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MODULAR TEACHING PRACTICES IN IMPROVING HEALTH SKILLS OF GRADE 4 PUPILS IN SUBIC DISTRICT, SUBIC ZAMBALES

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Abstract: **The purpose of this study is to determine whether the modular teaching strategies utilized at Subic Central School and the learners' health skills are related in any way. A summative test was given to grade 4 pupils to assess their academic progress in understanding the characteristics of infectious illnesses, recognizing the agents of communicable diseases, and identifying practices and personal habits in the prevention and control of communicable diseases. Learners at Subic Central School were able to describe and recognize the agents of communicable illnesses to a satisfactory level. They possess very high levels of proficiency in their routines and individual habits for stopping the transmission of contagious illnesses. Overall, the learners' levels of health knowledge are all extremely good. The researcher draws the conclusion from the data that there is a significant positive correlation between modular teaching methods and the students' health skills in terms of teaching methodologies.**

Keywords: **Health Skills, Modular Teaching Practice.**

I. INTRODUCTION

Health and learning, these are the two major aspects of the learners' lives which the Covid-19 pandemic has greatly affected. Since the virus possess great threat for the health and lives of learners' and their families, the school calendar had been abruptly interrupted last year. Billions of learners around the world were forced not to have and celebrated their graduations for they had to stay at home (UNICEF, 2020). The educational system had immediately shifted from the traditional face to face learning to the different learning modalities (DepEd Order No. 12, s. 2020). The major modality which is implemented in the school system in this pandemic is the Modular Distance Learning. As per survey of the Department of Education, though the Modified Enrolment Learner School Form, majority of the learners and their parents had chosen this kind modality because of its convenience and it is more economical for them especially now that the livelihood of the families were also struggling if not impaired.

The health of the learners is the outmost priority of the department. Though it is hard enough for the teachers and the learners to constitute the teaching and learning process through distant learning, they had to be resilient enough to survive this pandemic. The level of awareness of the learners in the present situation of their environment is an important factor of learning. It uplifts their understanding and compassion in the things and people around them. Learning about the communicable disease, like viruses, like Covid-19, is an important element for them to become engaged with the activities that happened around them. Though their understanding, they could apply what they can learn from to battle the virus themselves.

This study aims to assess and improve the level of awareness of the learners regarding the communicable disease like Covid-19. The researcher believes that if the learners know, they can be engaged and eventually develop the academic performance. It is hoped that the results of the research contribute to valuable insights on the effects of modular teaching practices to the health skill of the learners and to be useful to the teachers will be able to assess the level of awareness of the learner regarding communicable disease. With this, they may innovate ways and means to reach their learners and make supplementary learning materials for them to have better understanding regarding communicable diseases.

Our learners will be the future community builders of our nation. The future depends on them. By uplifting their awareness on the different communicable diseases and the facts affecting them, they could be the key in positively managing the next pandemics or crisis to come. It will also raise their engagement and commitment in battling their pandemic with the adults. With this study, they could know the programs, projects and activities that they could craft that would further develop and give deeper meaning for the learners to learn more about communicable diseases. As the future of the nation, the community will be able to have responsible and productive citizens through the learners. They would be able to develop more through having healthier individuals. The study would provide a springboard from which future research will be undertaken on effects of modular teaching practices to the learners' Health Skills.

Research Questions

This study aims to determine the effects of modular teaching practices to the health skills of learners. Specifically, this study seeks to answer the following questions:

1. How may the level of the modular teaching practices be described in terms of;
   1.1 Preparation of the Weekly Home Learning Plan;
   1.2 Submission of the Individual Learning Monitoring Plan;
   1.3 Quality and Frequency of Distribution of Modules; and
   1.4 Teaching Approaches?
2. How may the level of Health Skills of the learners be defined in terms of;
   2.1 Describing Communicable Diseases;
   2.2 Identifying Agents of Communicable Diseases; and
   2.3 Practices and Personal Habits in Preventing and Controlling Communicable Diseases?
3. Is there a significant correlation between the level of modular teaching practices to the learners' Health Skills?

II. METHODOLOGY

The following section presents and describes the research methods, study participants, instrument construction and validation, data collection, and data processing.

