Teachers' Critical Challenges and Opportunities in Modular Distance Delivery

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Abstract

This paper explores the challenges and opportunities in Modular Distance Delivery. Data was collected from elementary schools of Bayugan City Division, Philippines. This research applied descriptive-quantitative-correlational method. The subject of this research are the Elementary teachers in Bayugan City Division Philippines. The study revealed that, support from the school in crafting modules for modular distance learning is very important to make an effective and efficient material for effective instructional delivery. It further explains that there is no significant difference among teachers' critical challenges and opportunities in modular distance learning delivery. This means that the participants profile does not define their effectivity. No matter what the challenges in terms of modular distance learning delivery they do not back out they pass through it. The result of the study recommends to the DepEd School heads and administrators to support on crafting educational modules to create a well-crafted instructional material

to address the needs of the learners especially in modular distance learning.   Aside from that, teachers also sees to it that the modules created suits to the needs of the learners.

Keywords: Modular Distance Learning; Teachers Challenges and Opportunities; module crafting; school support; school budget; and organization and structure

1. Introduction

Due to COVID-19 pandemic, face to face learning engagement of students and teachers within school are suspended. This pandemic has paved the way to the implementation of Modular Distance Learning as an urgent response to ensure continuity of education. The Philippines is in the process of adapting to the new normal form of education at present, and continuous innovations of educators and active involvement of other stakeholders are the driving force for its success (Dangle, et al 2020).

Most countries around the world have temporarily closed educational institutions to contain the spread of the virus and reduce infections (Tria, 2020). For the continuity of education and for every school to still attain its mission and vision which is to provide quality education to every Filipino learner, the Department of Education implemented the Modular Distance Learning.

Responding to the call of WHO, the Department of Education (DepEd, Philippines), created a series of DepEd Memorandum (DM) No. 15, 21, 23, 31 and 34 in the first quarter of 2020 entitled "Creation of a Task Force for the Management of Department of Education Response to Novel Coronavirus Acute Respiratory Disease (2019-nCoV ARD)" (Department of Education, 2020a). The DepEd, Philippines, also created a learning website called DepEd Commons catering for Alternative Learning School (ALS) students, Out-of-School-Youth (OSYA), regular learners from Kindergarten to Grade 8. The online learning hub is available both for public and private schools all over the country. The website aims to reinforce education anytime and anywhere suitable for learners who have access to the internet using equipment such as smartphones, tablets, laptops, and desktop computers (Department of Education, 2020b).

Distance Learning refers to a learning delivery modality, where learning takes place between the teacher and the learners who are geographically remote from each other during instruction. This modality has three types: Modular Distance Learning (MDL), Online Distance Learning (ODL), and TV/Radio-Based Instruction. (Quinones, 2020)

Modular learning is the most popular type of Distance Learning. In the Philippines, this learning modality is currently used by all public schools because according to a survey conducted by the Department of Education (DepEd), learning through printed and digital modules emerged as the most preferred distance learning method of parents with children who are enrolled this academic year (Bernardo, J). This is also in consideration of the learners in rural areas where internet is not accessible for online learning.

The teacher takes the responsibility of monitoring the progress of the learners. The learners may ask assistance from the teacher via e-mail, telephone, text message/instant messaging among others. Where possible, the teacher shall do home visits to learners needing remediation or assistance (Llego, n.d.). Printed Modules will be delivered to students, parents or guardians by the teachers or through the Local Government Officials. Since education is no longer held within the school, parents serve as partners of

teachers in education. Parents play a vital role as home facilitators. Their primary role in modular learning is to establish a connection and guide the child. (FlipScience, 2020).

The use of modules encourages independent study. One of the benefits of using modules for instruction is the acquisition of better self-study or learning skills among students. Students engage themselves in learning the concepts presented in the module. They develop a sense of responsibility in accomplishing the tasks provided in the module. With little or no assistance from others, the learners progress on their own. They are learning how to learn; they are empowered (Nardo, M.T.B, 2017). Other advantages of modular instruction include more choice and self-pacing for students; more variety and flexibility for teachers and staff; and increased adaptability of instructional materials.

