

# Exploring the Available Learning Resources for Grade 8 Mathematics in the Philippines

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**Abstract** — This paper identified the existing learning resources for the learning competencies of Grade 8 Mathematics that were partially covered or not covered for the School Year 2022-2023. The respondents were the 28 Grade 8 Mathematics teachers in one of the city schools divisions of the DepEd in the Philippines. The study employed descriptive method of research. The instruments used to gather data in this study were researcher-made survey questionnaire and unstructured interviews. Statistical tools like frequency count, percentage, and thematic analysis were used to analyze and interpret the gathered data. The findings of the study showed that among the 52 Most Essential Learning Competencies (MELCs) in Grade 8 Mathematics, 12 were not covered, none were partially covered, while the rest were completely covered. It was also found that some competencies were not covered due to varied reasons. Furthermore, it was revealed that among the learning resources available for utilization for the not covered learning competencies, the Learning Activity Sheets (LASs) were the most commonly and widely used learning resources by the teachers. However, they were found to have significant errors – a factor that could negatively affect the quality of learning the learners could receive. It is recommended that this learning resource be enhanced to make it suitable for interactive and independent learning when distributed to the learners at the end of the school year.

**Keywords** — DepEd, Existing Learning Resources, Not Covered, Philippines.

## I. INTRODUCTION

Education seeks to nurture individuals to be well-rounded, capable of overcoming life's challenges, and self-assured for success in academics, careers, and the realities of life. In mathematics, ensuring that learners acquire the necessary skills holds undeniable importance. Beginning School Year 2015-2016, the K to 12 Basic Education Curriculum has been implemented in the Philippines. Its goal is to create responsible citizens with the values, competencies, and abilities necessary for both job and lifetime learning (Official Gazette of the Republic of the Philippines, 2013). To do this, mathematics teachers play a pivotal role in translating this curriculum into effective instruction, with encouragement to employ creativity, innovation, and purposefulness in their teaching methods, hence, encouraging innovations in their teaching. Patrice (2017) asserts that implementing innovative curricula is a critical first step in raising educational standards. Doing this can enhance student engagement, motivation, and achievement, as well as foster creativity, collaboration, and critical thinking, the lifelong skills needed to be acquired by 21<sup>st</sup> century learners.

In the most recent report of Trends in Mathematics and Science Studies (TIMSS), the Philippines showed to be the lowest among the 58 countries involved with scores of 297 in Mathematics and 249 in Science among Grade 4 learners (Magsambol, 2020). This result is “significantly lower” than any other participating countries revealing only about 19 percent of the Filipino learners at the low benchmark, which means they have only basic mathematical knowledge. This very recent assessment has been worsened by the physical closure of the schools because of the pandemic beginning 2020 to 2022 because no face-to-face instruction has been given to the learners in 2021; limited in 2022; and full in late 2022 to present. These limitations have brought DepEd officials to streamline the content of the curriculum and directed teachers to use the Most Essential Learning Competencies (MELCs). The total number of competencies of MELCs in all fields of study from kindergarten to 12th grade (except TVL special subjects in high school) decreased from 14,171 to 5,689 (about 60%) in the basic education curriculum (De La Fuente, 2022).

Apparently, the National Learning Recovery Program (NLRP) of the Department of Education (DepEd) through DepEd Order No. 013, s. 2023 aims to strengthen the learning recovery and continuity program, improve literacy and numeracy, and accelerate the achievement of education targets. It focuses its attention on the literacy and numeracy skills of the students, especially the struggling ones. It also offered various teaching strategies in the subjects of English, Filipino, Mathematics, and Science. In the Division of Sorsogon City, a project called Oplan Kwenta was launched through the initiative of the Education Program Supervisor (EPS) in Mathematics, Mr. Antonio J. Jintalan. The said project aims for the students to master the four fundamental operations in mathematics, and in the long run, produce Sorsogonans who are critical thinkers and problem solvers. Many other undocumented remedial and intervention strategies were implemented by the Grade 8 Mathematics teachers in the division. The general aim of these programs is to give scaffolding activities to learners who can be at risk due to the identified learning loss and gaps in Grade 8.

