International Journal of Science and Research (IJSR)
ISSN: 2319-7064
SJIF (2022): 7.942

Junior High School Mathematics Facilitators Competence in Modular Learning Assessment

Lany M. Tumapang[1], Josephine S. Lambinicio[2]

[1]Department of Education Pangasinan Division II-San Felipe Integrated School, Address:San Nicolas, Pangasinan 2447, Philippines
Email: *tumapangl[at]gmail.com*

[2]Urdaneta City University, Urdaneta City, Pangasinan2428, Philippines
Email: *jolambinicio65[at]gmail.com*

Abstract: ***This study aims to determine the level of Junior High School Mathematics facilitators' competence in modular learning assessment in the public secondary schools in the Sixth district of Pangasinan Division II. It also deals with the facilitator's competence in modular learning assessment and the development of assessment tools, use of assessment tools, analysis and interpretation of assessment results and reporting, and feedback. Descriptive Survey research was utilized through the participation of one hundred twenty-five Junior High School Mathematics Facilitators. A questionnaire-checklist was served as a data-gathering instrument. A four-point Likert scale was used to determine the average weighted mean values with their corresponding descriptive equivalent. On the other hand, Analysis of variance and Pearson Product Moment of Correlation was employed to test the null hypothesis at a 0.05 level of significance. The study reveals that the assessment competence level of the Junior Mathematics facilitators along with analysis and interpretation of assessment results, development of assessment tool and reporting and feedback but highly competent in the use of assessment tool. The findings show that the Junior mathematics facilitators are performing more than enough in the use of modular learning modality towards the highest level of performance in times of pandemic challenges.***

Keywords: Assessment; Competence; Mathematics Facilitators; Modular Learning

1. Introduction

The resume of schools will come with ambiguity among teachers and students on returning to regular order. The students and teachers need to conform to the community despite this pandemic. The adjustment period is paramount for schools and teachers to evaluate where the situation of the students and allow them to adapt to the 'new normal' that may prevail for some time after returning to school. Teachers should be motivated to use low-stake formative assessment techniques to evaluate where children are[4]. Hence, formative assessment[15] is implemented throughout the educational process to enhance student learning. The implementation of formative assessment suggests obtaining evidence about learning to close the gap between current and desired performance, giving feedback to students, and requiring students' participation in the assessment and learning process and formal evaluation or examinations are assessed at the end of a term, stage, course or program [1]. The demand for the new normal, adoption of a new model of learning and protocols teachersof the learners' progress. However, teachers may lack essential resources, relevant training, and sufficient experience particularly on different digital learning platforms and some programs may reduce the time allotted to learners' self-learning. The Department of Education continues to deliver its services through the adoption of modular learning with the utilization of self-learning modules due to the reasons that not everyone can afford to own a laptop or a mobile phone, and poor internet connectivity. Hence, modular learning was the quick solution to this problem.

The integration of the different formative assessment components whereby students submit tasks to teachers and teachers provide individualized, timely, and collective feedback regarding learning content and student error patterns are a must. This can be formed through effective communication between educators and learners (e.g., teachers checking in on students via smartphones) or guide the teachers to facilitate learning.

Expectations for formative assessment must be appropriately communicated to schools, teachers, students, and parents. Teachers may use different channels to collect and evaluate children's learning areas' targets and priorities. Online platforms are used, assignments can be placed at a given location on a given day, according to the rules and regulations, or teachers can communicate with the students periodically. Protocols should be followed and implemented when children are observed as not learning or not accessing distance programs. Teachers must attend training on digital competencies to meet the demand of this digital world.

Assessment is a term used to describe a set of processes that measure the results of students learning in terms of acquired learnings, understanding, development, and abilities gained. It encourages students to gain feedback on their knowledge and improves their academic performance [8]. Assessment can affect learners in distance learning in two ways. First, it can empower an individual learning path and the selection of learning modules. Second, it can limit them from following the defined assessment criteria laid down by the education institutions. The assessment process or methods are critical as these may have a more significant influence on students' learning growth than the effect of supervising educators or teaching aids [15]. Assessment for Learning emphasizes the opportunities to develop students' ability to assess themselves, make judgments about their performance, and improve upon it. It uses assessment mechanisms and offers opportunities for learners to enhance their skills through formative assessment and using summative evaluation sparingly.

1.1 Objectives of the study

The study aims to investigate the level of competence in Modular Learning Assessment of Junior High School Mathematics facilitators of the public secondary schools' Division II in the sixth district of Pangasinan, Region 01. Specifically, this study sought to determine: a) the profile of the respondents in terms of age, sex, teaching position, classification of school, highest educational attainment, length of service in teaching mathematics, and a number of relevant training and seminars in assessment for the last three years; b) the level of assessment competence along with the development of assessment tools, use of assessment tool, analysis and interpretation of assessment results, and reporting and feedback; c) the significant differences in the level of assessment competence across sex, teaching position and school classification; d) the significant relationship in the level of assessment competence and the variables as to the highest educational attainment, length of service teaching mathematics and number of assessment-related training and seminars. A proposed program can be developed from the results of the study.

1.2 Limitations of the study

This study is delimited to the Junior High School Mathematics Facilitators which were conducted in the public secondary schools, Division II of the sixth district of Pangasinan, School Year, 2020-2021. The respondents were teachers in the National high schools in the municipalities of Asingan, Balungao, Natividad, Rosales, San Manuel, Sta Maria, San Nicolas, SanQuintinTayug, and Umingan, province of Pangasinan, Region I, Philippines. Further, data analysis and interpretations can be enhanced for better results or findings of the study. Moreover, the level of competence of the Junior High School Mathematics facilitators in modular learning assessment includes only in the following aspects: a) the development of assessment tools, b) the use of assessment tools, and c) the analysis and interpretation of assessment results and reporting, and feedback.

