

Lived Experiences of Mathematics Teachers in Modular Distance Learning Modality Amid Pandemic

Anafe Fungo-Fulo¹ and Ritzelda A. Deri²

^{1,2}Sorsogon State University, Philippines

Email: fuloanafe1218@gmail.com and ritzeldaagnes2004@yahoo.com

Abstract— This study described the lived experiences of Senior High School Mathematics teachers in modular distance learning amid pandemic in Sta. Magdalena, Sorsogon, SY 2021-2022. It utilized the traditions of a descriptive qualitative research approach. It utilized a pure qualitative data to give answers to the prevailing research questions. The informants are the Grade 11 Mathematics teachers of Sta. Magdalena District, Sorsogon. Since this study is pure qualitative research, the depth of data to be gathered is the focus more than the number of informants to be considered in the study. In-depth interview and observation were utilized as research tools. Transcriptions of interview sessions were the main source of data. Establishing codes and categorize on the informants' responses through conventional content analysis of the transcription was done to achieve the goal of this present research. Grade 11 teachers in Mathematics have lived experiences on the preparation of module and feedbacking during modular distance learning. They have adopted different strategies on how they deliver lessons that involved the four thinking Mathematics standards such as problem solving, communication, reasoning and connection. They may extend support and cooperation to the division-wide implementation of modular distance learning so that they can give a worthwhile sharing of their resources and initiative to the welfare of the whole division and the nation in general. They may reflect on the quality of strategies they employ when embedding the four thinking Mathematics standards to their instruction even during modular distance learning, which considers the underlying philosophies, theories and framework. Further research may be conducted such as assessment of teachers' present capacity to hold technology or computer assisted teaching and learning to pave the way for blended, synchronous and asynchronous classes for Senior High School.

Keywords— Lived Experience; Modular Distance Learning Modality; Qualitative.

INTRODUCTION

The present educational setup has gained interests among researchers due to the sudden shift in the mode of educational delivery because of a pandemic. The whole world is struggling to overcome the effects of this pandemic which have impacted the different domains of each country from health, economy, transportation, tourism and above all education. Education is one sector widely affected because the traditional education delivery was shifted from the face-to-face physical classroom encounter to now distance mode of learning. The educational sector remains to be of no exception.

Teachers have greater role to play when education is faced with challenging situations that demands for a drastic change from the tradition to According to Ebona (2020), teachers have to be a team player, cultivating students' motivation, and a change innovator. She stated that cooperation between and among the key persons in the pursuit of serving the best education to the learner's despite of this pandemic can ultimately surpass the difficulties that is faced by education sector during the distance learning setup. Schaaf (2021) said that teachers need to be future-focused, life-long learners, facilitators of learning (not sages on stages), embracing discovery

learning, and innovating teaching for real-world meaning.

These roles need to be imbibed by teachers to cope up with the changes or else quality of education may continue to deteriorate. The pandemic has caused the closure of schools globally, with more than 1.57 billion children (90% of the total enrolled students) from more than 190 countries being unable to attend their regular classes (UNESCO, 2020). Basically, it is the focus of change because of the restrictions on face-to-face encounter while country after country still aim for learning to continue as they combat the effects of COVID-19. All these are done to keep everyone safe, students and teachers alike from being sickened by the deadly SARS-COV 2 virus (COVID-19).

In tradition, teaching and learning happened in a physical classroom. Teachers are in face-to-face daily transaction with students; the lessons are prepared and designed while students are around within the classroom. Teachers are trained to deliver lessons in a physical classroom environment, and students come to school daily and are prepared to meet their teachers personally. Without physical appearance of both teacher and students means absences from work and school, and they miss the chance to do schoolwork. However, the

worldwide spread of COVID-19 virus that started in Wuhan, China in August 2019 has intercepted the educational tradition which left with no choice but to shift to distance learning.

In March 2020 when the education sector around the world was directly affected by the effects of COVID-19 directing every school around the world to be closed due its threat to health and lives (Hain, 2020). Aside from schools, other sectors were also forced to be closed and stop their operations for the time being while their respective governments dealt with COVID-19 pandemic. The goal is to restrict people from moving and prevent them from physical contact as super spreader activities. Only the essential sectors that deliver basic goods and services such as food, agricultural needs, medical services, telecommunication and selected transport services were allowed to operate; but not schools where crowd are always expected and anticipated from students, parents and teachers coming in and out of schools.