DepEd's study showed that only a few teachers reported having adequate time to teach all learning competencies, with less than 20 percent reporting they had enough time to teach all the required learning competencies in a quarter (Go, 2023). MELCs aim for the learners to be provided with their needs to continue to subsequent grade levels and ultimately have a successful life (DepEd Order No. 12, s. 2020, p. 29). It is a must

that all the competencies stipulated at a particular grade level and learning area must be completely covered. Hence, a mechanism should be implemented to ensure learners could be able to acquire the not covered learning competencies. One thing that could be done was to look into the existing learning resources. This research was conducted to identify the existing learning resources in Grade 8 Mathematics available for utilization by learners to acquire the partially covered and not covered learning competencies expected of them to learn in Grade 8.

**II. OBJECTIVES**

This study aimed to identify the existing learning resources for the learning competencies of Grade 8 Mathematics that were partially covered or not covered for the School Year 2022-2023. Specifically, this paper aimed to determine the number of learning competencies that were completely covered, partially covered, or not covered within a school year, enumerate the learning resources available for utilization by learners to the partially covered and not covered learning competencies, and state the reasons for not completely covering these competencies.

**III. METHODOLOGY**

This study utilized a descriptive method of research. Both quantitative and qualitative data were obtained from the respondents. These respondents were the 28 Grade 8 Mathematics teachers from the 19 public secondary schools in the Division of Sorsogon City – one of the city schools divisions of the DepEd in the Philippines. Total sampling was used to select the respondents while frequency count, percentage, and thematic analysis were used in the statistical treatment of data. The main sources of the data for this research were the results of the researcher-made survey questionnaire and unstructured interviews.

**IV. RESULTS AND DISCUSSIONS**

The Grade 8 Mathematics teachers in the Division of Sorsogon City determined the status of each learning competency in the Most Essential Learning Competencies (MELCs) of Grade 8 Mathematics during the School Year 2022-2023. The respondents categorized them into their respective statuses as completely covered, partially covered, and not covered. Completely covered (CC) refers to learning competencies that were entirely taught by the teachers; partially covered (PC) refers to learning competencies whose subtopics, after sub-tasking of learning competencies was done, were not entirely taught by at least one of the teachers while completely covered by others; and not covered (NC) refers to learning competencies that were not taught by at least one teacher. Table 1 shows the number of learning competencies in each status.

The table shows that out of 52 learning competencies in the MELCs, 40 (76.92%) were completely covered, none (0.00%) were partially covered, and 12 (23.08%) were not covered. Further, the data imply that the Grade 8 Mathematics teachers failed to comply with the time allotment intended to cover each competency as per the MELC Code. A teacher from a big school shared,

*Kahit na hindi ko na nasusunod ang timeline na nakalagay sa MELC Code, tinuturo ko pa rin ito base sa pagkakasunod sunod sa guide.*

[Even though I am not able to follow the timeline as stated in the MELC code, I still discuss the competencies in the same order as written in the guide.]

Many other teachers shared that they did the same scheme, which implied that the 12 not covered learning competencies were also the last 12 competencies in the MELCs.

TABLE 1. Number of Learning Competencies in Each Status

Status of Learning Competency	Number of Learning Competencies	Percentage
Completely Covered	40	76.92%
Partially Covered	0	0.00%
Not Covered	12	23.08%
<b>Total</b>	<b>52</b>	<b>100.00%</b>

It is a must that all the competencies stipulated at a particular grade level and learning area must be completely covered. The not covered learning competencies should not be left in the same state for it could add to the problem of learning gaps for the learners. Hence, a mechanism should be implemented to ensure learners could be able to acquire these competencies. According to Rahmat, Muslim, Situmorang, Sukardjo, and Ferdina (2023), learning resources have been considered an integral part of standards and become one of the factors that can improve the quality of education. Hence, exploring the available learning resources in the locale that could be used by the learners to acquire the not covered learning competencies may be done to address this problem.

UNESCO (2014) defined learning resources as any form of media intended specifically to support learning, including textual materials, objects, models, electronic media, and supplementary reading materials. In this study, learning resources refer to the teaching and learning materials that are available to Grade 8 Mathematics teachers in the Division of Sorsogon City when covering a particular learning competency of the learning area. The study found varied available learning resources for Mathematics 8 competencies enumerated by the respondents. They were categorized as follows:

