E-ISSN: 2454-9312 Vol.7, Issue.12, pp.01-06, December (2021) **P-ISSN:** 2454-6143

Coping Mechanism of Island School Students on the Problems Encountered in Modular Distance Learning

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Available online at: www.isroset.org

Received: 06/Dec/2021, Accepted: 13/Dec/2021, Online: 31/Dec/2021

Abstract—The Covid-19 pandemic has brought changes in all aspects of life particularly in the education sector. Called as the new normal, students have battled on continuing their studies through distance learning modality via printed modules. This new normal for learning brought setbacks to many island school students who juggle work, responsibilities, and schooling simultaneously. The study aims to identify the coping mechanisms on the problems encountered of island school students in modular distance learning. The design of the study used mixed methods of quantitative and qualitative approaches. Semi-structured interview was conducted for gathering data. Two hundred sixty (260) students from an island secondary school in Philippines were considered as key informants of the study. Thematic analysis approach through coding was used to substantiate oral responses, and frequency count of similar responses was also executed. Findings revealed that students (1) seek help from more knowledgeable others due to unavailability of an immediate support system, (2) cheat or refer to internet for independent learning, and (3) they carefully organized the modules to manage time well prior to answering and submitting outputs. The data connoted that students were resourceful enough to address the problems they encountered in modular distance learning.

Keywords—Coping Mechanism, Distance Learning, Modules, Problems, Students

INTRODUCTION I.

Last December 2019, a pandemic outbreak started in China locking down most countries and freezing all transactions including schools and universities [1]. With the advent of continuous learning, Philippines pushed with the opening of classes on October 5, 2020 with the Covid-19 cases in the country still rising. To cope with the situation of pandemic, the country adapted the distance learning with modular approach as the mostly cited modality especially for distant and less privileged areas. Though the school opening caused alarm and clamor for many civilians that it might possibly worsen the Covid-19 cases in the country, President Rodrigo Duterte supported this scheme for learning promising to scrape the bottom of the barrel for funding. Also, Education Undersecretary Diosdado San Antonio said that Department of Education shifted to distance learning for the school year to comply with Inter-Agency Task Force (IATF) directive for schools to delay face-to-face classes until coronavirus vaccine is available [2].

Distance education is not a new way of teaching. It was believed to start in 18th century but its rapid growth began in late 1900s because of technological advances. According to Reference [3], Sir Isaac Pitman was the pioneer of distance education by mailing his students with postcards and instructed them to transcribe passages from the bible. Over the last 300 years, distance learning run

parallel with innovations in communications technology, and continued to grow in popularity. It sustained to reach new heights as the technology develops [4].

Research Paper

In Philippines, modular learning is a form of distance learning that uses individualized Self-Learning Modules (SLM) based on the most essential learning competencies provided by Department of Education. The modules include sections on motivation and assessment that serve as a complete guide to both teachers' and students' desired competencies [5]. According to Reference [6], modular distance learning features instruction in print or digital format/electronic copy, whichever is applicable to the learner. Learners under modular distance learning can also use other resources such as Learner's Materials (LMs), textbooks, activity sheets, study guides, and other study materials. Usually, teachers will have to deliver appropriate learning materials. However, students can also access these materials by downloading electronic copies through their computer, tablet, or smartphone.

RELATED WORKS

Despite the potential use of distance learning in this time of pandemic, quality of instruction, independence, hidden costs, time, family support, misuse of technology, and the attitudes of instructors, students and administrators were some of the seen drawbacks [7]. On the context of onlinebased learning, Reference [8] found out that online-based platform for learning is new to students and they lack the elementary computer skills while others were newcomers in the internet. Supervisors for distance learning also faced a lot of concerns like time constraints, official restrictions, irregular contacts and technology itself [9]. On modularbased learning, Reference [10] noted that teachers failed to provide written or oral feedback on the assessment of learning especially in large classes/sections. They further noted that modular instruction is below expectation. Likewise, Reference [11] narrated that modular approach had some challenges especially on getting engage students who lack interest in studying. They further noted that modular approach lacks the adequate supply of facilities at the required quality and quantity. Nevertheless, the literature of studies holds insufficient data on the ways how students cope with these problems encountered in distance learning.

