



LEARNERS' LEARNING, PERFORMANCE, AND APPRECIATION TOWARDS TEACHER MADE MATH MODULES WITH ACROSS CURRICULUM INTEGRATION

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KeyWords

Level of Learning, Academic Performance, Level of Appreciation

ABSTRACT

This study aimed to investigate and explore the impact of **Teacher Made Self Learning Modules (TMSLM)** with integration of science and financial literacy to students' level of learning, academic performance, and level of appreciation in Mathematics. To facilitate such concern, Pretest and Posttest Questionnaires for Academic Performance and another set of questionnaires for measuring level of learning and level of appreciation were utilized. Frequency, Percentage, Mean, Pearson Product Moment Correlation Coefficient and T-test were the statistical tools used in this research. A total of 90 students were considered actual respondents on this study using simple random sampling method. The results showed that students' level of learning increased from learned level to very well learned level (93%). In terms of academic performance, from did not meet expectations to outstanding (97%). Meanwhile, level of appreciation increased from not appreciated at all level to very well appreciated level (100%). Significant relationships were also registered on level of learning ($r=0.937$), academic performance ($r= 0.967$) and level of appreciation ($r=0.947$) significant at 0.05 level of significance. Significant difference were also registered for level of learning and academic performance ($t=1.402$) and level of appreciation and academic performance ($t=0.908$) significant at 0.05 level of significance.

Introduction

The Department of Education envisions achieving a culture of excellence in providing quality and standard education to all learners. To realize such vision, it provides quality, equitable, cultured based, and complete basic education. However, there is a subject area that has been consistently stigmatized and judged as the most difficult and boring. And that is Mathematics. The subject has always received low appreciation among learners as they find it not relevant to other fields overshadowing its importance in our day-to-day activities.

The worst thing occurred when the pandemic struck us way back in the latter part of 2020. The mode of learning shifted to online or modular wherein most of the learners were not prepared in this new normal and some of them were not yet fully developed as independent learners. This adds to the learners' perceptions that indeed Mathematics is a very difficult subject. Knowing that the subject is vital to the development of 21st century learners, teachers were challenged and encouraged to make sure that learners with difficulties were given assistance to minimize negative feelings and anxiety towards learning Mathematics concepts.

Thus, this innovation themed research project responded and adhered to call of the Department of Education to develop and produce literate 21st century learners and teachers through giving a quality and standard performance in teaching education to all learners. The teacher aims to produce a self-learning module to be used as additional learning resources for learners with least mastered skills on concepts related to basic statistics as well as in improving learners' level of learning and in making them realized that Math is connected to other field of specializations as well.

The objectives of this innovation themed research were to improve mastery on basic statistical skills among learners and to made emphasis on the importance of math concepts towards other learning areas like science and financial literacy. Moreover, this out of the box effort made by the teacher researcher aims to elevate level of appreciation of learners towards mathematics and to provide additional reference in studying and in aiming mastery towards the math concepts being considered in this study.

The target beneficiaries of this innovation were the grade 10 learners that has less mastery on the topic covered in this teacher made self-learning modules at Alubijid National Comprehensive High School (ANCHS), Lourdes Alubijid National High School (LANHS) and Sungay Integrated School (SIS). The program took part during the bridging activity for learners that lasted for a week.

This innovation themed research is anchored on DepEd Order Number 76, series 2011 entitled National Adoption and Implementation of the Learning Resources Management and Development System (LRMDS) encourages all the teachers in the field to utilize printed materials from the Learning Resources Management and Development System (LRMDS) portal in the teaching and learning process and DepEd Order number 18, series of 2020 Policy guidelines for the provision of Learning Resources in the Implementation of the basic education Learning continuity Plan that inspires teachers to make learning resources aligned with k to 12 curriculum that will serve as supplements for the teaching and learning process.

Furthermore, this study is also anchored on the theories of Pavlov on behaviorism. Behaviorism focuses on how people behave. In the field of education, behaviorism examines how students behave through learning. More specifically, behaviorism focuses on observing how students respond to certain stimuli that, when repeated, can be evaluated, quantified, and eventually controlled for everyone.