From this point forward, education system has been changed exactly different from what were used to be. This time, the technology has intervened to become the main platform to instigate a physical classroom into a virtual one. The education system underwent a 360-degree paradigm shift especially in its education service delivery (Maqsood, Abbas, Rehman, & Mubeen, 2020). With this shift, the teacher has no choice but to continue teaching using the new modes and alternatives to learning.

In the Philippines, the SY 2019-2020 was cut short due to the pandemic during the time when the school year was about to end. Little did anyone expect that the untimely and forced closure of school would go this far, about two school years spent engaging all learning transactions on alternate mode of education delivery. This scenario has led different views and perceptions that questioned the quality of education that students can achieve because they cannot come to school physically and cannot be attended by their teachers personally while they go about with their learning. The Department of Education was able to give three modes of learning that every school can choose from depending on the preferences and considerations of their clientele. This is in compliance with Memorandum DM-CI-2020-00162 that was put in effect by the Office of the President which prohibited face-to-face classes while COVID 19 threatens the health and lives of every Filipino young and old. Subsequent to this executive order was the execution of DepEd Order No. 012, s. 2020, also known as “Adoption of the Basic Education Learning Continuity Plan for School Year 2020-2021 in

Light of the COVID-19 Public Health Emergency” on June 19, 2020 that enabled the concepts of Distance Learning Delivery Modalities (DLDM). DLDM gives the alternatives of learning through digital, online and modular (printed modules).

Along with the cited DepEd Order was the simplification of existing curriculum guides into now known as Most Essential Learning Competencies (MELC) that dramatically reduced learning contents to fit to the current situations and restrictions due to this prevailing pandemic. From the three choices of education delivery mode, the Sorsogon Province Division chose to cater to their learners’ needs through printed modular distance learning being the most adequate mode of learning for teachers and the learners. During the first two quarters, printed modules were utilized. But complains and suggestions overs the contents and tasks were raised by the parents. Their children found difficulties in answering their modules and as parents, they were also occupied to assist their children accomplish these modules. With this, the DepEd simplified the contents and tasks from modules to learning activity sheets (LAS). LAS now is the simplified version of the modules containing only the objective, short introduction about the topic, activity (one to two activities only) and the evaluation. Teachers this time are able to come up with their own LAS to be distributed to their respective students.

At times, teachers go house to house and home visits to check on their students and hand them their LAS. Most of the time, parents come to school to pick up and return LAS their children have answered. This scenario was the ultimate role of teachers in the distance learning arrangement that replaced their significant role of learning facilitators inside the physical classroom. Many teachers are doubtful about the quality of teaching that they thought they can only provide while their students are inside the classroom with their direct supervision.

One predicament is shared by teachers who are teaching one of the hardest subjects in the curriculum, the Mathematics. Students were already struggling learning Mathematics concepts when there were face-to-face classes which could be even challenging with the present set up of distance learning. Mathematics teachers recognize the difficulties and hardships that their students face in learning; they would like to come to assistance; however, the restrictions are forcefully implemented for the health and safety of everyone. In light with this present study, the researcher would like to describe the circumstances in distance learning that Mathematics teachers are into, the experiences that they encounter, the challenges and the coping mechanisms

that they do to fully maximize the meager chances of learning at this time of pandemic. Nevertheless, learning must continue. Thus, this study is being proposed.

Primarily, this study described the lived experiences of Senior High School Mathematics teachers in modular distance learning amid pandemic in Sta. Magdalena, Sorsogon, SY 2021-2022. Specifically, it answered the following questions:

1. *What are the lived experiences of teachers during modular distance learning in terms of:*

- a. Preparation of module
- b. Feedbacking

2. *How do teachers deliver the lessons involving the four thinking Mathematics standards such as:*

- a. Problem solving
- b. Communication
- c. Reasoning
- d. Connection

Instruments

This study described the lived experiences of Senior High School Mathematics teachers in modular distance learning amid pandemic in Sta. Magdalena, Sorsogon, SY 2021-2022. It utilized the traditions of a descriptive qualitative research approach. It utilized a pure qualitative data to give answers to the prevailing research questions. The informants are the Grade 11 Mathematics teachers of Sta. Magdalena District, Sorsogon. Since this study is a pure qualitative research, the depth of data to be gathered is the focus more than the number of informants to be considered in the study. In-depth interview and observation were utilized as research tools. Transcriptions of interview sessions were the main source of data. Establishing codes and categorize on the informants' responses through conventional content analysis of the transcription was done to achieve the goal of this present research.