Cagraray island is located on the eastern coast of Bicol region, Philippines. Its geographical isolation was further intensified by the advent of distance learning modality, not to mention the experienced poverty in the locale [12]. It is the home of thousands of island school students who relied in printed modular distance learning modality as an augmentation to the continue schooling amidst pandemic. This current research study covers the interview on the coping mechanisms of students in an island school in Cagraray island who encountered problem(s) in modular distance learning. This research study aims to; (1) determine the problems encountered by students of island school in modular distance learning in terms of: (a) Support System, (b) Time Management, (c) Independent Learning; (2) determine the coping mechanisms of students to address the problems in modular distance learning; and, (3) develop a scheme for distance learning to lessen the problems encountered by students. The study is beneficial to the students and teachers because it makes them mindful on the coping strategies and potential problems in the conduct of modular distance learning in the years to come.

III. RESEARCH METHODOLOGY

The study is a mixed approach of quantitative and qualitative design using frequency count and thematic analysis. Semi-structured interview was conducted as a method for gathering data. An interview to the students of a *Cagraray* island school in Philippines was conducted to identify the coping mechanisms on problems encountered in modular distance learning. A total of 260 student-samples ages 12-23 were identified using Slovin's sampling formula [13] as key informants. Identification of the student key informants were made possible by the conduct of fish bowl method to eliminate any potential biases in the selection of samples.

After securing the letter of approval from the office of the school head to implement the study, the researcher coordinated to the respondents to determine their availability for the interview. An interview questionnaire was adapted, modified, and translated fro Reference [14] and Reference [15]. Offshoot questions and follow up details were the key characteristics of the semi-structured interview to gather much data from oral responses. Since

the interview is face-to-face, the researcher followed Covid-19 safety measures and protocols like wearing face mask, face shield, and social distancing. Coding was directed to reduce the data and to substantiate the oral responses through thematic approach. Frequency count determined the modal of score of identified codes whereas thematic analysis of the oral narratives was used to generate a global theme of the issues grounded on the responses.

IV. RESULTS AND DISCUSSION

The following narratives were the significant findings of the study based from the semi-interview conducted in the research locale.

Problems Encountered by Students in Modular Distance Learning in Terms of Support System, Time Management, and Independent Learning

A. Support System

The students narrated the different problems they encountered in the modular distance learning following the support system- immediate family. The codes shown in Table 1 were the oral narratives recorded by the researchers and were used to generate the general theme of the problems encountered.

Following the frequency count of the codes, it can be deduced that much of the responses of problems focus on the unavailability of the support system to provide help as they lack the academic foundation. Though the unavailability is attributed to natural limitations, parental responsibilities at home bound them to the attainment of physiological needs depriving academic support to the academic requirements of students. Moreover, these data suggest that the demand for an academic support from family is needed by the student in the advent of modular distance learning via modules. Organization of themes revealed that (1) there is no family member present to aid in learning, (2) family lacks educational background to assist students, and (3) family is busy. The fact that academic support is needed by the students, these scenarios experienced by the island school students indicated that their immediate family support system cannot aid in their academic needs. This situation connotes that the support system lacks the setting of priority to academic demands whether natural or intentional.

Table 1: The common oral narratives (codes) of students on their support system for modular distancing learning.

support system for modular distancing rearing.					
Codes	Frequency (Multiple Responses)	Translation* (English)	Organizing Themes	General Theme	
"Gadan ang	27	"Deceased			
magurang"		parents"			
	83		No support		
"Bulag and		"Separated	system to		
magurang"	203	parents"	attend to		
"Warang matua na matabang"		"No elder siblings to help"	academic needs		
"Dae man tatao ang magurang kang nasa module"	150	"Parents do not now know the entries of module"	Support system lacks	The Support system cannot	
"Dae man nakapag-adal ang mga magurang. Dae man ako matabangan"	123	"Parents were uneducated. They cannot help"	educational background	provide help in the modular distance	
"May trabaho ang magurang siring man ang tugang"	142	"Parents have work to do, as well as elder siblings"	Support system is	learning.	
"Daeng panahon ang magurang sa pagturo"	148	"Parents have no time for teaching"	busy		

^{*}Authors' translations

B. Time Management

Table 2 enlists the most common responses of students from island school on time management for modular distance learning. The codes were used to create the general theme of problems on this learning aspect.

