were found to be "very effective." Rank 1 were two particulars having the same weighted mean of 5.00: "A diagnostic pre-test is included at the start of any topic to check whether learners have the necessary background to understand the module" and "The module has post-tests that are used for checking learners' final mastery of the objectives." Next were "The objectives of the module as a whole are listed at the beginning and activities within the module have specific objectives as well," "The module contains sequenced instructional activities that form the core of the module and set out the input-practice tasks-feedback sequence for each activity," "The purpose and aims of the module are stated clearly; they define well the anticipated learning outcomes," "Spaces for learners' feedback or reinforcement are made available at the end of the module for learners to write their reflection or responses" and "Instructions on how to use the module are clear, useful, and wellexplained," having weighted means of 4.98, 4.96, 4.90, 4.84, and 4.67, respectively. The least rated by the respondents was "The module provides list of pre-requisite skills to allow for advance preparation work for the module itself," with a weighted mean of 4.65 meaning "fully effective." The average weighted mean of 4.88 indicates that JHS teachers perceived modular distance learning as to its structural component as "very effective."

4.88

Very Effective

4.77

Very Effective

The study found that senior high school teachers perceived modular distance learning as "very effective" in its structural component. The highest rated aspects were diagnostic pre-tests at the start of topics, sequenced instructional activities, clear purpose and aims, and well-defined objectives. The lowest rated aspect was instructions on how to use the module, which were clear, useful, and well-explained.

Modular instruction during the pandemic involved individualized instruction using self-learning modules (SLMs) in print or digital format, along with other learning resources such as Learner's Materials, textbooks, activity sheets, and study guides. Learners access electronic copies of learning materials on a computer, tablet PC, or smartphone, and can access e-learning materials through CDs, DVDs, USB storage, and computer-based applications. The teacher takes responsibility for monitoring learners' progress, and learners can seek assistance



Sta. Ana, Pampanga, Philippines



iJOINED ETCOR P - ISSN 2984-7567 E - ISSN 2945-3577

UN The Exigency



P - ISSN 2984-7842 RUN# E - ISSN 1908-3181

via email, telephone, text message/instant messaging, and home visits. Para-teachers were also needed to serve as community members. Overall, modular distance learning proved to be very effective in enhancing the learning experience for senior high school teachers.

Website: https://etcor.org

Table 11. Extent of Implementation of Modular Distance Learning by the Respondents

Table 11. Extent of Implementation of Modular L		Ť T	JHS Teach		SHS Teachers		
	Particulars	Wt. Mean	QD	Rank	Wt. Mean	QD	Rank
1.	Establish the needed health and safety protocols as appropriate	5.00	FI	1.25	5.00	FI	1.25
2.	Provide mental and psychosocial support services to learners such as establishing safety nets for learners against violence and abuses at home and in the community, provision of hotlines and setting-up of help desks in coordination with DSWD	4.25	FI	6	4.28	FI	6
3.	Provide Self-learning Modules (SLMs) and Learning Activity Sheets (LAS) to learners in printed format	4.93	FI	5	4.77	FI	5
4.	Supplement Curriculum Guides (CGs) and MELCS' delivery and assessment with materials currently available in LR Portal and DepEd Commons	3.12	MI	8	3.18	MI	8
5.	Check availability of gadgets and equipment for learners and teachers as appropriate	5.00	FI	1.25	5.00	FI	1.25
6.	Prepare learning plans, home learning tasks of learners and individual monitoring plan for learners	5.00	FI	1.25	5.00	FI	1.25
7.	Request for load allowance and travelling expenses for teachers who provide aid to learners needing assistance and remediation, subject to availability of funds and applicable rules and regulations	1.02	LI	10	1.10	LI	10
8.	Tap and train community learning facilitators (parents, guardians, other adults) to support learners while learning from home using this learning delivery mode	1.07	LI	9	1.21	LI	9
9.	Conduct regular Parent-Teacher Conferences to ensure updating and mutual support in facilitating the learning process	5.00	FI	1.25	5.00	FI	1.25



