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The Journey of Junior High School Math Teachers in Module Development: A Phenomenological Study

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Abstract - The study explored the Lived Experienced of High School Math Teachers. The outcomes of this study provide insight into math teachers' viewpoints, tactics used, and obstacles and struggles they had throughout COVID-19 module creation. The phenomenological methodology was utilized given the goal of this study is gaining insights into the lived experienced of high school math teachers in module development. Likewise, six participants hailed from different parts of the Department of Education Division of Lapu-Lapu City, using purposive sampling in the selection process. The study revealed twelve significant themes including, (1) viewpoint towards mathematics, (2) mantra in teaching mathematics, (3) role as a math teacher, (4) strategies employed in teaching, (5) sentiments, (6) pressure, (7) module creation, (8) strategies employed in module development, (9) struggles in module creation, (10) motivation, (11) module enhancement/Alteration, and (12) output satisfaction. In creating the modules, the module writers were terrified, hesitant and under pressure. During module development, they encountered difficulties. Despite their difficulties, they completed the module. They were happy and satisfied to have created a module for the students.

Keywords: Module Development, Mathematics

Introduction

Mathematics is a dialect of sequential and valuable statements that we want to convey. According to NCTM (2000), there are 5 standard operations essential in the study of mathematics, namely: problem solving, reasoning, communication, connections and representation. Students must use the knowledge they have acquired in order to solve problems, and with constant practice and experience henceforth they will grow new understanding in mathematics. Students' academic trajectories is redirected because of the coronavirus pandemic (Leowus 2020) Educational leaders constantly search for ways to improve the academic performance of the learners especially in the times of crisis amidst the pandemic. Administrators and teachers are mindful of the importance of educating the students especially in teaching mathematics. This dissertation focused on hearing the journey of math teachers in module development. (cited in Telaumbanua 2017).

According to Kusumawati (2018), teachers must devise the most appropriate learning strategies for each situation, particularly in mathematics, in order to assist students in achieving their objectives. A mathematics learning strategy is a plan for completing mathematics learning activities in order to meet specific objectives. It selects the appropriate strategy, method, model, media, methodology, and learning strategy. Learning strategies are determined not just based on the skill or ability being tested, but also on the learning content, students' prior knowledge, time allocation and facilities, as well as the personality and experience of the teachers. To build an effective learning strategy, the instructor needs be familiar with several types of learning models, as well as the benefits and drawbacks of each model.



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Salandanan observed in 2001 that a crucial talent for effective and efficient teachers is the ability to organize and design self-instructional materials, such as modules, that match the degree of preparedness and cognition of pupils. A self-instructional material (SIM) can provide students and teachers with a number of advantages. Small-step, sequential, concept-and/or skill-oriented framework of a specific unit learning characterizes this sort of instructional material. SIMs are a good way to present essential concepts to a class, because they allow for more time for meaningful conversations than teacher-centered lectures. It can also be an effective strategy for remediation sessions, particularly for low-performing students, as well as enrichment activities for talented, intellectually gifted students.

According to Engles (2006), including modules into the pedagogy allows students to grasp difficult topics while also allowing the teacher to meet the students' particular learning requirements. Certainly, being able to utilize the numerous capabilities of SIMs in the various aspects of the educational process might ultimately improve learning, not only for students, but also for teachers.

The educational system can withstand any circumstance. Teachers are looking for flexible learning option as the pandemic spreads. It encompasses a variety of learning modes and interventions that are tailored to the needs, context, and circumstances of the learners.

"A *journey of a thousand miles must begin with a single step*" (*Lao Tzu*). The dissertation's title is "The Journey of Junior High School Math Teachers in Module Development: A Phenomenological Study," as previously stated. The outcomes of this study provide insight into math teachers' viewpoints, tactics used, and obstacles and struggles they had throughout COVID-19 module creation.

Methods and Materials

The phenomenological research design is used in this study. The emergent character of phenomenology and the researcher's participation with the participants provided a platform for a deep investigation of high school math teachers' journey in module construction during the COVID-19 epidemic. The hermeneutical phenomenological research was a suitable approach given the researcher's goal of gaining insights into the lived experienced of high school math teachers in module development.

Purposive sampling was utilized by the researcher. The participants are the module writers, or teachers who have been involved in module development in the Lapu-Lapu City Division. Through the DepEd Lapu-Lapu City website, the researcher verified that the potential participants are bona fide module writers. In the Learning Resources Management and Development System (LRMDS) section, the module created were found. In each module, the author or writer's name is written on the "Development Team of the Module". The researcher surveyed or interviewed the participants to know their opinions and experience during module creation. The researcher conducted the study through online platforms such as Messenger and Google Forms.

