

# TEACHERS' AND PARENTS' ABILITIES TO ENCOURAGE MODULAR LEARNING

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## Abstract

The study was conducted to investigate the teacher's and parent's effectiveness in facilitating modular learning on the MPS of the pupils. The study was conducted in all small Elementary schools of Arakan East District during the school year 2021-2022. It utilized purposive sampling as sampling technique with grade 6 elementary teachers as subject of the study and also utilized stratified sampling with the parents of the grade 6 pupils as the respondents of the study that employed a researcher-made survey questionnaire which undergone validation, and pilot testing before it was administered. To analyze the collated data, it used descriptive-correlational research design using the mean, Pearson r and multiple regression as statistical tool. The questionnaire gained 0.930 Cronbach result.

Teachers level of effectiveness in facilitating modular learning in terms of preparation, delivery and evaluation were very effective manifested. While monitoring and giving feedback were manifested effective. Similarly, parents' level of effectiveness in facilitating modular learning in terms of structuring home learning environment for modular teaching, motivation strategies, time management and learning support were effective manifested. Moreover, the modular learning of the pupils in English, Math and Science are moderately proficient.

Furthermore, the level of teacher's effectiveness in facilitating modular learning significantly related to the MPS of the pupils particularly the delivery and giving feedback. Also, factors such as preparation and monitoring manifested significant relation to the MPS of the pupils; however, is negative. Moreover, the level of teacher's effectiveness in facilitating modular learning manifested significant contribution to the level of MPS of the pupils. In addition, the level of parent's effectiveness in facilitating modular learning revealed significant relation to the MPS of the pupils in terms of structuring home learning environment for modular teaching, motivation strategies, time management and learning support; however, is negative. Similarly, the level of parent's effectiveness in facilitating modular learning showed significant contribution to the level of the MPS of the pupils.

**Keywords:** Structuring Home Learning Environment, Modular Distance Learning, Motivation Strategies, Philippines.

## 1. INTRODUCTION

The occurrence of COVID-19 in the Philippines compelled the Department of Education to accept face-to-face teaching and learning alternatives (OECD, 2020). Thus, modular learning was implemented as one of the modalities for children to continue learning while they stay at home. Expectedly, parents assist their children in learning.

The struggles of teachers and parents in facilitating modular learning is rooted on the disadvantages of modular teaching. In fact, Nardo (2017) mentioned these challenges, which include increased student self-discipline and motivation, more time preparation and increased administrative resources required to track students and operate multiple modules, as well as rewards for teachers and staff. Their struggles are evident in some studies. Dejene (2019) revealed that teachers have complained about the time allotted for each subject is insufficient to cover the competencies utilizing

appropriate teaching methods and measure the learning of students in meaningful ways. In the Philippines, mothers are struggling through many difficulties in this mode of education (Education in the New Normal: Modular Learning in Sagada, 2020). There are literatures on modular learning. However, studies correlating the effectiveness of teachers and parents in facilitating modular learning are not sufficient.

Hence, the researcher decided to investigate the level of effectiveness of teachers and parents in facilitating modular learning for it is believed that the findings will provide insight into teachers' and parents' experiences and struggles with modular learning. As a result, this will serve as the foundation for an intervention plan to aid in the implementation of modular learning, particularly on the part of teachers and parents.

## 2. STATEMENT OF THE PROBLEM

This study investigated the effectiveness of teachers and parents toward modular learning of the pupils in Arakan East District. Specifically, it sought to answer the following research questions:

1. What is the level of teachers' effectiveness in facilitating modular learning in terms of preparation, delivery, monitoring, evaluation, and giving feedback?
2. What is the level of parents' effectiveness in facilitating modular learning in terms of structuring home learning environment for modular teaching, motivation strategies, time management, and learning support?
3. What is the level of modular learning of the pupils in Arakan East District?
4. Is there a significant relationship between the effectiveness of teachers in facilitating modular learning and the MPS of the pupils?
5. Does the effectiveness of teachers in facilitating modular learning have a significant influence on the MPS of the pupils?
6. Is there a significant relationship between the effectiveness of parents in facilitating modular learning and the MPS of the pupils?
7. Does the effectiveness of parents in facilitating modular learning have a significant influence on the MPS of the pupils?