1701NED P - ISSN 2984-7567 E - ISSN 2945-3577



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

Sta. Ana, Pampanga, Philippines

Website: https://etcor.org

Establish strong home-school-community collaboration

4.05

7

4.05

7

Average Weighted Mean

3.84 Implemented

3.86 Implemented

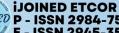
The study analyzed the implementation of modular distance learning by JHS teacher-respondents, focusing on four out of ten specific aspects. The highest rated aspects were establishing health and safety protocols, checking gadget availability, preparing learning plans, home learning tasks, individual monitoring plans, and conducting regular Parent-Teacher conferences. The study found that SHS teachers fully implemented aspects such as providing Self-learning Modules (SLMs) and Learning Activity Sheets (LAS) to learners, providing mental and psychosocial support services, and establishing safety nets against violence and abuses. The study also found that SHS teachers moderately implemented aspects like supplementing Curriculum Guides and MELCS' delivery and assessment with materials available in LR Portal and DepEd Commons, tapping and training community learning facilitators, and requesting load allowance and travel expenses for teachers who provide aid. The results support Llego's (2020) study, which suggests that modular instruction during the pandemic involved individualized instruction that allowed learners to use self-learning modules (SLMs) in print or digital format, as well as other learning resources like Learner's Materials, textbooks, activity sheets, study guides, and other materials. The teacher took responsibility for monitoring learners' progress, and learners may ask for assistance via email, telephone, text message/instant messaging, and home visits. Para-teachers were needed for any family or community stakeholder. Overall, the study demonstrates that JHS teachers effectively implemented modular distance learning during the pandemic.

Table 12. t-Test Results of the Perceptions of JHS Teachers and SHS Teachers on their Experiences in the Implementation of Modular Distance Learning

	Particulars	(x ¹ -m) ²	$(x^2-m)^2$	SD ¹	SD ²	t-computed	p-value	Result
1.	Extent of Realization of the Objectives of Modular Distance Learning	0.68	0.61	0.41	0.39	0.10234	.460505	NS
2.	Extent of Effect of Modular Distance Learning as to its Structural Component	0.14	0.59	0.14	0.28	0.94068	.18141	NS
3.	Extent of Implementation of Modular Distance Learning by the Respondents	22.93	21.34	1.59	1.53	-0.02139	.491586	NS
4.	Challenges Encountered by the Respondents in the Implementation of Modular Distance Learning	8710.70	6495.63	(32.5)	(26.8)	0.82856	.209102	NS

Website: https://etcor.org





1707NED P - ISSN 2984-7567 E - ISSN 2945-3577



UN The Exigency P - ISSN 2984-7842 **RUN** # E - ISSN 1908-3181

p-value of .05 and below are significant and above .05 are not significant

Sta. Ana, Pampanga, Philippines

The table reveals that Junior High School teachers (M=4.75, SD=0.41) are more committed to fulfilling the objectives of modular distance learning (MDL) than their Senior High School counterparts (M=4.73, SD=0.39). JHS teachers are more convinced about MDL's effectiveness in its structural component than SHS teachers. However, SHS teachers are more faithful in implementing MDL compared to JHS teachers. JHS teachers experience more challenges in implementing MDL than their SHS counterparts. The p-values on "Extent of Realization of the Objectives of Modular Distance Learning," "Extent of Effect of Modular Distance Learning as to its Structural Component," "Extent of Implementation of Modular Distance Learning by the Respondents," and "Challenges Encountered by the Respondents in the Implementation of Modular Distance Learning" are above.05, indicating no significant differences among the factors involved between the perceived experiences of junior high school and senior high school teachers. The data reveals that both teachers from junior high and senior high schools in Cabarroguis District implemented MDL in their respective schools, and their experiences and affective factors are likely similar.

Challenges on the Implementation of MDL (Modular Distance Learning)

<u>Table</u>	able 13. Challenges Encountered in the Implementation of Modular Distance Learning								
	Particulars*		JHS Teacher	'S	SHS Teachers				
i di ticulai 3		f	%	Rank	f	%	Rank		
1.	The module contains excessive and unnecessary activities for each learning competency.	75	81.52	4	27	69.23	3		
2.	The module has many errors.	43	46.74	6	16	41.03	5		
3.	Learners experience difficulty in independent study due to lack of supervision from parents or guardians.	31	33.69	7	7	17.95	9.5		
4.	Learners cannot comprehend directions and instructions in the module.	13	14.13	9	9	23.08	7		
5.	Lack of support and guidance from the parents/guardians.	50	54.35	5	12	30.77	1.25		
6.	Difficulty of parents/guardian in grasping the contents of the module (not able to finish formal basic education).	77	83.69	3	7	17.95	9.5		
7.	Difficulty of teachers to bring modules to learners' homes/community.	27	29.35	8	22	56.41	4		
8.	Lack of resources of the school in the reproduction process in order to provide adequate modules to all learners; not able to meet the 1:1 ratio.	82	89.13	2	30	76.92	2		
9.	Lack of time for teachers to evaluate answers of learners in the self-learning modules and give feedback immediately.	91	98.91	1	35	89.74	1		
10.	Lack of support from stakeholders such as	9	19.78	10	8	20.51	8		

icational Research Center Inc

Pampanga, Philippines



1701NED P - ISSN 2984-7567 E - ISSN 2945-3577





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

and municipal LGU barangay in distribution and retrieval of modules.

