

# Preparedness and Challenges on Modular Teaching of Social Studies Teachers in Public Secondary Schools in Zambales, Philippines

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**Abstract:** The purpose of this study was to assess the preparedness and challenges of teachers of Social Studies on modular teaching in public secondary schools in Zone 1, Schools Division Office of Zambales during SY 2020-2021. The study utilized the quantitative descriptive survey research design with questionnaire as the main instrument in gathering data from one hundred (100) teachers coming from the 18 Secondary Schools, teaching Social Studies who were randomly selected.

The researcher found out that the teacher-respondent is female relatively young in her early adulthood, Teacher-I, graduate of masteral degree of education, teaching for almost two decades and had attended training related to modular teaching in the Division level. The teacher-respondents assessed "Agreed" on course/subject design, course communication, Time Management, and Technical Competence as dimensions on preparation of modular teaching. The respondents were "Strongly Agreed" on the perception towards challenges encountered in the implementation of modular learning approach. There is significant difference on Course/Subject Design, Course Communication and Time Management when grouped according to position profile variables. There is significant difference on the perception towards challenges encountered in the implementation of modular learning approach when grouped according to position and attendance to training related to modular teaching. There is positive moderate relationship between the level of challenges encountered and the level of preparedness in the implementation of modular learning approach. Project PROMOTE (PReparedness to Overcome challenges on MOdular TEaching) generally aims to develop skills of teachers to overcome challenges in modular teaching that contains sets of activities.

**Keywords:** Preparedness, Challenges, Modular Teaching, Quantitative, Philippines.

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## I. INTRODUCTION

Government and IATF are putting in place measures that restrict the amount of people congregating in public locations while the COVID-19 Pandemic plays out. Such actions have interfered with how schools and colleges typically operate.

As a result of the government's and the IATF's preparation, DepEd's developed online learning platform and Alternative Distance Mode (ADM) Modules, which were especially designed to address the present constraints that both instructors and students are facing during the crisis, are now available. Due to the issue with internet access in many areas of the division, the Division of Zambales offers Modular Alternative Learning Delivery. Since face-to-face instruction is still not permitted due to the current state of the public health, the integration of Self-Learning Modules (SLMs) with the modular alternative learning delivery modality would help DepEd guarantee that all students have access to quality basic education for SY 2020–2021 (DepEd, 2020).

According to a DepEd poll done before the start of the school year, parents believe that modular learning is the best way to teach their kids this school year. Materials for modular learning can be downloaded or printed. All subjects are applicable to modular. It is a new innovation built on the widely accepted and well-established phenomena of programmed learning. It takes into account the unique variations between each learner, which calls for the preparation and use of the most effective teaching methods in order to support each person's growth and development at her/his own paces.

Because face-to-face interaction increases the chance of the corona virus spreading, the best immediate answer would have to be distance learning via weekly delivery and pickup of school packets. The COVID-19 Pandemic is a crucial adaptive and transformative challenge for educators, one for which there is no pre-established playbook that can serve as a guide for the right actions. To safeguard the educational chances for young people both during and after the pandemic, teachers seek to enable the quick design process and implementation of adaptive responses to the growing issues in education.

### Research Design

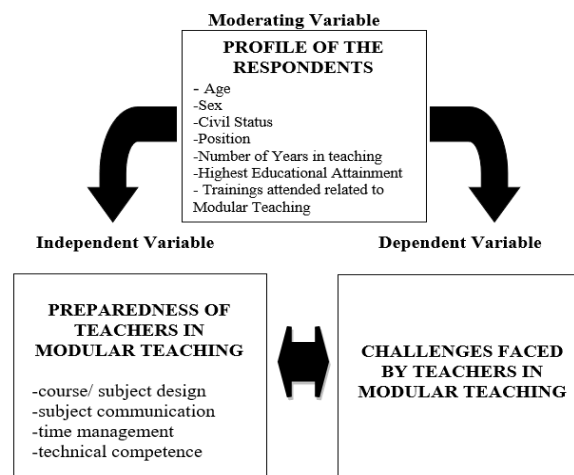


Fig. 1. Conceptual Paradigm of the Study

The conceptual framework of the study was shown in the paradigm in Figure 1. This study is anchored on Bruner Constructivism theory. Constructivism as cited by Vergara (2017) emphasize the active role of learner in building understanding and making sense of the information. The constructivist teaching is learner-centered where students are actively involved in knowledge construction rather than passive learners. A major theme in the theoretical framework of Bruner is that learning is an active process in which learners construct new ideas or concepts based upon their current and previous knowledge. The learner selects and transforms information, constructs hypotheses, makes decisions, and rely on their own understanding. Cognitive structure (schema) provides meaning and organization to experiences and allows the individual to go beyond the information given. In other words, the teacher should try and encourage learner to discover principles by themselves. With the use of the module the learner would be able to process new ideas that they read from the module. From there, they can depend on their own understanding and develop their skills.

The instrument was administered to the teachers to identify their preparedness in modular teaching and challenges faced in modular teaching. The Independent Variable-Moderating Variable- Dependent Variable (IV-MV-DV) model provides a simple but effective framework for research design. The independent variable in this study is the level of preparedness of teachers. It arrows to the dependent variable which is the challenges faced in modular teaching. The independent and dependent variables connect to the moderating variable which is profile of the respondents which are the following: age, sex, civil status, position, number of years in teaching, highest educational attainment and training’s attended related to modular teaching.

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

### Statement of the Problem

The purpose of this study was to assess the preparedness and challenges of teachers of Social Studies on modular teaching in public secondary schools in Zone 1, Schools Division Office of Zambales during SY 2020-2021.