2. Materials and Methods

2.1 Research Design

The descriptive method of research was utilized to describe and interpret the present condition of the study [16][5]and gathering evidence relating to the current or present conditions concerning the nature of a group of persons, several subjects, or class of events and may involve the procedure of introduction analysis, clarification, enumeration of measurement [9] to gain more realistic, valid informationregarding the assessment competence of Mathematics teachers in modular learning delivery.

2.2 Population and Locale of the Study

Complete enumeration was employed in the study which was participated by one hundred twenty-five (125) respondents Junior high school Mathematics facilitators of the DepEd Division II, sixth District, Pangasinan. These are the total respondents who are teaching mathematics in various high schools.

2.3 Data Collection Instrument

The main data gathering instrument used was the questionnaire checklistwhich was validated by experts in the field of mathematics. These experts were the school principals,program specialists, and master teachersas to their actual experience in the field of mathematics teaching and supervision in order to ascertain the validity of every item in the questionnaire to ensure that all the indicators measure appropriate content. Content validityrefers to the extent to which itemsin the assessment instrument are fairly representative of the entire domain the test seeks to measure [20].A four-point Likert scale was utilized in determining the level of competence of the Junior Mathematics facilitators. A Likert scale according to [17] is a type of scale used toprovide answers to a statement or question that permits respondents to indicate their positive to negative strength of agreement or strength of feeling regarding the question or statement.

2.4 Treatment of Data

In order to treat the numerical results on the specific problem in this study, statistical tools such as frequency count, weighted average, analysis of variance (ANOVA), and Coded Pearson Product correlation coefficient were used.

3. Results and Discussion

3.1 Profile of the respondents

Table 1: Distribution of Facilitators Respondents' Profile, n=125

Profile Variables	Variable Category	Frequency	Percentage
Age	21-30	39	31
	31-40	34	27
	41-50	28	22
	51-60	22	18
	61 and above	2	2
Sex	Male	45	36
	Female	80	64
Position	Teacher I	40	32
	Teacher II	10	8
	Teacher III	66	53
	Master Teacher I	8	6
	Master Teacher II	1	1
Classification of School	Small	9	7
	Medium	42	34
	Large	74	59
Highest Educational Attainment	BSE/BEED	25	20
	With MA Units	60	48
	MA Degree Holder	31	25
	With Ph.D/EdD Units	8	6
	Ph.D/EdD Degree Holder	1	1
Length of Service Teaching Mathematics	Five years and below	41	33
	6 – 10 years	40	32
	11 – 15 years	16	13
	16 – 20 years	7	5

	21 years and above	21	17
Number of Assessment-Related Training and Seminars Attended for the last three years	International Level		
	NONE	83	66
	1 – 2	28	22
	3 – 4	7	6
	5 or more	7	6
	National Level		
	NONE	65	52
	1 – 2	46	37
	3 – 4	6	5
	5 or more	8	6
	Regional Level		
	NONE	67	54
	1 – 2	47	37
	3 – 4	6	5
	5 or more	5	4
	Division Level		
	NONE	20	16
	1 – 2	44	35
	3 – 4	29	23
	5 or more	32	26

Table1 presents the distribution of the Junior Mathematics facilitators-respondents. It shows that among the age bracket of the respondents, most of the respondent Mathematics teachers belong to 21-30 years old is 31 percent. The outcomes presented that the age of the mathematics teachers is in the prime time of their life. They perform well in their teaching, classroom management duties, and functions. Consequently, as to sex, it reflects that more female Mathematics teachers numbering 80 or 64 percent out of the total number of 125. This gives the impression that female Mathematics teachers are dominant in numbers. This further gives the impression that women are now equal to or even more than a comparable job or employment opportunities with men. The study results also showed that women today are making a difference in the enjoyment of their right to equality with men in terms of social, economic, political, and educational opportunities. Besides, the teaching profession is female-dominated. This is consistent with the statistics, which proved that there are more female teachers in the Philippines as compared to male faculty [10]. On the other hand, most teachers are occupying teacher III positions with 66 or 53 percent.However, as to the classification of schools, it revealed that most of the schools belong to a large category, 74 or 59 percent, 42 or 34 percent are medium schools, and 9 or 7 percent are small schools. As to the highest educational attainment, only 1 or 1 percent of the 125 Mathematics teacher respondents have reached the highest educational qualification of being doctoral degree holders. Most of the teachers earned Master of Arts units, 60 or 48 percent. In comparison, 25 or 20 percent are baccalaureate degree holders, which is the lowest level of academic attainment. The results showed that the educational profile of the mathematics facilitators' respondents is high enough with the impression that a significant number of them went beyond bachelor's degree. Educational qualification is one essential factor for promotion in the practice of a profession or career service. In accord with [7], ranking for vacancies for teachers positions for Secondary Level will be conducted at the School where the item belongs. One of the criteria for promotion to a higher position is their educational qualification which is 25 points, experience or length of service 5 points, training and seminars 5 points also. These criteria can be found in [7] and also stressed in their study that educational attainment is one of the qualifications to be promoted to a higher position [11].The search for knowledge is a continuing process. The leaders enhanced their skills through professional change. Truly Mathematics teachers need to learn more and grow professionally to expand their ability in their teaching job. Enrolling in graduate courses, scale-up professional skills, and the majority have Master of Arts units only. Those who finished their masters' degrees are vying for a higher position. Likewise, The number of years teaching in Mathematics contributes to the ability of the teacher to gain mastery and expertise in the delivery of instruction. Further, the most significant group classification is five years and below, 41 or 33 percent. Most of the mathematics facilitator respondents in the Sixth District of Pangasinan are new to the profession and this is an indication that new facilitators enjoy than the veteran teachers in the service in acquiring new skills. In line with the [19], which aims to a) improve the performance of less experienced and non-major teachers (mentees); b) increase the opportunity of mentees to experience success through the development of a support system via the program; c) promote the personal and professional well-being of the mentees; and d) provide professional growth opportunities for both mentors and mentees,new teachers in the service are trying their best to attain the goal of educating the students to become well-rounded personalities. This is relative to the [18] domain 4 – curriculum and planning, strand 4.4 – Professional collaboration to enrich teaching practice. Furthermore, the respondents' attendance in the assessment-relevant training and seminars for professional growth and development. Surprisingly, even during the pandemic, there are still teachers who attended the international, national, and regional workshops and training: However, most of the respondents did not participate in international, national, and regional conferences and training. With regards to division level assessment seminars and training participated by the respondents, there is 44 or 35 percent, and there was32 or 26 percent attended workshops and conferences for the last three years.The result illustrates that the rest enjoy the opportunity of attending seminars at one level or the other but not in all training. It is impressive that they attend meetings, conferences, and seminars to keep them abreast with the trends in education. It is noted that a significant number of respondents have participated at the division levels of training. Attendance at training is very effective in performing their roles and responsibilities. One needs to undergo self-upgrading to ensure professional competency and expertise. Attending forums can enhance proficiency, particularly in the employment of effective management of the mathematics program. It is also a chance to improve their knowledge or performance because of their interaction with experts. This is parallels [18] domain 7 – Personal Growth and Professional Development.