The emphasis in behaviorism is on that which is observable and not on the mind or cognitive processes. In sum, if you cannot observe it, it cannot be studied. The development of behaviorism is frequently associated with Ivan Pavlov, famous for his experiments with dogs, food, and audible stimuli, such as a bell. In his experiments, dogs learned to associate food or feeding time with the sound of the bell and began to salivate. Pavlov conducted his experiments in the early 1900s and they were replicated by many other researchers throughout the 20th century (McLeod, 2017).

John B. Watson, among the first Americans to follow Pavlov's work, saw it as a branch of natural science. Watson became a major proponent of Pavlov and is generally credited with coining the term behaviorism. He argued that mind and consciousness are unimportant in the learning process and that everything can be studied in terms of stimulus and response. Other major figures associated with behaviorism are B.F. Skinner and Edward Thorndike. Skinner is particularly well known, primarily because he introduced what he referred to as operant conditioning which emphasized the use of both positive and negative reinforcement to help individuals learn new behaviors.

This was quite different from Pavlov, who relied on simple reflexive responses to specific stimuli although both Pavlov and Skinner promoted repetitive behavior that leads to habit formation. These proponents have significant impact on various educators on the development of modular distance learning approaches. The delivery of the instructional model of this research were patterned on these theories and educators and realigned with the current state or level of understanding and learning capacity of learners under this study.

The studies of Cox (2011) and Weegar (2012) revealed that behaviorism is still significant in today's teaching and learning process however it must be aligned with the current learning needs and styles of learners. Thus, using a theory in the teaching and learning process needs enhancements and modifications to make it more useful and effective. This was seen on the study of Reese (2013) revealed that behaviorism plays a vital role in the child development. To make it more effective it must be accompanied with the use of technologies available that can make learning aligned with the current trend in education.

Moreover, Berry (2017) revealed that behaviorism plays vital role in the teaching and learning process. As time goes by teachers incorporate behaviorism with other theories to make learning more effective. Thus, according to Kaplan (2018) teachers must continue in using behaviorism theories in making best learning plan and activities for the learners. Indeed, Behaviorism is still functional and useful even at this time where technology advancement is at its higher level and that so many evolutions happened in the field of education.

The project timeframe was anytime on the whole 4th quarter of school year: 2021-2022 to give more time for the teachers, parents, and students to practice and master the concepts. The reproduction and soft bounding of the teacher made self-learning modules will be shouldered by the teacher-innovator. Furthermore, It was conducted in three (3) schools offering junior high school levels located in Alubijid East and West districts respectively.

Distance Learning refers to a learning delivery modality, where learning takes place between the teacher and the learners who are geographically remote from each other during instruction. Modular Learning happens on the schedule and non-real time basis (Staff, 2020). In this environment, the teachers prepare the learning materials, weekly study guides and other resources for the modular distance learning. Parents supervised their child's interaction with the materials and communication with the teacher. Furthermore, students must accomplish the module activities, complete the individual learning plan, connect with the teacher for feedback through text, messenger, or any form of communication (Codamon, 2020). Thus, outputs of the learners will be evaluated as basis for Mathematics performance.

Mathematics performance is the measurement of student achievement Math. As noted, teachers and education officials typically measure achievement using student activities like performance task, written works, portfolio, and results from standardized tests like the pretest and post-test. Academic performance is the barometer in measuring what the students learn in a unit, quarter and even in a grade level. It does not only define about passing mark but about retention and mastery.

Research studies were also considered in choosing the type of learning modality as it gives ideas on its effectiveness and its efficiency as well as its flaws. Anzaldo (2021) confirmed that in the Philippines modular distance learning is the most common tool used in the delivery of education specially in the cities that enjoy modern living. Students in this area have much better internet access and gadgets to use as aid in studying.

Meanwhile, the study of Sumaoang (2020) revealed that the main challenges include: lack of school funds delivery of modules to students living at far flung areas, learners have difficulty adjusting to self-learning mode, and parents or guardians lack of knowledge or time to guide or assist their learners. This was affirmed by Alcala (2021) citing further those stakeholders should help and assist the school specially the teachers in planning for various alternatives to combat issues and challenges in the implementation of distance learning. Thus, success can be achieved if all sectors of society unite in supporting school programs and activities.