## 3. THEORETICAL FRAMEWORK

The study is anchored on the self-efficacy theory of Bandura (1982). Self-efficacy is defined as belief in one's own ability to achieve in particular circumstances or complete a task. Self-efficacy can influence how teachers and parents approach goals, tasks, and challenges in facilitating modular learning. Teachers and parents with high self-efficacy, that is, those who believe they can perform well in their facilitation of modular learning, are more likely to view difficult tasks resulting from it as something to be mastered rather than something to avoid.

Thus, they are the ones who manage their stresses and challenges relating to their facilitation of modular learning very well.

## 4. CONCEPTUAL FRAMEWORK

The study will investigate the relationship between the level of effectiveness of teachers and the level of effectiveness of the parents in facilitating modular learning to the level of modular learning of the pupils in Arakan East District.

The level of effectiveness of teachers, as well as the level of effectiveness of parents will serve as independent variable (IV) of the study. The level of effectiveness of teachers will be indicated preparation, delivery, monitoring, evaluation, and giving feedback (home visitation) (Castroverde & Acala, 2021). Meanwhile, the level of effectiveness of parents will be indicated by structuring home learning environment, motivation strategies, time management and learning support (Schueler, McIntyre & Gehlbach, 2017). Moreover, the level of modular learning will serve as dependent variable (DV) of the study. This is the Mean Percentage Score (MPS) of the grade 6 pupils in all their subjects for the first quarter of the school year 2021-2022.

## 5. RESEARCH DESIGN

This study employed the descriptive – correlational method of research. It is descriptive for it describes the level of effectiveness of teachers in facilitating modular learning which was indicated by preparation, delivery, monitoring, evaluation, and giving feedback (home visitation). Also, it was descriptive for it would describe the level of effectiveness of parents in facilitating modular learning which was indicated by structuring home learning environment, motivation strategies, time management and learning support. Similarly, it described the level of modular learning of the pupils. Meanwhile, it was correlational for it determined the significant relationship between the level of effectiveness of the teachers and the level of effectiveness of the parents in facilitating modular learning to the level of modular learning of the pupils in Arakan East District.