As to frequency of mentions of the challenges encountered by the teacher-respondents in the implementation of modular distance learning, rank 1 was "Lack of time for teachers to evaluate answers of learners in the selflearning modules and give feedback immediately." Almost 99% of the JHS respondents and 89% from the SHS level argued that this was the most challenging part of the modular approach during the second year of the pandemic where MDL was used.

Challenges on the Implementation of Modular Learning

Based on the interviews and FGDs conducted, teachers found the piles of modules and learning activity sheets exhausting to go through, since every module and answer sheet must be scrutinized to ensure that proper feedback is given. Some teachers reflected that:

Teacher 1: "Checking modules as well as evaluating learners' answers is too-much time consuming because almost all competencies have more than five activities which made it much difficult to check ... "

Teacher 2: "Napakaraming activities, halos makapal 'yung SLM para sa isang competency lamang...' "Hindi madaling icheck ang mga sagot ng mga bata lalo na kapag essay-type or subjective."

To address this, teachers "filtered out" necessary activities which were what learners would only answer. Teacher 3: ".. we delete the repetitive and irrelevant activities. We don't require learners to answer them, only to review them on what they learned..."

Both respondent from the JHS and SHS levels agreed that the second highest-rated challenge involved "Lack of resources of the school in the reproduction process in order to provide adequate modules to all learners; not able to meet the 1:1 ratio," with 89% and 76 % of respondents, respectively, ticking this on the checklist.

"Since the SLMs and LAS from the division, region, and national offices were late in arriving, and the school year started already, we had to scramble for modules to give our learners...

"We had to sacrifice personal finances just to spend on coupon bonds, inks, and printer sets to be able to print all the soft copy of the modules given by DepEd..."

"...kailangan naming mag-print noon kasi ano ang ibibigay namin kapag pumupunta ang mga parents na kumukuha na modules..."

"Halos nag-oovertime kami para makaprint ng modules kasi walang dumating. Ung meron man, kulang para sa 1:1 ratio para sa mga bata..."

The same sentiments were issued by school heads, who had joined in the interview during the focus group discussions. Respondents remarked that the lack of resources prompted them to solicit printing materials from the local government units and private individuals. Teachers reflected that:

"We had to ask from our alumni and stakeholders because we could not meet the required number of modules for our learners."

83% of the JHS teachers reported that their top 3 challenge was "The module contains excessive and unnecessary activities for each learning competency" which sourced out complaints from parents who helped in the learners' education at home, according to the respondents. This was because since the teachers were not available due to social distancing, parents and guardians served as knowledge-bearers at home.

Educational Research Center Inc SEC Rea. No. 2024020137294-00

Sta. Ana, Pampanga, Philippines





1701NED P - ISSN 2984-7567 E - ISSN 2945-3577

The Exigency P-ISSN 2984-7842

E - ISSN 1908-3181

For the SHS teachers, their top 3 challenge was "The module contains excessive and unnecessary activities for each learning competency," with 69% agreeing to this. According to them, oftentimes, upon skimming pages of the modules, they would notice that each competency has more or less eight activities that learners needed to answer. Most of the activities were just reinforcement activities which added to voluminous tasks and burden among both teachers and learners. They recommend that at least two or three activities can already expound the learning competency. More work activities contribute to the "study exhaustion" among learners.

Website: https://etcor.org

A notable challenge faced by teacher-respondents included "Difficulty of teachers to bring modules to learners' homes/community." This is particularly true in the case of secondary schools in Cabarroquis District, whose learners reside in far-flung areas. A mountainous place, rural Cabarroquis can be reached by vehicle transportation in about one and a half to two hours from Gundaway, the town's capital. Teachers reflected that:

....Malayo ang mga bahay ng aming mga estudyante [Our learners' houses are far from the school] na kailangang lakarin o kaya ay umupa ng tricylce para mapuntahan {that we needed to walk going there or even hire a tricyle to bring us there...]"

