

Teachers' Best Practices in Modular Distance Learning: Supporting Learners to Achieve the Most Essential Learning Competencies

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Abstract: *The COVID-19 pandemic has compelled educational institutions to adopt new methods of instruction, including Modular Distance Learning (MDL). This study investigated the experiences of 15 secondary school teachers in the Schools Division of Puerto Princesa City, Philippines, who implemented MDL and the best practices they employed to help learners achieve the most essential learning competencies (MELCs). The researcher utilized a purposive sampling technique and conducted a phenomenological investigation through individual interviews. The study found that teachers used various strategies to enhance learning, including sharing video clips from online resources over Facebook Messenger and providing activity sheets to supplement modules. Additionally, teachers provided learners with study guides to aid in acquiring the MELCs. The teachers utilized video clips to enhance student engagement and critical thinking skills. Giving activity sheets and study guides as supplementary materials aided learners in achieving the MELCs by providing additional opportunities for practice, application, and a better understanding of the material presented. The findings of this study suggest that teachers can enhance the effectiveness of MDL by employing best practices such as those identified in this study. Educational institutions should provide the necessary resources and training to ensure teachers can deliver MDL effectively. Parents or guardians should provide support for their children's education at home. By implementing these best practices, teachers can better support learners in achieving the MELCs through MDL.*

Keywords—best practices, printed modular distance learning, teachers' experiences, supplementary materials

1. INTRODUCTION

Education is a critical component of human development and plays a vital role in shaping individuals' personal and professional lives, as well as the growth and development of society as a whole. According to UNESCO (2023), education is a fundamental human right and a powerful tool for promoting social and economic development, reducing poverty, and achieving sustainable development goals. Education provides individuals with knowledge, skills, and values that enable them to participate fully in society, make informed decisions, and contribute to the betterment of their communities. Moreover, education is essential in promoting social mobility and reducing inequalities, as it provides individuals with opportunities to improve their social and economic status.

The COVID-19 pandemic has had a significant impact on education worldwide, with the closure of schools and universities affecting millions of students and teachers. According to UNESCO (2022), at the peak of the pandemic, over 1.6 billion learners in more than 190 countries were affected by school closures, leading to disruptions in their education and social lives. The COVID-19 pandemic has compelled schools to adopt new modes of learning delivery to ensure that learners continue to receive quality education. One of the learning delivery modalities adopted by the Department of Education in the Philippines is Modular Distance Learning

(MDL), which utilizes self-learning modules (SLMs) to support learners in achieving the Most Essential Learning Competencies (MELCs) (DepEd Memorandum DM-CI-2020-00162, s. 2020). MDL has become a popular option for learners who do not have access to digital devices or reliable internet connectivity. However, implementing MDL can be challenging for teachers, who must ensure that learners achieve MELCs and maintain the continuity of education during the pandemic.

Modular Distance Learning (MDL) is a distance learning modality that utilizes self-learning modules (SLMs) to support learners in achieving the Most Essential Learning Competencies (MELCs). MELCs are the core competencies that learners must acquire to move to the next grade level or graduate from basic education (DepEd Memorandum DM-CI-2020-00162, s. 2020). However, implementing MDL can be challenging for teachers, especially in areas with poor internet connectivity (Pugoy et al., 2016). The lack of face-to-face interaction with learners and limited support materials can make it difficult for teachers to assess learners' progress and provide timely feedback (Wong, 2022). Teachers must also ensure that learners have access to the necessary learning materials and support systems to achieve MELCs. Despite these challenges, MDL has become a popular option for learners who do not have access to digital devices or reliable internet connectivity.

Before the pandemic, teachers employed various practices to support learners in achieving learning competencies. Face-to-face interactions, classroom discussions, and group activities were common teaching strategies employed by teachers (Bhuvaneshwari, 2021). They also provided learners with personalized attention and feedback, enabling them to address their unique learning needs effectively (Hellrung & Hartig, 2013). Teachers used a range of assessment tools, such as quizzes, exams, and projects, to evaluate learners' understanding of concepts and identify areas of improvement (Andrade & Brookhart, 2019). They also encouraged learners to participate in extracurricular activities, such as sports, music, and drama, to develop their social and emotional skills (Angelcheva, 2017). Teachers collaborated with parents and guardians to create a supportive learning environment, ensuring that learners had access to necessary resources and support systems (Epstein, 2018). These practices were essential in promoting learners' academic and personal growth and development.