*Textbooks.* A textbook is a book containing facts about a particular subject that is used by people studying a subject (Collins English Dictionary, 2024). Textbooks have an important role in teaching and learning mathematics (Kristanto and Santoso, 2020). The use of this learning resource could help teachers in ensuring that learners acquire the competencies expected of them. In the Division of Sorsogon City, two types of textbooks were identified as available to the Grade 8 Mathematics teachers – government-issued and personally purchased textbooks. The government-issued textbooks include Elementary Algebra I, Intermediate Algebra II, Geometry III, Advanced Algebra and Trigonometry IV, Mathematics in Everyday Life series, and Worktext in Mathematics E-Math book series. Most of these textbooks do not have probability-related content topics because the DepEd released most of them during the implementation of the 2002 Basic Education Curriculum, but, as mentioned by some of the respondents, they

can still be used as reliable learning resources for a number of learning competencies in the MELCs. The other type is the personally purchased textbooks like Phoenix Math for 21st Century Learners for Grade 8 Mathematics and Sharp Math for Grade 8. According to a respondent in a small school,

*Bumili ako ng libro gaya ng Phoenix Math para makadagdag sa references sa aking pagtuturo. Although meron namang module ang DepEd, maganda pa rin na may other reference akong mapagkukunan. [I purchased a book like Phoenix Math for an additional reference in teaching. Although there are modules issued by the DepEd, it is still good that I have other references.]*

Similar statements were expressed by some other respondents who preferred purchasing textbooks as additional resources in teaching. It is undeniable that teachers based the concepts and ideas they teach on what is written in the textbooks. Hence, an additional copy of this learning resource could significantly help them.

*Contextualized Prototype Daily Lesson Plans (CP-DLPs) in Grade 8 Mathematics.* CP-DLPs are compilations of model lessons that other teachers can use as a pattern for their own teaching approaches. It is a systematic record of a teacher's view on how the learners will progress toward the attainment of a specific objective to be covered. This learning resource was crafted to purposely reduce administrative and paper works of Bikolano teachers provided by the DepEd Regional Office V – Bicol, under the leadership of Director Gilbert T. Sadsad, resulting in teachers having more time for more productive work, forestalling burnout, and systematizing the quality of the teaching and learning process (Llego, 2019). It contains lesson exemplars in the region that are aligned to the K to 12 Curriculum, having the objective of each lesson as the learning competencies of the curriculum. This learning resource was distributed to the teachers quarterly during the School Year 2018-2019 through a memorandum and is still used by them up until now. According to a respondent from a newly founded public secondary school,

*Ang DLPs hinatag san region para maging guide natun sa pagturo. Dahil sa DLPs di na natun kaipuhan maggibo DLL urualdaw. Dakulaon na bulig saatin. [The DLPs were provided by the region to guide us in teaching. Because of this, it is no longer needed for us to craft a DLL every day. It is a big help for us.]*

However, these learning resources were distributed to the teachers in soft copies, and printing would be at their expense.

*Learning Module.* The learning module is a logically structured collection of subject-related materials for teaching and learning a specific topic or skill. There are two types of learning modules available in Grade 8 Mathematics in Sorsogon City. These are the Grade 8 Mathematics learner's module and the self-learning modules. The first was released by the DepEd upon launching the K to 12 Program in the Philippines in 2015. It is known to provide learners with various activities and was designed as a learner-centered material. It has been used by both teachers and learners even up to the present.

However, this learning resource was found to have limited copies among the schools in the Division of Sorsogon City because not all learners who borrowed it in the School Year 2019-2020 returned it to school due to the restrictions brought by the COVID-19 pandemic. The second type of module, the self-learning modules, was used for independent and individualized learning (Bonso and Fortes, 2019). It is also known as alternative delivery modules (ADM). According to DepEd Secretary Briones (2020), they are in place to address the needs, situations, and resources of every learner and will cover all the bases in ensuring that basic education will be accessible amid the present crisis posed by COVID-19. These learning resources are self-contained, self-instructional, self-paced, and interactive learning resources for public schools intended for learning a specific topic or lesson where the learner interacts actively with the instructional material rather than reading the material passively (DepEd Order No. 18, s. 2020). However, the studies of Churiyah, Sholikhah, Filianti, and Sakdiyyah (2020) and Pangket (2023) found out that this resource contains many pages and the learning activities found in this resource were found to be repetitive and gave burden to learners which eventually caused parents to complain about these concerns.

*Learning Activity Sheets (LASs).* These are supplementary learning resources that learners may engage in. These include individualized learning activities that help learners improve the knowledge and skills they are learning from various lessons (DepEd Order No. 36, s. 2021). The available LASs pertained to by the respondents were those developed during the School Year 2021-2022. The development of these materials underwent a similar process as the manner mentioned in the study of Dugan and Ricafort (2022) wherein the subject area supervisors validated these resources through the help of select teachers comprising the Division Learning Resource Management and Development System (LRMDS). The Quality Assurance (QA) team followed the locally developed guidelines in checking the content of the materials. LASs were designed primarily to lessen the cost of production as well as to lessen the volume of tasks required of the learners, compared to self-learning modules, as they continued learning independently. This learning resource was utilized by all public secondary schools in the Division of Sorsogon City beginning the same school year and is still being used up until now.