"Sa layo ng mga bahay ng aming mga estudyante, ayaw ng parents na pumunta sa school para kumuha ng modyul kasi mahal ang pamasahe [Due to distance of their houses to the school, the parents do not like to come to school to get modules because the fare is high]."

In order to address this, the school through a joint effort with the barangay would use the barangay transport to visit learners' houses for the retrieval and distribution of modules.

The results support Pabalate's study in 2020 that showed several challenges encountered by parents such as difficulty comprehending the lessons printed in English, printed visuals that couldn't be identified, website links that were too long to type, some links which contained unsuitable content placed in the lesson by mistake, and reprinting modules at their own expense because the copies were incomplete and have missing texts.

Moreover, this study also agrees with Adonis (2020) that affirms the presence of learners who couldn't understand the questions on the learning module, thus tended to copy answer keys from the modules.

Further, the researchers were able to come up with key insights about the difficulties of teachers on modular

learning:			I
Key Statements	Themes	Codes	Thematic Description
"Checking modules as well as evaluating learners' answers is too-much time consuming because almost all competencies have more than five activities which made it much difficult to check" "Napakaraming activities, halos makapal 'yung SLM para sa isang competency lamang" "Hindi madaling icheck ang mga sagot ng mga bata lalo na kapag essaytype or subjective" "we delete the repetitive and irrelevant activities, we don't require learners to answer them, only to	Checking answers	Difficulty in assessment	Teachers found it hard to evaluate learners' activities based on the modules; assessment of answers was not easy to do so that teachers resorted to filtering activities to check.



Educational Research Center Inc.



iJOINED ETCOR P - ISSN 2984-7567 E - ISSN 2945-3577

RUN The Exigency







| RUN | P - ISSN 2984-7842 | P - ISSN 1908-3181

RESEARCH COM	EuroPub EuroPub	e: nttps://etcor.org	NAL BOOK OPMENT BOARD TO THE TOTAL BOOK OPMENT BOARD THE TOTAL BOOK OPMENT BOOK OPMENT BOARD THE BOOK OPMENT BOOK OPME
review them on what they learned"			
"Since the SLMs and LAS from the division, region, and national offices were late in arriving, and the school year started already, we had to scramble for modules to give our learners"	Printing costs	Lack of resources for printing modules	Teachers found it difficult to provide printed modules for learners due to lack of printing resources.
"We had to sacrifice personal finances just to spend on coupon bonds, inks, and printer sets to be able to print all the soft copy of the modules given by DepEd"			
"kailangan naming mag- print noon kasi ano ang ibibigay namin kapag pumupunta ang mga parents na kumukuha ng modules"			
"Halos nag-oovertime kami para makaprint ng modules kasi walang dumating. Ung meron man, kulang para sa 1:1 ratio para sa mga bata"			
"We had to ask from our alumni and stakeholders because we could not meet the required number of modules for our learners."			
"Malayo ang mga bahay ng aming mga estudyante [Our learners' houses are far from the school] na kailangang lakarin o kaya ay umupa ng tricylce para mapuntahan {that we needed to walk going there or even hire a tricyle to bring us there]"	Transportation problem	Delivery of modules to learners' homes poses a problem	Teachers must bring modules to learners in their communities especially if learners live in far-flung areas.
"Sa layo ng mga bahay ng aming mga estudyante, ayaw ng parents na			

Website: https://etcor.org









The Exigency P-ISSN 2984-7842

pumunta sa school para kumuha ng modyul kasi mahal ang pamasahe [Due to distance of their houses to the school, the parents do not like to come to school to get modules because the fare is high]."

Summary

A study analyzed 92 junior high school teachers, with 71.61% aged 21-25 years old, 8.69% aged 26-30, 21.83% aged 31-35, 19.57% aged 36-40, 14.13% aged 41-45, and 11.96% aged 51-55. The majority of teachers were experienced in curriculum and instruction, married, and held bachelor's degrees. The study found that junior high school teachers realized four out of five objectives of modular distance learning, including self-learning modules in print or digital format, flexible learning opportunities, and ensuring learning continuity during school closures. Senior high school teachers also recognized the importance of helping learners reflect and reassess their learning. The study suggests that teachers from both JHS and SHS levels are keeping themselves updated with teaching and instruction trends through various trainings and seminars. Modular distance learning (MDL) was found to be very effective in its structural component for junior high school teachers, with the highest rated aspects being diagnostic pre-tests, sequenced instructional activities, clear purpose and aims, and well-defined objectives. The study also analyzed the implementation of MDL by JHS teacher-respondents, focusing on four out of ten specific aspects: establishing health and safety protocols, checking gadget availability, preparing learning plans, home learning tasks, individual monitoring plans, and conducting regular Parent-Teacher conferences. JHS teachers were more committed to fulfilling MDL objectives than their senior high school counterparts. Both teachers from junior and senior high schools in Cabarroquis District implemented MDL in their respective schools, with similar experiences and affective factors.