3.2 Level of Assessment Competence of Junior High School Mathematics Facilitators

The prime purpose of this research is to determine the level of competence of Junior High School Mathematics Facilitators in the Sixth District of Pangasinan. The proponent requested the participants to rate themselves and

their school administrators to counter-check the respondents' response in their competence in Modular Learning Assessment along with the development of assessment tool, use of assessment tool, analysis and interpretation of assessment results, and reporting and feedback.

Development of Assessment Tool

During this pandemic, teachers must develop their assessment tools according to the learning modality. Teachers assess students' knowledge and make up-to-date decisions that improve their educational experience. Assessment tools help members rate their progress towards definite results and amend their behavior to meet those goals. Assessment is a vital part of instruction, as it plays an essential role in meeting the education goal. The review affects placement, advancement, teaching needs, curriculum, and, for some reason, funding [22].

Table 2: Level of Assessment Competence of Junior High School Mathematics Facilitators along with the Development of Assessment Tools

As a Mathematics teacher, I develop assessment tool by…	As assessed by facilitators		As assessed by school administrators		Overall Rating	
	WM	TR	WM	TR	WM	TR
1) Planning according to the most appropriate tool for the learners.	3.65	HC	3.50	HC	3.58	HC
2) Designing a relevant to the performance tasks.	3.51	HC	3.45	C	3.48	C
3) Checking the assessment tool prior to implementation.	3.60	HC	3.54	HC	3.57	HC
4) Developing assessment tool that is fair to every learner.	3.61	HC	3.38	C	3.50	HC
5) Designing a tool that ensure flexibility and reliability.	3.55	HC	3.50	HC	3.53	HC
6) Further consulting experts if the content of the tool is correct and relevant.	3.30	C	3.23	C	3.27	C
7) Reviewing the tool with the help of experts to ensure its appropriateness for the learning modules.	3.35	C	3.46	C	3.41	C
8) Making a dry run before using it to the learners.	2.94	C	3.12	C	3.03	C
9) Testing the effectiveness of the assessment tool without affecting the learners.	3.18	C	3.09	C	3.14	C
10) Ensuring that the assessment tool developed must be valid to judge the quality of performance of the learners.	3.54	HC	3.46	C	3.50	HC
Average Weighted Mean	3.42	C	3.37	C	3.40	C

Legend:

Rating Scale	Descriptive Equivalent	Transmuted Rating
3.50 – 4.00	Always	Highly Competent
2.50 – 3.49	Often	Competent
1.50 – 2.49	Seldom	Slightly Competent
1.00– 1.49	Never	Not Competent

Table 2 presents that the mathematics respondent facilitators indicated competent in developing assessment tools, as signified by themselves and school administrators with an overall weighted mean of 3.40 combined, described as "competent."

The data in the table would imply that Mathematics teachers are close to being an expert in the development of assessment tools. This includes their competence in planning according to the most appropriate tool for the learners with a combined mean of 3.58 described as Highly Competent. The result means that most of the respondent teachers set their goal as a basis in performing specific tasks that lead to adequate assessment tools development. It can be inferred from such findings that the respondent teachers possess the necessary skills and knowledge to develop assessment tools for the new standard learning delivery.

Use of Assessment Tools

Another dimension of mathematics facilitators' competence in modular learning assessment is the assessment tools. Teachers' assessment tools are an essential part of judging the capabilities, progress, and development of students in different learning areas. Assessment tools help teachers evaluate how much a student knows at the beginning of a school year, semester, or subject.