*Learning Materials from the Learning Resources Management and Development System (LRMDS).* The official repository for all DepEd-approved and developed teaching and learning resources is LRMDS, also referred to as the LR Portal (DepEd Memo No. 82, s. 2017). It is a web-based system designed by the DepEd to simplify the distribution and accessibility of quality teaching and learning resources. It rolled out in October 2011 and is being managed and maintained by the Central Office following their requirements. Counterparts at the lower level, regional and division levels, are also established in support of the use of this platform. Particularly, in the Division of Sorsogon City, a Facebook page, DepEd LRMDS Sorsogon City, was created on July 6, 2019, to intensify the support for its utilization. In addition, the use of LRMDS among schools in the division is monitored through a tally

board wherein the number of teachers and the number of times they accessed it are recorded.

**Video Lessons.** These refer to videos where a teacher or a learning facilitator discusses a particular learning content. The use of these learning resources combined with modular approaches was found to result in effective learning (Bullo, 2021) and Maningo (2021). This was made possible because video lessons could be able to assist teachers in increasing learners’ motivation and enhancing their knowledge and understanding of the topic. During the pandemic, video lessons were developed and utilized in the Division of Sorsogon City. Various trainings and webinars were conducted to support teachers in making video lessons. A respondent from a big school shared her experience with creating a video lesson,


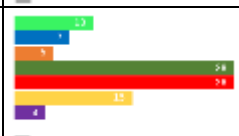

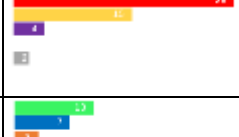
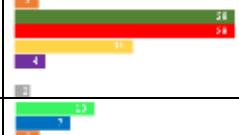
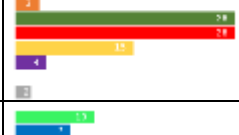




*Hindi biro ang pag gawa ng video lesson. Una, gagawa ka ng script ng teacher na magtuturo. Then, ipapakita sa mga kagrupong ayos na pagkagawa. Sunod nito ay mag vivideo recording na. Then, mag eedit, sa editing talaga ang mahirap. Yung mga techy, mga bata pa, ang gumagawa ng task na yun. Para mapadali ng kunti, ginagawa namin ay inaassign nalang kung sino ang mga responsible sa bawat role. [Creating a video lesson is not a joke. First, you will write the script of the teacher-presenter. Then, you will let your colleagues check it. Followed by video recording. Then, editing is next, a very difficult part. Our technology-oriented colleagues, usually the younger ones, do it. To make the task a little bit easier, we assign each of us to be responsible in performing a specific role.]*

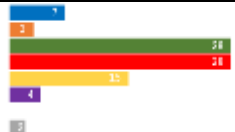
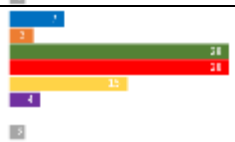
This statement showed how difficult and time-consuming it is to make a video lesson. Nevertheless, they still do so for the sake of their learners. The video lessons created were shared with the learners as links that redirect them to the YouTube platform or Google Drive. Some of these, however, are not uploaded online and are shared only through offline sharing devices like Bluetooth, Share It, and flash drives, as mentioned by a number of respondents.

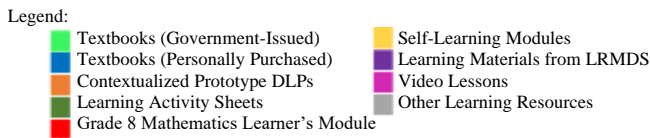
**Other Learning Resources.** Other learning resources refer to the available learning resources in Grade 8 Mathematics in the Division of Sorsogon City that were not included in the aforementioned categories. Among these are electronic books, slide presentations, and images containing concepts. They can help in the teaching and learning process and are accessed by the teachers using any web browser. According to Wahyuningsih, Wahyono, and Nugroho (2021), teachers prefer using these resources rather than making their own that is more suitable for their needs because they are readily available on the Internet. They could save time and effort through these resources, reducing their workloads and giving them time to do other work-related tasks.