Conclusions

In these findings, most teachers in JHS and SHS levels have 11-15 years of teaching experience, with varying lengths of service. They are keeping up with trends in teaching and instruction by attending seminars and trainings. Modular distance learning (MDL) has proven effective in enhancing the learning experience for senior high school teachers, and para-teachers are needed for family and community stakeholders. Both teachers in Cabarroguis District implemented MDL in their respective schools, with similar experiences and affective factors. Teachers should develop an assessment scheme for efficient evaluation of modules, re-evaluate modules, and submit feedback to Department of Education channels for quality assurance.

Recommendations

Public secondary schools in Cabarroquis District should improve their programs and guidelines for modular distance learning (MDL) to ensure effective implementation during emergencies like weather disturbances and natural disasters. They should also encourage community participation and support to facilitate timely module delivery and distribution. The Department of Education should conduct trainings, seminars, and workshops to improve instruction through various learning delivery modalities. With the support of local government units (LGUs) and private partners, the Department should provide sufficient funds and support for module reproduction. Teachers should re-evaluate modules and submit feedback to DepEd channels for quality assurance. They should be active online and offline to attend to learners' and parents' needs during distance learning. An assessment scheme for effective evaluation of modules-based activities and answer sheets should be developed to accurately record performance based on MDL. Similar studies should be conducted by researchers on related factors and programs to enhance the implementation of MDL.

Educational Research Center Inc SEC Reg. No. 2024020137294-00 Sta. Ana, Pampanga, Philippines





iJOINED ETCOR P - ISSN 2984-7567

E - ISSN 2945-3577 The Exigency P - ISSN 2984-7842





REFERENCES

- Abude, A. J. (2021). The effectiveness of modular distance learning modality to the academic performance of students: A literature review. Himalayan Journal of Education and Literature, 2(6).
- Adonis, M. (2020, October 8). DepEd modules stump even adults. Inquirer.net. https://www.google.com/amp/s/newsinfo.inquirer.net/1344942/depeds-modules-stump-even-adults/amp
- Arcilla, J. (2020, July 31). DepEd: Most parents prefer modular learning. The Manila Times. https://www.manilatimes.net/2020/07/31/news/national/deped-most-parents-prefer-modularlearning/748207/amp/
- Bagood, J. (2020). Teaching-learning modality under the new normal. Philippine Information Agency. https://pia.gov.ph/features/articles/1055584
- Bernardo, J. (2020, July 30). Modular learning most preferred by parents: DepEd. ABS- CBN News. https://news.abscbn.com/news/07/30/20/modular-learning-most-preferred-by-parents-deped
- Boholano, H. B., Jamon, B. E., & Cabanes-Jamon, M. G. (2022). Modular-distance learning experiences of public school teachers in the Philippines: A phenomenology. London Journal of Research in Humanities and Social Sciences, 22(13), 15-24.
- Dangle, Y. R., & Sumaoang, J. D. (2020). The implementation of modular distance learning in the Philippine secondary public schools. 3rd Intenational Conference on Advanced Research in Teaching and Education.
- Department of Education 92013), Republic Act No. 10533 Enhanced Basic Education Act of 2013 (Official Gazette, Philippine Government) https://www.officialgazette.gov.ph/2013/05/15/republic-act-no-10533/
- Department of Education (2020). DepEd order no. 12, s. 2020 "adoption of the basic education learning continuity plan for school year 2020-2021 in light of the covid-19 public health emergency" https://authdocs.deped.gov.ph/deped-order/do s2020 012-adoption-of-the-be-lcp-sy-2020-2021/
- Department of Education (2020, July 1). DepEd prepares self-learning modules for education's new normal. [Press Release] https://www.deped.gov.ph/2020/07/02/deped-prepares-self-learning-modules-for-educations-new-
- Department of Education (2020). Guidelines for the Remainder of School Year 2019-2020 in light of COVID-19 Measures. https://www.deped.gov.ph/wpcontent/uploads/2020/03/DM_s2020_042-20200315_Guidelinesfor-Remainder-of-SY-2019-2020-COVID-19.pdf.
- Gonzales, E. (2015). A modular approach utilizing decision tree in teaching integration techniques in calculus. Calamba City, Laguna, Philippines: Department of Arts, Sciences and Teacher Education, City College of Calamba.
- Guido, R. (2014). Evaluation of a modular teaching approach in materials science and engineering. American Journal of Educational Research, 2 (11). doi: 10.12691/education-2-11-20.
- Isnani, K. (2019). A study among English teachers' perceptions: Investigating the roles of ICT in Indonesian EFL classroom. ETERNAL (English, Teaching, Learning, and Research Journal), 5(2), 247. https://doi.org/10.24252/eternal.v52.2019.a6
- Jamon, B., Boholano, H., Cabanes-Jamon, M., & Pardillo, M. (2021). Teachers Lived Experiences In The New Normal In Philippine Public Schools: A Phenomenology. International Journal of Research, 8(2), 773-782.