The disadvantages include greater self-discipline and self-motivation required for students, increased preparation time and lack of concrete rewards for teachers and staff, and greater administrative resources needed to track students and operate multiple modules (Dangle, et al 2020).

This research aims to determine teachers' critical challenges and opportunities in modular distance learning delivery. It also identifies whether there is a significant effect to the teachers the critical challenges and opportunity in modular distance learning delivery.

This will help the faculty and administrators to know the critical challenges and opportunities in modular distance learning delivery. Moreover, this study will be used as basis for enhancement program of the school which the school administration will consider helping the teachers improve in certain aspects in new teaching modality.

2. Materials and Methods

2.1 Research Design

The researchers used descriptive-quantitative-correlational method in conducting the study wherein the significant purpose of the study is to quantify the significant difference among teachers in the critical challenges and opportunities in modular distance learning delivery. Thus, a quantitative research method is the most appropriate option to make. Additionally, the study realized the processes of gathering, collecting, tabulating and analyzing data for interpretation and description of a phenomenon suggesting it to be descriptive. Moreover, the study was interested in determining whether there is no significant difference among teachers in the critical challenges and opportunities in modular distance learning delivery.

2.2 Research Site

This study was conducted in Bayugan North District, Bayugan City Division. Bayugan is one of the fastest growing component city in Northern Mindanao. The city's name was either derived from a Manobo term for "pathway" or from the bayug tree. Fifty percent (50%) of the schools in the district participated in this research.

2.3 Data Collection, Analysis and Method of Validation

This study went over phases and systematic procedures in gathering data and securing the reliability of the data. This study conducted a survey through Google forms to gather data needed in the analysis and

interpretation. needed for this study. The researchers sent a letter of approval to the principals of Bayugan City Division Public Elementary Schools. To ensure the research understandability, the participants situated the purpose of the study. When permission was acknowledged, the researcher applied statistical treatment, analysis, and interpretation.

Furthermore, descriptive statistical techniques appropriate for the gathered data was employed. Frequency and Percentage were used to determine the responses of the teachers in Google Form.

Through the data gathered, findings were used to determine the prevalence and relationship among variables and to forecast events from current data and knowledge about Module Learning Delivery. Prudence was required to assist the researchers in avoiding mistakes where important issues are singled out for discussion and several options were put forward in analyzing data. There was also a careful selection of participants since schools vary in learning modalities used.
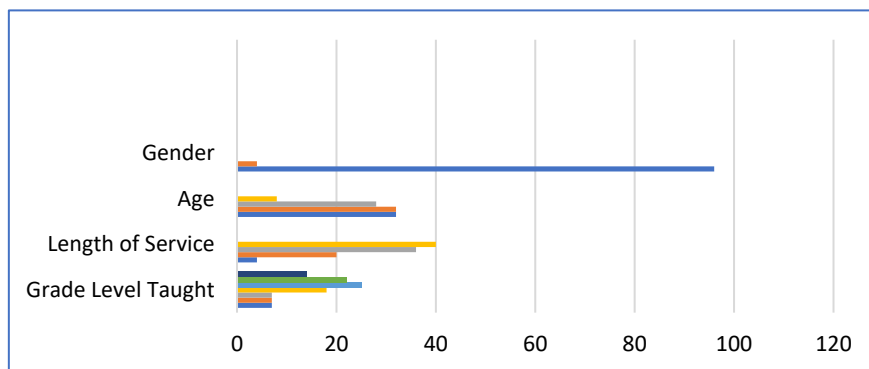
3. Results and Discussions