Table 2 enumerates the not covered learning competencies and the number of Grade 8 Mathematics teachers in the Division of Sorsogon City that have the existing learning resources for each learning competency, as well as the reasons for not covering some competencies written under “remarks”.

TABLE 2. Number of Grade 8 Mathematics Teachers that have the Existing Learning Resources for Not Covered Learning Competencies

Not Covered Learning Competencies	Number of Grade 8 Mathematics Teachers that have the Existing Learning Resources	Remarks
The learner...		
1. proves statements on triangle congruence. <i>M8GE-IIIh-1</i>		- Specific competency issues
2. applies triangle congruence to construct perpendicular lines and angle bisectors. <i>M8GE-IIIi-j-1</i>		- Learner’s understanding and processing
3. illustrates theorems on triangle inequalities (Exterior Angle Inequality Theorem, Triangle Inequality Theorem, Hinge Theorem). <i>M8GE-IVa-1</i>		- Time constraints - Class suspensions and interruptions
4. applies theorems on triangle inequalities. <i>M8GE-IVb-1</i>		- Other learning delivery challenges
5. proves inequalities in a triangle. <i>M8GE-IVc-1</i>		
6. proves properties of parallel lines cut by a transversal. <i>M8GE-IVd-1</i>		
7. determines the conditions under which lines and segments are parallel or perpendicular. <i>M8GE-IVe-1</i>		
8. illustrates an experiment, outcome, sample space and event. <i>M8GE-IVf-1</i>		
9. counts the number of occurrences of an outcome in an experiment: (a) table; (b) tree diagram; (c) systematic listing; and (d) fundamental counting principle. <i>M8GE-IVf-g-1</i>		
10. finds the probability of a simple event. <i>M8GE-IVh-1</i>		

11. illustrates an experimental probability and a theoretical probability. <i>M8GE-IVi-1</i>		
12. solves problems involving probabilities of simple events. <i>M8GE-IVi-j-1</i>		



Not covered learning competencies start from MELC 41 to 52. The MELCs 41 and 42 are part of the learning competencies intended for the third quarter, while the rest are the competencies in the fourth quarter.

In MELC 41, the learner proves statements on triangle congruence (*M8GE-IIIh-1*), ten teachers had government-issued textbooks, while seven teachers owned personally purchased textbooks. Five teachers had copies of contextualized prototype DLPs; 28 had learning activity sheets (LASs) and Grade 8 Mathematics Learner's Modules; 15 teachers had self-learning modules (SLMs); four teachers had access to learning materials from LRMDS; no video lessons were available; and two teachers could explore other learning resources. The same number of teachers utilized the mentioned learning resources in MELC 42, the learner applies triangle congruence to construct perpendicular lines and angle bisectors (*M8GE-IIIi-j-1*).

In MELCs 43, 44, 45, 46, and 47, intended for the fourth quarter, the learner illustrates theorems on triangle inequalities (Exterior Angle Inequality Theorem, Triangle Inequality Theorem, Hinge Theorem) (*M8GE-IVa-1*); the learner applies theorems on triangle inequalities (*M8GE-IVb-1*); the learner proves inequalities in a triangle (*M8GE-IVc-1*); the learner proves properties of parallel lines cut by a transversal (*M8GE-IVd-1*); and the learner determines the conditions under which lines and segments are parallel or perpendicular (*M8GE-IVe-1*), 10 teachers had government-issued textbooks, while seven teachers owned personally purchased textbooks. Three teachers had copies of contextualized prototype DLPs; 28 had LASs and Grade 8 Mathematics Learner's Modules; 15 teachers had SLMs; four teachers were able to have access to learning materials from LRMDS; no video lessons were available; and two teachers could explore other learning resources.

In MELC 48, the learner illustrates an experiment, outcome, sample space and event (*M8GE-IVf-1*), none of the teachers have government-issued textbooks, while seven teachers own personally purchased textbooks. Three teachers had copies of prototype DLPs; 28 had LASs and Grade 8 Mathematics Learner's Modules; 15 teachers had SLMs; four teachers were able to have access to learning materials from LRMDS; no video lessons were available; and two teachers could explore other learning resources. The same number of teachers utilized the mentioned learning resources in MELCs 49, 50, 51, and 52,

the learner counts the number of occurrences of an outcome in an experiment: (a) table, (b) tree diagram, (c) systematic listing, and (d) fundamental counting principle (*M8GE-IVg-1*); the learner finds the probability of a simple event (*M8GE-IVh-1*); the learner illustrates an experimental probability and a theoretical probability (*M8GE-IVi-1*); and the learner solves problems involving probabilities of simple events (*M8GE-IVj-1*), respectively.

