LEARNERS’ PERCEPTION AND ASSESSMENT ON PRINTED OR DIGITAL MODULES (PDM) AS MODULAR DISTANCE LEARNING (MDL)

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Abstract— The study aimed to determine learners’ personal assessment, performance, and importance in having PDM-MDL in this time of the pandemic. The study was qualitative-descriptive in nature. Graduating students from Senior High School (S.Y. 2020-2021) were the respondents of this study. The data were collected by purposive sampling and thru surveys conducted via google forms and ms excel. This study proved that although a face-to-face setup is more helpful to them, still, majority of them are in favor of modular distance learning in this time of the pandemic. Thus, to give notice on the “needs”; and focusing on the “appropriate” activities, strategies, and techniques that are suited to the said mode of learning are highly recommended.

Keywords— PDM-MDL, MDL, Distance Learning, FtoF

I. INTRODUCTION

It was December 2019 when World Health Organization (WHO) reported the so called nCOV 2019 in which was then started in China. On the following month, (January 2020), the said disease became known as COVID-19 or Coronavirus and “defined as illness caused by a novel coronavirus called severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2; formerly called 2019-nCoV)”, the WHO then declared a global outbreak. Thus, in the widespread called COVID-19 which truly affects all aspects of humans’ lifestyles in all over the world, one of which is the education system. The Philippines, therefore, which regularly starts classes every June of the year moved the said classes in October for the school year 2020-2021 with the “appropriate steps” for this situation. This is also to make sure that the education will be “accessible to all”. As an initiative of the Department of Education to ensure that “no Filipino learner will be left behind amidst the crisis” the department has launched the short and long-term strategy known as the Basic Education Learning Continuity Plan (BE-LCP). The BE-LCP has multiple learning modalities namely: face to face, distance learning (MDL-modular distance learning, ODL-online distance learning, and RBl/ TBI(R/TVI)-Radio-Based Instruction/ TV Based Instruction), blended learning and homeschooling. Among those modalities, modular distance learning (MDL) is being considered the most challenging for the learners as it is a self-instructed learning modality which consists of three modules: “(1) The Printed or Digital Modules (PDM) are delivered to the homes of learners or picked up by their parents or guardians at designated places within coordinated schedules. Printed modules refer to learning packets (work sheets, activity sheets, self-learning materials). Digital means modules (e-modules) are saved in USB/flash drives, CDs, OTGs. To be able to access the content of these materials, laptops, computers or tablets are needed. The e-copy of the learning modules like interactive and inclusive e-books, courseware and other offline content formats are provided; (2) Online Distance Learning (ODL), this modality is applicable to learners as well as teachers with technology devices in which internet connectivity is required. Learning resources such as the DepEd commons are uploaded in the DepEd Learning Portal and other DepEd-authorized learning management systems or platforms. Example of these include the Microsoft Teams, Google Classroom, Edmodo, Moodle etc which may Synchronous wherein it is applied to various forms of televisual, digital and online learning where students learn from the teachers in real time but no physical appearance is required or Asynchronous which is self-directed and self-pace that does not require all the learners to be virtually present at the same time and uses message boards, discussion groups and self-paced online courses; (3) The Radio/TV-Based Instruction (R/TVI) learning modality uses TV and/or radio in instruction. It involves modular development wherein in the TV-Based Instruction (TBI), the teacher prepares the lesson and script for TV broadcasting and in the case of Radio-Based Instruction (RBI), lesson and script for radio broadcasting, then live broadcast or pre-records the lesson scripts. At home the students listen to the lesson being broadcasted. Parents monitor their children’s work then give feedbacks to the teacher via phone call or home visits. The submission of the accomplished tasks to the teacher may be through the barangay or community learning center or any available delivery support” (Philippine Information Agency).”
Also, to note, “Module is a unit of work in a course of instruction that is virtually self-contained and a method of teaching that is based on the building up skills and knowledge in discrete units. Its characteristics are: “it should be independent, self-contained, self-instructional, well defined, clearly defined objectives, concern individual differences, association, structure sequence of knowledge, systematically organized learning opportunities, utilization of a variety of media, active participation by learner, immediate reinforcement of responses, mastery of evaluation strategy and evaluation of the work (Sejpal, 2013).” This modality therefore was and being developed with careful analysis and study for the effective self-learning of the learners.