Assessment tools will track the learners' progress and inform the teacher of the lessons learned in the subject areas. Instructors' assessment tools come in innumerable forms, with homework, tests, interviews, oral reports, papers, and instructor observation. Teachers' evaluation tools can be formative, cumulative, objective, and subjective [14].

Table 3: Level of Assessment Competence of Junior High School Mathematics Facilitators along with the Use of Assessment Tools

As a teacher, I use the assessment tool to…	As assessed by self		As assessed by school administrators		Overall Rating	
	WM	TR	WM	TR	WM	TR
1) Measure the learners' academic abilities.	3.74	HC	3.70	HC	3.72	HC
2) Assess learner skills or fluency in each lesson/topic.	3.69	HC	3.58	HC	3.64	HC
3) Rate one's development to academic expertise in a specific subject area,	3.62	HC	3.43	C	3.53	HC
4) Decide on the strategies to enhance student learning.	3.66	HC	3.29	C	3.48	C
5) Identify strengths and weaknesses where learners need intervention and remediation.	3.67	HC	3.41	C	3.54	HC
6) Have a better plan and tailor instruction to learner's distance learning.	3.52	HC	3.42	C	3.47	C
7) Assess and evaluate students' performance tasks.	3.70	HC	3.58	HC	3.64	HC
8) Determine students' interest to make judgment about their learning process.	3.37	C	3.30	C	3.34	C

9)	Help facilitate in the assessment of evaluation of every learning activity in the self-learning modules.	3.64	HC	3.54	HC	3.59	HC
10)	Gather relevant information about learner's progress or performance.	3.63	HC	3.60	HC	3.62	HC
	Average Weighted Mean	**3.62**	**HC**	**3.49**	**C**	**3.56**	**HC**

Legend:

Rating Scale	Descriptive Equivalent	Transmuted Rating
3.50 – 4.00	Always	Highly Competent
2.50 – 3.49	Often	Competent
1.50 – 2.49	Seldom	Slightly Competent
1.00– 1.49	Never	Not Competent

Table 3 reflects the combined assessment of teachers and school administrators on the use of assessment tools which the respondent teachers expected to perform impressively. The respondent rated themselves highly competent in using assessment tools with a weighted mean ranging from 3.34 to 3.72 and a combined overall weighted mean of 3.56. The rating of their school administrators ranges from 3.29 to 3.70, described as "competent."

The use of assessment tools specified in the table in which mathematics teachers gauge themselves as highly competent includes measuring the learner's academic abilities with the highest combined weighted mean of 3.72 described as "Highly Competent." The indicator that determines students' interest to make a judgment about their learning process got the lowest combined weighted mean of 3.34, described as "Competent."

The respondents indicate themselves as highly competent in using assessment tools during this pandemic. The respondents' rating shows that they are experts in the utilization and implementation of various assessment tools in mathematics.
These findings are an analogy to the results of [13] that assessment is the gathering of information in the form of data. The student's knowledge of concepts and skill levels are measured and assigned a rate using numbers or letters. Ideas are what students understand about a topic and skills can do. The teachers evaluated the students' achievement. The administrators also equate student assessment as a method of measuring teacher accountability.

This finding implies that the mathematics teachers possessed the skills and knowledge in using appropriate assessment tools for their students. Meanwhile, the research of [23], that assessment tools and methods help teachers gauge the development and progress of their students. The assessment methods encompass how a teacher wishes to assess students. Tools are the instruments for measurement for each technique. These tools include standardized tests and age-related developmental milestones. Informal methods and tools include flashcards and anecdotal records.

4. Analysis and Interpretation of Assessment Results

The assessment results evaluated whether the students met the expected outcomes. The analyzed context, understanding, and conclusion give meaning to the information collected. This step provides ideas essential in effective communication of the assessment results.

Analyzing data means organizing, synthesizing, interrelating, comparing, and presenting the assessment results. Since data may be interpreted in various ways, it is important to involve others in reviewing the results. Discussing the data in groups resulted in a better understanding of the context, often through different perspectives.

Table 4 pictures the mathematics teachers' level of competence in modular learning assessment concerning analysis and interpretation of assessment results as rated by them and school administrators.

The weighted mean of their ratings ranging from 3.30 to 3.51 with an overall weighted mean of 3.40 by themselves and an overall rating of 3.37 by the school administrators indicate the level of assessment competence of teachers. The combined weighted mean is 3.39, described as "Competent." The teachers' rating in mathematics learning assessment is very consistent with the other modular learning assessment area, as observed earlier.

Table 4: Level of Assessment Competence of Junior High School Mathematics Facilitators along with Analysis and Interpretation of Assessment Results

As a Mathematics teacher, I….		As assessed by self		As assessed by school administrators		Overall Rating	
		WM	TR	WM	TR	WM	TR
1)	present the data with the programs' identified goals and objectives.	3.51	HC	3.47	C	3.49	C
2)	use qualitative or quantitative methods to present a well-balanced picture of assessment goals and driving questions.	3.43	C	3.40	C	3.42	C
3)	formulate recommendations based on the analysis of data.	3.30	C	3.39	C	3.35	C
4)	make varied analysis and reporting procedures according to identified learners.	3.33	C	3.29	C	3.31	C
5)	examine the figures with a process that answers the evaluation question.	3.34	C	3.30	C	3.32	C
6)	interpret the data and conclude to answer the evaluation questions.	3.36	C	3.46	C	3.41	C
7)	examine and document the limitations of evaluations.	3.38	C	3.40	C	3.39	C
8)	identify appropriate assessment measurements for specific goals and tasks.	3.47	C	3.25	C	3.36	C
9)	ensure validity and reliability of test instruments.	3.49	C	3.40	C	3.45	C