To sum up, the table reveals that the Grade 8 Mathematics teachers have different learning resources available for use in the not covered learning competencies. These learning resources include government-issued and personally purchased textbooks, contextualized prototype DLPs, LASs, Grade 8 Mathematics Learner's Module, SLMs, learning materials from LRMDS, and other learning resources. However, their availability varied, with all respondents saying they had LASs and Grade 8 Mathematics Learner's Module for all competencies. The table further reveals that none of the respondents had video lessons available for utilization in the not covered learning competencies. The results imply that only the LASs and Grade 8 Mathematics Learner's Module are available for distribution to learners as means for them to learn the not covered learning competencies.

The reasons for not covering the learning competencies provided by the Grade 8 Mathematics teachers are also shown in the table. These reasons were classified into five categories as follows:

*Specific Competency Issues.* These refer to learning competencies whose tasks are complex and need to be unpacked into subtasks that can be covered within a session, usually 60 minutes. In doing so, the teachers chose to deliver to the learners only those subtasks of the competency that they thought were more important. Most of the time, these subtasks were pre-requisites to the next grade level. A newly-hired teacher mentioned a particular case of this situation while he was teaching the competency about triangle inequalities, the learner illustrates theorems on triangle inequalities (Exterior Angle Inequality Theorem, Triangle Inequality Theorem, Hinge Theorem) (*M8GE-IVa-1*). In this competency, he did not include the Hinge Theorem in his discussions for the following reason:

*Hinge Theorem is not a pre-requisite topic to the learning competencies in the next level Grade 9.*

With this idea in mind, he preferred not to deliver a portion of the said learning competency, hence, resulting in the entire competency being classified as partially covered.

*Learner's Low Understanding and Processing.* All teacher-respondents agreed that the level of understanding and processing of the current learners was lower compared to those learners before the pandemic. A teacher from a small school in the Bacon Cluster said,

*Isipun mo tabi sir ha, simpleng pag add ki integers dai tatao. Kan dati before pandemic, bako man arog kaan ang mga estudyante. Pag natungtong na dati ki Grade 8 taratao na an kaiyan although may nagkapira talaga na dai tatao. Pero nangunyan halos sobra kabanga. Dai ko sana aram*

*kun pareho man saimo.* [Just think about it, Sir. It seems that many learners these days struggle with basic addition of integers. Students were different before the pandemic. By the time they reached Grade 8, most of them had already grasped the concept, although there were a few who struggled to comprehend it. Now, it's nearly over half of the class. I'm not sure if you feel the same way].

Therefore, recognizing that operations on integers were no longer explicitly included in Mathematics 8 MELCs but were essential competencies for comprehending other topics in this grade level, a review was necessary to ensure mastery of this skill. A teacher from the Sorsogon Cluster said,

*Additional time are needed to recall unmastered skills, thus, more time consumed. Next competencies to cover are affected.*

This statement was affirmed by the findings of Schult Mahler, Fauth, and Lindner (2022) when they said that low-achieving learners in Mathematics seem to have a learning backlog that needs to be given attention in the future. Therefore, modifying the distribution of work for each quarter, with the purpose of ensuring that learners fully grasp the necessary foundational abilities before moving on to the main learning objectives, contributed to the inability to cover certain learning competencies in Grade 8 Mathematics.

*Time Constraints.* With the adjustments in the budget of work, limited time for the discussion of the remaining learning competencies became one of the major problems in ensuring that the learners could acquire all of them. In fact, a teacher from a barrio school said,

*Wara nang oras para mapag-adalan pa ang topics lalo na sa Quarter 4 dahil sa gahul na ang oras bunga yan kan kakapaulit ulit kan lesson kay san pandemic nagkaugwa sin learning gaps an mga batit.* [We don't have much time left to study the topics, especially in Quarter 4, since time is already limited. This is because of the need to review lessons more often due to learning gaps that caused by the pandemic].