Specifically, it sought to answer the following questions:

1. What is the profile of the teachers in terms of:
  - 1.1. age;
  - 1.2. sex;
  - 1.3. civil status;
  - 1.4. current position;
  - 1.5. number of years in teaching;
  - 1.6. highest educational attainment; and
  - 1.7. trainings attended related to modular teaching?
2. How prepared are teachers in modular teaching in terms of:
  - 2.1. course/ subject design;
  - 2.2. subject communication;
  - 2.3. time management; and
  - 2.4. technical competence?
3. What are the challenges faced by teachers in modular teaching?
4. Is there a significant difference on the preparedness of teachers in modular teaching when grouped according to the profile variables?
5. Is there a significant difference on the challenges faced by teachers in modular teaching when grouped according to the profile variables?
6. Is there a significant relationship between preparedness of teachers and challenges in modular teaching?
7. What intervention program shall be devised to develop the preparedness of teachers to surpassed challenges?

### **Statement of Hypotheses**

For a deeper analysis of the study, the following hypotheses were tested:

1. there is no significant difference on the preparedness of teachers in modular teaching when grouped according to the profile variables;
2. there is no significant difference on the challenges faced by teachers in modular teaching when grouped according to the profile variables; and
3. there is no significant relationship between preparedness of teachers and challenges in modular teaching.

## **II. LITERATURE REVIEW**

**Modular Teaching.** According to Reiser (2013) cited that students for them to develop understanding of subject matter requires that teachers know what students already understand and believe about the world. These prior conceptions serve as foundations for building new understandings. Teachers can only use students' prior knowledge if they know what it is. Contextualization activities help relate the ideas to be learned to students' prior ideas. Reiser (2013) also added that students may bring particular kinds of knowledge and experience that are unique to their cultural, ethnic and socioeconomic backgrounds. Students may also lack the prior knowledge and experience necessary to engage in dialogue and collaboration around particular concepts simply because they have not had access to certain experiences. In addition, students may bring epistemological stances and ways of knowing that diverge from those valued in classrooms and communities. Teachers use several strategies that make instructional materials accessible to students in deep and meaningful ways. This literature is related to current study since it gives the prerequisite on how to utilize module in teaching. In the study of Balderas (2016) as cited by Vergara (2017), on the characteristics of module, stressed that learning modules are the progeny of two reform movements in education that included programmed learning and mastery learning. Mastery learning plans contain the major features of the present-day modules, such as: Educational objectives were specified. Instruction was organized into learning

units. Diagnostic progress tests were administered after each unit. Mastery of one unit was required before the learner is allowed to proceed to the next module or unit. Modules should be self-contained, self-pacing, short and well-defined, adequately motivating, properly sequenced, providing opportunities for interaction with learners, clearly written with correct language, accurate, not in conflict with other subject matter and values, and utilizing every opportunity to achieve learning outcomes. This literature is important since it give the description of what module is and how it can help the students. Similarly, the study of Nardo (2017), modular teaching is one of the teaching-process. Modular instruction is an alternative instructional design that uses developed instructional materials which are based on the needs of the students. Students are encouraged to work on various activities that are interesting and challenging to maintain focus and attention. Learners study the modules in their own working environment. Learners can study without disturbing their normal activities and responsibilities. Modules can be administered to individual use, for small group or large group. It enables the learner to have control over his/her learning. The discussion of Nardo is related to the present study since in our time needs to utilized modules.

**Preparedness Among Teachers on Modular Teaching.** In the study conducted by Lapada (2020) show that the length of teaching experience and specialization is very strongly correlated to readiness to distance learning education. Simultaneously, the teachers' geographic location is strongly correlated to readiness to adapt to distance learning education. Teachers' gender, length of teaching experience, and geographic location have significant differences with their readiness to distance learning education. Furthermore, another study on distance education readiness found 90% of the total special education and preschool teachers surveyed got motivated to implement distance education despite having diverse students, lack of specialists, home-schooled, under long medical treatment, attending short stay with group or family and private school (Fedina, Burmykina, Zvezda, Pikalova, Skudnev and Voronin, 2017). On the same manner, the study of Lichoro (2015) revealed that making the transition from face-face teaching to online instruction experience is considerably time consuming and changes faculty's role and teaching responsibilities. Most of the participants in this study, both the seasoned faculty members and the relatively inexperienced, unanimously seemed to concur that they did not feel adequately prepared to teach in the online setting. All faculty members interviewed cited mentorship as being one of the benefits of being a member of the consortium. Likewise, the study of Arzadon and Nato (2015) pointed out that ALS teachers should try their best to provide a meaningful learning experience to such a diverse group (Alternative Learning System Learners). Three teaching strategies were recurring in the survey taken. One is the use of informal sharing of experiences at the beginning of the session. This would inform the teacher about the condition of the learners, their current concern and interest. They carefully consider the learners' interests before starting to teach them the contents of the ALS module. The study of Arzadon and Nato (2015) is important to the present study since it give some insights on how to prepare learners in modular teaching. This may lead teachers to do course orientation and introductions.

**Challenges Among Teachers on Modular Teaching.** According to the study of Cacho (2011) studied the Alternative Learning System of Aeta. In the case study on the Aeta community, the functional literacy modules that they have been waiting to be delivered by the national office is always delayed, this cause a problem in the education of the indigenous learners. This was supported by the following issues; the first issue has to do with allocation of share from the Special Education Fund for ALS, it is a fund intended to help local education but it is not regularly and predictably granted to ALS; the second issue pertains to the delineation of roles and responsibilities between ALS and Literacy Coordinating Councils at the local level; the third issue refers to the instrument to use in order to make the ALS-LGU partnership official. On the same vein, the study of Baywong (2011) found that lack of fund to purchase, produce and learning materials was mainly responsible for the inadequacy of materials needed in the implementation of ALS curriculum. The importance of using modular approach, according to Sanchez (2012) as cited by Vergara (2017) identified concerns with the DepEd modules and even communicated with BALS regarding the need to update their materials. The studies of Cacho (2011), Baywong (2011) and Sanchez (2012) are important to the present study since it give some of the problem related to instructional materials in Modular Teaching.