10) investigate and infer quantitative and qualitative data composed as part of the assessment plan.	3.42	C	3.35	C	3.39	C
Average Weighted Mean	**3.40**	**C**	**3.37**	**C**	**3.39**	**C**

Legend:

Rating Scale	Descriptive Equivalent	Transmuted Rating
3.50 – 4.00	Always	Highly Competent
2.50 – 3.49	Often	Competent
1.50 – 2.49	Seldom	Slightly Competent
1.00– 1.49	Never	Not Competent

As indicated in the table, the mathematics teachers who performed competently presented the data about the programs' goals and objectives with a combined weighted mean of 3.49 described as "Competent" while item number 4 make varied analysis and reporting procedure according to identified learners got the lowest combined weighted mean of 3.31 still described as "Competent." The series of seminars, training, and conferences online provided by DepEd are made accessible to concerned teachers in the present learning delivery modality in our country. These seminars and workshops contribute to the high rating of the teachers.

Furthermore, the overall combined average weighted mean of both the assessment of respondent teacher and school administrators is 3.39, rated as competent. This result indicates that Mathematics teachers possess the necessary skills and knowledge in analyzing and interpreting the assessment results of the learners in modular learning delivery.

The findings also indicated that Mathematics teachers are diligently performing their functions in analyzing and interpreting the assessment results. This result suggests the deep concern of the mathematics teachers in carrying out the things to do during the pandemic.

It is interesting to note that as teachers, they exemplify such skills in analyzing and interpreting the assessment results. Thus, activities during a pandemic are carried out smoothly, particularly in analyzing and interpreting the assessment results.

[8] said that scoring a test result in a collection of raw scores makes it easy. They can be arranged in frequency distributions or displayed graphically as histograms or frequency polygons. After scoring a test, the teachers interpret the results and use these interpretations to make grading, selection, placement, or other decisions. The teacher will analyze the performance of the test as a whole and the individual test items to interpret the test scores. The teacher will then draw inferences about students' performance after the interpretation of data. This information also helps teachers prepare for posttest discussions about the exam.

This chapter summarizes the process of conducting test and item analyses. It also proposes ways in which educators can utilize posttest discussions to improve student learning and seek student feedback that can lead to test-item improvement.

5. Reporting and Feedback

In this study, another area of concern is reporting and feedback. Feedback is an element of the incremental process of ongoing learning and assessment. Providing frequent and constant feedback is a means of improving achievement in education. It includes the establishment of evidence about characteristics of understanding and performance given by experts, peers, oneself, and from learners to practitioners. Significant feedback guides the learner to reflect on their learning and their learning plans and adjust to make better progress in their learning [12].

Table 5: Level of Assessment Competence of Junior High School Mathematics Facilitators along with Reporting and Feedback

As a Mathematics teacher, I…	As assessed by self		As assessed by school administrators		Overall Rating	
	WM	TR	WM	TR	WM	TR
1) Focus on the quality of learner's work product and processes.	3.65	HC	3.52	HC	3.59	HC
2) Motivate and challenge the learners to further develop their knowledge and skills.	3.68	HC	3.50	HC	3.59	HC
3) Give praise and reward to deserving students	3.42	C	3.21	C	3.32	C
4) Recognize students who work well with their self-learning modules and submit their answers on time.	3.69	HC	3.34	C	3.52	HC
5) Listen to the parents/students' comments and suggestions with regards to the distribution and retrieval of self-learning modules.	3.51	HC	3.45	C	3.48	C
6) Discuss the assessment results with students, parents and other teachers.	3.18	C	3.12	C	3.15	C
7) Encourage the students and parents to ask questions and give feedback about the learning delivery modality.	3.62	HC	3.56	HC	3.59	HC
8) Allocate time to discuss feedback with the learners or small group basis.	3.34	C	3.30	C	3.32	C
9) Give opportunities for learners and parents to ask questions about the assessment of their self-learning modules.	3.62	HC	3.58	HC	3.60	HC
10) Address immediately any problems regarding the distribution and retrieval of self-learning modules.	3.70	HC	3.61	HC	3.66	HC
Average Weighted Mean	**3.54**	**HC**	**3.42**	**C**	**3.48**	**C**

Legend:

Rating Scale	Descriptive Equivalent	Transmuted Rating
3.50 – 4.00	Always	Highly Competent
2.50 – 3.49	Often	Competent
1.50 – 2.49	Seldom	Slightly Competent
1.00– 1.49	Never	Not Competent

Table 5 shows that the respondent teachers rated themselves as highly competent as indicated by their weighted mean rating ranging from 3.18 to 3.70 with an overall weighted mean of 3.54, while the overall rating of the school administrator is 3.42, described as "competent." This outcome implies that the respondent teachers confidently and reliably teach their field of specialization. In other words, they provide the necessary reporting and feedback among learners, administrators, and parents.

[21] reported that disseminating information to parents and families commonly happens at least twice per year in an official written report from the school. Relating parents and families in the education process by providing them with more common feedback about their child's learning development and approaches they may use to support their child to improve is effective in improving student achievement.

Effective feedback determines the learner's level of understanding and skill development to plan the next steps towards achieving the learning goals. Feedback provides the teacher and learner with evidence about knowledge and skill improvement. Knowing the learner's progress and achievement enables the practitioner to plan the steps in the learning program. It allows students to evaluate their learning strategies to improve their studies [5].