While there have been numerous studies on the challenges of implementing Modular Distance Learning (MDL), there is limited research on the best practices that teachers employ in supporting learners to achieve Most Essential Learning Competencies (MELCs) through MDL. Identifying effective practices in MDL can assist teachers in ensuring that learners achieve MELCs, even in challenging circumstances, and can inform the development of policies and guidelines for effective MDL implementation (Talimodao & Madrigal, 2021). Moreover, this study can contribute to the literature on distance learning, particularly in the context of the COVID-19 pandemic, and provide insights on how to improve the delivery of basic education in the Philippines. By identifying the best practices that teachers employ in MDL, the study can provide guidance and support to teachers and education stakeholders in implementing effective distance learning strategies that promote learners' academic and personal growth and development.

2. METHODOLOGY

This study employed a qualitative research design, specifically a descriptive phenomenological approach, to investigate the experiences of 15 secondary teachers as they implemented Modular Distance Learning (MDL) and identified best practices to support learners in achieving the Most Essential Learning Competencies (MELCs). The study used purposive sampling to select participants, and open-ended interview questions were used to allow participants to respond in their own words. The interview protocol was developed by the researcher and modified based on feedback from three pilot interviews.

The study obtained a Permit to Study from the Schools Division Office of Puerto Princesa City, and informed consent or waiver was obtained from each participant before data collection began. The interviews were recorded and verbatim transcribed, and the data was analyzed using cool and heated analysis, with warm analysis identifying emerging themes. The study used bracketing to understand how the phenomenon appeared to participants. The study identified best practices that teachers employed to support learners in achieving MELCs through PMDL, and the findings can inform policies and guidelines for effective PMDL implementation.

3. RESULTS AND DISCUSSION

The primary role of education is to equip students with the knowledge and skills they need to become productive citizens. However, with the outbreak of COVID-19, ensuring the health and learning continuity of students has become a significant challenge. To address this, countries worldwide, including the Philippines, have adopted a new normal procedure that prioritizes the health security of important stakeholders in teaching-learning scenarios. The Department of Education, under the direction of Secretary Leonor M. Briones, has implemented various distance learning programs, including Modular Distance Learning (Montemayor, 2020).

The Schools Division of Puerto Princesa opted to use Printed Modular Distance Learning (PMDL) as the distance learning delivery modality, which involves delivering printed modules as instructional resources, teaching materials, and guides to learners. To ensure that learners achieve the learning competencies, the participants of this study implemented various best practices, including providing supplementary materials and committing to activities that would help learners improve their attainment of the learning competencies.

Video-clips shared via Facebook messenger

One of the supplementary materials provided by the teachers who participated in this study was video clips from various online sources, which were shared with students using Facebook Messenger or the class's GCs. The teachers realized that many videos were available on the internet, and upon checking the learners' modules, they recognized the need to supplement students' learning to help them better achieve the Most Essential Learning Competencies (MELCs). To support their students, the teachers went the extra mile to search for appropriate video materials and shared them through their GCs. Although not all students had access to the internet and GCs, the teachers believed that providing video clips to those who had access could help them learn the competencies better. This was because some students struggled to understand the lessons provided in the modules, and extra videos available on YouTube or elsewhere could help them comprehend the concepts more easily. Through the use of YouTube and online

tutorials, the teachers believed that they were helping their learners. Overall, sharing video clips or tutorials through GCs could be a useful way to supplement students' learning and support their achievement of the learning competencies. As narrated by participants 8 and 9:

"I have been searching for video lessons related to the topic and sharing them with their GCs to supplement their learning." (P8)

"We are providing videos, especially for students who have difficulty understanding the lessons given in the modules. There are supplementary videos available online, such as on YouTube, that are easier to comprehend step-by-step." (P9)

These statements were supported by participants 7 and 15 who said:

"I utilize the help of YouTube and online video tutorials. From time to time, I send online tutorials from YouTube related to our topics. I search for videos that I think will be helpful to them." (P7)

"I also utilized social media. If the students have an internet connection, I give them videos from YouTube or other portals to provide additional materials that will aid their understanding of the lesson." (P15)

Incorporating videos into learning has been found to be an effective tool in improving student performance and motivation. Li (2022) found that students scored better when videos were included in the classroom, while Lertola (2019) reported that students regarded films and clips as the most beneficial and efficient teaching medium for improving learning. Seidel, Blomberg, & Renkl (2013) discovered that movies and clips created to aid tutoring had a substantial impact, and Hoogerheide, Loyens & Van Gog (2014) found that watching videos improved understanding for 94 percent of students.

Additionally, video lectures have been shown to be effective in enhancing distance learning. Hoogerheide, Loyens & Van Gog (2014) found that students who had previously failed were more likely to continue their studies after being exposed to video materials, and Copley

(2007) suggested that video lectures could help distance learners feel less isolated and have a longer attention span.