Figure 1. Participants' Profile

Figure 1 shows the gender, age, length of service and the grade level taught of the participants. As displayed in figure 1, 96% of the participants are female while the male participants are only 4%. Thus, majority of the participants are female.   As to age, majority belonged to the 26 and above age brackets while only 8% are from ages 21 to 25. Therefore, majority of the participants are already mature (Statistics Canada, 2017). Moreover, only 4% have 16 years and above teaching experience. Majority of them have 6 to 10 years of teaching experience which constitutes 40% of the population.   Hence, most of the participants have adequate experience in teaching. The figure also shows that 28% of the participants taught 4th Grade, 20% for fifth grade and 16% for sixth grade. Those who taught kindergarten, first and second grade are same in number which is 8%. Therefore, most of the participants are teaching in the intermediate class.   According to the study of Shah and Udgaonkar, (2018), gender or age is not a barrier in effective teaching if the teacher is active and is showing interest. Moreover, they noted that experience has a positive influence to teaching.
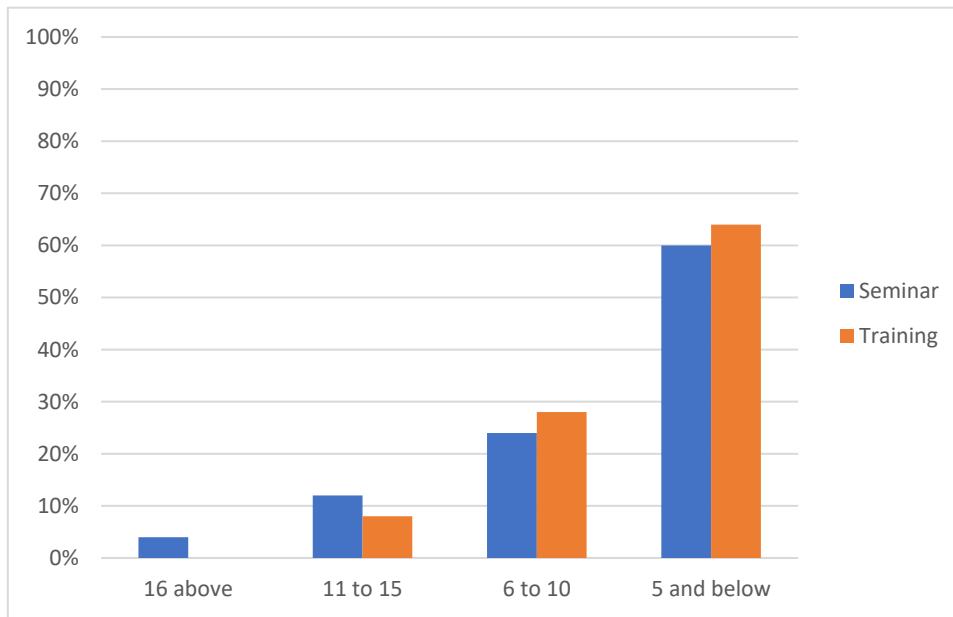
Figure 2. Participants' Attended Trainings and Seminars.

Figure 2 shows the participants' number of attended trainings and seminars regarding modular learning delivery. It can be observed that majority of the participants have attended at least five or below number of trainings and seminars regarding the modular learning delivery which constitute to 60% and 64% respectively. On the other hand, only 24% have attended at least six to ten seminars and 28% have attended at least six to ten trainings. Only 12% were able to attend eleven to fifteen seminars and only 8% were able to attend eleven to fifteen seminars. The figure further shows that only 4% were able to attend 16 and above number of seminars. Therefore, majority of the participants have attended only a minimal number of relevant training on modular learning delivery.

Training and seminar for the implementation of the new learning modality such as the modular learning are warranted to promote a better understanding of the new normal teaching. Hence Walsh et al., (2021) noted that faculty trained during the emergency transition demonstrated more determination than faculty without training and faculty trained after the transition. Receiving training during the emergency transition afforded the faculty a greater cognitive ability to attend to positive behavior in the class.

Table 1. Critical Challenges and Opportunities in Modular Distance Learning Delivery in terms of Views on Module crafting.