Researcher-made interview guide or interview schedule to gather pertinent data for this research to undertake. This interview guide enumerated the different possible questions to be asked to the informants. Before the actual conduct of the in-depth interview, the researcher sought first comments, suggestions and improvement of the interview guide questions to the panel of experts. She consulted some language experts whether the questions to ask were appropriated to derive an answer to the questions and goals of the present research. This served as dry run activities of the interview guide questions as a main research tool of this present study. When such approvals were achieved, the researcher used this as

guide during the interview. The flow of the structured interview was audio recorded.

RESULTS AND DISCUSSION

1. Lived experiences of teachers during modular distance learning in terms of preparation of module and feedbacking

Preparation of Module

In the preparation of module/LAS, there were three thematic categories found from the content analysis conducted. These are: guided by the MELC, conducting diagnosis of learner's ability and establishing Quality Assurance Committee to screen the module/LAS before utilization.

Guided by the MELC. Teachers shared that the very first thing they do before they thought of the activities to include in the module/LAS is to consult the MELC. They are guided by the MELC to ensure that all activities in the module are aligned with the minimum competencies required in a distance learning modality. One teacher shared:

“ano ang pwedeng matutunan sang bata before makapagcreate sang mga activity na dapat yung knowledge na nasa module, nabutang yun sa MELC. Amo pinakauna na hinihimo nato.” (“whatever the learner will achieve depends on the activities that are given to them through the competencies that are stated on the MELC”)

Due to the limitations brought by distance learning as compared to the usual tradition classroom setting, the K to 12 Basic Education Curriculum was streamlined to MELC. The MELC dictated the most essential learning competencies to learn with the DepEd's desire to continue learning even in the midst of a pandemic. The setting is a home schooling where parents are the learning facilitators using the modules and LAS.

These competencies set direction to the activities being included in the module/LAS. One informant said that they always consult the MELC and give focus to the module/LAS they are making by the competencies in the MELC. Although it is very limited, they chop the competencies to more specific ones which they use as sub-competencies in their module/LAS. Also, they also consult their work with their immediate supervisors such as master teachers or other knowledgeable colleagues to help them with their module/LAS.

The Division Office also assigned a Quality Assurance Committee to assure that the module/LASs being

distributed to learners are of quality. During the making of the module/LAS, consultation is being conducted. They meet and do a meeting to draft the modules for Mathematics for a certain period. With this, they collaboratively work their assigned module/LAS. This activity ensures them of the alignment of their module/LAS to the MELC which is their guide in choosing the objectives to carry out in their module/LAS that replaced their classroom presence to teaching and learning activities.

Conducting diagnostic of learners' ability. Conducting diagnostic of the learner's ability is very essential and basic protocol when drafting the module/LAS. Without diagnosis, teachers might not be able to consider where their students are before lessons on Mathematics be given. One teacher said:

"ibig sabihon kun may basic knowledge ang bata mas maganda kasi na maaraman naton kung hain sinda sa niyan bago kita maghatag sin activity sa kanira" (it means that students have background knowledge that we need to know so that we can identify the kind of activities to give them.)

This statement would tell that part of the preparation for module is diagnosing where the learners are. Teachers said that they need to modify the module/LAS being put down by the National Office because it would be very inappropriate for their students as these modules /LAS are very generic and did not consider the unique situation of their learner. To quote:

"aahh siguro kapagal lalo kung kita pa ang mahimo na dire ta namomodified kay kaluoy man mga bata na lain nacoconsider an kanira ability, nasasayang ang module, lain nira nasabutan." (LAS should be modified to consider the ability of the students. Students may find it difficult because they did not have any background knowledge of these activities.)

However, one thing that hindered teachers to conduct diagnosis is the distance learning setup given the fact that online classes cannot be hold because on gadgets to use and the internet to make them connect online. The face-to-face classes was more convenient in terms of conducting diagnosis because the teacher can at once assessed their abilities. With the distance learning, they still need to wait one to two weeks before the accomplished modules/LAS be done by their students before they can check and assess. But they conduct home visits as schedule to check personally their students.