Moreover, incorporating videos into learning can have positive effects on exams and tests. Prakoso, Tasnim, Fardhani, (2021) found that including movies in lectures had a good impact on students' test scores, while Stanley & Zhang (2018) discovered that including videos as part of the course increased the number of students passing the course. Topping, 2013 reported that summary movies helped students revise for their exams. Kay (2012) conducted an extensive study on the effectiveness of video-based learning and found that it improved understanding, motivation to learn, study habits, and academic performance. Overall, incorporating films and clips into learning has been found to have favorable results and can be an effective tool in promoting student learning and success.

The use of supplementary videos in student learning is becoming increasingly important, especially in the current context of distance learning during the COVID-19 pandemic. Teachers have been using videos from online sources such as YouTube and other portals to supplement their students' learning. These videos provide a wealth of additional resources that can aid students' understanding of the lesson and help them achieve the Most Essential Learning Competencies (MELCs). According to Dodd et al (2015), providing supplementary materials such as videos in the classroom can improve students' performance and interest in the subject. Thus, the use of supplementary videos can be a valuable tool in supporting students' learning and achievement of the MELCs.

Supplementary videos can be particularly helpful for students who struggle to understand the lessons provided in the modules. Some students may find it challenging to comprehend the concepts presented in the modules, which can hinder their learning progress. In this case, supplementary videos can provide a more engaging and interactive way for students to learn the material. These videos are often more visual and can help students better visualize and understand the concepts presented in the modules. By supplementing the modules with videos, teachers can help students achieve a deeper understanding of the topics and improve their performance in the subject (Ljubojevic et al, 2014)

In conclusion, the use of supplementary videos in student learning can be a powerful tool to support their achievement of the MELCs. The COVID-19 pandemic has highlighted the importance of distance learning and the need for alternative resources to support students' learning. By providing supplementary videos, teachers can engage students in more interactive and engaging ways and help them better comprehend the lessons. These videos can be especially helpful for students who struggle with the modules and can

provide an additional resource for all learners to achieve their learning goals (Dodd, 2015).

Activity sheets to supplement the modules

In addition to the modules, teachers also provided learners with additional activity sheets to help them achieve the learning competencies. These supplementary materials were given to students who needed extra support or had weak knowledge of the subject. The activities provided were designed to be done at home using materials that were readily available to the students. The teachers ensured that these students did not encounter any difficulties or incur additional expenses. The activity sheets were also tailored to suit the students' abilities.

The teachers offered various supplemental materials to complement the students' studies, especially for modules that contained an excessive amount of information. They provided worksheets or activity sheets that made learning more engaging and interactive. By providing this type of supplemental materials, the teachers catered to the diverse learning needs of their students. The provision of supplementary materials like the activity sheets enhanced students' learning experience and helped them achieve the learning competencies. Teachers played a critical role in identifying students who required additional support and providing them with appropriate materials. Through this, teachers helped students better understand the lesson and maintained their motivation to learn. As shared by participants 7 and 5:

"Aside from the modules, when we see that a child really needs support, we also provide other activities through activity sheets. For example, in general physics, if I see that the child's knowledge is still lacking, I provide additional supplementary problem sets for them to answer."
(P7)

*"What I do is I think of activities that they can do on the activity sheets that I give them. These are activities that they can do using materials that are available to them or can be found nearby. This way, they won't have to spend money or encounter problems."
" (5)*

These statements were agreed by participants 14 and 15:

"I provide activity sheets that are suited to their abilities and are

aligned with their competencies for that week." (14)

"I provided various supplementary materials to complement the students' learning, especially for modules that contained an excessive amount of information. I gave worksheets or activity sheets to keep students motivated and help them understand the lesson." (15)

The student activity sheet is a valuable tool for students to track their progress in applying and practicing what they have learned. It is crucial in encouraging children to absorb and master the information presented. By working on the activity sheet, teachers can observe which students have understood the material and which ones have not. It is one of the teaching resources used to strengthen the teacher's function and is critical to the effectiveness of the learning process (Simbolon et al, 2018).

The activity sheet is a set of self-directed educational materials designed to help learners complete activities at their own pace and on their own time using contextualized community resources. It helps learners develop the skills, information, and attitudes necessary for productivity and employment. Activity sheets facilitate teaching-learning activities indicated in each Most Essential Learning Competency (MELC) with minimal or no face-to-face contact between the teacher and the learner. They were created to assist students in continuing their education even when they are not in school. These learning materials include tasks that are both meaningful and entertaining for independent learning.