Moreover, Aksan (2021) revealed that students have positive perceptions towards modular distance learning in mathematics and posted positive academic (Very Satisfactory) performance. Thus, distance learning is an effective modality in the absence of face to face learning. Fidalgo (2020) stated that many students are interested in distance education but has concerns in terms of Time Management and English Language Skills. In search of finding innovations and practices that made contributions to the learners' level of learning, academic performance and appreciation, the teacher-researcher utilized the used of teacher made self-learning module with integration of concepts from science and financial literacy as part of instructional materials for additional reference and means of studying to ensure that learning and acquisition of knowledge and skills were still at high level.

In recent years, Instructional materials (IMs) are defined as resources that organize and support instruction, such as textbooks, tasks, and supplementary resources. It refers to the human and non-human materials and facilities that can be used to ease, encourage, improve, and promote teaching and learning activities. They are whatever materials used in the process of instruction. The great Soviet encyclopedia defines IMs as educational resources used to improve students' knowledge, abilities, and skills, to monitor their assimilation of information, and to contribute to their overall development and upbringing of students under the auspices of a teacher.

Instructional materials (IMs) are those items that assist the information aspect of teaching. Not teaching holistically. These could take the form of textbooks, worksheets, 3D models, charts, info graphics, over-head projector, audio-speakers, and self-learning modules which assist teachers in conveying information, message across the learner's within and far at during the instruction. A module is a short unit of instruction dealing with a single conceptual unit of subject matter. It is a self-contained and independent unit of instruction with the primary focus on a few well-defined objectives. (Padmapriya, 2015). Self-learning module allows the learner to learn at their pace, learner can acquire knowledge, skills and attitude in the absence of a teacher.

Review of Related Literatures

This part of the research includes literatures that enrich the understanding of this study. The materials were taken primarily from local and foreign studies, books, journals, and internet websites from which the framework of this study was based. These are presented by grouping foreign and local setting.

In mathematics teaching, students' academic achievement is considered an important indicator in the assessment of educational systems. It relates to the learned or acquired abilities from lessons or competencies in a learning module which are measured through a teacher-made test. Thus, the teacher may check whether student's learning outcomes showed greater gains or not after exposed to the learning material or a demonstrated class discussion.

This also allows the teacher to examine the students' performance and think of ways and means to further improve academic performance. Mathematics has always been stigmatized as difficult and boring subject. Therefore teachers, must address this by blending modular distance learning with other learning strategies to make it more relatable and exciting for the learners. Students with good study habits do better in academics and graduates on time while students with poor study habits tend to delay the study and poor rate of academic performance.

Academic performance is important for an institution and for the good outcomes that lead to the job performance in the future of graduates. The academic performance should not be affected by age, gender, and place of residence (Razak, 2015). Students with good study habits do better in academics and graduates on time while students with poor study habits tend to delay the study and poor rate of academic performance.

Jameel (2013) revealed that teacher's strictness and lack of assistance towards learners are major causes of low performance in mathematics. Teachers must address this issue as it can led to various concerns even in student's anxiety and self-confidence towards mathematics. In fact, Zhang (2019) study revealed that student's anxiety could lead to low academic performance of students in Math. The deeper its level of anxiety will also result to much lower academic performance. Moreover, Peteros (2019) revealed that student's self-rating in terms of ability and skills played an essential part in mathematics performance. Students with high self-rating were also the individuals with high math performance.

On the other hand, Mustaq (2013) revealed that students that makes more efforts in studying mathematics often gain much higher performance. Parent's support, self-confidence and interest in math are also key factors in determining math performance. That's why assistance must be provided as much as possible to ensure positive notion towards mathematics. The study of Guinocor (2020) revealed that students' mode of learning differs from one another. However, with assistance given to students they were still able to achieve higher math performance. In fact, Yeh (2019) revealed that helping low achieving students was beneficial they perform much better performance after assistance were given. Retention level also increased along with the math scores.

An experimental study to investigate the effectiveness the modules, by comparing students who were taught by proficiency modules, with students taught by traditional approach. There were fifty-seven students in the two control groups and sixty students in the two experimental groups. In the four of the five units and in the total tests the students taught by the proficiency module performed significantly better than the students taught by the conventional method (Disher as cited by Padmapriya, 2015).

Another study reported that self-instructional module can be used as an effective teaching learning device in educational psychology course (Kryspin as cited by Shea, 2016. The study of Windell as cited by Ladrillo, 2021 revealed that the modules are effective to produce reliable changes in trainees' knowledge and skill in the use of techniques for determining the reading level of the exceptional children.