The additional time spent by the teachers in teaching the unmastered pre-requisite skills affected the delivery of the remaining learning competencies in Mathematics 8. In addition, the implementation of the 50-minute session each period in Sorsogon National High School (SNHS) as part of the school's mechanism to ensure learning delivery to all learners, despite shifting classes, added to the reasons for not covering some of the competencies. With this situation, the time allotment for class meetings in SNHS was reduced to 200 minutes per week only from the original 240 minutes prescribed by the DepEd in teaching Mathematics in Junior High School. According to a seasoned teacher in the said school,

*In the remaining 10 minutes per day, we are tasked to give a take-home activity for the learners to complete 60 minutes per day.*

The momentum of the class discussion is often disrupted, leaving the learners in a state of confusion with insufficient grasp of the subject matter. Therefore, significant activities and/or assessments cannot be effectively executed or

administered.

*Class suspensions and interruptions.* There were several days when classes were suspended and interrupted during the school year 2022-2023 in the Division of Sorsogon City. According to Kraft (2021), even small interruptions and disruptions in schools can add up to a considerable amount of lost learning time. A soon-to-retire teacher-respondent expressed her idea about class suspensions and interruptions, saying,

*Class suspensions (and interruptions) prolong the process of learning delivery and let these competencies be not covered.*

The statement implies that suspensions and interruptions negatively impact the learning acquisition of learners. This can occur due to various reasons, despite the school's efforts to prevent it. In the Division of Sorsogon City, the majority of class suspensions occurred during severe weather conditions, specifically from January to February 2023 with heavy rains and from April to June 2023 due to extremely hot weather in the area. DepEd Order No. 37, s. 2022 provided guidelines for the implementation of modular distance learning in the event of canceled or suspended classes due to natural disasters, calamities, and human-induced hazards to ensure learning continuity by delivering instruction for the target learning competencies and meeting the objectives of the curriculum. Hence, teachers were encouraged to give off-site tasks to learners during these times.

Some schools implemented modular distance learning during these periods and were guided by the conditions of the aforementioned DepEd Order to ensure continuity of learning. Implementing the scheme, however, proved to be insufficient for learners to acquire the knowledge and skills in a specific competency, as stated by most respondents of this study. According to a teacher serving for almost 10 years in the public schools,

*Pagbaralikan san (face-to-face) klase, kaipuhan mo man gihapon ituro an laman san hinatag mo sa batit kay kun dili, di man ninda mauukudan ki maray. Kung halimbawa nagkataon na pre-requisite an skill, sigurado sasakitun ka pag turo san competency na masunod kay kun dili man na-master ninda.* [When face-to-face classes resume, you still need to teach the contents of the materials you gave the learners because if not, they will not fully learn it. If the skill is pre-requisite to the next topic, for instance, you may find it difficult when teaching the next competency if they haven't mastered it].

Hence, class suspensions and interruptions affected the acquisition of learning as much as it also became one of the reasons for not covering some of the learning competencies, particularly those in the last part of the MELCs.

*Other Learning Delivery Challenges.* Aside from the four aforementioned reasons for not covering the listed learning competencies, other factors, like the frequent absence of teachers and extra-curricular activities in schools wherein learners were involved, contributed to the problem of not covering some competencies. A teacher from a big school said,

*Scheduled an pagpacheck up ko kay doc kaya baga absent ako depende sa schedule namun nan kun minsan malain an pagmati kaya di na din ako nalaog sa school. [My doctor's check-up is scheduled, so I may be absent depending on our schedule, and occasionally when I'm not feeling well, I don't go to school].*

Some other respondents shared similar experiences. Consequently, the time allotted for the teacher's meeting with the learners became limited. Some of the respondents shared that they filed a leave of absence because of stress and burnout in their work. According to recent polls, teachers are twice as likely as other working individuals to experience stress related to their jobs, Walker (2022) said. The respondents said that their stress was usually caused by the overloaded paper works assigned to them and the negative attitude of the learners they were handling. Other reasons for not covering all competencies in Grade 8 Mathematics were the involvement of learners in extra-curricular activities such as sports-related events and culminating activities. Nevertheless, it was undeniable that participating in these activities provided cognitive, social, and mental health benefits, as recognized in the study of Fares, Saadeddin, Al Tabosh, Aridi, El Mouhayyar, Koleilat, Chaaya, and El Asmar (2016). Despite these advantages, these activities were conducted during regular school days, hence, reducing the total number of school days learners could spend attending their classes. These activities in school led to learning competencies being left not covered at the end of every school year. Aside from the mentioned reasons, the respondents said that other unpredictable personal reasons or circumstances could contribute to some competencies being not covered.