Modular teaching is very new to all teachers especially here in the Philippines. Teachers' training is a major consideration that would require schools to readjust their budget allocation in order to respond to this emerging need. Modular teaching involves a lot of preparation, and teachers now find themselves having to use tools they are not familiar with. For sure, there would be a big adjustment. As this pandemic is slated to exist until the preventive vaccine is discovered, it is essential to know how the educators who are the prime facilitators of the education adjusted to this transition and what challenges they faced while adapting to this transition as their preparedness for the coming times. With the above cited premise, the researcher would like to find out the level of preparedness and challenges of teachers of Social Studies on modular teaching in public secondary schools in Zone 1, Schools Division Office of Zambales, hence this study.

### III. METHODOLOGY

This chapter provides a presentation and description of the research methodology, respondents and locale of the study, construction and validation of the instruments, data distribution and gathering procedure, and the statistical treatment of the data.

#### Research Design

The study used descriptive-correlational research design. In the present study, the researcher identified the preparedness and challenges faced by teachers in modular teaching and its relationship. According to Bueno and Matriano (2016) described descriptive-correlational method as a type of study in which information is collected without making any changes to the study subject and to see if two variables are related and to make predictions based on this relationship. Descriptive studies generally use surveys or other methods of data collection that rely on existing records.

Furthermore, descriptive research is a study designed to depict the participants in an accurate way. It is all about describing people who take Descriptive research aims to accurately and systematically describe a population, situation or phenomenon that can answer what, where, when, and how questions (McCombes, 2019).

#### Research Locale

This study was conducted in 18 public secondary Schools in Zone 1, Schools Division Office of Zambales including: Bani NHS, Taltal NHS, Coto NHS, San Salvador HS, Sto. Rosario Integrated School, Candelaria School of Fisheries, Luis National High School, Pamibian IS, Uacon IS, Acoje NHS, Guisguis NHS, Mena Mem. NHS – San Fernando HS, Mena Mem. NHS (Bolitoc NHS), Sta. Cruz NHS, Sta. Cruz NHS – Don Marcelo C. Marty HS, Sta. Cruz NHS – Jesus F. Magsaysay HS Annex, Sta. Cruz NHS – Lipay HS and Sta. Cruz South HS.

#### Participants of the Study

The respondents of this study were the one hundred (100) social studies teachers coming from the 18 secondary schools in Zone 1, Schools Division Office of Zambales during SY 2020 – 2021. The researcher coordinated to every school head to be able to communicate to the respondents of each school. The distribution of the respondents is shown in Table I.

**TABLE I: DISTRIBUTION OF THE TEACHER-RESPONDENTS IN ZONE 1, SDO OF ZAMBALES**

Name of School	Number of Teachers	Percentage
<b>Masinloc</b>		
Bani NHS	6	6
Taltal NHS		
Coto HS	8	8
San Salvador HS	4	4
Sto. Rosario IS	4	4
<b>Candelaria</b>		
Candelaria School of Fisheries	6	6
Luis National High School	8	8
Pamibian IS		
<b>Sta. Cruz</b>		
Uacon IS	4	4
Acoje NHS	7	7
Guisguis NHS	3	3
Mena Mem. NHS – San Fernando HS		
Mena Mem. NHS (Bolitoc NHS)	4	4
Sta. Cruz NHS	7	7
Sta. Cruz NHS – Don Marcelo C. Marty HS	3	3
Sta. Cruz NHS – Jesus F. Magsaysay HS Annex	5	5
Sta. Cruz NHS – Lipay HS	8	8
Sta. Cruz South HS	6	6
<b>TOTAL</b>	<b>100</b>	<b>100</b>

### **Research Sampling**

The researcher got the whole population since only 100 Social Studies teachers are concern that are employed in the current school year for ease in distribution and retrieval.

### **Research Instrument**

The study utilized the survey instrument adopted from the Study of Martin Budhrani and Wang (2019) to suit the needs to answer questions asked in earlier Chapter 1. The closed-ended instrument is composed of three (3) main parts. The first part of the questionnaire was the personal profile of the teachers limited in terms of age, sex, civil status, position, number of years in teaching, highest educational attainment and trainings attended related to Modular Teaching. The second part contained the level of preparedness of teachers with regards to (1) course/ subject design; (2) subject communication; (3) time management; and (4) technical competence. The last part was the assessment of the respondents towards challenges faced by teachers in the utilization of Modular Teaching approach. It is in a form of statement to be assessed by the respondents with the following scale: 4 – Strongly Agree, 3- Agree, 2- Disagree and 1 – Strongly Disagree. The researcher adapted the questionnaire of Lapada (2020). This was adapted by the researcher to obtain the challenges faced by teachers in modular teaching. Some words were changed to align in the present study.

Because of some modification on the instrument, after the proposal defense, the researcher sought pre-approval from the members of panel committee to assure on correctness of the variables used in the study. After which, the researcher conducted a dry run or trial among twenty (20) faculty from Candelaria District for the validation to assure the validity and reliability of the survey instrument. The result of the Cronbach Alpha demonstrate that Course/Subject Design, Course Communication, Time Management was tested “Good” while “Acceptable: on the Technical Competence. The reliability test for the item indicators for the challenges encountered in the use of modular approach was “Excellent”. All noted discrepancies or vague statement on the instrument were integrated and incorporated in the finalization of the instrument.

### **Data Gathering Procedures**

After the approval of the thesis proposal, the researcher sought permission from the Schools Division Office of Zambales and endorsed and consented by the Zone 1 Principals regarding the conduct of this study and the administration of the survey instrument to the teachers. The researcher asked the help of Social Studies Department Coordinators to provide the names of Social Studies teachers and their e-mail addresses or messenger profile. The questionnaires in a form of Google Form were sent to the teachers in Zone 1 and allotted fifteen (15) days to assure that one hundred (100%) retrieval of the instrument.

### **Data Treatment and 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 was tested using 0.05 Alpha level of significance. Percentage was used to determine what proportions of the respondents belongs to a specific category. Weighted Mean (WM) was used to determine the assessment of respondents on their preparedness and challenges faced in modular teaching. Analysis of Variance (ANOVA) was used to determine the differences in the assessment of respondents when grouped according to their profile variables. Pearson(r) was used to test the significant relationship between the level of preparedness and challenges faced in modular teaching. Likert Scale. Was used to facilitate the interpretation of the ratings of the preparedness and challenges faced in modular teaching, the following assigned scale was used: 3.25- 4.00 (Strongly Agree), 2.50 - 3.24 (Agree), 1.75 - 2.49 (Disagree) and 1.00- 1.74 (Strongly Disagree).