Summary of the Level of Assessment Competence of Junior High School Mathematics Facilitators

Abilities in choosing assessment methods that are appropriate, functional, administratively convenient, technically adequate, and proper are requirements to good use of information to support instructional decisions. A teacher needs to be well-informed about the kinds of information offered by an extensive array of assessment substitutes and their assets and weaknesses. These teachers should be familiar with the criteria for evaluating and selecting assessment methods considering instructional plans.

Table 6: Summary of the Level of Assessment Competence of Junior High School Mathematics Facilitators

Assessment Competence of Junior High School Mathematics Facilitators	As assessed by self		As assessed by school administrators		Overall Rating	
	AWM	TR	AWM	TR	AWM	TR
1) Analysis and Interpretation of Assessment Result	3.40	C	3.37	C	3.39	C
2) Development of Assessment Tool	3.42	C	3.37	C	3.40	C
3) Reporting and Feedback	3.54	HC	3.42	C	3.48	C
4) Use of Assessment Tool	3.62	HC	3.49	C	3.56	HC
Overall Weighted Mean	3.50	HC	3.41	C	3.46	C

Legend:

Rating Scale	Descriptive Equivalent	Transmuted Rating
3.50 – 4.00	Always	Highly Competent
2.50 – 3.49	Often	Competent
1.50 – 2.49	Seldom	Slightly Competent
1.00– 1.49	Never	Not Competent

Table 6 provides a general view of the mathematics teachers' self-rating and the rating of school administrators in their competence in modular learning assessment, along with the four indicators used in this study.

The respondent facilitators revealed that they are highly competent in the modular learning assessment, as shown in Table 6. The overall weighted mean as assessed by them is 3.50, which is described as "Highly Competent," while the administrators gave them a 3.41 weighted mean which is described as "Competent," Still, the combined overall weighted mean is 3.46, which is also described as "Competent." The result concluded that the level of competence of Junior High School Mathematics Facilitators Competence in Modular Learning Assessment is competent.

However, as shown in Table 6, the respondent assessment to themselves is higher than the assessment of the school administrator as shown in the overall weighted mean of the mathematics teachers' level of competence in modular learning assessment when they assessed themselves. Nevertheless, both assessments show that the level of competence in modular learning assessment of the mathematics teachers is commendable since it is competent.

Teachers are aware of the appropriateness of the assessment approach suitable to their learners. Teachers find information or reviews of various assessment methods in many ways. Moreover, assessment options are diverse. It includes text – and curriculum-embedded questions and tests, standardized criterion–referenced and norm–referenced tests. Assessment tools also includes the art of questioning, spontaneous and structured performance assessments, creating portfolios, conducting exhibitions, skills demonstrations, rating scales, written works, teacher–made tests, seatwork and homework, peer – and self-assessments, student records, observations, questionnaires, interview, projects, products, and others' opinions [2].

Differences in the Levels of Assessment Competence of Junior High School Mathematics Facilitators across their Profile Variables

This study also attempted to compare the performance of the mathematics teachers with each other in their modular learning assessment when grouped according to their profile variables. In addition, this study provides a more in-depth analysis of the data gathered using statistical measures, which are the analysis of variance (ANOVA).

Table 7: Significant differences in the Level of Assessment Competence of Junior High School Mathematics Facilitators across the profile variable

	Development of Assessment Tool		Use of Assessment Tool		Analysis and Interpretation of Result		Reporting and Feedback	
	F	Sig.	F	Sig.	F	Sig.	F	Sig.
Age	1.007	.391	.299	.826	.085	.968	.130	.942
Sex	.913	.341	.175	.676	.303	.583	.770	.381
Position	.452	.716	1.556	.202	1.463	.226	.453	.716
Classification of the School	.529	.618	.803	.372	.863	.274	.362	.489

Table 7 summarizes the computed ANOVA as indicated by the F-values and their corresponding significant values. The computations of the ANOVA for each modular learning assessment area covered in this study are the development of assessment tools, use of assessment tools, analysis and interpretation of assessment results, and reporting and feedback of their profile variables. It is from which the summary table, herein, presented was based.

The assessments indicated in the table by the F-values across such profile variables state that the mathematics teachers are not comparable in their competence in modular learning assessment. The computed F-values did not show a significant difference in the modular learning assessment, as shown in Table 8. The null hypothesis is accepted. In other words, the level of competence of junior high school mathematics facilitators in modular learning assessment does not vary when they are grouped based on the following profile variables: age, sex, position, and classification of the school.

Relationship between the Mathematics Facilitators Competence in Modular Learning Assessment and their Profile Variables

The gathered data gathered in this study determined the relationships between the Mathematics Facilitators' Competence in Modular Learning Assessment and their profile variables. Determination of the relationships of the two variables used Pearson coefficient of correlation or Pearson r and the t-test for significant correlation. Table 8 shows such relationships.

The table shows the competence of Mathematics teachers in modular learning assessment is related to the profile variables in terms of the highest educational attainment and number of assessment-relevant training and seminars for the last three years attended in the division level.

However, the table indicates that the Pearson r values for relationships between the variables do not reflect any significant relationship at the .05 level with other profile variables.