Learners must demonstrate mastery of a defined set of skills or competencies in competency-based learning (Alliance for Excellent Education, 2013). For this reason, teachers and instructional leaders should find a way to deliver the 12 enumerated not covered learning competencies. By allowing these competencies not be covered would mean a gap in their learning, a disparity between what a learner has mastered and what is expected at their particular grade level (Hegwood, 2019). According to Harris (2023), these learners' knowledge and understanding gaps can impact their ability to learn more advanced skills. Hence, there is a need for the attention of teachers, school administrators, and stakeholders to do innovative work to solve this problem.

Table 2 revealed that Grade 8 Mathematics teachers in the Division of Sorsogon City have various learning resources available to each not covered learning competencies in Mathematics 8. Teachers may utilize these learning resources to facilitate learning and improve the performance of their learners (Rahmat, Muslim, Situmorang, Sukardjo, and Ferdina, 2023). Among these available learning resources, only a few teachers have the available learning materials from LRMDs, video lessons, and other learning resources. It was found that only those teachers who had time to browse websites and had access to the internet had these learning resources.

Moreover, regarding the textbooks that were available to teachers, it can be observed that the use of government-issued textbooks by teachers had decreased in competencies related to

probability, mainly due to the absence of these topics in these textbooks. Only seven (25%) of the 28 Grade 8 Mathematics teachers owned personally purchased textbooks. Both textbooks were limited in number, so they could not be distributed to all learners. For the contextualized DLPs, it can be noticed that the same number of teachers utilized it in all competencies from the previous quarters and then gradually decreased in the next quarters. This learning resource is designed only for the utilization of teachers. It could not be distributed to learners. Similarly, there was limited teachers' access to SLMs. The table further revealed only 15 teachers had copies of SLMs for the MELCs in the third and fourth quarters.

Meanwhile, all the respondents confirmed to have copies of the Grade 8 Mathematics Learner's Module and LASs. It has been noted, however, that the Grade 8 Mathematics Learner's Module had a limited number of copies for distribution to learners, making it impossible to be given to them in a 1:1 ratio. On the other hand, the LASs were used commonly by the teachers, and since they have their printed and/or electronic copies of this resource, these could be used anytime. This learning resource might be given to learners at the end of the school year to ensure that they could acquire all learning competencies, especially the not covered ones. However, upon using these materials, a teacher in a small school commented,

*Nung binigay saamin ang kopya ng LASs nung pandemic, may mga napansin akong errors dito. Kabilang na diyan ang pagkakaencode ng mga texts and symbols. May napansin din akong mali ang solutions at pati na rin ang answer. Ginagawa ko nalang since naphotocopy na for distribution, nagsesend nalang ako sa GC ng buong klase para maayos ang mga mali. [When the copies of LASs were given to us during the pandemic, I noticed some errors in them. This includes typographical errors in the texts and symbols. I also observed mistakes in the solutions and even in the answers. Since the materials were already photocopied for distribution, I just send the corrections to our GC in order to correct the errors].*

The statement supported the idea that LASs had significant content, grammatical, and computational errors. Additionally, the use of LASs did not promote a high level of interaction between the teacher and the learners since these were designed to be distributed only to the learners, and the outputs were collected afterward, thereby making the process of giving and receiving feedback a challenge for them.

## V. CONCLUSIONS

It is a must that all learning competencies in the Most Essential Learning Competencies (MELCs) be completely covered within a school year. In the Division of Sorsogon City, it was found that only 40 out of 52 learning competencies in the MELCs were completely covered in the School Year 2022-2023 while the remaining 12 competencies were left not covered.

The Grade 8 Mathematics teachers have different learning resources available for use in the not covered learning competencies. These learning resources include government-

issued and personally purchased textbooks, contextualized prototype DLPs, LASs, Grade 8 Mathematics Learner's Module, SLMs, learning materials from LRMDs, and other learning resources. Among these, the Grade 8 Mathematics Learner's Module and LASs were resources available to all teachers. However, while the learner's module was found to have a limited number of copies for distribution to learners, the LASs, on the other hand, were observed to contain significant errors that would potentially affect the quality of learning the learners can receive.

The reasons for not covering the last 12 competencies in the MELCs include specific competency issues, learner's low understanding and processing, time constraints, class suspensions and interruptions, and other learning delivery challenges like the absence of teachers and extra-curricular activities in school where learners are involved.

## VI. RECOMMENDATIONS

Learning Activity Sheets (LASs), being the learning resource most commonly available to the not covered learning competencies, must be enhanced by adding features to address challenges in its utilization. Doing this could make the resource more suitable for interactive and independent learning when distributed to the learners at the end of the school year.

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