Much of the responses revealed that the students were busy doing non-academic activities which, in turn, forsake the time for studying. Household responsibilities and personal attitude for learning were the problems drawn in time management for modular learning. In fact, the organized themes of the responses revealed that (1) responsibilities at home, (2) irresponsible use of technology, (3) procrastination, and (4) early employment were the major problems experienced by island school students on their management of time. This shows that personality and discipline for schooling were affected by diverse factors which led to mismanagement of their time for studying. Though some of these factors were laid natural by experienced life setbacks, majority of the responses connoted poor self-control of setting academic engagement as top priority of time allocation. Grounding the problems on time management showed that time allotment for studying is distracted by environmental and personal factors.

Table 2: The common oral narratives (codes) of students on their time management for modular distancing learning.

Codes	Frequency (Multiple Responses)	Translation* (English)	Organizing Themes	General Theme
"Dakolon na gibo sa harong" "Nag papaturo so mga tugang na may module man"	247 187	"Plenty of household chores to do" "Responsibility for teaching younger siblings on answering their	Responsibilities at home affect time management.	
"Nagpapara kawat na mobile legend"	145	modules" "Playing mobile legend" "Frequent	Technological recreation consumes much	Time management is distracted by personal
"Nag-para gamit na Facebook"	208	usage of facebook"	of time management	and environmental
"Nag paparatambay"	257	"Hanging out"	Procrastination	factors
"Tig-huhugakan mag simbag"	245	"Feeling lazy answering modules"	influences time management	
"May trabaho. Ako man lang kaya ang tig-asahan"	59	"I have a job. My family relies on me alone"	Employment hinders time management	

^{*}Author's translation

C. Independent Learning

Table 3 summarizes the codes of oral narratives of students on the problems encountered for independent learning.

Struggles for independent learning were attributed to the mechanics of modules. The excessive amounts of learning activities cause academic burn out and distress to students. Furthermore, problems on independent learning are

associated to the cognitive level of the students vis-à-vis the degree of difficulty of the module. In fact, the organized themes of responses revealed (1) bombarded activities, (2) hard lessons, and (3) modular errors were the problems impeding independent learning. Whether these data were the reflection of the truth on problems experienced in learning independence, it only shows that their ability to individually paced learning is affected by the structure of the learning material supplied. Grounding the perspective of the interviewed students, the data imply that modules were not cognitively appropriate and overran with activities. Also, independent learning is affected by the errors in module like blurry print and unorganized sorting out of pages.

Table 3: The common oral narratives (codes) of students on their independent learning for modular distancing learning.

Codes	Frequency (Multiple Responses)	Translation* (English)	Organizing Themes	General Theme
"Dakulon na tuumon"	235	"Plenty to memorize"		
"Dakulon na simbagan"	241	"Plenty to answer"		
"Nadidipisilan mag-essay na activity"	248	"Hard to do essays in activities"	Modules bombarded with	
"Nadidipisilan pag abot sa mga drawing. Mga activity na kaipuhan magibong video"	233	"Hard to do drawing and activities which require video making"	activities distress independent learning	
"May mga activities na kaipuhan pang I search sa internet"	239	"There are activities which require surfing the internet"		Problems in independent
"Dai kayang mag-sabot ki hirararomon na words"	253	"Cannot understand highfaluting terms"	Hard	learning are caused by modules itsel
"Nadidipisilan mag-sabot ki lesson lalo na pag abot sa mga mathematics ta dai man tinuro"	197	"Hardly understand lessons especially when it comes to mathematics because they were not taught"	entries/lesson s impede independent learning	
"Malabo ang mga pictures sa module"	211	"Pictures in module are blurry"	Errors in modules	
"Bali-baliktad ang pagka print sa module"	218	"Pages of module are not organized in proper sequence"	affect independent learning.	

^{*}Author's translation

The Coping Mechanisms on How Students from Island School Address the Problems in Modular Distance Learning

Codes were still used to determine the coping mechanisms among island school students on addressing the identified problems in modular distance learning. The codes were thematic in accordance to support system, time management, and independent learning. Table 4 summarizes these coping mechanisms on the encountered problems.