These are the process of how the researcher gathered the data. First, preparation of the survey questionnaire or interview. Next, communication with the module writers thru Messenger and ask consent to participate in the survey or interview. Also, the researcher asked if they will be available for an interview or answer the survey based on their convenient time. Then, administration of the survey questionnaire or interview to the module writers. The researcher gathered their responses. Lastly, interpretation and analyzation of the data.

Research Ethics

This research study's ethical considerations are based on the Belmont report from 1974. The Belmont Report was written by the National Commission for the Protection of Human Subjects in Biomedical and Behavioral Research. The Commission was charged by the National Research Act of 1974 with determining the core ethical



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principles that should drive biomedical and behavioral research involving human subjects, as well as developing recommendations to ensure that such research is conducted in conformity with those principles. It outlines key ethical principles and norms that address ethical challenges emerging from the conduct of human research.

Its primary purpose is to ensure the safety of participants in clinical trials and research investigations. The three concepts that guide this report are beneficence, fairness, and individual respect. Individuals should be viewed as self-sufficient agents, with those with less autonomy being protected. Participants in this study are given the choice of answering the questions provided. Moreover, no students or children are involved. The participants were given informed consent, which included information about the study's purpose, potential risks, and benefits, the degree to which the data would be kept confidential, and a statement stating that they had voluntarily participated in the study.

Results

The data were analyzed using thematic analysis. It yielded eleven significant themes, which include, (1) viewpoint towards mathematics, (2) mantra in teaching mathematics, (3) role as a math teacher, (4) strategies employed in teaching, (5) sentiments, (6) pressure, (7) module creation, (8) strategies employed in module development, (9) struggles in module creation, (10) motivation, (11) module enhancement/alteration, and (12) output satisfaction.

Theme 1. Viewpoint towards Mathematics

Mathematics perception refers to how participants see mathematics as a subject. Two participants stated that mathematics plays an important role in our daily lives.

"Math is part of our daily lives, it is more than a subject and a necessity that needs to learn. It connects everyone and gives order to things around us." (Participant 1)

Moreover, two participants said mathematics hone our ability to think critically.

"Mathematics is a study that involves numbers, patterns and formula that aims to solve world problems and establish truth by the use of reasoning, creativity and critical thinking" (Participant 3)

"Mathematics is a science that deals with critical thinking. We always get to use our own common sense which is basically uncommon when we do Math." (Participant 6)

Mathematics has existed since the beginning of time. It has flourished the greatest minds and been passed down through the centuries. Participants have acquired their ideas in mathematics through learning it.

Theme 2. Mantra in Teaching Mathematics

Mantra is the belief of how the participants approach teaching mathematics. Two participants stated that students should be involved and do mathematics.

"My philosophy in teaching mathematics is inspired by John Dewey "learning by doing." I believe students learned best if they are actively involved in the lesson." (Participant 1).

"To learn Mathematics is to do Mathematics by Paul Halmos" (Participant 4)

Also, one participant said prior to application, establish the concepts first.



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"Concepts before application" (Participant 5)

Our action is defined by our thoughts. In teaching, using a mantra to teach mathematics could guide the participants in the way they instruct the subject and encourage students to learn the topic.

Theme 3. Role as a Math Teacher

This theme focuses on how participants portray themselves to their students. Half of the participants said their role as a math teacher is to simplify the lesson to the students.

"As a Math teacher, my role is to make complicated things simpler for the students to better understand the concepts" (Participant 2).

"to teach Mathematics in simple and easy way for the students to appreciate the importance of it" (Participant 5)

"My role as a Math teacher is to make complex lesson simpler, facilitate learning and make lesson interesting." (Participant 1)

Meanwhile, two participants would inspire and encourage the students to think critically in learning mathematics.

"My role as a Math Teacher is to deliver lessons that develop students' theoretical and applied mathematics. I am someone who inspires students to look beyond the pages of the textbook to become problem solvers and critical thinkers" (Participant 4).

"A Math teacher helps and encourages students to develop their critical and creative thinking skills to be able to solve problems and discover truth and beauty of mathematics" (Participant 3).

The role of a teacher encompasses all aspects as they are pertained as 'role models" in the society. They exhibit their utmost best for the learners. The participants, as math teachers, want to help their students achieve their full potential.