Research Design

This research was conducted using the descriptive correlational method. The features of this method, specifically the data presentation features, could show, and justify the effects of the modular teaching practices of the health skills of the learners.

Conceptual Framework of the study

The conceptual framework of the study was shown in the paradigm in Figure 1. As reflected, the study was based on the concept that teaching practices affects the health skills of pupils. The instrument will be administered to teachers to identify their practices in improving health skills of pupils and Grade 4 pupils with the guidance of parents to identify their knowledge on communicable diseases.

The Independent Variable-Dependent Variable (IVDV) model provides a simple but effective framework for research design. The Dependent Variable in this study is the teaching practices of teachers. The Independent Variable in this study is the health skills of learners. The teaching practices will be described in terms of Preparation of the Weekly Home Learning Plan, Submission of the Individual Learning Monitoring Plan, Quality and Frequency of Distribution of Self Learning Modules and Teaching Approaches that is aligned to DepEd Order No. 12, s. 2020 and DepEd Order No. 31, s. 2020. The

Health Skills of Learners will be described in terms of Describing Communicable Diseases, Identifying Agents of Communicable Diseases, Practices and Personal Habits in Preventing and Controlling Communicable Diseases with the lesson aligned to Most Essential Learning Competencies, 2020 and DepEd Order No. 31, s. 2020).

The research followed the following process of data presentation, interpretation and analysis: the used of survey questionnaires through Google Forms; documentary analysis and statistical tools like percentage, weighted mean, Pearson r and Likert Scaling Technique or using the scale of 1 – 4.

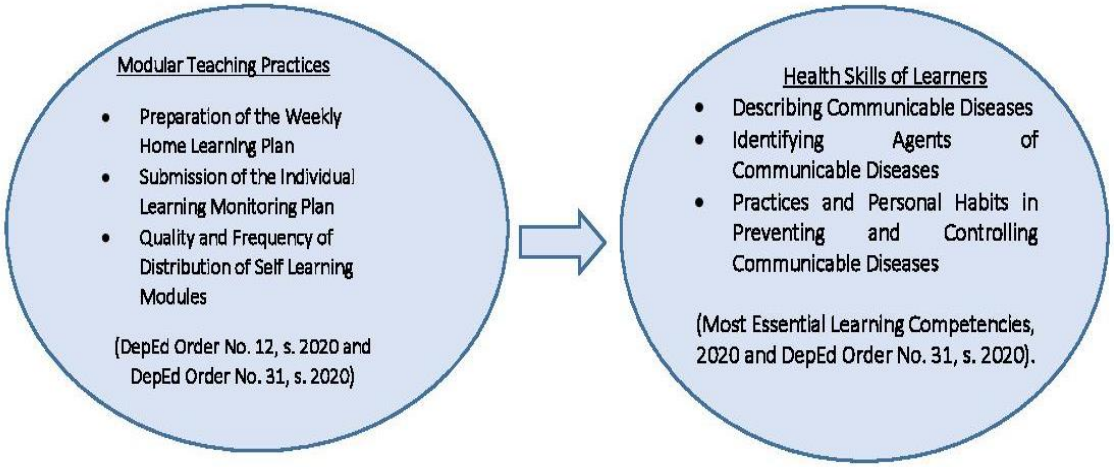

Figure 1: The Conceptual Paradigm of the Study

Data Collection

After the thesis proposal, the researcher seek approval from the adviser, panel and graduate studies director in conducting the study. The researcher asked permission from the Schools Division Office of Zambales and endorsed and consented by the District Supervisor and School Principal of Subic Central Elementary School regarding the conduct of this study and the administration of the survey instrument to the teachers and students.

The researcher asked the approval of Principal to distribute the survey questionnaire to the teachers. The researcher allotted fifteen (15) days and assured one hundred (100%) retrieval of the instrument.

The teacher-researcher gave parental consent to each pupil participant during the retrieval and distribution of modules. The researcher collected the consent before conducting the summative test.

Data Analysis

After the distribution and retrieval of the instrument, the researcher organized, collated, tabulated and analyzed according to the following statistical tools using the software Statistical Package for Social Sciences (SPSS) version 26. The statistical tools used on the analysis and interpretation of gathered data are mentioned below. The inferential result tested using 0.05 Alpha level of significance.