Table 4. Coping Mechanism on Addressing Problems in Support System, Time Management, and Independent Learning

Categories	General Theme	Coping Mechanism on the Problems Encountered (codes)	Frequency (Multiple Responses)	Translation* (English)
		"Nagpapaturo sa ibang tatao"	254	"Seeking help from others"
Support	The Support system cannot provide help in the modular distance learning	"Nagpapaturo sa kataning"	247	"Seeking help from neighbors"
		"Nag papaturo sa mga tawong ahead"	221	"Seeking help from people who are ahead of me"
		"Nag nahapot sa kaklase"	260	"Seeking assistance from classmates"
Time Management b	Time management is affected by personal and environment al factors	"Tig aayos ang mga module poon sa pasil hanggang dipisl"	213	"Arranging modules from easy to difficult"
		"Pasaro-saro tig simbagan ang module o pa butal butal"	227	"I answer modules one-by-one or part-by-part"
		"Nakikihuron sa magurang o sa tugang na kung pede sinda muna mag-gibo kang mga gibuhon sa harong."	230	"Pleasing parents and siblings to take care of household chores"
Independent Learning	Problems in independent learning are caused by modules itself	"Nag-sesearch sa internet (nag GOOGLE, etc.)"	163	"Surfing the internet (using GOOGLE, etc.)"
		"Nag-aarog sa ka-klase"	238	"Copying answers from classmates"
		"Nag-aarog sa answer key"	251	"Copying the answer keys"

^{*}Authors' translations

Though numerous problems were encountered by the students on the implementation of modular distance learning, the data show that they are resourceful enough on developing coping mechanisms to address environmental and personal issues they deal with. The unavailability of an immediate support system incites students to seek help from more knowledgeable others in the community whom they can rely on answering the modules. Likewise, problems on time management were resolved through properly organizing the modules in accordance to difficulty level and seeking help from support system to attend on non-academic tasks supposed to be done by the students. More intriguing than not, problems on independent learning were worked out not by cognitive capacities of the students but through cheating and surfing the internet. These data showed that the students were able to cope with the new normal in schooling though, arguably, some coping mechanisms were deemed inappropriate and an academic malpractice. It testifies to further study the new normal on distance learning by determining the validity of knowledge it develops to island school students.

Scheme for Distance Learning to Lessen the Problems Encountered by Students in Modular Distance Learning

Modular distance learning is new to students as it is the new schooling scheme for Filipino students caused by Covid-19 pandemic. To reduce the problems the island school students' faced, schemes and revisions in the existing guidelines for the implementation of modular distance learning are hereby proposed.

One of the reasons why students do not have support system is the unavailability of an immediate family to support them, whether naturally or intentionally. To address this problem, a scheme where the school may assign *Barangay* teachers within the catchment area of the school is proposed. These Barangay teachers can be the teacher practitioners from the school or anyone from the community who may act as teachers. Provided, however, that social distancing protocols must be observed. Through this approach, students will have less difficulty in distance learning because they are guided by more knowledgeable others whom they can ask questions about the lessons and activities in the modules.

The schematic diagram below is the paradigm on how these general themes of problems can be addressed by the proposed scheme to lessen problems in distance learning.

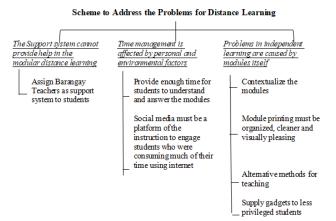


Figure 1. The Schematic Diagram for Addressing the Problems in Distance Learning

Some students are not intelligent enough to understand the lessons. It is necessary to make the modules more contextualized to level off to their cognitive levels. In this way, students will be able to understand the lessons in the module with ease. It is also necessary to avoid bombarding the modules with plenty of activities to avoid academic burnout and stress. In addition, students also need to be given enough time to understand the lessons and answer the given activities. Mechanically, it is necessary to make the module printing clearer and cleaner so that students can perceive more and understand the entries especially for modular activities that require conveying of lessons from an image.