Theme 4. Strategies employed in Teaching

The focus of the theme is on the methods used to teach mathematics.

One participant said that students should be involved in the daily activity.

"Learning by doing is one of the strategies I applied to my students. I let my students do the mathematics individually, by pair or by group. The other strategy is to make it hands-on. If the concepts are new to them, it can be hard for them to visualize a scenario where they can relate. Manipulatives are hands-on tools that make Math a lot easier for students to understand. I can use tools which can all be used in the classroom to demonstrate how math ideas work. Another strategy is to use visuals and images which related to the topic wherein most of my students are visual learners." (Participant4)

Additionally, two participants stated develop a positive mindset towards the subject.

"The effective teaching strategies in Mathematics is to create positive environment conducive to learn, know your student's interest to form connections and apply in mathematics lesson. Importantly, use differentiated activity to cater student's diversity" (Participant 1).



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"Using realias, images, and learning aids Making a positive mindset about math Exercises and drills Integration in real life situation" (Participant 3)

Moreover, one participant chose to be creative in the way they teach mathematics.

"We can used variety of effective strategies but of course you can never go wrong with singing, games, puzzles, storytelling and dancing. These are basic and simple but the students interests in Math could be more persuading when we used these kind of strategies. In this way they can both learn and appreciate Mathematics." (Participant 6)

Theme 5. Sentiments

This theme explores the participants' thoughts or feelings when they were asked to compose the module. Most of the participants were hesitant and afraid to create the module.

"I got overwhelmed. I am hesitant, I am afraid I cannot satisfy the standards and expectations of my co-teachers, master teachers and everyone who will evaluate my writing." (Participant 2)

"At first I was confused because I don't know how to write a module and there's no proper seminar or orientation for it. It is a challenge that educators need to face. This current pandemic is the reason why education experienced a great turning point. "(Participant 1)

"It would be a challenge for me to make something I haven't done before considering that making modules needs certain expertise on the subject. At first I was quite hesitant because module writing obligation was given to the master teachers who spent years teaching the subject and I think I lack the expertise on the matter but few days passed by I realized the need for students to learn math in a different and easy way that is why I challenged myself to try being a module writer." (Participant 3)

"Honestly it was really a burden at first. But when it already finished, it was overwhelming because I really made it so simple in making my modules so that my students could understand hopefully. I was hoping that my students will read and understand the modules I made." (Participant 4)

While one was in awe to be given the chance to compose a module.

"It was during the pandemic when I received a text message from my supervisor that I was one of the chosen few to be given the privileged to write a module. I was in awe because it was really my dream to write a book about Math. Thus without any hesitation I carefully think about contextualize and localized examples which I can possibly used as an example." (Participant 6)

Theme 6. Pressure

The participants' pressure is the subject of this theme. During the authoring of the module, the majority of the participants felt under pressure.

"Yes, because the lack of knowledge about proper module writing hindrance me to produce quality output." (Participant 1)

"Yes. Knowing that there are more experienced teachers that me, it scared me. I fear criticism but somehow I realized that I need to believe in myself to be able to improve." (Participant 3)



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"Yes because I don't have any experienced about writing contest and I don't even know how to start. Also, I am newly hired and don't have any trainings about module writing". (Participant 2)

"Yes, I felt pressured while writing the module due to the given short amount of time to finish." (Participant 4)

"Yes because of the timelines or deadlines and other works to be done as a teacher." (Participant 5)

Although, one participant never felt pressure.

"No, never at all. In fact I was so excited because by God's grace I will be able to share my love about Mathematics. I felt blessed to be given the opportunity to be a module writer because I get to share my own simplified way of solving Mathematics which is the exact opposite of the usual thinking of most students where they visualized Math as difficult and boring." (Participant 6)

It's natural to feel pressure when we're confronted with fresh experiences. Because this was their first time creating a module, the majority of the participants felt under pressure.

Theme 7. Module Creation

The participants were given uniform template to create the module.

"They give us a format and everything follows. I read books, videos, articles and others for reference." (Participant 1)

"I was collecting resources first. I selected the best ones, then make it a reference for writing or developing a module." (Participant 2)

"I studied three or more references like books, google, youtube and etc. then I come up with my own motivation that could capture the interest of my readers in which they get to play, dance, or even sing while reading. I make sure that the activities are new and parallel to the topic and to the MELC (Most Essential Learning Competency) as well. Most importantly I take into consideration in using the most simplified way of introducing the lesson knowing that they have to answer the module without the supervision of the teacher." (Participant 6)

Theme 8. Strategies employed in Module Development

Participants in this theme discussed how they planned to create a module. Some participants select activities that is suitable to the level of difficulty of the students.