## **IV. RESULTS AND DISCUSSION**

This chapter presents the gathered and processed data in a tabular form analyzed and provide interpretation for better understanding on the study.

### **1. Profile of the Teacher-Respondents**

Table II are the responses that were tabulated and analyzed by the researcher. These were the data that came from the questionnaire and it embodied one-third of the research proper. The profile of the respondents was divided into seven (7) main parts: age; sex; civil status; position; number of years in teaching, highest educational attainment and trainings related to modular teaching.

**TABLE II: FREQUENCY AND PERCENTAGE DISTRIBUTION OF THE TEACHER-RESPONDENTS' PROFILE**

Profile		Frequency (f)	Percentage (%)
Age Mean=36.2 years old	51-60	11	11.00
	41-50	26	26.00
	31-50	22	22.00
	21-30	41	41.00
Sex	Male	26	26.00
	Female	74	74.00
Civil Status	Single	25	25.00
	Married	75	75.00
Position	Teacher I	29	29.00
	Teacher II	22	22.00
	Teacher III	13	13.00
	Master Teacher I	23	23.00
	Master Teacher II	13	13.00
Number of Years in Teaching Mean=17.55 years	36 and above	9	9.00
	31-35	10	10.00
	26-30	14	14.00
	21-25	8	8.00
	16-20	11	11.00
	11-15	12	12.00
	6-10	9	9.00
	5 and below	27	27.00
Highest Educational Attainment	Doctorate Graduate	1	1.00
	With Doctorate Units	18	18.00
	Masteral Graduate	41	41.00
	With Masteral Units	28	28.00
	Bachelor Degree	12	12.00
Trainings attended related to modular teaching	International	1	1.00
	National	11	11.00
	Regional	67	67.00
	Division	16	16.00
	District	5	5.00
<b>Total</b>		<b>100</b>	<b>100.00</b>

**1.1. Age.** Most of the teacher-respondents were from age group of 21-30 years old with 41 or 41.00%; 26 or 26.00% from 41-50 years old; 22 or 22.00% from 31-40 years old and 11 or 11.00% from 51-60 years old. The computed mean age of the teacher-respondents was 36.2 years old. The data implies that the teacher-respondents were relatively young in their early adulthood.

**1.2. Sex.** Majority of the teacher-respondents were females with 74 or equivalent to 74.00% while 26 or 26.00% are male teachers.

**1.3. Civil Status.** Majority are married with 75 or equivalent to 75.00% while 25 or 25.00% are still single.

**1.4. Position.** Most of the teacher-respondents were Teacher-I with 29 or equivalent to 29.00%; 23 or 23.00% are Master Teacher I; 22 or 22.00% are Teacher II; and 13 or 13.00% are Teacher III and Master Teacher-II respectively.

**1.5. Number of Years in Teaching.** Most of the teacher-respondents had been in the teaching service for 5 years and below with 27 or 27.00%; 14 or 14.00%, 26-30 years; 12 or 12.00%, with 11-15 years; 11 or 11.00%, with 16-20 years; 10 or 10.00%, with 31-35 years; 9 or 9.00%, with 36 years and above; and 8 or 8.00% with 21-25 years in the service. The computed mean years in teaching was 17.55 years. Gains in teacher effectiveness associated with experience are steepest in teachers' initial years, but continue to be significant as teachers reach the second, and often third, decades of their careers.

**1.6. Highest Educational Attainment.** Most of the teacher-respondents are graduates of masteral education program with 41 or equivalent to 41.00%; 28 or 28.00% are BS degree with masteral units; 18 or 18.00% are with doctoral units; 12 or 12.00% are Bachelor Degree holders and only 1 or 1.00% is full pledge doctoral graduate. According to Edsource Org. (2015) There was no statistically important difference in attrition between teachers who began teaching holding bachelor’s degrees and those with master’s degrees.

**1.7. Trainings attended related to modular teaching.** Majority had attended regional trainings with 67 or equivalent to 67.00%; 16 or 16.00%, division level; 11 or 11.00%, national level; 5 or 5.00% are trainings in the district level and 1 or 1.00% under the international level trainings related to modular teaching. The data clearly indicates on the provision of trainings for teachers organized by the regional office to assure the competence of teachers in the preparation, construction and development of modules.

**2. Assessment of the teacher – respondents on preparation for modular teaching**

Table III shows the Summary Table on the responses towards dimensions on the preparation for modular teaching.

**TABLE III: SUMMARY TABLE ON THE RESPONSES TOWARDS DIMENSIONS ON THE PREPARATION FOR MODULAR TEACHING**

Dimensions On the preparation for modular teaching		Overall Weighted Mean	Qualitative Interpretation
1	Course/Subject Design	3.00	Agree
2	Course Communication	2.97	Agree
3	Time Management	2.96	Agree
4	Technical Competence	2.90	Agree
<b>Grand Mean</b>		<b>2.96</b>	<b>Agree</b>

The teacher respondents assessed “Agreed” particularly on course /subject design, where the computed overall weighted mean on the responses was 3.00 and Course Communication, 2.97 and ; Time Management, 2.96 and Technical Competence, with lowest mean of 2.90 and . Overall, the computed grand mean on the responses towards dimensions on the preparation for modular teaching was 2.96 with qualitative interpretation of “Agreed”.

The table clearly illustrates on the agreement of the teacher-respondents on all dimensions towards preparation for modular teaching. The teacher must possess readiness on the rudiments of modular preparation and construction as to course learning contents, student assessment and progress, feedback mechanism, time management and the technical competence or the know-how in writing modules as instructional learning materials for the students.