A study about developed and evaluated five self-instructional modules to provide basic knowledge on the identification and correction of reading difficulties. The modules were used for diagnostic prescriptive reading instruction, word recognition skills, the informal assessment of reading difficulties and the correction of reading difficulties. Results from the evaluation showed that the modules were suitable for the intended purpose Lampe as cited by Jena, 2019). Kumar as cited by Teng (2017) conducted a study on the Effect of Teacher assisted Modular Approach in learning Physics in Secondary schools. The study concluded that the Teacher Assisted Modular approach is more effective than Textbook approach in teaching physics.

Although this research might have some similarities to the studies mentioned in this part of the research, still there are variables here that were not utilized in previous studies. This work was the first made in Alubijid East and West Districts, Misamis Oriental dealing on impact of teacher made self-learning modules towards academic performance and mastery of learners on basic Statistics Concepts and selected key concepts on financial literacy. Under such conditions this will provide with reasons, ideas and perspective on influences on one's take towards learning via modular distance learning with the aid of other strategies.

Methodology

The researcher utilized the descriptive method of research to the respondents. The data gathered were used to answer the research problems in this study. The researcher conducted a pilot study of the Questionnaires in one of the junior high schools in Alubijid East District in Misamis Oriental. After conducting the pilot test, the data gathered were subjected to Cronbach's Alpha test to determine the reliability of the questionnaires.

The result was an alpha of 0.968 for Level of learning questionnaire which means that the questionnaire has consistency and is a reliable instrument. Another result was an alpha of 0.924 for Level of Appreciation questionnaire which means that the questionnaire has consistency and is a reliable instrument. The Pretest and posttest questionnaire were evaluated by the two master teachers

from Mathematics and Science department in terms of its appropriateness to be used as additional instructional materials. In addition, three specialists composed of a guidance counselor, a master teacher and an experienced University Professor with high educational attainment and qualifications have evaluated and certified the said questionnaire's validity.

The respondents of this study were the selected grade 10 students from Alubijid National Comprehensive High School, Lourdes Alubijid National High School, and Sungay Integrated School. Sampling was made by the researcher by identifying students with only passing or failed marks based on pretest scores. The following are the basis on grouping the learners' scores:

Academic Performance (Based on DepEd Order No. 36 s. 2016)

Scale	Range	Grade Range	Interpretation
5	4.20 – 5.00	90-100	Outstanding
4	3.40 – 4.19	85-89	Very Satisfactory
3	2.60 – 3.39	80-84	Satisfactory
2	1.80 – 2.59	75-79	Fairly Satisfactory
1	1.00 – 1.79	Below 75	Did not meet Expectations (Poor)

Level of Learning

Scale	Range	Interpretation
5	4.20 – 5.00	Very Well Learned
4	3.40 – 4.19	Well Learned
3	2.60 – 3.39	Learned
2	1.80 – 2.59	Less Learned
1	1.00 – 1.79	Not Learned at All

Level of Appreciation

Scale	Range	Interpretation
5	4.20 – 5.00	Very Well Appreciated
4	3.40 – 4.19	Well Appreciated
3	2.60 – 3.39	Appreciated
2	1.80 – 2.59	Less Appreciated
1	1.00 – 1.79	Not Appreciated at All

Due to the existing presence of Covid 19 pandemic, strict and measures and guidelines about health and safety protocols was observed and implemented. Through a written request, the researcher asked permission from the school district supervisor and school principal in conducting the research study or innovation and in gathering the data. Upon getting and organizing the data the researcher then proceeded with the unstructured interview among the selected students and parents for data confirmations and insights.

The participants of this study were asked to join voluntarily and that they were informed about the whole content of the research as well as the purpose and contents of the study. The researcher assured the participants that data gathered and details taken from them were held with utmost confidentiality for privacy, safety and ethics concerns. After the conduct of the study or innovation for the third to fourth quarter of school year 2021-2022 from February 2022 to April 2022, the researcher then proceeded with the tabulation of responses on questionnaires for data gathering and analysis and conduct unstructured interview for the insights and comments was also implemented.