Mean Percentage Scores (MPS). This was used to describe the learners' level of health skills. The scale below was used for interpretation of the result.

Interpretation of the Ratings of Health Skills of Pupils

MPS	Descriptive Interpretation
0– 4	Poor
5– 35	Needs Improvement
36– 65	Satisfactory
66– 95	Very Satisfactory
96– 100	Outstanding

Standard Deviation. This was used to find whether the scores of the learners in the health skills test is homogeneous or heterogeneous.

Weighted Mean (WM) used to determine the assessment of teaching practices of teachers in improving the health skills of pupils.

Pearson*(r)* was used to test the significant relationship between teaching practices of teachers and health skills of pupils.

Interpretation of the Ratings of Pearson r

Scale	Strength of Correlation
1.00	Perfect Correlation
0.91-0.99	Very High Correlation
0.71-0.90	High Correlation
0.41-0.70	Moderate Correlation
0.21-0.40	Low Correlation
0.00-0.20	Negligible Correlation

Likert Scale In order to facilitate the interpretation of the ratings of the teaching practices of teachers in improving the health skills of pupils, the following assigned scale was used:

Interpretation of the Ratings of Teaching Practices of Teachers in improving the health skills of pupils

Scale	Descriptive Interpretation	Symbol
3.50-4.00	Always	A
2.50-3.49	Often	O
1.50-2.49	Sometimes	S
1.00- 1.49	Never	N

III. RESULTS AND DISCUSSION

Data gathered were tabulated and presented, analyzed and interpreted in this chapter. Statistical tools used for analysis includes mean percentage scores (MPS), mean analysis, Likert scale and correlation to determine the effects of modular teaching practices to the health skills of learners.

Modular Teaching Practices.

Modular approach is the emerging trend educational thinking that shifts traditional method of instruction to an outcome-based learning paradigm. Modularization is based on the principle of dividing the curriculum into small discrete modules or units that are independent, non-sequential, and typically short in duration. The practices of the teachers in modular teaching can be describe in terms of preparation of weekly home learning plan, submission of the individual learning monitoring plan, quality and frequency of module distribution and teaching approaches.

Preparation of Weekly Home Learning Plan (WHLP).

This is the preparation of tool that shall aid the teachers and parents in keeping track of the day-to-day learning processes that is suitable and feasible in alternative learning modality and creates awareness among learners of what they are responsible to learn. Table 1 shows the mean analysis on teachers' practices in terms of preparation of the WHLP.

The teachers rated highest weighted mean of 3.73 which indicates that the Always submit the WHLP on a weekly basis and have these checked by their school hears. They rated lowest (3.53, Always) in communicating well with the learners and the parents about the WHLP and completely accomplishing the WHLP in the designated instructional time.

Table 1: Modular Teaching Practices in terms of Preparation of WHLP

Practices	Wt. Mean	Descriptive Interpretation
1. WHLP is aligned with the Most Essential Competencies (MELCS).	3.60	Always
2. WHLP weekly submitted and checked.	3.73	Always
3. WHLP clearly reflects the modality/ies that will commence in a week.	3.67	Always
4. WHLP is communicated well with the learners and their parents/ guardians.	3.53	Always
5. WHLP is completely accomplished in the designated instructional time.	3.53	Always
Composite	**3.61**	**Always**

The composite value 3.61 indicates that they Always prepare the WHLPs that are aligned with the most essential learning competencies (MELCs) as required by the Department of Education to which the modalities that would commence in a given learning period is clearly reflected. This implies that the teachers are committed in provided home learning plans to guide the learners and the parents in using the modules at home.

Submission of Individual Learning Monitoring Plan (ILMP). This refers to the submission of the document that shows if the learners have shown either mastery of the learning competencies, significant progress, or insignificant progress. Table 2 presents the mean analysis on the practices of the teachers in terms of submission of the ILMP.

The teachers garnered a highest mean weight of 3.67 that indicates they Always state the needs of the learners in the individual learning monitoring plan. Additionally, they always use the ILMP for learners that needs intervention to cope up with the competencies required to be learned in each module. They had a lowest mean weight of 3.27 which indicates they Often communicate with the learners and parents about the importance of using the learning monitoring plan given.