A. Views on Module crafting	Mean	Verbal Description
1. I have generally put a lot of effort in making the modules.	3.25	Often
2. In making sense of my activities, I have related them to practical or real-life contexts.	3.38	Often
3. I've been quite systematic and organized in the preparation of the modules.	3.42	Often
4. I've looked at existing materials carefully to come up with my own activities.	3.21	Often
5. I've organized my time carefully to make the best use of it.	3.46	Often
6. Concentration has not usually been a problem for me, unless I've been really tired.	3.38	Often
Average Weighted Mean	**3.35**	**Often**

Source: From the authors.

The table 1 shows the challenges and opportunities in modular distance learning delivery in terms of views on modular crafting. It further represents in modular crafting, the participants have organized their time carefully to make the best of it with the highest weighted mean of 3.46 which means participants are often done the statement most part of it. On the other hand, participants looked at existing materials carefully to come up with their own activities has the lowest weighted mean of 3.21 which means they are often into the statement. Furthermore, the overall weighted mean of the challenges and opportunities in modular distance learning delivery in terms of views on modular crafting was 3.35 with a verbal description of often which means the participants have done the statement most part of it.

Table 2. Critical Challenges and Opportunities in Modular Distance Learning Delivery in terms of planning learning activities.

B. In Planning Learning Activities	Mean	Verbal Description
7. I planned my learning activities on the basis of entry behavior of the learners.	3.54	Always
8. I based the learning activities on the needs of learner.	3.75	Always
9. I considered individual differences in my activities.	3.63	Always
10. I provided adequate time for my students to see their progress.	3.54	Always
11. I included activities that will help students connect to their existing knowledge or experience.	3.71	Always
12. I asked my colleagues or friends some help in making the activities.	3.54	Always
Average Weighted Mean	**3.62**	**Always**

Source: From the authors.

The table above indicates the challenges and opportunities in modular distance learning delivery in terms of planning learning activities. Thus, participants based the learning activities on the needs of learner with a highest weighted mean of 3.75 with a verbal description of always which mean participants have done the statement all the time. While the lowest weighted mean was 3.54 that participants asked their colleagues or friends some help in making the activities. They provided adequate time for their students to see their progress. Also, they planned their learning activities based on entry behavior of the learners. Moreover, the overall average weighted mean of the challenges and opportunities in modular distance learning delivery in terms of planning learning activities was 3.41 with a verbal description of often which means participants have done the statement most part of it.

Table 3. Critical Challenges and Opportunities in Modular Distance Learning Delivery in terms of Organization and structure.

C. Organization and structure	Mean	Verbal Description
13. It was clear to me what my students will supposed to learn in each course unit.	3.50	Often
14. The topics followed each other in a way that will make sense to my students.	3.50	Always
15. I gave my students a good deal of choice over how they'll go over with the material.	3.50	Always

16. Each unit in the module is organized, well thought of and smooth.	3.42	Often
17. My students were allowed to choose over some aspects of the subject.	3.17	Often
18. The activities in the module matched to what the students are supposed to learn.	3.38	Often
Average Weighted Mean	**3.41**	**Often**

Source: From the authors.

The table three displays the challenges and opportunities in modular distance learning delivery in terms of organization and structure. It further shows that it was clear to the participants what their students supposed to learn in each course unit. The topics followed each other in a way that will make sense to their students. And also, participants gave their students a good deal of choice over how they'll go over with the material. With the highest weighted mean of 3.50 with a verbal interpretation of always with means participants are into the statement all the time. On the other hand, participants whose students were allowed to choose over some aspects of the subject has a lowest weighted mean with 3.17 with a verbal description of often which means the participants have done the statement most part of it. Thus, the overall weighted mean was 3.41 with a verbal interpretation of often which means participants have done the statement most part of it.

Table 4. Critical Challenges and Opportunities in Modular Distance Learning Delivery
in terms of Lesson Delivery.

D. Lesson Delivery	Mean	Verbal Description
19. The students are encouraged to look for references and related sources of the lesson.	3.42	Often
20. The students have seen the relevance of the modules through their outputs.	3.33	Often
21. I encouraged my students to rethink their understanding in some aspects of the subject.	3.67	Always
22. Plenty of examples and illustrations were given to help the students to grasp things better.	3.38	Often
23. The module I made encouraged the students to relate to issues in the wider world.	3.42	Often
24. The learning activities that I made helped my students understand the topics better.	3.63	Always
Average Weighted Mean	**3.47**	**Often**

Source: From the authors.