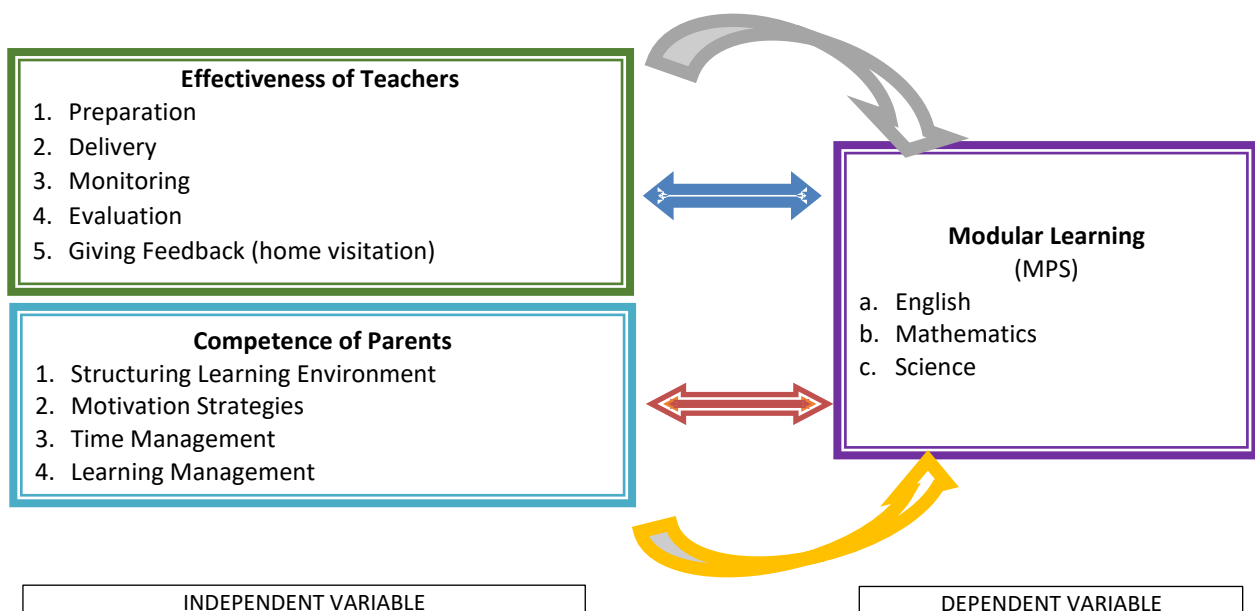


Figure 1 Schematic presentation showing the independent and dependent variables of the study

## 6. DATA GATHERING METHODS

For the data gathering procedure, the researcher undertook the following steps: first, the researcher had the questionnaire be validated by the experts. After its approval, the researcher personally asked permission to the school heads to conduct the study through an approved communication letter. This was signed by the Dean of the graduate School. Then, the researcher immediately administered the questionnaires to the respondents of the study following the health protocol after seeking permission and approval from the authorities. Next, the researcher retrieved the questionnaires from the identified respondents after they had filled out. Lastly, the data was collated, tabulated, and statistically treated.

## 7. PARTICIPANTS OF THE STUDY

The study's participants were all the grade 6 teachers in the 7 small elementary schools of Arakan East District who implemented modular teaching approach under new normal for the school year 2021-2022. In addition, the parents of the grade 6 pupils under those teachers were the respondents of the study.

Table 1 Respondents of the Study

School	No. of Teachers	No. of Parents	Sample Size of Parents
Allab Elementary School	1	22	16
Guitawan Elementary School	1	16	10
Kinawayan Elementary School	1	30	21
Libertad Elementary School	1	26	18
Ma. Caridad Elementary School	1	22	16
Sto. Niño Elementary School	1	35	25
Valencia Elementary School	1	19	14
Total	7	170	120

## Statistical Tools and Data Analysis

Mean was used to determine the effectiveness of the teachers in facilitating modular learning in terms of preparation, delivery, monitoring, evaluation and giving feedback (home visitation). Similarly, it was used to describe the effectiveness of parents in facilitating modular learning in terms of structuring home learning environment, motivation strategies, time management and learning support (Clark Carter, 2010). Pearson correlation coefficient (Pathak, 2020) was used to determine the relationship of the study; while, multiple linear regression analysis (Hayes, 2021) was employed to test the influence of the study.

## 8. RESULTS AND FINDINGS

### Quantitative Strand

This section dealt with the result of the quantitative data gathered through the survey questionnaires.

### Summary of Results and Discussions

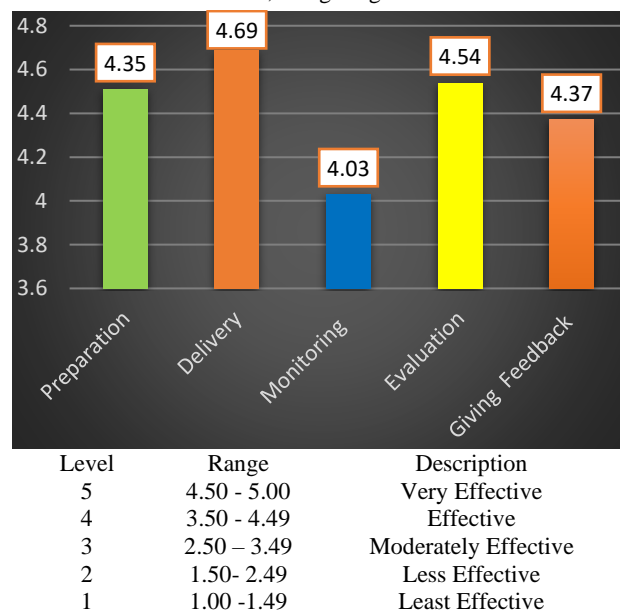
#### Research Problem No. 1

Among the five (5) indicators of the level of teachers' effectiveness in facilitating modular learning, delivery got the highest weighted mean of 4.69 described as very effective. The result implies that the teachers had adjusted to the manner of learning delivery in which parents are the ones facilitating modular learning in terms of delivery through modules. They effectively established connection

with parents and ensure that facilitating learning is effectively done by disseminating and orienting the parents on the schedule of module distribution and retrieval.