Table 2: Modular Teaching Practices in terms of Submission of ILMP

Practices	Wt. Mean	Descriptive Interpretation
1. ILMP is used for learners who needs interventions.	3.53	Always
2. ILMP states the needs of the learners.	3.67	Always
3. ILMP contains the interventions and remarks used to address the learner's needs.	3.47	Often
4. ILMP is communicated well with the learners and their parents/ guardians.	3.27	Often
5. ILMP is used effectively in addressing the needs of the learners.	3.40	Often
Composite	**3.47**	**Often**

The composite value 3.47 indicates that the teachers Often submit the individual learning monitoring plans. They often submit ILMPs containing the interventions and remarks to be effectively used in addressing the needs of the learners. This implies that the teachers are aligned with addressing the challenges of using the distance learning modalities for students and parents to be able to cope up with these challenges.

Quality and Frequency of Module Distribution. This is the evaluation and the number of distributed learning resources that can be used by the learners without the physical presence of the teachers. Table 5 shows the mean analysis on the practices of teachers in terms of quality and frequency of module distribution.

It can be seen on Table 3 shows that the teachers garnered a highest mean of 3.60 which indicates that they Always provide module that are of assured quality and are aligned with the learning competencies that are essential for the students to learned out of the modules distributed. Additionally, they always distribute the modules at the specified target time.

Table 3: Modular Teaching Practices in terms of Quality and Frequency of Module Distribution

Practices	Wt. Mean	Descriptive Interpretation
1. Quality assured modules are provided.	3.60	Always
2. Modules are aligned with MELCS.	3.60	Always
3. Modules are given on target time.	3.60	Always
4. Modules distributed are enough to the number of learners.	3.13	Often
5. Modules are submitted by learners on time.	3.00	Often
Composite	**3.39**	**Often**

The teacher had a lowest mean weight of 3.00 which indicates that they Always see to it that their students comply on the specified submission period. The composite values 3.39 indicates that the teachers Often practice distributing modules that comply with the quality prescribed to effectively deliver the teaching and learning objectives. This implies the commitment of the teacher in providing modules that students and parents could maximize in learning in lieu of the face-to-face interaction done in the schools.

Teaching Approaches.

These are set of principles, beliefs, or ideas about the nature of learning which is translated into the classroom. An approach is a way of looking at teaching and learning. Table 6 presents the mean analysis on the teaching approaches of the teachers in the modular teaching-learning modality

It can be seen on Table 4 that the teachers are Always (3.53) ready in offering various genres of the subjects on demand. They rated lowest mean weight of 3.20 which indicates that they Often reinforce resilience in schools through meaningful participation and conflict resolutions and apply experiential learning through inclusive online pivot and useful applications and discussed this in reaching out to parents of their students.

Table 4: Modular Teaching Practices in terms of Teaching Approaches

Practices	Wt. Mean	Descriptive Interpretation
1. Teachers' readiness to offer various genres of courses on demand.	3.53	Always
2. Using reflective thinking for andragogical and pedagogical approach.	3.49	Often
3. Reinforcing resilience in schools through meaningful participation and conflict resolution.	3.20	Often
4. purposeful learning and inquiry-based learning for students.	3.27	Often
5. experiential learning through an inclusive online pivot in and useful apps are discussed to reach out to parents' community	3.20	Often
Composite	**3.32**	**Often**

The composite value 3.32 indicates that the teachers Often apply several teaching approaches that could help students achieve learning outcomes in terms mastery of the contents of the modules and. learn how to apply the content in particular contexts. This implies that the teachers apply learner-centered approach where learners are treated as autonomous, self-directed, internally motivated, problem-solving-oriented and pragmatically-oriented individuals who have a need to be respected and accepted for their knowledge and experience.

Learners' Level Health Skills

Health skills to the knowledge and strategies to maintain, protect, and improve all aspects of health. The health skills of the students were measured in a test aligned to the MELCs in the provided modules for the learning period. These skills focused on describing communicable diseases, identifying agents of communicable diseases and practices and personal habits in preventing and controlling communicable diseases. Table 7 presents the level of health skills of learners. Lower values of the standard deviation (SD) indicate a more homogenous distribution of test scores among the learners.