"My strategies is to make sure the level of difficulty fits to the kind of learners we have right now, module should meet the objectives and the activities are interesting" (Participant 1)

"I just stick to selecting simple ideas so that the readers as well as the students can understand easily the module." (Participant 2)

In addition, one participant suggested incorporating real-life scenarios into mathematical instruction.

"Integrating real life situation, Differentiated activities, Drills and exercises" (Participant 3)

Furthermore, one participant suggested that mathematical principles be taught using games and riddles.



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"I used discovery method by means of games and puzzles to encouraged the learners to read more and understand better the Mathematical concepts introduced." (Participant 6)

Theme 9. Struggles in Module Creation

Module writing can be a tedious process. For instance, integrating localized problems and passing the plagiarism check are two different struggles that participants face when constructing the module.

"Making localized problems integrated to the topic" (Participant 3)

"Its the plagiarism that we need to pass" (Participant 5)

"During the plagiarism check, I honestly used my own words to explain the concepts but I guess we have the same words used for most of the writers. So I keep on changing words in my modules". (Participant 4)

Additionally, due to internet issues, one participant experienced delays.

"I encountered delays due to the internet and time in writing the module because I am an adviser and have to deal with the parents and students for the module distribution." (Participant 2)

Theme 10. Motivation

All of the participants expressed a willingness to construct the module for the betterment of their learners.

"My students keep me motivated, due to this pandemic we need to do something to continue the learning process. Module is one of the answer to avoid academic freeze." (Participant 1)

"I always kept telling myself that this is for my students and I love my students and my work so I was doing it." (Participant 4)

"Doing everything for the benefit of my students" (Participant 3)

In particular with respect, one participant stated that being cheered on while carrying out the task kept her motivated.

"So I realized this is the best time for me to be proud of myself. Some teachers looked up to me and cheered me up because they believe I can, so I must also believe in myself." (Participant 2)

Theme 11. Module Enhancement or Alteration

This theme talks about alterations the participants want to enhance in the module. One participant responded that she would create games-based activities.

"Create activities that involves play that can improve students creative and critical thinking." (Participant 3)

Moreover, one participant would like to lessen the number of items in the activity.



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"There are topics which can be fused into one to make it short but concise. I will also lessen the number of activities. I will just make it to five problems instead of 10." (Participant 4)

However, two participants said there is nothing they want to change in the module.

"For me, nothing because I believed, what I made is enough for the students capability." (Participant 2)

"For me there was nothing to enhance or change and it was clearly evident to the final output since 99.5% of what I made was really published." (Participant 6)

Theme 12. Output Satisfaction

The last theme of this study is output satisfaction. This corresponds to the participants' overall satisfaction with the module's creation. All of the participants were satisfied and proud of what they have achieved through creating a module.

"Yes, because I created with love for our students" (Participant 5)

"Yes, I am satisfied. Because it was used by many students." (Participant 4)

"Somehow. I know there are some parts of my module that needs improvement but I am willing to learn on how to improve myself professionally" (Participant 3)

"Yes, because so far I didn't received any bad comments and feedbacks about it. Also, I got proud because they never returned it for corrections or changes." (Participant 2)

"With a humble heart, I can say that I am deeply satisfied with my work knowing that there were only minimal revisions as to how I write my module." (Participant 6)

Discussion

The first finding of the study is a person's viewpoint toward mathematics. Participants have varying perspectives on mathematics as a topic. Individual ideas and self-perceived relationships with mathematics are critical in shaping learning and teaching behavior (Philippou, G. N., & Christou, C., 1998).

The mathematical epistemology of a teacher includes objective and subjective knowledge of mathematics and mathematics instruction (Furinghetti and Pehkonen 2002). This subjective information is referred to as "beliefs." Personal beliefs, concepts, and theories are examples of beliefs (Thompson 1992). They are mental constructions that embody people's experiences and understandings codified (Schoenfeld 1998, 21). And they're made up of subjective knowledge of certain items that lasts a long time, as well as the attitudes that go with it (Pehkonen and Törner 1996, 6, cited in Philippou, G. N., & Christou, C., 1998).