**3. Assessment of the teacher – respondents on the challenges encountered in modular teaching**

Table IV shows the Assessment of the teacher – respondents on the challenges encountered in modular teaching. The teacher-respondents were “Agreed” on all indicators particularly on #7, “As a Teacher, I’m facing challenges on giving instruction and responding to queries through messenger and phone messages”, manifested on the high mean value of 3.40 and ranked 1<sup>st</sup> while indicator #8, “As a Teacher, I’m facing challenges on encouraging participation and utilization of features in modular class” with lowest mean value of 3.17 and ranked 15<sup>th</sup>. The computed overall weighted mean on the responses towards challenges encountered by teachers in modular teaching was 3.28 with qualitative interpretation of “Strongly Agreed”.

The data clearly demonstrate that the teachers are encountering great challenges on the use of modular learning approach. Because of the COVID-19 Pandemic where IATF recommended on face-to-face restriction and resulting on the use of distance learning as to modular learning platform. The teacher-respondents were eager and enthusiast to get feedback from the student, parents and community stakeholders in order to improve its services in the distribution and retrieval of the self-learning modules.

The modular teaching is a new approach for many teachers in the educational field because they are not using this learning modality in the delivery of their lessons. Thus, when the DepEd offers varied learning modalities, teachers consider these as difficulties and challenges in the execution of their work. These modalities are new to them (Sejpal, 2013). They make a way to inform the school heads, teachers, parents, and learners regarding the flow of these learning modalities.



**TABLE IV: ASSESSMENT OF THE TEACHER – RESPONDENTS ON THE CHALLENGES NCOUNTERED IN MODULAR TEACHING**

	As a Teacher, I'm facing challenges on ...	Weighted Mean	Qualitative Interpretation	Rank
1	knowledge and skills required in delivering distance learning education classes	3.35	Strongly Agree	3
2	establishing communication with my students	3.28	Strongly Agree	8
3	having stable internet access intended for distance learning education and resources to communicate to parents/ guardians	3.24	Agree	11
4	the availability of Self-Learning Modules	3.38	Strongly Agree	2
5	the use of any Learning Resources Management and Development System (LRMDS)	3.30	Strongly Agree	6
6	use of social media, e-mails, and other platforms of distance learning education.	3.23	Agree	13
7	giving instruction and responding to queries through messenger and phone messages.	3.40	Strongly Agree	1
8	encouraging participation and utilization of features in modular class	3.17	Agree	15
9	time management in the conduct of classes, monitoring of responses, availability of outputs of students, and other modular classes issues.	3.24	Agree	11
10	the sudden shift from face to face to modular classes.	3.21	Agree	14
11	managing the stress caused by community quarantine at home and in between modular classes demands.	3.24	Agree	11
12	beating the deadlines and requirements set by the school administrators	3.27	Strongly Agree	9
13	establishing a network of communication among stakeholders such as parents for support at home.	3.34	Strongly Agree	4
14	checking and evaluating students' output	3.29	Strongly Agree	7
15	building a positive environment through modular classes through emotional support among my students aside from content-based teaching and learning.	3.31	Strongly Agree	5
	<b>Overall Weighted Mean</b>	<b>3.28</b>	<b>Strongly Agree</b>	

**4. Test of difference on the preparedness of teachers in modular teaching when grouped according to the profile variables**

**4.1 Course/Subject Design.** Table V shows the Analysis of Variance to test difference on the preparedness of teachers in modular teaching when grouped according to the profile variables as to Course/Subject Design.

**TABLE V: ANALYSIS OF VARIANCE TO TEST DIFFERENCE ON THE PREPAREDNESS OF TEACHERS IN MODULAR TEACHING WHEN GROUPED ACCORDING TO THE PROFILE VARIABLES AS TO COURSE/SUBJECT DESIGN**

Sources of Variations		SS	df	MS	F	Sig.	Decision
Age	Between Groups	0.788	3	0.263	1.438	0.236	Accept Ho
	Within Groups	17.539	96	0.183			Not Significant
	Total	18.328	99				
Sex	Between Groups	0.092	1	0.092	.496	0.483	Accept Ho
	Within Groups	18.235	98	0.186			Not Significant
	Total	18.328	99				
Civil Status	between Groups	0.030	1	0.030	0.161	0.689	Accept Ho
	Within Groups	18.298	98	0.187			Not Significant
	Total	18.328	99				
Position	Between Groups	2.467	4	0.617	3.694	0.008	<b>Reject Ho</b>
	Within Groups	15.861	95	0.167			<b>Significant</b>
	Total	18.328	99				

Number of Years in Teaching	Between Groups	1.195	7	0.171	.917	0.497	Accept Ho
	Within Groups	17.132	92	0.186			Not Significant
	Total	18.328	99				
Highest Educational Attainment	Between Groups	0.983	4	0.246	1.346	0.259	Accept Ho
	Within Groups	17.345	95	0.183			Not Significant
	Total	18.328	99				
Trainings Attended related to Modular Teaching	Between Groups	0.863	4	0.216	1.174	0.327	Accept Ho
	Within Groups	17.465	95	0.184			Not Significant
	Total	18.328	99				

There is significant difference on the perception on the preparedness of teachers in modular teaching as to Course Subject Design when grouped according to position manifested on the computed Sig. value of 0.008 which is lower than ( $<$ ) 0.05 Alpha Level of Significance, therefore the Null hypothesis is rejected. On the other hand, there is no significant difference on the perception on the preparedness of teachers in modular teaching as to Course Subject Design when grouped according to age, sex, civil status, number of years in teaching, highest educational attainment and training attended related to modular teaching manifested on the computed Sig. values of 0.236, .483, 0.689, 0.497, 0.259 and 0.327 respectively which are higher than ( $>$ ) 0.05 Alpha Level of Significance, therefore the Null hypothesis is accepted. The data simply indicates on the divergence of opinion towards Course Subject Design when grouped according to position. Teacher 1 had an opposing view with other teachers as to their preparation and readiness in the development and construction of modules. The neophyte teachers are more skeptical and doubtful and could be ascribed on the little knowledge and skills in the writing of modules which needed expertise and mastery to comply elements in the module development.