Establishing Quality Assurance Committee to screen the module/LAS before utilization. The module/LAS distributed for SY 2020-2021 and onwards were issued by the Division Office for the schools in the Division to use. The Division Office assigned teachers to be members of the said committee according to their academic rank and subject area. This is headed by the education supervisors assisted by master teachers and teachers, whoever they see is capable to do the job. All those teachers need to do is to ready them to be distributed to the students. The practice is parents are the ones to pick up the module/LAS since minors are not allowed to go out. These modules/LAS are made by the teachers before the scheduled time of pick up and retrieval by the parents.

According to teachers, there is less work for them to do when the module/LAS came from the Division Office. All that they need to do is to assure that teachers have enough number of module/LAS for their students; that these modules /LAS are printed properly, clear and properly packed. With the Division-issued module/LAS, teachers are confident that these materials are of quality and contained the needed competencies for their students to learn in Mathematics. One teacher shared that they have better time monitoring their students when they do not anymore think of the materials to give their students. It would be cumbersome for teachers to still make their materials when they still monitor the progress and situation of their students. However, they said that during times when they see from the results of the answered module/LAS are not good, they do remedial activities. They send out simpler module/LAS to do for their students. During home visits, they give more attention to students who have poor performance in the module/LAS.

Feedbacking

In the Feedbacking, there were four categorical themes identified, namely: Parents complain about the behavior of their children when doing the activities in their modules; The use of Las is easier and more convenient than module; Teachers encounter difficulties in retrieving the modules; and Clear instruction gives better feedback.

Parents complain about the behavior of their children when doing the activities in their modules.

Parents have difficulties in assisting their children to accomplish their module in Mathematics because their children are already in the higher grade level and they are taught of higher Mathematics concept. Some students are not comfortable being taught by their parents. For them, teachers are different person from

their parents being their teachers a figure of authority. One teacher shared:

“dini sa balay kasi di ta man po baga aram ang mga ugali sang bata may-on sang bata na pag abot sa balay silensyohun may dire pasahayon sympre dire man maniwala ang magurang, may-on sa balay na mga bata na dire makapaniwala aayy si noy mayadon yun

di man yun dire nira naiimud dire unlike niyan na mismo sira mismo ang nagkukuan nakaimod sa mga bata nira na talagang ang pagkukulang kaipuhan mapunoan” (At home, students have different attitude than in school. There are students who are behaved at home but ill-mannered in school. So, parents could not believe the behavior that their children manifest in school. While teachers can observe the behavior of these children and teachers need to do something about these misbehavior).

Teachers give advice to parents who give such feedback to become more understanding to their children and extend more patience to them. They can call or text their teachers whenever they want assistance in understanding the lesson they have on the module. Also, teachers shared that there some students are already engaged to part-time jobs which made it difficult for them to provide time for their module/LAS.

The use of LAS is easier and more convenient than module. During the early part of the distance learning, module was the material being used to implement the distance learning. Many parents, students and teachers alike complained to the overwhelming tasks that must be complied given the short period of time allotted for each and the absence of the physical presence of the teachers to guide them in doing these tasks. Eventually, LAS was implemented as simplified form of module. It contained very minimal activities that must be done by the student in a certain week for a particular learning competencies.

As teachers shared, this LAS is easier that the module for their monitoring/tracking of their student learning. It was focused and limited. At the same time, students are more accomplished about the LAS because it simplified and capsulated form of the module.

Teachers encounter difficulties in retrieving the modules. One teacher shared that they have a difficult time retrieving the module/LAS from their students. Some parents are not cooperative in the retrieval and

pick up of module. Other parents send their children to do this for them. But there were also modules/LAS that were incompletely answered by the students. It was difficult for teachers to keep track of their learning when there are activities left unanswered. Another difficulty encountered by the teachers is the fact that they are not familiar with their students. One shared “niyan na modular diri ta man aram kun sino an maaram kay di ta kilala.” It would be hard for them to keep track of their learning when students are not familiar to their teachers. Although home visits help, seeing students on a day-to-day basis is a different thing. With distance learning, only names of students are familiar to teachers without giving the chance to know them deeper.