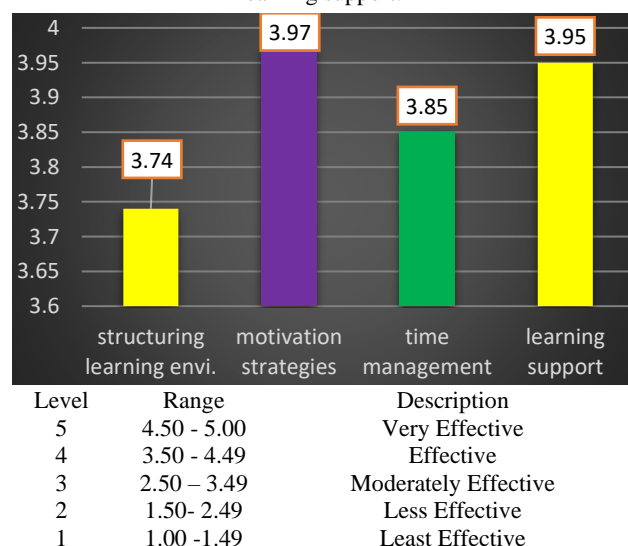
The result further implies that teachers had an open communication with the parents, which matches to the emphasis of Magsambol (2020) that depending on their module delivery schedule, parents will receive the Self-Learning Modules (SLMs) as well as a retrieval schedule.

Table 2 Level the level of teachers' effectiveness in facilitating modular learning in terms of preparation, delivery, monitoring, evaluation, and giving feedback



#### Research Problem No. 2

Table 3 Level of parents' effectiveness in facilitating modular learning in terms of structuring home learning environment for modular teaching, motivation strategies, time management, and learning support.



Among the four (4) indicators of parents' effectiveness in facilitating modular learning, motivation strategies got the highest weighted mean of 3.97 described as effective. It manifests that parents are effective in encouraging the child to answer the module and in giving reward if the child already finished answering the modules.

This implies that parents are effective in facilitating modular learning specifically on motivation strategies. Parents give reward to the child that can finished the module on time like giving appreciation and free time on doing activity they love. This implication is aligned to Garbe, Ogurlu, Logan, and Cook (2020) explained that some parents accept responsibility as a motivator for their children.

#### Research Problem No. 3

Table 4 Level of modular learning of the pupils Arakan East District

Subject	Mean	Description
English	83.04	Moderately Proficient
Math	82.16	Moderately Proficient
Science	82.62	Moderately Proficient
Weighted mean	82.61	Moderately Proficient
Range	Description	
90- 100	Highly Proficient	
85 - 89	Proficient	
80- 84	Moderately Proficient	
75 - 79	Slightly Proficient	
74 - below	Very Slightly Proficient	

The table indicates that the level of modular learning of the pupils in terms of MPS particularly in English (83.04), Math (82.16) and Science (82.62) are moderately proficient.

The result implies that the level of modular learning of the pupils are moderately proficient. In other words, the level of their knowledge on modular learning is average.

The result of the study conforms to Guiamalon, Alon and Camsa (2021) mentioned that the issue in modular approach when it comes to pupils learning, the absence of face-to-face instruction means that pupils cannot fully focus on learning. Most likely, this is the reason why the pupil's MPS is just average.

#### Research Problem No. 4

Table 5 Relationship between the effectiveness of teachers in facilitating modular learning and the MPS of the pupils

		Factors	MPS
Spearman's rho	Preparation	Correlation Coefficient	-0.715**
		Sig. (2-tailed)	0.000
		N	120
	Delivery	Correlation Coefficient	0.367**
		Sig. (2-tailed)	0.000
		N	120
	Monitoring	Correlation Coefficient	-0.185*
		Sig. (2-tailed)	0.043
		N	120
	Evaluation	Correlation Coefficient	0.122
		Sig. (2-tailed)	0.185
		N	120
Giving Feedback	Correlation Coefficient	0.572**	
	Sig. (2-tailed)	0.000	
	N	120	
**. Correlation is significant at the 0.01 level (2-tailed).			
*. Correlation is significant at the 0.05 level (2-tailed).			