The study also found that the attitude toward teaching and learning mathematics is a mantra in mathematics education. Attitude, according to Fazio (1995), is a learnt relationship between an object and its judgment. Through experiences, teachers discover whether or not they enjoy mathematics. Their views, on the other hand, can direct their investigation and therefore shape their experience. Attitude learning is a dynamic interaction with the environment, in which attitudes direct both approach and avoidance behaviors, and are updated by the feedback provided by such exploration (Eiser et al. 2003, 1223). One key takeaway is that ideas have a powerful influence on



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behavior (Schoenfeld 1998, 21). Students' critical thinking, classroom participation, group work, and interaction and communication skills can all benefit from a positive attitude (cited in Z.Zulkarnain, M. Saim and R. Abd Talib, 2011)

A role as a math teacher is another discovery. Affective variables, such as concepts, beliefs, and attitudes toward mathematics, have been shown to play a role in the development of teaching strategies in previous studies. (Vale, 1993; Fernandes, 1995) Teaching style has a tremendous impact on students' interest and understanding of a subject. One of the aspects that determines a student's success in a subject is the lecturer's ability to teach (A. R. Madar, 2005).

Eshun describes the environments in which students engage with others and with mathematics become crucial focal areas when highlighting the relevance of individual experiences. In their research, Fraser and Kahle found that learning settings at home, at school, and within the peer group accounted for a large amount of diversity in student attitudes, and that class ethos had a major impact on the scores children received for these attitudes. A favorable attitude toward mathematics indicates a positive emotional disposition toward the topic, and vice versa (cited in R. Zan and P. Martino, 2008).

These emotional states influence one's conduct because one is more likely to succeed in a subject that one enjoys, trusts, or finds valuable. As a result, good attitudes toward mathematics are desired since they may influence one's propensity to study as well as the benefits that mathematics training can provide (B. Eshun, 2004)

Furthermore, one of the study's findings is the use of teaching methodologies in mathematics. It became clear that teaching does not have a formula. In the teaching of mathematics, a thorough and meticulous organization of education is necessary. Teachers are expected to use progressive teaching methods to suit students' diverse skills and help them succeed in school. Games and simulations (Foster, 2008), an alternative creative technique in the teaching of mathematics and science that deviates from traditional approaches, have been demonstrated to be effective and widely employed in science education. Effective mathematics teaching requires a rich set of teaching strategies from the teachers to ensure the effectiveness of the lesson. Teachers face a problem in helping children learn properly. Teachers must understand that using only one style of instruction is insufficient (Suriati Sulaiman&Tajularipin Sulaiman, 2010). In order to ensure a successful teaching and learning process, effective teaching tactics are required. Individual teacher attributes have been identified as having a significant impact on their capacity and ability to provide good learning opportunities for their students (Ball & Perry, 2009). Finding successful teaching practices that allow teachers to feel at ease while teaching and students to learn in a fun and relaxed environment would benefit education. All learning materials must provide opportunity for students to build on their strengths and improve their inadequacies in each intellectual area (Lash, 2004). As a result, it is vital to evaluate the efficacy of our current teaching style and seek new ways to improve our teaching in order to improve the teaching and learning effect (Delaney & Shafer, 2007).

The study also revealed the participants' sentiments. "Sentiment is the underlying mood, attitude, evaluation, or emotion linked with an opinion," according to Liu (2017). This adaptability appears to support Anderson's claim that "an effective e-teacher is an outstanding teacher" (Anderson, 2008), with pedagogical skills that enable them to comprehend the teaching process and make the most use of the activities available to them. Prepandemic research (Rienties 2013, Cubeles 2018, Orr 2009) suggest that technological preparedness can be a determining factor in lecturers' way of teaching. Although these findings cannot be directly applied to emergency education, the participants in this study had technological familiarity with some of the technologies used to generate activities. Lecturers gained an experience that will forever mark their teaching lives following the emergency teaching experiences related to the COVID-19 pandemic event. (cited in Corey, D. L., et. al. 2021 &Martinho, D., et. al. 2021)



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Similarly, the study discovered that there was a lot of pressure when creating the module. The majority of the people who took part in the module felt rushed. Teachers, according to Manoucherhri (1999), are under a lot of pressure, therefore instructional improvisations are perceived as "yet another addition to an already overburdened daily routine". Teachers appear to be concerned about having too much to do and not enough time to do it. (Deci et. al. 1982) observes that teachers who are reminded that they are responsible for a student meeting high standards are more critical of the student, use more suggestions, use more directive language, and are more controlling than those who are not. (cited in Deci, E. L, et. al. 2014)