Clear instruction gives better feedback. With distance learning, only through module that teaching and learning take place. Teachers especially those assigned to make the module/LAS ensure that clear instructions are given in the module/LAS so that students will not be confused and will be guided properly. These module/LAS replace that presence of the teacher in the instruction proper, so module/LAS makers thought that these should given the students the atmosphere of learning similar to the classroom. Teacher shared:

“Ang instructions tapos nakuha talaga nira ang kun nano ang gusto mo, nano ang inhahapot mo, nano ang inaayo mo didto sa problem solving o kung nano” (With correct instruction in the module, teachers can be able to yield the correct answers to the students.)

Teachers strived to check the module/LAS before distribution so that they know how to answer their students every time they need guidance or queries. They have to be familiar with every part of the module since they are not the ones who do all the module. Some of them may be contributors to some module/LAS only so they should be familiar with other modules/LAS. One teacher shared that during the home visit, she also checked the module/LAS that students have at the moment to give them a personal instruction on how they go about the activities. With the clear instruction on the module/LAS, with the conduct of home visit, students are also guided with the presence of the teacher. But because of the restrictions and the inconvenience of going around to visit students at far-flung areas, teachers can only do this on a case-to-case basis. Teachers believe that with good and clear instruction, students would also feel satisfied, inspired and fulfilled with accomplishing their module/LAS. This will help them get through with doing the tasks in full enthusiasm to accomplish them without confusion and misunderstanding of the things that they need to do.

2. Strategies to deliver the lessons involving the four thinking Mathematics standards such as problem solving, communication, reasoning and connection

Problem Solving

Review of Mathematics concepts previously learned is included in the module/LAS. In the problem solving, students have to be assessed of their current learning ability. With this input, teachers will be able to know where and what to start. That is why teacher shared that for his strategy for problem solving, he first conduct assessment to determine the current status of his learners' ability in problem solving on Mathematics concepts.

“Ah unang una is before we ask dapat kumbaga ano natutunan sang bata before makapagcreate sang mga panibagong activity, included ko yun dapat yung knowledge na nasa module or nasa LAS”

Teacher claimed that in the module/LAS that they use, the first thing that are in the discussion proper is the review of the previous lesson or review of the Mathematics concepts that are needed to understand further the new concept being taught by the present module/LAS to undertake. One teacher shared:

“an basic foundation dapat sa Mathematics, dapat grade 11 doon ka talaga ma tukdo san todo” (Grade 11 should be given greater attention by the teacher.)

Teacher emphasized that since his students are now in Grade 11, teaching and learning must be on a more sophisticated level. These students are now being prepared for college and they need to already possess higher skills to problem solving. So, before discussing for the new Mathematics concept to teach in the module/LAS, students need to undergo first tasks that measure or give them a quick review of the previous learning they have in Mathematics.

Striving to have clear instruction and flow of activities on the process of problem solving especially in the discussion part of the LAS. Problem solving strategies are embedded in the different activities in the module/LAS since actual strategies in the classroom is not possible at this time. The only way to learn in the situation of Grade 11 students is through modular distance learning. So teachers strive that their module/LAS contain the needed competencies and skills that must be possessed by their students even in the midst of pandemic. One teacher shared:

“Ang instructions tapos nakuha talaga nira ang kun nano ang gusto mo, nano ang inhahapot mo, nano ang inaayo mo didto sa problem solving o kung nano” (In the problem solving activity, clear instruction is very important so that students can be guided with what they have to do and how they would go about the activity.)

The organized flow of the instruction and the level of activity given one after another is important as a step-by-step process of developing problem solving skills among the students. So, teachers have to be organized, systematic and logical in the arrangement of their activities/tasks in the module/LAS.

Also, one informant said:

“kaipuhan an understanding san bata mas deepen an sabi ko man lang basahon sin mayad, isipon ito na basic knowledge san Mathematics mao mo lang masasagutan yon. Sa Mathematics бага daghanon an liko liko bago ka mag kadto sa right answer. Kaipuhan may mga sub solution pa KayA dapat internalized muna ang problem.” (I told my students to read carefully what is in the LAS and remember the previous learning they have so that they can answer and understand the new lesson they have.)

With the limitation of teacher to reach out to their students, teachers give general advices to their students that in problem solving, they need to review their previous lessons, and they need to remember what they learned in the previous lessons. This way, they can connect to the new learning they have in Mathematics for the new concepts to learn.

Asking follow up questions on the process that students underwent when solving problems. To clarify students' answer, teachers need to do follow up questions. To do this in the midst of the pandemic is difficult to do but teachers do extra effort like contacting students or vice versa using cellphones and other gadgets to do communication. An informant shared:

“pag hinatagan mo sya exercises then haputon mo, how did you come up with that answer” (when you give students an activity, you have to ask them how did they arrive at that certain answer.)