The result discloses the relationship between the effectiveness of teachers in facilitating modular learning and the MPS of the pupils, which yielded significant relationship between delivery, and giving of feedback as indicated by R-value 0.376\*\*and 0.572\*\* respectively, which are lesser than the alpha value of 0.01 with

significant levels. However, factors such as preparation shows R-value of -0.715\*\* and monitoring shows the R-value of -0.185\*\* are also lesser than the alpha value of 0.01 with significant levels. In this case, therefore, the hypothesis which states that there is no significant relationship between the level of teachers in facilitating modular learning and the MPS of the pupils is rejected.

This means that the more effective the teachers in facilitating of modular learning; the higher is the learners MPS. On the other hand, this result also implies that even the teachers are effective in facilitating modular learning, pupils' learning is in moderate. This can be attributed to some reasons such as unstable internet connection, some pupils have no gadgets to use, limited direct contact to pupils during home visitation because of pandemic and some modules returned were answered by parents.

#### Research Problem No. 5

Table 6 Significant influence of effectiveness of teachers in facilitating modular learning on the MPS of the pupils

Model	Coefficients <sup>a</sup>			t	Sig.
	Unstandardized	Std. Error	Std. Beta		
	B				
(Constant)	116.837	6.390		18.284	0.000
Preparation	-2.320	0.647	-0.232	-3.582	0.000
Delivery	2.607	0.863	0.189	3.019	0.003
Monitoring	-4.040	0.891	-0.256	-4.535	0.000
Evaluation	1.467	0.617	0.157	2.379	0.019
Giving feedback (home visitation)	-6.238	0.632	-0.599	-9.871	0.000

$R^2 = .538$ ;  $F=36.604$ ;  $Prob = 0.000$

The table reveals Table 13 reveals that effectiveness of teachers in facilitating modular learning on the MPS of the pupils ( $F$ -value=36.604,  $Prob=0.000$ ). Null Hypothesis is rejected since probability value is significantly lesser than 0.05.

In fact, there is 53.8% of the identified indicators of teachers' facilitating competence affect the modular learning of the pupils in terms of MPS and only 0.001% attributed to other factors not included in this study.

Correspondingly, none of the dimensions of effectiveness of teachers in facilitating modular learning on the MPS of the pupils was found to be the great indicator of the effectiveness of teachers that influence the MPS of pupils. However, the combined value showed to have a significant influence. This implies that teachers are effective in facilitating modular learning that influence the MPS of the pupils.

Similarly, the study of Stetson, Stetson, Sinclair and Nix (2012) revealed that the teacher respondents linked giving feedback through home visits resulted to improved study habits, which influenced the pupil's academic achievement.

#### Research Problem No. 6

The result reveals the relationship between the between the parents' facilitating competence and the modular learning of the pupils., which yielded negative significant relationship in all its parameters and are also lesser than the alpha value of 0.01 with significant levels. In this case, therefore, the hypothesis which states that there is no significant relationship between the level of teachers in

facilitating modular learning and the MPS of the pupils is rejected. This implies that parent's effectiveness in facilitating modular learning is oppositely related to learners MPS. The more effective the parents in facilitating learning; the lower is the learners MPS.

Table 7 Relationship between the parents' facilitating competence and the modular learning of the pupils

			MPS MEAN
Spearman's rho	Structuring home learning environment	Correlation Coefficient	-0.213*
		Sig. (2-tailed)	0.020
		N	120
	Motivation Strategies	Correlation Coefficient	-0.288**
		Sig. (2-tailed)	0.001
		N	120
	Time Management	Correlation Coefficient	-0.227*
		Sig. (2-tailed)	0.013
		N	120
	Learning support	Correlation Coefficient	-0.288**
		Sig. (2-tailed)	0.001
		N	120

\*\*. Correlation is significant at the 0.01 level (2-tailed).

\*. Correlation is significant at the 0.05 level (2-tailed).