Activity sheets are one of the learning resources that teachers can use as facilitators in learning activities. They can be designed and developed according to the conditions and settings of the learning activities to be experienced, as well as the objectives to be met (Yulkifli et al, 2019; Mulyani, 2021). They are available resources that aid in the facilitation of learning activities, which foster success and promote student achievement (Lacsa, 2022).

Activity sheets are an essential supplementary material in learning that can aid in the acquisition and mastery of knowledge and skills. According to Yulkifli et al, 2019, activity sheets are self-directed educational materials that learners can use to complete activities at their own pace and on their own time. The use of activity sheets allows students to engage in independent learning, which promotes the development of self-discipline, self-regulation, and self-directedness. Furthermore, activity sheets can provide learners with opportunities to practice and apply what they

have learned, which can enhance retention and transfer of knowledge.

In addition, activity sheets can facilitate the teaching-learning process, especially when used as a tool for formative assessment. According to Lee (Simbolon et al., 2018), activity sheets can help teachers monitor student progress and identify areas where additional support is needed. Activity sheets can also provide students with immediate feedback, which can help them identify their strengths and weaknesses and adjust their learning strategies accordingly. Overall, activity sheets are a valuable tool for both teachers and learners in promoting independent learning, enhancing retention and transfer of knowledge, and facilitating the formative assessment process.

Activity sheets have become an essential resource in facilitating learning, especially during times of distance or remote learning. According to Mulyani, 2021, activity sheets can be designed and developed according to the objectives and conditions of the learning activities to be experienced. They can also be adapted to suit the learners' needs and preferences. The use of technology has made it possible to create digital activity sheets that can be accessed from anywhere and anytime using different devices. This has increased the flexibility and accessibility of activity sheets, making them a valuable resource for learners who may not have access to traditional classroom resources.

Moreover, activity sheets can be used to promote active learning, which has been shown to enhance engagement, motivation, and learning outcomes. According to Lacsa, 2022), activity sheets that are based on the scientific approach can improve critical thinking skills and enhance the quality of learning. Activity sheets that incorporate problem-based learning, multiple intelligences, or other active learning strategies can provide learners with opportunities to apply their knowledge and skills to real-life situations. Overall, activity sheets are a versatile and effective tool for promoting independent and active learning, enhancing retention and transfer of knowledge, and improving learning outcomes.

Study guides to supplement the modules

Another supplementary material provided by the teachers who were participants in this study was the study guide. To truly assist the learners, they created reviewers or study guides for them. They believed that this would help the students better understand the lessons and prepare for the validation assessment. They provided various extra materials to enhance the students' learning, and study guides were one of them. They kept the students engaged and helped them grasp the concepts. As shared by participant 5:

"To truly help my students, I started creating my own reviewer. It's in

Tagalog because some students have a hard time understanding English. Sometimes, when I've already given them two or more supplementary materials and they still can't understand, I make a reviewer for them as the third option. I write it in Tagalog and even include step-by-step drawings to make it easier for them to understand. The handout reviewer or study guide is theirs to keep, so they can use it to review when it's time for the assessment."

As affirmed by participant 15:

"I provided various supplementary materials to complement the students' learning, especially for modules that contained an excessive amount of information. To keep the students motivated and help them understand the lesson, I provided study guides. These study guides were designed to supplement the module and help students better understand and retain the information presented."

A study guide is a type of instructional material that acts as a critical link between resources, assisting students in understanding information, focusing on key themes, and reviewing for quizzes or tests ("Study guide: What is it & how to create an amazing one?," 2022). Study guides engage students in learning processes by acting as a critical thinking stimulator. Professional literature has recommended study guides for decades, as they serve two purposes: to help students discover significant facts or text concepts and to guide them in thinking about those ideas ("Learning guides," 2022).

As not all students have access to appropriate technology or reliable internet access, the study guide may be offered as printed materials (Vandsburger & Duncan-Daston, 2011). This is especially true in the Schools Division of Puerto Princesa, where the majority of learners lack the ability to participate in synchronous or asynchronous online distance learning. Printed materials are one of the easiest ways to employ as intervening material, as all students will have an equal chance to use this teaching strategy. The study guide's contents, including diagrams, colorful drawings, examples, vocabulary, and concepts, are developed and changed from a variety of sources with proven validity and dependability (Balan, 2018).

Several investigations on the effectiveness of various supplemental materials have been conducted. These studies found that supplementary resources improve students' academic achievement and help them stay motivated. Additionally, Balan (2018) found that study guides are effective in helping students navigate literature, absorb content, and undertake activities linked to the subject being taught. However, studies on the use of supplementary resources to improve students' academic performance are mostly conducted in a face-to-face setting, where teachers can interact with students inside the classroom.