With this statement, it can be understood that one way to develop problem solving skills is through questioning. Students need to defend how they come up

with answers because every strategy to solve a problem in Mathematics is justifiable. With the questioning that teachers utilized, students could understand and clarify their thoughts as well as their mistakes committed in doing their problem solving activity.

Another informant said:

“bakit nagka ganon ang answer mo? Kasi Diba minsan Kita parehas an answer pero ...magka Iba an solution, ipa explain mo Yun sa bata. Magka iba sila pero parehas tama.” (Why did you arrive at this answer? Sometimes, they arrive at similar answer with different solutions yet both answers are correct.)

Those are the questions usually asked to students, why they arrive at certain solution, what steps did they take to have such answer. With these kinds of questions, teachers believe that they help student achieve problem solving skills.

Communication

Using the mother-tongue when doing remedial lessons. Usually, what hindered students to understand Mathematics lesson is the language used for instruction, English for Mathematics in the Senior High School. During remediation, teachers use the mother tongue so that students can easily understand the concepts of the lessons being taught. One teacher shared:

“when it comes to communication mas madali talaga saaton o maski sa mga bata an mother tongue, mao po” (When communicating to students, the best way to use is their mother tongue.)

The use of the mother tongue can easily facilitate understanding as shared by teacher in this statement. Teachers believe and they are comfortable to use their mother tongue in their teaching for deeper understanding of the students in Mathematics concepts. Language is for them an essential tool for teaching, for understanding new lessons and for learning new concepts in Mathematics.

Encouraging students to verbalize their thoughts or speak their minds. Teachers encourage students to speak up their minds as a strategy that teachers employ for communication as one aspect of Mathematics thinking standards. In this statement: *“doon mo maiimod kun pan-o an bata nag iisip, maluwas na dun an communication skills, kun pan-o” (in that case you can see how students think, they must speak and show their communication skills.)* One best way for students

to communicate is for teachers to encourage them to speak. Without speaking, teachers could not be able to determine what is going on the minds of her students, whether they have wrong or correct thinking. Although not always possible at this present situation during distance learning, but whenever given the chance such as during home visits, teachers take time to talk to their students especially about the lessons they are attending in their module/LAS. Also, they use gadget to make communication possible although it cannot replace the opportunities that it can offer when communication is done on a face-to-face forum such as the traditional classroom setup.

Motivating students with encouraging words. Most often, when returning the accomplished modules/LAS to students after being checked and recorded, teachers give students notes as a form of encouragement. This is another way to communicate to students using encouraging words. Also, teachers give comments and suggestions for improvement using notes whenever needed. One informant shared:

“kasi kun hayaan mo lang Ang bata. Ok anak Tama ini na hinimo mo, wara na follow up, wara na hanggang dun nalang yon. Pero kung an bata nabati mo an rason mauli yon sa kanira balay pag pinuri mo sya mas ma momotivate sya.” (whenever you let your child, just saying, okay you are doing well, simply like that, it will stay like that. But when a child listened to you, your reasons, the logic of why they are told so, you explain, you encourage them, you make them inspired and motivated.)

In this statement, she is emphasizing the need for students to be encouraged and motivated with the right words. Grade 11 students are already grown ups, they have sensitive feelings, so whenever negative comments have to say, still teachers strive to state them positively. Teachers have to be careful with the words to say to their students especially that they are into restrictions brought about by the pandemic and they have very limited social life. Mental health is crucial as well at this period of time.

Use of technology to facilitate efficient communication. At this time, the role of technology cannot be undermined. To facilitate communication, teachers need to have gadgets that will make communication possible. They used these to reach to far places that are too cumbersome to reach especially that Sta. Magdalena is a rural place. With the use of cellphone, laptops and computer, generated by the internet connection, teachers use messenger, facebook,

text messages and other applications to undertake communication. In one statement, it says:

“Sa messenger para atleast mas mapadali mapaabot sang mga estudyante makipagcommunicate din ang mga teacher thru messenger kung ano mga concern ninda.”