In the study of Fidalgo (2020), although there were factors that were found out that need to be considered in distance learning, these did not become the reasons of the learners not to enroll in the same mode. In fact, there were some recommendations gathered from the learners to make this modality more effective and useful. In the study of Sumui, et.al. (2017) there were elements that the instructional designers need to re-consider in formulating and developing instructional materials for distance learning. It is recommended that the other type of distance learning which is ODL shall be considered as one of the approaches in this kind of learning. These considerations and recommendations from the students itself would totally satisfy their needs for their future studies and learnings.

On the other hand, both studies of Sadiq & Zamir (2014) and Alam, et.al. (2012), found out that students considered their time in choosing MDL, whereas Sadiq & Zamir (2014) paper proved that “Modular teaching is more effective in teaching learning process as compared to ordinary teaching methods. Because in this modular approach the students learn at their own pace.” Conversely, Alam, et.al. (2012) study proved that “The preference for distance learning by this category of students is largely because of the awareness and effectiveness of DL along with contributing factors of flexibility of use of time location and work commitment. The study suggests that majority of the students are satisfied with teaching and learning via distance.” Time became the number one factor of the students in their studies in choosing the modality because of its convenience in doing the assigned task in their own availability and accessibility. Thus, this factor totally made the students to agree in MDL.

On the contrary, as the above studies proved on the students’ satisfaction of the mentioned modality, Dangle & Sumaoang (2020) proved in their study that great number of activities in the module per se is the main problem in the MDL approach. This study aimed to know the challenges encountered by the students, teachers, and parents. Most of the research were focused on the graduate and undergraduate students regarding distance learning in all and not really referring to the MDL per se or the PDM. While the study of Dangle & Sumaoang (2020) focused on the said specific approach, the researchers also considered the data that came from the parents and teachers. In this research, the specific PDM under MDL and the learners’ exclusive assessment, perception, views and even recommendations will be the focused and gist of the study. The research will also be concerning with the graduating learners (Grade 12) who is encountering the MDL for the first time and last year in their high school life. Also, in the DepEd survey last 2020, using Learner Enrollment and Survey Forms (LESFs), the data showed that there were “8.8M parents preferred modular (referred as printed modules), 3.9M blended, 3.8M Online, 1.4M Educational TV, 900K Radio based instruction and around half a million preferred other modalities”. Therefore, it shows that the most preferred modality is PDM. And since this modality is considered as the most challenging modality among others and had the highest preferred modality in the surveyed made by the department, thus learners’ exclusive and own assessment, perception, views and even recommendations should be also given much importance and priority.

Therefore, the researcher of this study and one of the teachers of MDL-PDM who is handling six (6) sections decided to conduct the study in her own classes which are from: Accounting, Business and Management (ABM), Humanities and Social Sciences (HUMSS), Electrical Installation Maintenance (EIM) and Cookery, Bread and Pastry Production, Food and Beverage Services (CBF) to determine the learners’ personal perspectives, views, assessment and importance of modular distance learning especially in this time of pandemic.

In the preceding objectives mentioned, the following research questions were formulated, therefore:

1) What are the learners’ assessment on the implementation of modular distance learning specifically the use of printed or digital modules?
2) What are the learners’ perception on the ease of implementation of modular distance learning specifically the use of printed or digital modules?
3) How modular distance learning affects their performance?
4) How MDL as PDM is important to them in this time of crisis?

II. METHODOLOGY

Research Design

In aiming the learners’ own assessment in the modality and own assessment in his/ her performance and importance of the modular distance learning specifically the printed or digitized modules, the researcher used qualitative-descriptive method of research. The tools were used by the researcher:

1) self-assessment;
2) structured interview questionnaire.