#### Research Problem No. 7

Table 8 Influence of effectiveness of parents in facilitating modular learning on the MPS of the pupils

Model	Coefficients <sup>a</sup>			t	Sig.
	Unstandardized	Std. Error	Beta		
	B				
(Constant)	86.928	0.974		89.212	0.000
Structuring Home Learning Environment	-0.414	0.226	-0.194	-1.837	0.069
Motivation Strategies	-0.556	0.328	-0.230	-1.694	0.093
Time Management	0.381	0.393	0.147	0.970	0.334
Learning Support	-0.484	0.376	-0.182	-1.285	0.201

$R^2 = 0.161$ ;  $F = 5.513$ ;  $Prob = .000$

It is reflected on table that effectiveness of parents in facilitating modular learning on the MPS of the pupils significantly influence the MPS ( $F$ -value=5.513,  $Prob = 0.000$ ). Null hypothesis of the study is rejected since probability value is significantly lesser than 0.05.

Table shows that there is only 16.1% variation of MPS was accounted by effectiveness of parents in facilitating modular learning and the remaining 83.9% was attributed to other indicators not included in the study.

Correspondingly, none of the identified indicators of effectiveness of parents in facilitating modular learning was found to be the effective predictor of the result of student's MPS. However, the combine identified indicators were found to have a significant influence to the MPS. This implies that if the indicators on parents' effectiveness in facilitating modular learning such as structuring home learning environment for modular teaching, motivation strategies, time management and learning support; individually, it won't contribute to the MPS of the pupils. But if these indicators will be taken holistically; they contribute to the MPS of the pupils. Thus, the combined indicators will make learning at home conducive for the learner.

## 9. CONCLUSIONS

Based on the result of the study, it can be concluded that teachers are highly effective in facilitating modular learning in terms of preparation, delivery and evaluation.

Moreover, teachers are found effective in facilitating modular learning particularly on monitoring and giving feedback. Similarly, parents are also effective in facilitating modular learning in terms of structuring home learning environment for modular teaching, motivation strategies, time management and learning support. Moreover, the modular learning of the pupils in English, Math and Science are moderately proficient.

Furthermore, the level of teachers' effectiveness in facilitating modular learning significantly related to the MPS of the pupils particularly the delivery and giving feedback. Also, factors such as preparation and monitoring manifested significant relation to the MPS of the pupils; however, is negative. The higher the effectiveness in facilitating modular learning of the teachers on the delivery and giving feedback; the higher is the MPS of the pupils. Meanwhile, the higher the effectiveness of teachers in facilitating modular learning on factors preparation and monitoring; the lower the MPS of the pupils. Moreover, the level of teacher's effectiveness in facilitating modular learning manifested significant contribution to the level of MPS of the pupils. In addition, the level of parent's effectiveness in facilitating modular learning revealed significant relation to the MPS of the pupils in terms of structuring home learning environment for modular teaching, motivation strategies, time management and learning support; however, is negative. Similarly, the level of parent's effectiveness in facilitating modular learning showed significant contribution to the level of the MPS of the pupils. The higher the effectiveness of parents in facilitating modular; the higher the MPS of the pupils.