The table four illustrates the critical challenges and opportunities in modular distance learning delivery in terms of lesson delivery. Thus, it further shows that the participants encouraged my students to rethink their understanding in some aspects of the subject has the highest weighted mean of 3.67 with a verbal interpretation of always which means participants have done the statement all the time. On the contrary, the students have seen the relevance of the modules through their outputs has the lowest mean of 3.33 with a verbal description of often which means they are into the statement most part of it. Furthermore, the overall average weighted mean of the critical challenges and opportunities in modular distance learning delivery in terms of lesson delivery was 3.47 with a verbal description of often which means participants have done the statement most part of it.

Table 5. Critical Challenges and Opportunities in Modular Distance Learning Delivery in Assessment.

E. Assessment	Mean	Verbal Description
25. It was clear for my students what were expected in the assessed work in the module	3.58	Always
26. As the teacher, I was encouraged to think and make appropriate activities in the module.	3.67	Always
27. I have seen that the activities were fitted in with what we were supposed to learn.	3.71	Always
28. I give feedback to the students' work to help them improve in their learning.	3.46	Often
29. Making the module helped me think about how evidence is used in this subject.	3.54	Always
30. I establish my own system of assessment based on the activities given.	3.29	Often
Average Weighted Mean	**3.54**	**Always**

Source: From the authors.

Table five represents the critical challenges and opportunities in modular distance learning delivery in terms of assessment. In which the participants have seen that the activities were fitted in with what we were supposed to learn has the highest weighted mean of 3.71 with a verbal description of always which means participants have done the statement all the time. Participants who establish their own system of assessment based on the activities given has the lowest weighted mean of 3.29 with a verbal description of often which means participants are into the statement most part of it. Moreover, the overall average weighted mean of the critical challenges and opportunities in modular distance learning delivery in terms of assessment was 3.54 with the verbal description of always which indicates that the participants are into the statement all the time.

Table 6. Critical Challenges and Opportunities in Modular Distance Learning Delivery
in terms of Integrity in submitted outputs.

F. Integrity in submitted outputs	Mean	Verbal Description
31. I Infused integrity and articulate expectations into the classroom culture.	3.54	Always
32. I incorporated teaching of values during the subject orientation.	3.63	Always
33. I respond appropriately when cheating and dishonesty occurs.	3.58	Always
34. I encouraged students to ask whenever there are points of clarification.	3.79	Always
35. I helped my students develop awareness of their school responsibilities.	3.71	Always
36. I established a way of communication with the parents and guardians regarding school policies.	3.71	Always
Average Weighted Mean	**3.66**	**Always**

Source: From the authors.

Table six shows the critical challenges and opportunities in modular distance learning delivery in terms of integrity in submitted outputs. Thus, the participants who encouraged students to ask whenever there are points of clarification has the highest weighted mean of 3.79 with a verbal description of always which means the participants are into the statement all the time. On the other hand, participants who respond appropriately when cheating and dishonesty occurs has the lowest weighted mean of 3.58 with a verbal description of always which means they are also into the statement all the time. The overall average weighted mean of the critical challenges and opportunities in modular distance learning delivery in terms

of integrity in submitted outputs was 3.66 with a verbal description of always which means participants are into the statement all the time.

Table 7. Critical Challenges and Opportunities in Modular Distance Learning Delivery in School Budget.

G. School Budget	Mean	Verbal Description
37. The school administration included module- related expenses in planning.	3.63	Always
38. The school has a separate budget for necessary materials used in making and printing modules.	3.67	Always
39. The school administration analyzed module-related expenditures quarterly.	3.79	Always
40. There are generally reports made for module expenditures.	3.58	Always
41. The school offered reimbursent for teachers' personal expenses.	3.25	Often
42. The school administration responded promptly to budget-related concerns.	3.58	Always
Average Weighted Mean	**3.58**	**Always**

Source: From the authors.