Table 8: Relationship between the Level of Competence of Mathematics Teachers in Modular Learning Assessment and their Profile Variables

Profile Variables	Pearson Correlation	Sig. (2-tailed)
Highest Educational Attainment	.389**	.003
Length of Service Teaching Mathematics	.138	.524
Number of Assessment Related Trainings and seminar for the last three years		
RT_Division	.347**	.005
RT_Regional	.295	.069
RT_National	.127	.126
RT_International	.241	.145

**significance at .05 level

Therefore, given such a point of reference, it can be said that the null hypothesis stating that there are no significant relationships between the Mathematics teachers' competence in modular learning assessment and their profile variables as to the length of service in teaching mathematics.

In other words, the data in the table positively confirm the said null hypothesis at the .05 level. The result implied that the highest educational attainment, relevant training, and seminars for the last three years could have an effect on the modular learning assessment. So much to that, it can be claimed that at .05 level of significance, it is 95 percent sure of saying that the highest educational attainment, and some assessment-relevant training and seminars for the last three years in the division level, are all related to the mathematics teachers' competence in the modular learning assessment.

The data above proved that the level of Mathematics teachers' competence along the different areas of modular learning assessment is depends on the highest educational attainment and many related training and seminars for the last three years in the division level.

Proposed Training Program to enhance the assessment competence of the Junior High School Mathematics Facilitators'

1) Training/ Activity Title:
6th Congressional District Training in Enhancing the Assessment Competence of Junior High School Mathematics Facilitators

2) Background and Rationale
Assessment is a process of gathering data to understand the strengths and weaknesses of student learning. It is also a process of motivation. Well-designed assessment methods provide valuable information about student learning.

Assessment Competence of teachers plays a vital role in the analysis and interpretation of assessment results, the development of assessment tools, reporting, and feedback that are aligned to the curriculum of the department of education and designed to assess what the students have learned.

In this context, the proponent decided to conduct a District Virtual Training in Enhancing the Assessment Competence of Junior High School Mathematics Facilitators. This

training enhances the skills and knowledge that the facilitators possess.

3) Description of the Training Program

This 6th District Virtual Workshop in Enhancing the Assessment Competence of Junior High School Mathematics Facilitators on June 8-10, 2022to be held at San Felipe Integrated School, San Nicolas, Pangasinan. This training will enhance the knowledge and skills of the Mathematics teachers in the analysis and interpretation of assessment results and developing assessment tools, reporting and feedback.

4) Objectives

a) Strengthen the knowledge and skills of the mathematics facilitators' in the analysis and interpretation of assessment results.
b) Enhance the knowledge and skills of mathematics facilitators' in developing the assessment tools.
c) Improve the knowledge and skills of mathematics facilitators' in giving feedback and reporting.
d) Develop teamwork during the training.

5) Expected Dates of Training and Venue

The seminar-workshop will be on June 8 - 10, 2022 to be held at San Felipe Integrated School, San Nicolas, Pangasinan. Participants in this activity are Junior High School Teachers in the 6th District of Pangasinan with an expected number of 125 attendees.

6) Strategies

Strategies to be used in this training will be a combination of teaching method. These include interactive lectures, quizzes and exercises. Participants are required to actively participate in discussions and workshop sessions.

7) Target Participants

Participants in this training are from various municipalities of 6th District of Pangasinan with a total of 125 Junior High School Mathematics Teachers.

8) Fund Source / Financial Plan

The budget to be used in this training will be outsourcing from the school funds/MOOE and Personal. The estimated amount would be at around ₱ 6,000.00. Such amount will include the Certificates of the participants, Resource Speakers and Hand Outs.

9) Activity Matrix

6th Congressional District Virtual Training in Enhancing the Assessment Competence of Junior High School Mathematics Facilitators (June 8-10, 2022, San Felipe Integrated School, San Nicolas, Pangasinan)

Day	Time	Topic/Activities	Personnel Involved
DAY 1 (June 8, Wednesday)	7:30-8:00	Registration of Participants	Secretariat
	8:00-8:30	Opening Program	
	8:30-10:00	Orientation Topic 1. Testing the effectiveness of the assessment tool without affecting the learner	Committee In Charge Resource Speaker 1
	10:00-10:30	Health Break	
	10:30-12:00	WORKSHOP 1	Resource Speaker 1
	12:00-1:00	Lunch Break	
	1:00-2:30	Topic 2. Administering / making a dry-run of assessment tools before using to the learners.	Resource Speaker 2
	2:30-2:45	Health Break	
	2:45-4:15	Workshop 2	Resource Speaker 2
	4:15-5:00	OPEN FORUM	Committee In charge
DAY 2 (June 9, Thursday)	7:30-8:00	Preliminaries	Committee In charge
	8:00-9:30	Topic 3. Formulating Recommendations Based on the Analysis and Interpretation of Data.	Resource Speaker 3
	9:30-9:45	Health Break	
	9:45-12:00	Workshop 3	Resource Speaker 3
	12:00-1:00	Lunch Break	
	1:00-2:30	Topic 4. Analysis and interpretation of Assessments of students in making varied analysis and reporting procedure according to identified learners.	Resource Speaker 4
	2:30-2:45	Health Break	
	2:45-4:15	Workshop 4	Resource Speaker 4
	4:15 – 5:00	Open Forum	Committee In Charge
Day 3 (June 10, Friday)	7:30-8:00	Preliminaries	Committee In Charge
	8:00-9:30	Topic 5. Feedback and reporting of assessment results	Resource Speaker 5
	9:30-9:45	Health Break	
	9:45-12:00	Workshop 4	Resource Speaker 1
	12:00-1:00	Lunch Break	
	1:00-3:45	Presentation and Evaluation	Committee In Charge
	3:45-4:00	Health Break	
	4:00 - 5:00	Closing Program	Committee In Charge

10) Monitoring and Evaluation of Implementation
To effectively monitor the implementation of the program, attendance of the participants and their participation in all activities must be observed.