Participants

The participants of this study were senior high school students from: Accounting, Business and Management (ABM 12-1&2), Humanities and Social Sciences (HUMSS 12-3), Electrical Installation Maintenance (EIM 12-1) and Cookery,
Bread and Pastry Production, Food and Beverage Services (CBF 12-2) in the first semester of the S.Y. 2020-2021. There were one hundred seventy-two (172) active learners in all sections mentioned, however due to limitations on the internet, only one hundred twenty (120) among them were able to answer the questionnaire given. Learners were composed of males and females with the ages 17-19.

**Instruments**

A five-point researcher made Self-Assessment Questionnaire was used to know the learners’ own assessment in using PDM-MDL approach. The rating scales used were: 1- Totally Disagree, 2- Disagree, 3-Neutral, 4-Agree and 5- Totally Agree and the evaluation scale used were: 1.0-1.79 Totally Disagree, 1.80-2.59 Disagree, 2.60-3.3 Neutral, 3.40-4.19 Agree, 4.20-5.00 Totally Agree. A Semi-Structured Questionnaire was also used to determine the learners’ views on how PDM-MDL modality affects their performance and its importance in this time of pandemic. This questionnaire was composed of five (5) questions. The instruments were made in MS Excel copy and google forms, respectively.

**Procedure/Data Gathering**

The data was gathered during the first semester of the school year 2020-2021. It took almost five (5) months from the month of October 2020 up to March 2021 to be able to gather the data. This was because learners have very limited resources and internet connection. The researcher-teacher of this pilot study instructed learners thru messenger (way of communication to MDL students). There were asked to answer the self-assessment questionnaire in MS Excel copy and send back thru e-mail or messenger (in whatever form of communication they are most convenient). Also, a google form made for semi-structured questionnaire in an online survey was conducted. The form was made in an online survey to be able the learners to answer it at their most convenient time and when the resources are available. Take note that printed or digital modules are simply known as modular distance learning or MDL by the learners.

**Data Analysis**

The fifteen (15) items self-assessment questionnaire was analyzed and counted by simple frequency count and computed its mean. The items were formulated to determine learners’ own assessment in the modality of MDL. On the other hand, the semi-structured questionnaire was computed by percentages only. This questionnaire served as the data to know the learners’ performance in the MDL modality and the importance of the implementation of MDL in their academic learnings in this time of pandemic. The questionnaire was also validated by an English Teacher and Curriculum Developer.

**III. RESULTS AND DISCUSSION**

**Self-Assessment Questionnaire**

Table 1 shows learners’ assessment in printed or digitized modules-modular distance learning modality

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Learners’ Assessment in PDM-MDL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item No.</td>
<td>WEIGHTED MEAN</td>
</tr>
<tr>
<td>1. MDL is helpful to continuing my studies especially in this time of pandemic.</td>
<td>4.40</td>
</tr>
<tr>
<td>2. MDL offers an interesting way of learning.</td>
<td>3.60</td>
</tr>
<tr>
<td>3. MDL is the same as face-to-face learning.</td>
<td>2.50</td>
</tr>
<tr>
<td>4. I am enjoying my study through MDL.</td>
<td>3.05</td>
</tr>
<tr>
<td>5. I am learning a lot through MDL.</td>
<td>3.35</td>
</tr>
<tr>
<td>6. MDL gives me ample time to study the lesson.</td>
<td>3.30</td>
</tr>
<tr>
<td>7. MDL gives me flexible time to finish the assigned task.</td>
<td>3.70</td>
</tr>
<tr>
<td>8. MDL gives me more satisfaction than face to face learning.</td>
<td>2.20</td>
</tr>
<tr>
<td>9. MDL gives me more confidence in accomplishing the tasks.</td>
<td>2.90</td>
</tr>
<tr>
<td>10. MDL allows me to have a quality output.</td>
<td>3.42</td>
</tr>
<tr>
<td>11. MDL allows me to be more curious about the topics or lessons.</td>
<td>3.30</td>
</tr>
<tr>
<td>12. MDL allows me to study the lesson at my own pace.</td>
<td>3.85</td>
</tr>
<tr>
<td>13. MDL allows me to be more creative in any assigned tasks.</td>
<td>3.34</td>
</tr>
<tr>
<td>14. MDL does not give me any pressure.</td>
<td>3.18</td>
</tr>
<tr>
<td>15. MDL does not give me any hesitations in answering the activities.</td>
<td>2.60</td>
</tr>
<tr>
<td>OVERALL MEAN</td>
<td>3.27</td>
</tr>
</tbody>
</table>