Table seven demonstrates the critical challenges and opportunities in modular distance learning delivery in terms of school budget. It further shows that the school administration analyzed module-related expenditures quarterly has the highest weighted mean of 3.79 with a verbal description of always which means the participants are into the statement all the time. While, the school offered reimbursement for teachers' personal expenses has the lowest weighted mean of 3.25 with a verbal description of often which means the participants have done the statement most part of it. the overall average weighted mean of the critical challenges and opportunities in modular distance learning delivery in terms of school budget was 3.58 with a verbal description of always which means the participants have done the statement all the time.

Table 8. Critical Challenges and Opportunities in Modular Distance Learning Delivery in School Support.

H. School Support	Mean	Verbal Description
43. The school has a separate budget for necessary materials used in making and printing modules.	3.75	Always
44. The school provides time for teacher's time to discuss problems issues on learning modality.	3.71	Always
45. The school provided relevant training opportunities for teachers and staff.	3.58	Always
46. The school followed health protocols in gathering, meeting or in any school activities.	3.79	Always
47. The school acknowledged the risks involved in module distribution and retrieval.	3.83	Always
48. The support from the Parent's Association and community is visible.	3.50	Always
Average Weighted Mean	**3.69**	**Always**

Source: From the authors.

As shown in table eight illustrates the critical challenges and opportunities in modular distance learning

delivery in terms of school support. It further explains that the school acknowledged the risks involved in module distribution and retrieval has the highest weighted mean of 3.83 with a verbal description of always which means that the participants have done the statement all the time. In the contrary, the support from the Parent's Association and community is visible has the lowest weighted mean of 3.50 with a verbal description of always which means the participants have done the statement all the time. Furthermore, the overall weighted mean of 3.69 with a verbal description of always which means the participants have done the statement all the time.

Table 9. Summary of the critical challenges and opportunities
in modular distance learning delivery.

Critical Challenges and Opportunities in Modular Distance Learning Delivery	Mean	Verbal Description
A. Views on Module crafting	3.35	Always
B. Planning Learning Activities	3.62	Always
C. Organization and structure	3.41	Often
D. Lesson Delivery	3.47	Often
E. Assessment	3.54	Always
F. Integrity in submitted outputs	3.66	Always
G. School Budget	3.58	Always
H. School Support	3.69	Always
Weighted Mean	**3.54**	**Always**

Source: From the authors.

The table nine indicates the summary of all the critical challenges and opportunities in modular distance learning delivery. It further indicates that the School Support has the highest weighted mean of 3.69 while the Views on Module crafting has the lowest weighted mean of 3.35. Furthermore, it shows that support from the school in crafting modules for modular distance learning is very important to make an effective and efficient material for effective instructional delivery.

Teachers nowadays face a variety of additional, equally essential difficulties in their jobs, including preparing students for instability, compassion, new technology, peace, and civic engagement, to name a few (Tolochko,2016). The most common type of distance learning is modular learning. According to a survey done by the Department of Education (DepEd), studying through digital and printed modules has appeared as the most favored distant learning mode for parents with children registered this academic year. This also takes into account learners in remote locations who do not have access to the net for e-learning. The teacher is responsible for keeping track of the students' performance. Learners can contact the teacher via e-mail, smartphone, text or email, or instant messaging, among other methods. If at all practicable, the teacher will make home visits to students who require enrichment or support. Teachers will give copied Modules to learners, spouses, or grandparents, or via Local Officials (Bernardo, 2020 & Llego,2020).

Table 10. Is there a significant difference on the challenges and opportunities in modular distance learning delivery when grouped according to their profile?