A module passes through at least six (6) different individuals who ensure the contents of the modules. Furthermore, the output is presented to the panel for the purpose of quality assurance (Nardo, 2017).

**4.2 Course Communication.** Table VI shows the Analysis of Variance to test difference on the preparedness of teachers in modular teaching when grouped according to the profile variables as to Course Communication. There is significant difference on the perception on the preparedness of teachers in modular teaching as to Course Communication when grouped according to position manifested on the computed Sig. value of 0.000 which is lower than ( $<$ ) 0.05 Alpha Level of Significance, therefore the Null hypothesis is rejected. On the other hand, there is no significant difference on the perception on the preparedness of teachers in modular teaching as to Course Communication when grouped according to age, sex, civil status, number of years in teaching, highest educational attainment and training attended related to modular teaching manifested on the computed Sig. values of 0.261, 0.447, 0.631, 0.916, 0.105, and 0.128 respectively which are higher than ( $>$ ) 0.05 Alpha Level of Significance, therefore the Null hypothesis is accepted. The data clearly manifest on the deviation and dissimilarities of opinion towards course communication. Teacher III and Master Teachers are more aware on the importance of course communication for effective utilization and implementation of modular learning approach.

**TABLE VI: ANALYSIS OF VARIANCE TO TEST DIFFERENCE ON THE PREPAREDNESS OF TEACHERS IN MODULAR TEACHING WHEN GROUPED ACCORDING TO THE PROFILE VARIABLES AS TO COURSE COMMUNICATION**

Sources of Variations		SS	df	MS	F	Sig.	Decision
Age	Between Groups	1.011	3	.0337	1.356	0.261	Accept Ho
	Within Groups	23.873	96	0.249			Not Significant
	Total	24.884	99				
Sex	Between Groups	0.147	1	0.147	.584	0.447	Accept Ho
	Within Groups	24.737	98	0.252			Not Significant
	Total	24.884	99				
Civil Status	Between Groups	0.059	1	0.059	.232	0.631	Accept Ho
	Within Groups	24.826	98	0.253			Not Significant
	Total	24.884	99				
Position	Between Groups	5.027	4	1.257	6.012	0.000	<b>Reject Ho</b>
	Within Groups	19.858	95	0.209			<b>Significant</b>
	Total	24.884	99				

Number of Years in Teaching	Between Groups	0.686	7	0.098	0.373	0.916	Accept Ho
	Within Groups	24.198	92	0.263			Not Significant
	Total	24.884	99				
Highest Educational Attainment	Between Groups	1.910	4	0.477	1.974	0.105	Accept Ho
	Within Groups	22.975	95	0.242			Not Significant
	Total	24.884	99				
Trainings Attended related to Modular Teaching	Between Groups	1.788	4	0.447	1.839	0.128	Accept Ho
	Within Groups	23.096	95	0.243			Not Significant
	Total	24.884	99				

**4.3 Time Management.** Table VII shows the Analysis of Variance to test difference on the preparedness of teachers in modular teaching when grouped according to the profile variables as to Time Management.

There is significant difference on the perception on the preparedness of teachers in modular teaching as to Time Management when grouped according to civil status manifested on the computed Sig. value of 0.002 which is lower than (<) 0.05 Alpha Level of Significance, therefore the Null hypothesis is rejected. On the other hand, there is no significant difference on the perception on the preparedness of teachers in modular teaching as to Time Management when grouped according to age, sex, civil status, number of years in teaching, highest educational attainment and training attended related to modular teaching manifested on the computed Sig. values of 0.362, 0.531, 0.790, 0.877, 0.128 and 0.106 respectively which are higher than (>) 0.05 Alpha Level of Significance, therefore the Null hypothesis is accepted. Clearly gleaned from the data on the divergence and contrast of the respondent's perspective towards time management. Master Teachers and Teachers III have seen the vital importance of time management that every minute, hours and days are very crucial to assure effectiveness of the modular learning approach.

**TABLE VII: ANALYSIS OF VARIANCE TO TEST DIFFERENCE ON THE PREPAREDNESS OF TEACHERS IN MODULAR TEACHING WHEN GROUPED ACCORDING TO THE PROFILE VARIABLES AS TO TIME MANAGEMENT**

Sources of Variations		SS	df	MS	F	Sig.	Decision
Age	Between Groups	0.721	3	0.240	1.080	0.362	Accept Ho
	Within Groups	21.382	96	0.223			Not Significant
	Total	22.104	99				
Sex	Between Groups	0.089	1	0.089	0.396	0.531	Accept Ho
	Within Groups	22.015	98	0.225			Not Significant
	Total	22.104	99				
Civil Status	Between Groups	0.016	1	0.016	0.072	0.790	Accept Ho
	Within Groups	22.087	98	0.225			Not Significant
	Total	22.104	99				
Position	Between Groups	3.485	4	0.871	4.445	0.002	<b>Reject Ho</b>
	Within Groups	18.619	95	0.196			<b>Significant</b>
	Total	22.104	99				
Number of Years in Teaching	Between Groups	0.709	7	0.101	0.436	0.877	Accept Ho
	Within Groups	21.395	92	0.233			Not Significant
	Total	22.104	99				
Highest Educational Attainment	Between Groups	1.588	4	0.397	1.838	0.128	Accept Ho
	Within Groups	20.516	95	0.216			Not Significant
	Total	22.104	99				
Trainings Attended related to Modular Teaching	Between Groups	1.689	4	0.422	1.965	0.106	Accept Ho
	Within Groups	20.414	95	0.215			Not Significant
	Total	22.104	99				

**4.4 Technical Competence.** Table VIII shows the Analysis of Variance to test difference on the preparedness of teachers in modular teaching when grouped according to the profile variables as to Technical Competence.