Table 5: Learners' Level of Health Skills

Skills	Control Group		
	MPS	SD	Qualitative Description
Describing Communicable Diseases	64.00	0.98	Satisfactory
Identifying Agents of Communicable Diseases	64.33	2.06	Satisfactory
Practices and Personal Habits in Preventing and Controlling Communicable Diseases	68.80	2.07	Very Satisfactory
Overall Score	**65.87**	**3.86**	**Very Satisfactory**

It can be seen on Table 5 that learners attained a Satisfactory level of skills in terms of describing communicable diseases (MPS=64.00, SD=.98) and in identifying agents of communicable diseases (MPS=64.33, SD=2.06)). They achieved a Very Satisfactory (MPS=68.80, SD=2/07) level of skills in terms of their practices and personal habits in preventing and controlling communicable diseases. These resulted to describe the learners to have a Very Satisfactory (MPS=65.87, SD=3.36) level of health skills during the time of assessment

This indicates that the learners are skilled in contributing to their environment and the community in preventing and controlling the spread of communicable diseases especially in this period of the pandemic. This supports Wang, et. al. (2018) stating that learners should be made aware of the things around them. This pandemic, the major issues on health had greatly affected the learners' lives in schools and at their homes. Having them learned about health education contributes to their deeper understanding and behavior towards communicable diseases. It makes the learners more responsive with the recent situation,

Relationship between Modular Teaching Practices and Learners' Health Skills

The researcher hypothesized that significant exists relationship between the modular teaching practices and the health skills of the learners Table 6 present the summarized correlation between the indicators in each of the two major variables aforementioned.

Table 6: Correlation between the Modular Teaching Practices and Learners' Health Skills

Modular Teaching Practices	Coefficients	Learners' Health Skills		
		Describing Communicable Diseases	Identifying Agents of Communicable Diseases	Practices and Personal Habits in Preventing and Controlling Communicable Diseases
Preparation of WHLP	Pearson Correlation	.371	.447	.426
	Sig. (2-tailed)	.174	.094	.113
	N	15	15	15
Submission of ILMP	Pearson Correlation	-.211	-.482	.158
	Sig. (2-tailed)	.450	.515	.574
	N	15	15	15
Quality and Frequency of Module Distribution	Pearson Correlation	.132	-.131	.261
	Sig. (2-tailed)	.640	.641	.348
	N	15	15	15
Teaching Approaches	Pearson Correlation	.804**	.544*	.572
	Sig. (2-tailed)	.000	.036	.026
	N	15	15	15

It can be seen on Table 6 that Teaching Approaches (r=.804, p=.000) have high positive correlation with the Describing Communicable Diseases which is significant at .01 alpha level. Moreover, Teaching Approaches have a moderate positive correlation with Identifying Agents of Communicable Disease (r=.544, p=.036) and Practices and Personal Habits in Preventing and Controlling Communicable Diseases (r=.572, p=.026) that are significant at .05 level of significance

From these premises, it can be inferred that there exists a significant positive relationship between the modular teaching practices in terms of teaching approaches and the health skills of the learners. This implies that when teacher more often uses different approaches, this could result to a higher level of learners' skills in describing, identifying the agents and preventing or controlling the communicable diseases.

IV. CONCLUSIONS

From the findings of the study, the researcher draws the following conclusions: The Grade 4 teachers in Subic Central School always prepare the weekly home learning plan that are aligned on the most essential learning competencies and they submit individual learning monitoring plan to help the learner and parents monitor the learning accomplishments. They provide quality modules that could be easily used by the learners and parents in the teaching-learning process at home. The teachers use several approaches in the modular distance learning modality that could help students achieve learning outcomes in terms mastery of the contents of the modules and. learn how to apply the content in particular contexts; the Grade 4 learners in Subic Central School have a satisfactory level of describing and identifying agents of communicable diseases. They have a very satisfactory level of skills in their practices and personal habits in preventing or controlling the spread of communicable diseases. Overall, all the learners have a very satisfactory level of health skills there is significant relationship between the modular teaching practices in terms of the frequency of applying teaching approaches and the health skills of students in describing and identifying agents of communicable diseases, as well as in their practices and personal habits in preventing of controlling communicable diseases.

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