Note: 5- Totally Agree; 4- Agree; 3- Neutral; 2-Disagree; 1- Totally Disagree

In the table above, the learners were totally agreed that MDL is very helpful in this time of crisis as it shows 4.40 weighted mean in item No. 1. Likewise, the learners were agreeing that modular distance learning is another interesting way of learning which also proven in the above table. It can be also noticed that though both item nos. 5 and 6 got the neutral option, it still proved that modular distance learning gives pleasure and learning to the learners. This maybe because in generality the MDL somehow makes them more productive in studying their lessons even in this time pandemic. “The goal of the modules is to provide resources to instructors that will allow them to transform their classrooms into active, student-centered learning environments (Stewart & Wilkerson, 1999 in Sadiq, 2014).” In which, the learners found this modality, interesting and enjoyable that made them become more active and in the end give them a lot of learnings.

Item Nos. 7 & 12 proved that this modality gives more time for the learners to study their lessons. When learners are engaged in a modular modality it is obviously that these learners can do the assigned tasks and study at their own pace. As Dangle & Sumaoang (2020) mentioned that: “One of the benefits of using modules for instruction is the acquisition of better self-study or learning skills among students.” On the other hand, in item Nos. 6 & 14 most of the students did not totally agree or agree and just fairly answered in the statement of not pressuring them. This maybe referring to the submission of the assigned task, whereas the school is implementing a schedule for the retrieval of the accomplished
or finished output. In fact, one of the students commented that “the date of submission gives them pressure.” In Santelli, et al. (2020) study it was mentioned that: “the quality and accuracy of work can be reduced due to the pressure associated with completing an assignment on a crunched timeline (Kim & Sco, 2015).” However, this case was already cleared out by the Department of Education where learners are allowed in delayed submission (in the most reasonable circumstances) of their outputs in which learners may submit unfinished task in the following retrieval date.

On the other hand, items no. 3 & 8 shows the highest weighted mean of totally disagreeing in the statement with a mean of 2.53 and 2.20, respectively. This proved that learners are still not convinced that modular distance learning is as the same as and is as satisfying as to face to face learning modality. It is because that the approach of these two modalities is very much different. As mentioned by Paul & Jefferson (2019), “classroom instruction is extremely dynamic. Traditional classroom teaching provides real-time face-to-face instruction and sparks innovative questions. It also allows for immediate teacher response and more flexible content delivery.” Thus, face to face learning modality is still more convenient for the learners.

The table also shows that when it comes to personal assessment, they believed that they are “fairly” confident, curious and creative as they answered “neutral” in items no. 9, 11, 13 and 15. The modality maybe gave them no more hesitations to learn new things as they study in their own without any comparing their works to the other students and so can do the task confidently. “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 in Dangle & Sumaoang, 2020). In which, they also agreed that their output is quality enough as shown in item no. 10.

Structured Interview Questionnaire

Figure 1 presents the learners’ views on the importance and personal performance in the implementation of PDM-MDL

Figure 1

Learners’ Views in the Importance and the Affects in their Performance of PDM-MDL

Figure 1 (Fig.1) clearly shows that almost 80% of them were confident enough to answer the tasks given in the module. Most of the students also answered this item as: “Yes, I have an access online, I can search whenever I need to.” Thus, it can be said that their confidence was also came from the online access in which they can use as other source of their assigned tasks. “The use of online learning resources reveals that it improves students’ achievements and faculty performance (Jones, et al. 2011 in Alshahrani, et. al. 2017).” This is also the reason why only half percentage of the learners who answered that the module is “difficult to accomplish.”