Results and Discussions

Problem 1. Determine the status of the learners as exposed to modular learning on basic concepts in statistics with integration of concepts on science and financial literacy in relation through teacher made self-learning modules according to:

1.1 Level of Learning;

Table 1 presents the comparative students' **level of learning** data on before and after the implementation of the study. It revealed that before the implementation of the program students' self-evaluation on level of learning were at learned level with 33 out of 90 or 37%, less learned level with 28 out of 90 or 31% and not learned at all levels with 18 out of 90 or 20%. After the implementation of the program, the student's self-evaluation on level of learning were at very well learned level with 84 out of 90 or 93% and well learned level with 6 out of 90 or 7%.

Table 1 Comparative Students Level of Learning

Rating		Before		After	
Descriptors	Range	F	%	F	%
Very Well Learned	4.20-5.00	0	0%	84	93%
Well Learned	3.40-4.19	11	12%	6	7%
Learned	2.60-3.39	33	37%	0	0%
Less Learned	1.80-2.59	28	31%	0	0%
Not Learned at All	1.00-1.79	18	20%	0	0%
Total		90	100%	90	100%

These data imply that before the implementation of the program, level of learning of the students were at learned level only while others were at less learned and not learned at all levels. Meanwhile, after the implementation of most of the students' level of learning were at very well learned level. Thus, the impact of the implementation of the program towards students' level of learning was very high.

These findings aligned with the studies of Mustaq (2013) revealed that students that makes more efforts in studying mathematics often gain much higher performance. Parent's support, self-confidence and interest in math are also key factors in determining math performance. That's why assistance must be provided as much as possible to ensure positive notion towards mathematics. The study of Guinocor (2020) revealed that students' mode of learning differs from one another. However, with assistance given to students they were still able to achieve higher math performance. In fact, Yeh (2019) revealed that helping low achieving students was beneficial they perform much better performance after assistance were given. Retention level also increased along with the math scores.

1.2 Academic Performance

Table 2 Comparative Students Academic Performance

Rating		Pretest		Post Test	
Descriptors	Scale	F	%	F	%
O	90-100	0	0%	87	97%
VS	85-89	10	11%	3	3%
S	80-84	28	31%	0	0%
FS	75-79	20	22%	0	0%
DE	74 and below	32	36%	0	0%
Total		90	100%	90	100%

Table 2 presents the comparative students' **academic performance** data on pretest and posttest results on the implementation of the study. It revealed that pretest results or before the implementation of the program students' academic performance were at did not meet expectations level with 32 out of 90 or 36%, satisfactory level with 28 out of 90 or 31% and fairly satisfactory level with 22 out of 90 or 20%. Posttest results of after the implementation of the program, the student's academic performance were at outstanding level with 87 out of 90 or 97% and very satisfactory level with 3 out of 90 or 3%.

These data imply that pretest results or before the implementation of the program, academic performance of the students were at did not meet expectations level only while others were at satisfactory and fairly satisfactory levels. Meanwhile, posttest results of after the implementation of most of the students' academic performance were at outstanding and very satisfactory levels. Thus, the impact of the implementation of the program towards students' academic performance was very high and effective.

These finding connect with experimental study to investigate the effectiveness the modules, by comparing students who were taught by proficiency modules, with students taught by traditional approach. There were fifty-seven students in the two control groups and sixty students in the two experimental groups. In the four of the five units and in the total tests the students taught by the proficiency module performed significantly better than the students taught by the conventional method (Disher as cited by Padmapriya, 2015).

Furthermore, it also affirmed the study reported that self-instructional module can be used as an effective teaching learning device in educational psychology course (Kryspin as cited by Shea, 2016. The study of Windell as cited by Bondoc, 2014 revealed that the modules are effective to produce reliable changes in trainees' knowledge and skill in the use of techniques for determining the reading level of the exceptional children.

Finally, it confirmed the study about developed and evaluated five self-instructional modules to provide basic knowledge on the identification and correction of reading difficulties. The modules were used for diagnostic prescriptive reading instruction, word

recognition skills, the informal assessment of reading difficulties and the correction of reading difficulties. Results from the evaluation showed that the modules were suitable for the intended purpose Lampe as cited by Jena, 2019). This was further reiterated by Ladrillo (2021) that teacher made activities have positive impact towards students academic performance.