The module-creation process begins here. During the module's creation, participants were given a format to follow. Module planning is a time-consuming process that involves dedication, planning, and a methodical approach. Consider the type of learner support that will be required to attain the learning outcomes while building courses. The objective to creating a module is to establish educationally sound and logical connections between learner needs, goals, learning outcomes, resources, learning and teaching methodologies, assessment criteria, and evaluation. (R. Donnelly and M. Fitzmaurice, 2005). Self-instruction, self-contained, stand-alone, adaptive, and user friendly/familiar are the traits that must be included in the module, according to Kejuruan (2008). (cited in Kusumawati, R, 2018)

The strategies used in module development are also discovered. In the classroom, game-based learning can be utilized to help students learn math. Mitchell believes that A. Smith, C.S., and others (2004) found that game-based learning can increase users' enjoyment, motivation, and engagement while also improving recollection and knowledge retrieval and encouraging the development of various social and cognitive abilities. Students can see the nature of the action they are performing and the outcomes of their actions as they play. As a result, mathematics can be more interesting to learn (Bragg L 2007). Mathematical games can help young children enhance their numerical knowledge. Students will also learn to be more adaptable and engaged in active learning through games and activities. (cited in W. F. B. W. Ahmad, 2010)

Another discovery is the struggle of developing modules. During the creation of the module, the majority of participants encountered challenges. Although modularity is seen as a "positive thing," it is recognized that it is not without flaws, and the goal of this project is to assist instructors in developing educationally sound ideas and tactics for improving learning, teaching, and evaluation in a modularized setting. (R. Donnelly and M. Fitzmaurice, 2005)

Similarly, the research uncovered the individuals' motivation. Teacher motivation is crucial not only because it influences the amount of energy invested in teaching and, presumably, its quality, but also because motivated faculty are more likely to engage students in studying, regardless of the quality of their instruction (Bakker AB, 2005, cited in Van den Berg, B. A. M., 2013). Need strength was regarded as an individual difference variable that arose from development (i.e., was acquired) and was considered a main predictor of behavior in the tradition of Murray's (1938) personality theory. The implication was that the more people sought a general objective (e.g., affiliation, or achievement), the harder they would strive to get it—that is, the more motivated they would be for activities they believed would lead to the desired outcome (Murray 1938, cited in Deci, E. L., & Ryan, R. M. 2014, Llinares, S. 2021).

Module enhancement or modification is another discovery. Participants wanted to make minor adjustments to accommodate the learners. Using various development methodologies, we may improve module development outcomes. Assessing has an impact on both assessors and students. Assessors learn how far pupils have progressed in their learning and can adjust their teaching accordingly. An assessee may respond to an assessment by challenging the assessor. After a period of reflection (possibly aided by a staff development program), the assessor's improved repertoire may become available for following cohorts of students (Yorke, M. 2003).



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Lastly, the study revealed the output satisfaction. It is crucial for teachers or module writers to make a critical appraisal of themselves that best aligns with the learning capacity of their students. Korman (1971) predicted that high self-esteem persons would show a significant positive correlation between job satisfaction and performance, but that low self-esteem persons would evidence a nonsignificant correlation between job satisfaction and performance. "All other things being equal, individuals will engage in and find rewarding those behavioral roles which optimize their sense of cognitive balance or consistency," says Korman (1976). Job satisfaction and performance are thus dependent on the employee's self-concept being implemented. The better the performance, the better the balance with his or her cognition as an adequate, need-satisfying individual, and therefore the more job satisfaction. Korman's (1970) distinct definitions of self-esteem help to determine a person's level of self-perceived competence for the work at hand, which influences effective performance directly (cited Lopez, E. M. 1982)

Conclusion

Teachers have varied perspectives on mathematics. A positive attitude toward mathematics aids students in their learning. In addition, math teachers have a vital influence in pupils' learning. Module assisted teaching, among the different individual learning methods, is the most recent method that combines the benefits of other individual learning methods. Module use can be defined as a general pattern of using modules in teaching and learning activities to meet preset learning objectives (Dewi&Lisiani, 2015). In creating the modules, the module writers were terrified, hesitant and under pressure. During module development, they encountered difficulties. Despite their difficulties, they completed the module. They were happy and satisfied to have created a module for the students.

Module writers should be provided sufficient instruction on how to make or create a module or any other learning resources. Modules that are appropriate for the learners' mental abilities must be prepared. Varied and practical exercises should be abundantly provided in the module to make learning in mathematics especially solving problems easy and enjoyable.

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