## 10. RECOMMENDATIONS

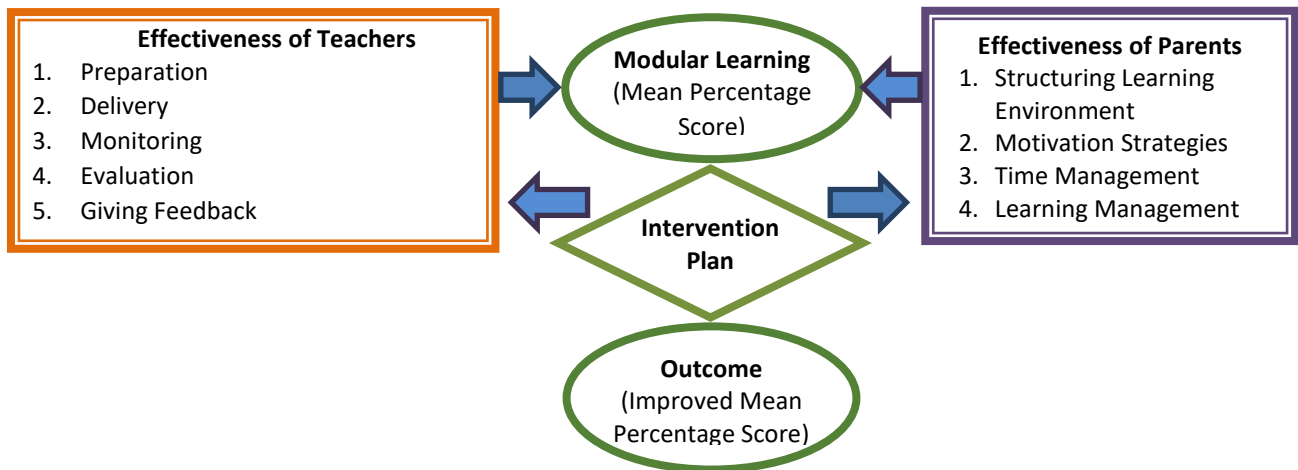
Based on the findings and conclusions of this study, the following recommendations are hereby presented:

1. Teachers must prepare activities suited for pupils.
2. Teacher must monitor the parents through text messages to follow up module distribution and retrieval.
3. Teachers must use scoring rubrics in checking the pupils' performance.
4. Teachers are encouraged to gather feedback on the module content and activity.
5. Parents must set a place for learning at home accessible for research activity.
6. Parents must encourage to give a reward if the child already finished answering the modules.
7. Parents must set up a daily time schedule for the child to have time in researching the difficult content in the module and provide additional activity/explanation to the child to understand the module.
8. Future researchers may conduct the same study but for the teachers as respondent, the school head will be the one who will answer the survey questionnaires of the study.

The Modified Framework reveals that teachers' effectiveness and parents' effectiveness in facilitating modular learning significantly contributed to the MPS of the pupils.

In consonance, the study of Sanders and Rivers (1996) attested that teachers' effectiveness increase students' academic achievement. Furthermore, Brooks (2019) mentioned that according to the National Coalition for

Parent Involvement in Education conducted research, pupils who have involved parents in their learning are more likely to have higher grade point averages and test scores, regardless of their income or background.



## INTERVENTION PLAN

### TRAININGS ON TEACHERS' EFFECTIVENESS IN FACILITATING MODULAR LEARNING UNDER NEW NORMAL

#### Rationale

The intervention plan is designed based on the result of the study Effectiveness of teachers and parents in facilitating modular learning.

Modular learning is the modality for delivering instruction used by the majority of the educational institutions to have learning continuity under new normal. The teacher's role is to facilitate learning through modular approach. Teachers must therefore master the necessary knowledge and skills in order to improve their effectiveness in facilitating modular learning.

#### Objectives

The program's goal is for teachers to master the necessary knowledge and skills for facilitating modular learning under the new normal. As a result, teachers will be more effective in facilitating modular learning.

#### Implementers

- Arakan East District Personnel
- School Heads
- Teachers

#### Plan of action

##### A. Preliminary Activities

- Identifying the participants for the program
- Meeting with the school heads and school coordinators.
  - a. Individual tasks/roles
  - b. Reporting and documentation process

- c. Identifying of the training activities corresponding to the essential topics on facilitating modular learning under new normal especially those aspects in the study with low results.
- d. Identifying of the resource speakers for the activities
- e. Schedule of the activities
- f. Preparation of needed materials

#### Implementation of the project/program

The program will be consisted of series of trainings on facilitating modular learning under new normal by the experts in the field.

#### Monitoring and Evaluation

1. Monitor the progress of the intervention program by listening to the participants on what they have learned after attending the lectures, seminars, trainings and workshops.
2. Solicit feedback from the participants of the trainings.
3. Solicit feedback on the difficulties of the participants in facilitating modular learning under new normal.
4. Assess the effectiveness of the project using a survey.
5. Evaluate the outcome of the project through assessing the teacher's facilitating performance of the participants on modular learning.
6. Provide narrative reports.

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