This simply means that even no online classes are undertaking, teachers into modular teaching are still using technology for communication purposes. This is basically to reach out among learners whenever possible. This strategy can enhance learning since communication is happening. The online platform can replace the need for physical appearance. It can conduct most similar classes to tradition and face-to-face. The three teacher-informants for this study did not undertake online classes because not everyone can afford the gadget required to conduct online aside from the required internet connection for online classes. At this moment, they are settled to text messages, facebook and messenger which they can open anytime at their own pace and time.

Reasoning

Doing home visits to confirm students’ ability to reason out. Doing home visits is one way to see students in person while avoiding crowds since the encounter is one-on-one. This is the only way to do to compensate for the restriction of face-to-face. Even with home visit, it is still certain to catching the COVID-19. So as much as possible, teachers are also careful in doing this. But whenever done, teachers take the chance to ask students about the lesson they have on the module/LAS and check on their reasoning ability about the lesson or Mathematics concept being learned. One teacher shared that she takes special notes on the students that need to be given special attention according to their performance in the module/LAS being done. Before doing home visits, she has with her the notes to be done by student. This will help her recall the kind of attention and reminder to give. In the notes as well are the things that she needs to follow up with the students especially on their reasoning ability for Mathematics concepts.

Ensuring alignment of activities to the objectives and discussion of the topic to develop reasoning. Because the module/LAS is compliant to the MELC, teachers ensure that these objectives are served in the activities included. With such, they are confident that reasoning ability among the Mathematics Grade 11 students can also be taught and developed. The competencies in the MELC should be realized in the module/LAS bearing the opportunity for the students to enhance their reasoning ability. Since the present situation could not

allow for face-to-face classes, teachers make use of module/LAS to embed reasoning as one ability to develop to the students.

Connection

Giving real-life situation as activities. Most often, teachers include real-life situations in the module/LAS making the activities contextualized and localized. This way, students can activate their prior knowledge which can lead them to understand the lessons to be learned. So, this way, students can always connect their learning with the environment they practically move about. One teacher said: “real-life situation dapat an mga activities na mahatag.” (students must be given activities that are of real-life situations). Teachers believe that they with real-life situations, students can easily assess themselves of what to learn, what needs to be remembered, and the processes to undergo to solve a mathematical problem and eventually understand the concept. Understanding the concepts of the Mathematics lessons can serve a life-long learning among the students. This is because with concept understanding, students tend to show a deeper understanding of the concept more than rote memorization of the lesson. Such idea can really give avenue to students between their learning and the world they live in.

Ensuring the connection of the previous lesson with the lesson to be presented in the module/LAS. Another strategy for teacher to do to realize connection as a mathematical thinking standard, is ensuring the connection of the previous lesson with the lesson presented in the module/LAS. As explained earlier in this discussion, such strategy is also done in establishing the ability for the students to connect the lesson learned with the actual environment they live in. In the module/LAS students are given the chance to review their lessons and to do this, teachers give practical examples so that students can clearly recall the content of the lesson. One informant said: “para maka connect ka i-review ta mun-a ito na mga basic knowledge, kun nano sadto an dapat learning na dapat mayon kapara maka kadto Ka sa topic” (before connecting, review must be done especially on the basic knowledge to use to proceed to a higher learning.)

This strategy on reviewing first before actual discussion has seen to be a flexible strategy where different purposes can be served. Review or recall is part of the flow of the lesson presentation which can serve different goal for teaching and learning. In making connections and meaning, it is also advised that doing a review can also pave the way of establishing the connection that students may find to build the abstract concepts of Mathematics to real one and vice versa.

RECOMMENDATION

Grade 11 teachers in Mathematics have lived experiences on the preparation of module and feedbacking during modular distance learning. They have adopted different strategies on how they deliver lessons that involved the four thinking Mathematics standards such as problem solving, communication, reasoning and connection. They may extend support and cooperation to the division-wide implementation of modular distance learning so that they can give a worthwhile sharing of their resources and initiative to the welfare of the whole division and the nation in general. They may reflect on the quality of strategies they employ when embedding the four thinking Mathematics standards to their instruction even during modular distance learning, which considers the underlying philosophies, theories and framework. Further research may be conducted such as assessment of teachers' present capacity to hold technology or computer assisted teaching and learning to pave the way for blended, synchronous and asynchronous classes for Senior High School; validation on the teaching material where the four Mathematics thinking standard are embedded in the flow of activities; and the effect of the three-day seminar working on the abilities of teachers to hold distance learning at any platforms.

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