1.3 Level of Appreciation

Table 3 Comparative Level of Appreciation

Rating		Before		After	
Descriptors	Range	F	%	F	%
Very Well Appreciated	4.20-5.00	1	1%	90	100%
Well Appreciated	3.40-4.19	7	8%	0	0%
Appreciated	2.60-3.39	18	20%	0	0%
Less Appreciated	1.80-2.59	30	33%	0	0%
Not Appreciated at All	1.00-1.79	34	38%	0	0%
Total		90	100%	90	100%

Table 3 presents the comparative students' **level of appreciation** data on before and after the implementation of the study. It revealed that before the implementation of the program students' self-evaluation on level of appreciation were at not appreciated at all level with 34 out of 90 or 38%, less appreciated level with 30 out of 90 or 33% and appreciated level with 18 out of 90 or 20%. After the implementation of the program, the student's self-evaluation on level of appreciation were at very well appreciated level with 90 out of 90 or 100%.

These data imply that before the implementation of the program, level of appreciation of the students were at not appreciated at all level only while others were at less appreciated and appreciated levels. Meanwhile, after the implementation of most of the students' level of appreciation were at very well appreciated level. Thus, the impact of the implementation of the program towards students' level of appreciation was very high.

Learner's impression towards the subject is very important as it can provide positive notion and outlook towards it making the subject desirable and liked by the learners wherein in return, the students will get inspired in learning its concepts. Moreover, connecting math topics to other field of studies or subjects like science and financial literacy will boost student's believe and appreciation that math is very useful and valuable to real life situations and not just a subject meant to make the students suffer due to its difficulty.

Problem 2. Find out significant relationship on students' status as exposed to modular learning on basic concepts in statistics with integration of concepts on science and financial literacy in relation through teacher made self-learning modules with regards to: level of learning (Before and After the Implementation), academic performance (Pretest and Posttest) and level of appreciation (Before and After the Implementation).

Table 4 Test Relationship on Level of Learning, Academic Performance and Level of Appreciation

Variables	Before		After		Critical r	Computed r	P-value	Decision
	Mean	SD	Mean	SD				
Learning	3.11	0.81	4.88	0.79	0.195	0.937	0.000	Significant
Acad. Perf	3.32	0.48	4.72	0.74	0.195	0.967	0.000	Significant
Appreciation	2.86	0.83	4.63	0.88	0.195	0.948	0.000	Significant

Table 4 presents the **test significance of relationship** on data for **level of learning, academic performance, and level of appreciation** before and after the implementation of the study. The computed r-value for level of learning of 0.937 (SD: 0.000) is higher than the critical r-value of 0.195 at 0.05 level of significance. The computed r-value for academic performance of 0.967 (SD: 0.000) is higher than the critical r-value of 0.195 at 0.05 level of significance. The computed r-value for level of appreciation of 0.947 (SD: 0.000) is higher than the critical r-value of 0.195 at 0.05 level of significance. Thus, the null hypothesis is rejected.

These data imply that positive significant relationship was established on students' level of learning, academic performance, and level of appreciation on the implementation of the program. The results further signify the importance of making innovations or remedial activities as it resonated positive feedback and performance from the students. Thus, teacher's efforts in making mathematics more interesting and valuable to daily living is essential and oftentimes rewarding.

Problem 3. Find out significant difference on students' status as exposed to modular learning on basic concepts in statistics with integration of concepts on science and financial literacy through teacher made self-learning modules according to level of learning, and appreciation towards academic performance.

Table 5 Test Significance on Level of Learning, Academic Performance and Level of Appreciation

Variables	Mean	SD	Mean	SD	Critical t	Computed t	P-value	Decision
Learning vs Academic Perf.	4.88	0.79	4.72	0.74	0.674	1.402	0.000	Significant
Appreciation vs Academic Perf.	4.83	0.88	4.72	0.74	0.674	0.908	0.000	Significant

Table 5 presents the **test significance of difference** on data for **level of learning, academic performance, and level of appreciation** before and after the implementation of the study. The computed t-value for level of learning and academic performance of 1.402 (SD: 0.000) is higher than the critical t-value of 0.674 at 0.05 level of significance. The computed t-value for level of appreciation and academic performance of 0.908 (SD: 0.000) is higher than the critical t-value of 0.674 at 0.05 level of significance. Thus, the null hypothesis is rejected.

These data imply that significant difference was established on the impact on students' level of learning towards academic performance and level of appreciation towards academic performance. The results further signify the importance of making innovations or remedial activities as it resonated positive feedback and performance from the students. Thus, teacher's efforts in making mathematics more interesting and valuable to daily living is essential and oftentimes rewarding.

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