And these learners who answered that it is “difficult to accomplish” maybe because of their time to accomplish the eight (8) subjects in two (2) to three (3) weeks. This was also proved in the study of Dangle & Sumaoang (2020) where 90% of the learners having a hard time to accomplish the tasks in the module and half of the learners do not really have enough time to finish the module in just one week. Also, one of the learners answered: “Sometimes whenever yhe [the] topic is really unfamiliar or couldn't understand the terms.” In this case, the learners must consider that there are subjects that sometimes need more comprehension and analyze as Salma & Rodrigues (2012 in Dangle & Sumaoang 2020) mentioned that in the case of problem solving especially in word problem, solutions will be get if proper understanding and analyzing in the problem was then first considered by the students.

This figure (fig.1) also proved that 70% of the learners preferred face to face learning modality (F2F) than modular learning modality (MDL) which got 30% only. This only means that majority of the students still believe that face to face learning inside the four corner of the classroom is more effective to them. As Kemp & Grieve, 2014 (in Paul & Jefferson, 2019) mentioned that: “The classroom setting provides more motivation, encouragement, and direction. Even if a student wanted to quit during the first few weeks of class, he/she may be deterred by the instructor and fellow students. F2F instructors may be able to adjust the structure and teaching style of the class to improve student retention.”

Thus, it is indubitably and not surprising that learners much into consideration of face-to-face learning than to modular. One of the learners also said that they preferred F2F because: “Although learning transcended beyond classroom borders amid pandemic, I would still prefer face to face classes. I still want to be in front of the teacher, listening in the discussion and broaden my knowledge. I think, it is more bearable than the new set up because we can clarify things right in front of our teachers so we could understand each topic better.” This only means that learners believed that learnings which are guided by the teachers personally is more effective than MDL. These graduating learners cannot just simply ignore the importance of how the lectures, discussions,
learnings, and knowledge being done personally with their teachers.

On the other hand, although the said modality is not as much preferred by the learners unlike the F2F, it can be noticed in figure (fig.1) that 90% of the learners believed that this modality is helpful and beneficial. In fact, some of them answered:

1) “Yes, MDL capacitates us students to continue learning despite the fact that we are in the midst of a pandemic. For a student who does not have stable internet connection and only have limited resources, it is truly preferable to get into Modular Distance Learning since not all students could keep up with online classes.”

2) “Yes. MDL is helpful for us students who does not have a stable internet connection during this time of pandemic or beneficial to students who do not own gadgets for online classes.”

3) “Yes, because it helps me to study well even if I am alone. Because of the situation, pandemic, we are facing right now. Students will not able to study in school so the module will be a big help for us, students, that don't have an access in studying online.”

4) “Yes because of MDL our learning year (SY 2020-2021) are not wasted, and also it makes our studies possible without risking our health life.”

Thus, this proved that learners also prioritized their personal health in this time of crisis. It can also be said that even though that there is a pandemic they were agreed that there should no hindrance/s or reason/s for them not to continue their studies, as there are always any other ways to that just like this modality-the modular distance learning (MDL) in printed or digitized. This was also proven in the study of Dangle & Sumaoang (2020) where: “Most of the parents still prefer Modular Distance Learning over Online or Blended Learning because they think that this modular approach is safer for their child/children.” Therefore, it is not only the learners who is concerned with their health but also their parents. In fact, in the recent survey (remote enrollment from June 1-July 15) of the Department of Education using the Learner Enrollment and Survey Form (LESF) resulted that it is 8.8 million parents who voted and preferred for modular type of learning modality.