In this study, teachers used videos, activity sheets, and study guides as supplementary materials to help their learners better achieve the learning competencies. These materials were provided as modules alone were not enough to meet the students' learning needs. Teaching materials are essential to facilitate and enrich students' learning, and teachers' creativity in supplying new supplemental materials is critical in this time of pandemic where most public schools have adopted modular remote learning (Olayinka, 2016). As a result, teachers should choose and employ additional materials that would mediate students' learning in a modular remote learning environment while maintaining their enthusiasm (Ghanbari et al., 2015).

Supplementary materials play a crucial role in promoting student learning and academic achievement. According to Zahra et al., 2015, supplementary materials can enhance students' communicative competence and help them develop their critical thinking skills. Supplementary materials such as study guides, activity sheets, and videos provide students with additional opportunities to practice and apply what they have learned. These materials also allow students to explore a subject in more depth and engage with the material in a more meaningful way. Furthermore, supplementary materials can help students who are struggling with a particular topic or concept by providing them with additional resources and support.

In addition, supplementary materials can help students stay motivated and engaged in their learning. It can provide students with a more engaging and interactive learning experience, which can help them stay focused and interested in the subject matter. Furthermore, supplementary materials can help students develop a deeper understanding of a topic and promote long-term retention of information. In sum, supplementary materials are an essential tool for promoting student learning and academic achievement.

Supplementary materials are especially important in today's educational landscape, where distance learning and hybrid models have become increasingly prevalent. According to Thakur (2015), supplementary materials such as study guides can help students navigate literature and absorb content in a remote learning environment. Additionally,

supplementary materials can help bridge the digital divide by providing students with alternative resources to access information and engage with the material. This is particularly important for students who may not have access to reliable internet or appropriate technology at home.

Moreover, supplementary materials can help teachers differentiate instruction and meet the diverse learning needs of their students. It can also help teachers create a more inclusive and engaging learning environment by providing materials that are culturally responsive and reflect the diverse backgrounds of their students. Overall, supplementary materials are a vital tool for promoting student learning, addressing individual differences, and creating a more inclusive and engaging learning environment.

4. CONCLUSION AND RECOMMENDATIONS

Using the study's findings as a foundation, the following claims can be made:

1. The teachers in the study found that sharing video clips from online materials through Facebook Messenger was an effective way to enhance student learning.
2. Providing activity sheets as a supplementary material to modules was identified as a best practice by the teachers to help learners better achieve the most essential learning competencies.
3. The teachers also found that providing study guides in addition to modules was an effective practice to aid students in better achieving the most essential learning competencies. Study guides were found to be helpful in summarizing key concepts and providing additional resources for students to review and understand the material more thoroughly.

Based on the study's findings, the following recommendations can be made:

1. Teachers should consider utilizing video clips from online materials and sharing them through platforms such as Facebook Messenger as an effective way to enhance student engagement and promote critical thinking skills. Providing activity sheets as a supplementary material to modules can help learners better achieve the most essential learning competencies by providing additional opportunities for practice and application of learning. They should consider providing study guides as an additional resource to modules to aid students in better understanding and retaining the material presented. Study guides can summarize key concepts and provide additional resources for students to review and understand the material more thoroughly.

2. In order to deliver high-quality education through modular distance learning (MDL), it is crucial for the Department of Education, higher offices, and school authorities to provide additional budget for the equipment and materials required for the preparation of supplementary materials. Moreover, teachers must receive appropriate resources, relevant training, and skill development workshops to craft and effectively use these supplementary materials.

3. Parents or guardians play a crucial role in supporting their children's education, especially in the context of modular distance learning (PMDL). As learning facilitators and household partners, they should be encouraged to provide support for their children's education at home to ensure that they are appropriately guided and monitored. They can support their children's education at home by monitoring their learning progress and providing them with the necessary resources, such as a conducive study environment, access to supplementary materials, and guidance on time management. They can also actively engage with their children's learning activities and provide feedback to their teachers to ensure that their children are receiving adequate support.

Furthermore, it is recommended that teachers create supplementary materials that are engaging, accessible, and inclusive to meet the diverse learning needs of their students. Teachers should also continue to innovate and produce supplemental resources or tools to assist the teaching and learning process, given the dynamic nature of the world. By doing so, educators can provide fascinating materials that mediate the students' learning in a modular remote learning environment while maintaining their enthusiasm. Overall, the study highlights the importance of prioritizing the development and usage of supplementary materials to enhance student learning and academic success.

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6. AUTHOR'S PROFILE

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