There is no significant difference on the perception on the preparedness of teachers in modular teaching as to Technical Competence when grouped according to age, sex, civil status, position, number of years in teaching, highest educational attainment and training attended related to modular teaching respectively manifested on the computed Sig. values of 0.706,

0.550, 0.507, 0.238, 0.925, 0.214 and 0.124 respectively which all are higher than (>) 0.05 Alpha Level of Significance, therefore the Null hypothesis is accepted. Clearly demonstrate on the Table 12 on the parallelism and congruency of opinion of the teacher-respondents towards technical competence. They had all agreed on the needed skills and competence must be possessed by teachers on the use and application of basic computer operation in the construction and development of modules.

**TABLE VIII: ANALYSIS OF VARIANCE TO TEST DIFFERENCE ON THE PREPAREDNESS OF TEACHERS IN MODULAR TEACHING WHEN GROUPED ACCORDING TO THE PROFILE VARIABLES AS TO TECHNICAL COMPETENCE**

Sources of Variations		SS	df	MS	F	Sig.	Decision
Age	Between Groups	0.245	3	0.082	.466	0.706	Accept Ho
	Within Groups	16.833	96	0.175			Not Significant
	Total	17.078	99				
Sex	Between Groups	.062	1	0.062	.360	0.550	Accept Ho
	Within Groups	17.016	98	0.174			Not Significant
	Total	17.078	99				
Civil Status	Between Groups	.077	1	0.077	.443	0.507	Accept Ho
	Within Groups	17.002	98	0.173			Not Significant
	Total	17.078	99				
Position	Between Groups	.954	4	0.238	1.405	0.238	Accept Ho
	Within Groups	16.124	95	0.170			Not Significant
	Total	17.078	99				
Number of Years in Teaching	Between Groups	.450	7	0.064	.356	0.925	Accept Ho
	Within Groups	16.628	92	0.181			Not Significant
	Total	17.078	99				
Highest Educational Attainment	Between Groups	1.002	4	0.251	1.481	0.214	Accept Ho
	Within Groups	16.076	95	0.169			Not Significant
	Total	17.078	99				
Trainings Attended related to Modular Teaching	Between Groups	1.241	4	0.310	1.861	0.124	Accept Ho
	Within Groups	15.838	95	0.167			Not Significant
	Total	17.078	99				

**5. Test of Differences on the challenges faced by teachers in modular teaching when grouped according to profile variables.**

Table IX shows the Analysis of Variance to test difference on the challenges faced by teachers in modular teaching when grouped according to profile variables.

**TABLE IX: ANALYSIS OF VARIANCE TO TEST DIFFERENCE ON THE CHALLENGES FACED BY TEACHER'S IN MODULAR TEACHING WHEN GROUPED ACCORDING TO PROFILE VARIABLES**

Sources of Variations		SS	df	MS	F	Sig.	Decision
Age	Between Groups	.310	3	.103	.286	0.835	Accept Ho
	Within Groups	34.733	96	.362			Not Significant
	Total	35.043	99				
Sex	Between Groups	.049	1	.049	.136	0.713	Accept Ho
	Within Groups	34.995	98	.357			Not Significant
	Total	35.043	99				
Civil Status	Between Groups	1.255	1	1.255	3.639	0.059	Accept Ho
	Within Groups	33.789	98	.345			Not Significant
	Total	35.043	99				
Position	Between Groups	4.547	4	1.137	3.541	0.010	<b>Reject Ho</b>
	Within Groups	30.497	95	.321			<b>Significant</b>
	Total	35.043	99				

Number of Years in Teaching	Between Groups	2.459	7	.351	.992	0.442	Accept Ho
	Within Groups	32.585	92	.354			Not Significant
	Total	35.043	99				
Highest Educational Attainment	Between Groups	.737	4	.184	.510	0.728	Accept Ho
	Within Groups	34.307	95	.361			Not Significant
	Total	35.043	99				
Trainings Attended related to Modular Teaching	Between Groups	4.936	4	1.234	3.894	0.006	Reject Ho
	Within Groups	30.107	95	.317			Significant
	Total	35.043	99				

There is significant difference on the perception towards challenges encountered by teachers in modular teaching when grouped according to position and training attended related to modular teaching manifested on the computed Sig. values of 0.010 and 0.006 which are lower than ( $<$ ) 0.05 Alpha Level of Significance, therefore the Null hypothesis is rejected. On the other hand, there is no significant difference on the perception towards challenges encountered by teachers in modular teaching when grouped according to age, sex, civil status, number of years in teaching and highest educational attainment manifested on the computed Sig. values of 0.835, 0.713, 0.059, 0.442, and 0.728 respectively which are higher than ( $>$ ) 0.05 Alpha Level of Significance, therefore the Null hypothesis is accepted. The data implies on the divergence of opinion by Teacher-I and those who have attended the regional training. The challenges encountered was considered challenging by the two groups compared to others. The mean plot as reflected on Appendix E denotes on the differences using Scheffe Test.

In the study of Nardo (2017), modular teaching is one of the teaching-process. Modular instruction is an alternative instructional design that uses developed instructional materials which are based on the needs of the students. Students are encouraged to work on various activities that are interesting and challenging to maintain focus and attention. Learners study the modules in their own working environment. Learners can study without disturbing their normal activities and responsibilities. Modules can be administered to individual use, for small group or large group. It enables the learner to have control over his/her learning.

#### 6. Test of significant relationship between preparedness of teachers and challenges in modular teaching

Table X shows the Pearson Product Moment Coefficient of Correlation to test significant relationship between preparedness of teachers and challenges in modular teaching.

**TABLE X: PEARSON PRODUCT MOMENT COEFFICIENT OF CORRELATION TO TEST SIGNIFICANT RELATIONSHIP BETWEEN PREPAREDNESS OF TEACHERS AND CHALLENGES IN MODULAR TEACHING**

Sources of Correlations		Level of Preparedness	Challenges in Modular Teaching
Level of Preparedness	Pearson Correlation	1	0.575**
	Sig. (2-tailed)		0.000
	N	100	100
Challenges in modular teaching	Pearson Correlation	0.575**	1
	Sig. (2-tailed)	0.000	
	N	100	100

There is positive moderate relationship between the level of preparedness of teachers and challenges encountered in modular teaching manifested on the computed Pearson Product Moment Coefficient of Correlation value of +0.575\*\*. The computed Sig. (2-tailed-test) value of 0.000 which is lower than 5% significant level, therefore the null hypothesis is rejected, hence there is significant relationship. The data simply indicates that as the challenges increases the level of preparation shall also moderately increases.