IV. CONCLUSION AND RECOMMENDATIONS

This study, therefore, proved that learners have positive assessment and perspectives in having printed or digitized modules as one of their options in modular distance learning even though face-to-face is their most preferred and believed effective modality. The neutral overall mean in the self-assessment proved that learners are satisfied enough in the implementation of PDM-MDL. Likewise, the semi structured questionnaire proved that the said modality is helpful in their academic performance; and beneficial and important to them especially when health is being considered for their own safety. “Although academic performance stems from a complex interaction between intellect and contextual variables, health is a vital moderating factor in a child's ability to learn. The idea that healthy children learn better is empirically supported and well accepted (Basch, 2010), and multiple studies have confirmed that health benefits are associated with physical activity, including cardiovascular and muscular fitness, bone health, psychosocial outcomes, and cognitive and brain health (Strong et al., 2005 in National Academies Press, 2013).” Also, “No degree is worthy of a person’s mental breakdown. No SLO’s or academic achievements are more important than one’s psychological balance.” (Dr. Alaki, 2020). It is telling us that there is none other important in our life but our own health whether physical or psychological. Thus, physical, or mental health are important than anything else. The availability of the modality at present had overcome the mean of going to school but still learning while at home and prevent the risk of having sickness.

The learners also believed that despite of learning the topics by their own they are confident enough that they are doing it right. The PDM modality challenged and taught them on how to do it by their own even without the help of their teacher or classmates. They also mentioned that there are also other ways or resources where they can easily finish the task. Dangle & Sumaoang (2020) exposing them in self-study is a better acquisition of learnings and skills to improve on.

Since the researcher is also the teacher of this study, it is highly recommended to consider even one student’s concern in this time of crisis. It is suggested to set a virtual class with them to explain further things that they do not know. In this manner, the learners may have the option to set time and date that are available to them and will not need much data connection as only topic needed to explain will be discussed. An exclusive video explainer prepared by teacher can be also another option where students may watch at their most convenient time or if they have only a budget for data connection. Unfortunately, the teacher must follow the IDEA (Introduction, Development, Engagement and Assimilation) when virtual class and video explainer is being implemented and used. The time being consumed in actual virtual class and now recording became the problem of the learners (even Google classroom); because of the learners’ limited load (internet) budget. Thus, the researcher-teacher recommend focusing only on the “things needed” by the students in which teacher have asked or gathered from the learners before the teacher conducted a virtual class and recorded the said video explainer. Remember that, at this time of pandemic, it is very important to consider the learners’ needs than we want to implement. As the DepEd Sec. Briones said: “No student will left-behind.” Then again, continuous communication using social media even in messenger is also would be a great help to them to surpass their difficulty to accomplish the task and even give them more confidence to do tasks.
Additionally, flexibility of time to do the task made them more positive in this kind of modality. It is because they may start and finish the assigned tasks in their own availability; they can just simply manage their time of when and what to do first. As French (2015), “allowing students to study at their own pace to suit their personal circumstances and to exit at the desired point.” In this way, they can still help their parents in household chores and other errands that is most needed in this time of crisis. Therefore, in the other side it has a very good impact to the learners especially that they are graduating students. This, at least, serve them to be more independent when doing tasks and accomplishing it.

Thus, the PDM modality gives the learners positive effect especially in health security, learning and independency that would greatly help them when they get graduated as they face the new chapter of their lives. This implied that the BE-LCP (Basic Education-Learning Continuity Plan) with the PDM learning modality is very helpful and important in this time of crisis; and that objective of having a continuous learning in this of time crisis is really advantageous.

This pilot study provides only data on PDM learning modality, since the researcher of this study is a teacher who is handling only PDM learning modality. It is also highly recommended in the future research to take considerations the learners “need” in this kind of modality at this time of pandemic or crisis. As mentioned by the researcher-teacher of this study, the IDEA must be implemented, it is therefore, the right time for the syllabus and curriculum developers or designers to find out when to follow the IDEA considering the status of the learner specifically the financial constraints as such internet load budget. Take note that the implementation of IDEA has about one up to one and a half hours per session. This, at this time of crisis is really advantageous. Thus, the head, master teacher or even school head require the teacher for the IDEA process even in MDL virtual class or video explainer (which process being checked and monitored in the teachers’ classroom observation (COT)) This, I think must also take considerations in the future study as it affects the “real needs of the learners.” In general, the future research must focus on “appropriate” activities, strategies and techniques that is suited to the said mode of learning and that is based on the “needs” of the learners and not of what we wanted to implement.

V. REFERENCE