To evaluate the implementation of the program, a questionnaire will be used to assess whether or not the training objectives were met. This questionnaire will also be used to measure the practical impact of the training to the participants, to measure the resources that were invested in the training program, and to measure what was learned during the training.

6. Conclusions

This forecited finding of this study led to the formulation of the following conclusions:(a) the respondent Mathematics facilitators' widely vary in their profile and a distinctively female-dominated group of Mathematics facilitators;(b) they are performing impressively more than enough during this pandemic in the modular learning assessment;(c) the mathematics facilitators' are not significantly comparable in the performance of their modular learning assessment functions at specific times and on certain roles;(d) their level of competence in modular learning assessment is dependent upon or affected or caused by the highest educational attainment and number of assessment-relevant training and seminars in the division level.

7. Recommendations

Based on the findings in this study and the conclusions, this study recommends the following: (a) the mathematics facilitators are encouraged to pursue the highest educational degree, the doctoral degree, and should undergo professional upgrading through related training and seminar workshops;(b) the mathematics facilitators should always aspire and soar high for excellent performance even during this pandemic in assessing learning modules by being innovative and resourceful teachers; (c) more relevant variables should be explored to determine the competence of teachers in the modular learning assessment;(d) the proposed training programs for enhancement/improvement of teachers' competence in the analysis, interpretation, development, and use of assessment tools must be implemented;(e) further research should be conducted, especially in the authentic assessment such as Experiments, Observations, Performance tasks, exhibitions and demonstrations, Journals, Rubrics, and Portfolios of student work.

References

[1] Aycayada, C. M. (2020). Implementing Summative Assessment In Distance Learning
[2] Bazaldua, D. L. (2020). Modular Assessment System for Modern Learning Settings
[3] Brabender, V. (2020). Teaching and Supervising Assessment BeyondCOVID 19
[4] Cahapay, B. M. (2019). Reshaping Assessment Practices in a Philippine Teacher Education Institution during the Coronavirus Disease 2019 Crisis
[5] Calmorin (1995). Method of Research
[6] Chappuis, N. L. (2015). Feedback and Reporting
[7] DepEd Order No. 66 s. 2007. Revised Guidelines on the Appointment and Promotion ofother teaching, Related Teaching and Non-Teaching Positions
[8] Falchikov, G. S. (2017). Learning Assessment in a Self-learning Material
[9] Good and Scates (1991). Method of Research
[10] Gepila Jr., E.C. (2020). Assessing Teachers Using Philippine Standards for Teachers;Universal Journal of Educational Research
[11] Galiza et.al. (2018). Educational Attainment, Teaching Experience, ProfessionalDevelopment and Self-Efficacy as Predictors of Chemistry ContentKnowledge: Implication for the Development of a NationalPromotion Examination.
[12] Greenstein, M. (2018). The Power of Purposeful Feedback
[13] Jackson, L. J. (2019). Assessment Tools for Teachers
[14] Jack, Leo (2018). Teachers' Assessment Tools
[15] Liberman, J. F. (2018). Formative Assessment in Higher Education: Moves Towards Theory and the Enhancement of Pedagogic Practice
[16] McCombes, S. (2020). Descriptive Research Design │Definition, Methods and Examples
[17] McLeod, S. (2019). Likert Scale Definition, Examples and Analysis │Simply Psychology
[18] Philippine Professional Standard for Teachers (2017)
[19] Regional Order No. 039 s. 2021 known as Policy Guidelines in the Implementing ofLearning Achievements via Mentoring Program (LAMP)
[20] Salkind, N. (2010). Content Validity │SAGE Research Methods
[21] Spiller, S. (2017). Assessment: Feedback to Promote Student Learning
[22] Tamony, A. T. (2021). Why is Assessment Important?
[23] Voza, Luann (2020). Teachers Assessment Tools

Author Profile

Lany M. Tumapang, San Felipe Integrated School, Pangasinan, Philippines. She finished her bachelor degree at Ifugao State University, Potia Campus and currently enrolled at Urdaneta City University, Philippines for her Master's Degree. At present, she is a Junior High School Teacher of Pangasinan Division II teaching mathematics and designate as the School Sports Coordinator.

Josephine S. Lambinicio, Ed.D., Urdaneta City University, Pangasinan, Philippines. She obtained her Doctor of Education degree in Educational Management and Master of Arts in Mathematics Education at the Pangasinan State University, Urdaneta City and her BS Commerce at St. Louis University, Baguio City, Philippines. At present, she is an Associate Professor and Director for Research and Development of Urdaneta City University and teaches graduate courses leading to masters and doctorate degrees in educational management. She held various designations in the same university as Vice President for Academic Affairs, Vice President for Research and Extension, Research and Extension Coordinator, OIC Dean, College of Commerce and Statistician. She has taught professional education courses as well as research courses in teacher education, social work, psychology and business programs at UCU; has served UCU in various capacities as Instructor, Reviewer, Resource Speaker, Research Consultant,

Researcher, Thesis and Dissertation Writing Adviser in the graduate programs. A recipient of the Outstanding Tagudinian Award in the field of Education. She is currently an officer of the Philippine Association of Graduate Education RO1, a lifetime member of the Research and Educational Development Institute and Pan Asia Training and Research Institute, Member of Mathematical Society of the Philippines and Philippine Association for Teacher Education.