Website: https://etcor.org

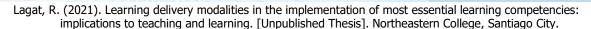
icational Research Center inc











Llego, M. (2020). DepEd learning delivery modalities for school year 2020-2021. Teacherph. https:// www.teacherph.com/deped-learning-delivery-modalities/

Pampanga, Philippines

- Malipot, M. (2020). Teachers air problems on modular learning system. Manila Bulletin. https://mb.com.ph/2020/08/04/teachers-air-problems-on-modular-learning-system/
- Malipot, M. (2021). Face-to-face classes still prohibited, guidelines for SY 2021-2022 issued by DepEd. Manila: Bull Newspapers.
- Madrazo, A.L., & Dio, R.V. (2020). Contextualized learning modules in bridging students' learning gaps in calculus with analytic geometry through independent learning. Journal on Mathematics Education, 11(3), 457-476. http://doi.org/10.22342/jme.11.3.12456.457-476.
- Meredith, D. P. (2019). Increasing student's engagement towards learning English using instant messaging as a teaching tool in a blended learning classroom. Proceedings of the 2019 The 3rd International Conference on Digital Technology in Education. https://doi.org/10.1145/3369199.3369209
- Morrow, R., Rodriguez A., and King, N. (2015). Colaizzi's descriptive phenomenological method. The Psychologist, 28 (8), 643-644.
- Naboya, M. (2019). Effect of modular approach on the level of achievement of students in inorganic chemistry. Journal of International Academic Research for Multidisciplinary, 7 (1), 52. https://www.academia.edu/41948205
- Oz, G. & Orak, S. (2018). An evaluation of modular teaching in the preparatory english program: a quantitative case study. 2nd International Symposium on Silk Road Academic Studies. https://www.researchgate.net/publication/331639229 AN EVALUATION OF MODULAR TEACHING IN TH E PREPARATORY ENGLISH PROGRAM A QUANTITATIVE CASE STUDY
- Pabalate, N. (2020). Modular learning is not working. Manila Bulletin. https://mb.com.ph/2020/11/16/modularlearning-is-not-working/
- Pálsdóttir, A. (2019). Advantages and disadvantages of printed and electronic study material: perspectives of university students. Information Research, 24(2), paper 828. http://www.webcitation.org/78mpNM1Gb
- Ouinones, M. T. (2020, July 3). DepEd clarifies blended, distance learning modalities for SY 2020-2021. Philippine Information Agency. https://pia.gov.ph/news/articles/1046619
- Roque, J. (2022). Modular distance learning in the area of education during the new normal: A systematic review. AIDE Interdisciplinary Research Journal, 3, 253-268.
- Rotas, E. & Cahapay, M. (2020). Difficulties in remote learning: voices of philippine university students in the wake of covid-19 crisis. Asian Journal of Distance Education, 15 (2),153. doi: 10. 5281/zenodo.4299835
- Saavedra, J. (2020). Educational Challenges and opportunities of the coronavirus (COVID-19) pandemic. Education for Global Development.
- Serrano, R., & Farin, E. (2022). Effectiveness of modular learning approach among secondary school students during pandemic in Zambales, Philippines. Asian Journal of Education and Social Studies, 33(2), 22-34.

Talimodao, A. J., & 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.