Variable 1	Variable 2	Chi Square	p-value	Decision	Interpretation
Age	Challenges and Opportunities	1.971	.578	Failed to Reject Ho	There is no significant difference among teachers' critical challenges and opportunities in modular distance learning delivery in terms of age.
Grade Level Taught		10.052	.122	Failed to Reject Ho	There is no significant difference among teachers' critical challenges and opportunities in modular distance learning delivery in terms of grade level taught.
Years of service		6.236	.101	Failed to Reject Ho	There is no significant difference among teachers' critical challenges and opportunities in modular distance learning delivery years if service.
Trainings		2.361	.307	Failed to Reject Ho	There is no significant difference among teachers' critical challenges and opportunities in modular distance learning delivery in terms of training attended.
Seminar		3.344	.342	Failed to Reject Ho	There is no significant difference among teachers' critical challenges and opportunities in modular distance learning delivery in terms of seminar attended.

Source: From the authors.

Variable 1	Variable 2	Mann-Whitney U	p-value	Decision	Interpretation
Gender	Challenges and Opportunities	7.000	.439	Failed to Reject Ho	There is no significant difference among teachers' critical challenges and opportunities in modular distance learning delivery in terms of gender.

Source: From the authors.

The table shows the significant difference between participants' profile and their challenges and opportunities. The chi-square between age and the challenges and opportunities has a chi-square of 1.971 with a significance of .578 (p-value >0.05), whereas grade level taught and challenges and opportunities has a chi-square of 10.052 with a significance of .122 (p-value >0.05), years of service and challenges and opportunities has a chi-square of 10.052 with a significance of .101 (p-value >0.05), trainings and challenges and opportunities has a chi-square of 2.361 with a significance of .307 (p-value >0.05), and seminars and challenges and opportunities has a chi-square of 3.344 with a significance value of .342 (p-value >0.05). In terms of gender and challenges and opportunities has a Mann-Whitney U of 7.000 with a significant value of .439 (p-value >0.05).

The result signifies that when grouped according to their profile and their challenges and opportunities has a higher significance value of p-value (p-value >0.05) which fails to reject the null hypothesis. Therefore, there is no significant difference among teachers' critical challenges and opportunities in modular distance learning delivery. This means that the participants profile does not define their effectivity. No matter what the challenges in terms of modular distance learning delivery they do not back out they pass through it.

According to Moses (2016), the gender of the respondents does not have a relation to their level of instructional modalities awareness. Gender might not be a vial factor in clarifying what aspects of forthcoming teachers are enticed to teaching. As stated by Fahman et. al (2019), he specifies that the respondent's profile does not define the teaching practices and their effectivity they have utilized during modular distance learning delivery, it is their knowledge and skills and teaching technique they had embodied for determining the best teaching practices. Teachers teaching practices has a significant impact on students' learning, and to be effective, teachers must be knowledgeable in a variety of subjects.   The capacity of a teacher to efficiently transfer knowledge is referred to as teaching. An effective teacher is competent, knowledgeable, and skilled, as well as a performer, meaning that he can apply his knowledge and skills in the classroom to achieve the instructor's objectives. Experience and age are thought to have a good impact on teaching (Rajesh Shah & Udgaonkar,2018).

4. Conclusion

Based on the data gathered, it was found out that majority of the participants are female, the participants are already mature, most of the participants have adequate experience in teaching, and majority of the participants have attended only a minimal number of relevant training on modular learning delivery. It also shows that support from the school in crafting modules for modular distance learning is very important to make an effective and efficient material for effective instructional delivery. It further explains that there is no significant difference among teachers' critical challenges and opportunities in modular distance learning delivery. This means that the participants profile does not define their effectivity. No matter what the challenges in modular distance learning delivery, they do not back out they pass through it.

The following are also highly recommended. DepEd School heads and administrators to support on crafting educational modules on the different aspect such as financial, moral and physical aspects to create a well-crafted instructional material to address the needs of the learners especially in modular distance learning.   Teachers also sees to it that the modules created suits to the needs of the learners according to what is ask from Most essential learning competences as much as possible it must be localize according to what is seen in the locality. Researchers also recommended an enhancement program for the administrators to be guided on how to address the challenges and opportunities that teacher faced in modular distance learning.

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