#### 7. Proposed Intervention program devised to develop the preparedness of teachers to surpassed challenges

The researcher designed an intervention program which she tagged as Project PROMOTE (Preparedness to Overcome challenges on Modular Teaching).

**Rationale of the Intervention Program.** The intervention program is a combination of program elements or strategies designed to produce behavior changes or improve status among individuals or an entire population. Interventions may

include educational programs, new or stronger policies, improvements in the environment, or a promotion campaign. Interventions that include multiple strategies are typically the most effective in producing desired and lasting change. Interventions may be implemented in different settings including communities, worksites, schools, organizations, faith-based organizations or in the home. Interventions implemented in multiple settings and using multiple strategies may be the most effective because of the potential to reach a larger number of people in a variety of ways (Health, 2021).

**Description of the Intervention.** Project PROMOTE (Preparedness to Overcome challenges on Modular Teaching) generally aims to develop skills of teachers to overcome challenges in modular teaching.

**Content/ Activities.** The intervention program contains sets of activities. The activities included are meetings, training and workshops, games and recreation, and mentoring sessions.

**Procedures.** The intervention program is divided into five core processes which include analysis, design, development, implementation, and evaluation.

The matrix of the intervention program is shown below.

**TABLE XI: PROJECT PROMOTE AS INTERVENTION PROGRAM**

Key Result Areas			
Areas of Concerns	Objectives	Strategies	Timeline
➤ Course / Subject Design	➤ Fully orient teachers on the technical aspects in writing modules	<ul style="list-style-type: none"> <li>➤ Virtual Seminars on Instructional Materials making</li> <li>➤ Virtual Seminars on Rubrics Making and Assessments</li> </ul>	During summer time
➤ Course Communication	➤ To train teachers in using appropriate language in teaching,	➤ Virtual Seminars on Course Communications	During summer time
➤ Time Management	➤ Provide skills on time management to assure delivery of modules to students be on time.	➤ Virtual Seminars on Time Management	During summer time
➤ Technical Competence	➤ To develop skills among teachers in the use and application of basic computer and advance knowledge and skills in the use of online learning platforms.	<ul style="list-style-type: none"> <li>➤ Virtual Seminars on Navigating the DepEd Commons and Learning Portals</li> <li>➤ Virtual Seminar Workshop on Using Computer Applications and Online learning platform as Google Classroom, Edmodo,</li> </ul>	During summer time
➤ Challenges Encountered	➤ To lessen challenges, stress and problems for teachers in the use and implementation of modular learning approach.	➤ Implementation of PROMOTE Intervention Program	During summer time

**Budgetary Requirements.** The funding for the materials, supplies, and other expenses for the intervention program amounting to 3475.00 pesos will be charged to solicitations and financial support from NGO's and other stakeholders.

**TABLE XII: PROJECT PROMOTE BUDGETARY REQUIREMENTS**

Quantity	Unit	Item Description	Estimated Unit Cost	Estimated Total Cost
10	Reams	A4 80gsm Bond Paper	170.00	1700.00
5	Bottles	Epson Ink	275.00	1375.00
10	Pack	A4 200gsm papers	40.00	400.00
<b>Total</b>				<b>3475.00</b>

## **V. CONCLUSION**

Based on the summary of findings, the researcher concluded that:

The teacher-respondent is female relatively young in her early adulthood, Teacher-I, graduate of masters degree of education, had been in the teaching services for almost two decades and had attended training related to modular teaching in the Division level.

The teacher- respondents assessed “Agreed” on course/subject design, course communication, Time Management, and Technical Competence as dimensions on preparation of modular teaching.

The respondents were “Strongly Agreed” on the perception towards challenges encountered by teachers in the implementation of modular learning approach.

There is significant difference on the dimensions of teacher’s preparedness towards Course/Subject Design, Course Communication and Time Management when grouped according to position profile variables while there are no significant differences when grouped according to age, sex, civil status, number of years in teaching services, highest educational attainment, training attended related to modular teaching respectively.

There is significant difference on the perception towards challenges encountered in the implementation of modular learning approach when grouped according to position and attendance to training related to modular teaching while there are no significant differences when grouped according to age, sex, civil status, number of years in teaching services, highest educational attainment respectively.

There is positive moderate relationship between the level of challenges encountered and the level of preparedness in the implementation of modular learning approach.

The Project PROMOTE (Preparedness to Overcome challenges on Modular Teaching) is hereby proposed generally aims to develop skills of teachers to overcome challenges in modular teaching that contains sets of activities.

## **VI. RECOMMENDATIONS**

Based on the summary of findings and the conclusions arrived at, the researcher recommended that:

To encourage all school administrators on the adaptation of modular learning approach as a good indicator of good practices in the teaching and learning process on the risk posed by the COVID-19 pandemic and the implementation of the enhanced community quarantine dictates a call for action for an alternative mode of learning.

While number of cases for positive is still surging, it is recommended by this study that the schools should opt for distance learning for the coming school year along with providing teachers’ capability building for distance learning education.

School managers and administrators are advised to invest, and purchases facilities and equipment needed for distance learning in order to enhance the institution’s capability in production, construction of distance learning materials to the students.

It is recommended that school administrators may conduct faculty in-service capability program to restructure the course syllabus that is simple and attainable in the learner’s level of limited capacity restricted by social distancing. Specific measures such as adopting remote and flexible learning be considered for those who lack access to the internet connection and other resources.

The teachers may conduct an intensive and advance planning for time management to assure the production and delivery and received of module to the student-clients are on time.

Schools may adapt Project PROMOTE to develop skills of teachers to overcome challenges in modular teaching.

To conduct a follow up study with in-depth and wider in scope so as to validate the findings obtained in the study.

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