Since cellphone usage affects time management, teachers may utilize this as an alternative method to engage their students better in modules. Social media can be used for students with phones through chats, entertaining queries, and clarifications in the best language the students can understand. In other words, teachers shall collaborate with students through social media. However, there are students

who do not have access to social media platforms. Teachers can print some of this alternative learning materials in trade to the hard activities embedded in modules. For students who do not have gadgets, Department of Education can also provide free gadgets through allocating funds and seeking help from the government and private institutions. This will aid students to surf unknown concepts in internet for independent learning.

Discussion

The data in the support system indicated that the family cannot provide support to the academic needs of the students. Though this situation could possibly develop resilience among adolescents [16], many non-resilient students could conceivably not be able to proceed with schooling as the immediate support system lacks the commitment to provide assistance. This assumption was deemed possible based from the earlier reports indicating that lack of parental involvement in schooling results in poor academic achievement or quitting school [17-18]. Nevertheless, most of the problems encountered in the support system were natural than intentional. Poor family educational foundation was also perceived by the students as a problem in their modular distance learning. This, in fact, supports the findings in the literature indicating that parents' lack of educational background is a personal barrier for distance learning [19]. As a rule, the general theme for all the problems encountered would imply that support system is unable to aid for distance learning. Coping mechanism for the problems in support system is primarily associated to asking help from well-informed and educated members of the community.

In some of the responses of the students, they mentioned that cramming becomes the consequence of their poor time management. This situation can lead to less quality work of outputs which receives poor remarks from teachers. In fact, literature showed that insufficient time for study is one of the problems encountered by the students in distance learning [20]. The general theme emphasizes how personal and environmental factors are related in time management as shown in the code of oral narratives. This would indicate that culture of apathy for academic perseverance is the least priority among island school students. Perhaps this apathy for learning is explained by the lack of support from the immediate family, students' perceived value of schooling, and personality factors leading to this attitude for schooling [21]. These assumptions further connote negative feedback for learning and unwillingness to put education in precedence to all other personal and environmental tasks. Nevertheless, they address the problems encountered by properly organizing and answering the modules by its degrees of difficulty and setting aside non-academic related tasks.

Narratives from students accepted the assertion that they are not all intelligent. This prevails among the interviewed respondents who still prefer face-to-face classes to let teachers explain the topics and clarify their questions about

the lesson. This response is congruent to the study by Reference [22] who noted that many students registered in the face-to-face class than distance learning platform. Whether the responses on modular problems were the reflection of the truth or is it the academic skill of the students which are doubtful, the data clearly show that independent learning is hard to attain. This result could be attributed to the accustomed way of teaching where students totally rely on teachers, while teachers were not fully equipped with the skills in module writing. Nonetheless, the collected data from the field blame the modules for problems in independent learning. Coping mechanism to settle struggles on independent learning were addressed through cheating on answer keys and surfing the internet. These data support the records in the literature where students engaged in distance learning (online) were prone to cheating [23-24].

Accounts from students revealed problems in support system, time management and independent learning were prevalent to the students of island school. Though these supporting data imply that the community is unready for this new scheme of learning, the students were practical enough on finding ways to solve learning issues, in any way, to meet the deadline of submission.

Despite the methods on how students face modular distance learning problems, there are still some students who cannot cope with settling their academic issues. As a result, they tend to become helpless and opt not to answer the difficult activities or the entire module itself.

IV. CONCLUSION

The codes of oral narratives of students determined their coping mechanisms grounded from various problems encountered in modular distance learning in terms of Support System, Time Management, and Independent Learning. The identified grounds of problems were serious threat to the quality of education where scheme for modifications must be immediately implemented to lessen the negative impact to learning needs. The help from a knowledgeable other and proper organization of modules were deemed appropriate coping strategies based from the problems cited. Notwithstanding this vigorous observation of problems encountered in the modular distance learning, the students were resourceful enough to address their struggles for distance learning modality. Thorough investigation needs to be carried to further assess the implementation of modular distance learning.

ACKNOWLEDGMENTS

The researchers would like to thank Mr. Roy L. Nipas for allowing the researchers to conduct the study, and to the SHS students of Cawayan National High School for their participation.

Also, the corresponding author is grateful for the moral and financial support invested by his parents; Mrs. Nerissa A. Barcenas, and Mr. Mario B. Barcenas.

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