
Effectiveness of The Teacher-Made Window Cards to The Numeracy Performance of The Grade 6 Pupils in Mathematics: Basis for Instructional Supervision

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ABSTRACT

This study aimed to Determine effectiveness of Teacher-Made Window Cards to the numeracy performance of the Grade 6 Pupils. The findings of the study served as a basis of a proposed Instructional Supervision plan. This study was demonstrated to teachers the possible value of Teacher made Window Cards into the classroom implementing the curriculum. The method used to gather relevant data was Quasi Experimental Research Design for Grade 6 pupils to complete in the 2nd grading period and a study of the numeracy skills based on their test scores before and after Teacher made Window Cards had been introduced and delivered in the classroom during the teaching and learning process. The output of this study is to provide instructional supervisory plan to help the teachers to create a more effective learning processes that would help the learners to improve their test performances. The results in table 3 implied that the null hypothesis was rejected, indicating that the intervention was the cause of the observed improvement in numeracy performance rather than a random event. The noteworthy rise in average scores between the pretest and posttest suggests that sixth-grade students' numeracy abilities significantly improved. The idea that the teacher-made window cards had a statistically significant impact on the mathematical proficiency of Grade 6 students is further supported by the computed t-value being higher than the critical t-value, which further reinforces the robustness of the observed improvement.

There has been an improvement in the overall numeracy performance, as evidenced by the posttest score range and frequency distribution. The posttest results showing no students in the "Fair" or "Poor" categories indicate that the intervention was successful in filling in the foundational gaps and moving students up to higher proficiency levels. The increased frequencies in the "Very Good" and "Excellent" categories indicate a notable advancement, demonstrating that a considerable proportion of the Grade 6 class has attained excellent numeracy abilities. The test results' statistical significance has important educational ramifications. The effectiveness of the teaching approach—likely the teacher-made window cards—is demonstrated by the improvement in numeracy performance that has been observed. This achievement can serve as a model for teachers looking to integrate similar cutting-edge techniques into their lesson plans. The importance of the results also emphasizes how customized interventions could close foundational gaps and improve students' overall academic performance. Even though the current study shows how effective the intervention is, more research could focus on the precise processes by which teacher-made window cards affect students' numeracy abilities. Future educational interventions could benefit greatly from an examination of the long-term sustainability of the observed improvements as well as any potential variations in effectiveness across various student demographics or learning styles. Table 3, all serve to support the beneficial effects of the teacher-made window cards on the numeracy performance of Grade 6 students. The effectiveness of the intervention is confirmed by the statistical significance of the difference between pretest and posttest scores, which has important implications for future research directions and educational practice.

I. INTRODUCTION

The goal of the basic education is to provide the school age population and young adult with skills, knowledge and values to become caring, self-reliant, productive and patriotic citizens. Generally, it aims to provide a well-rounded education that will assist each individual in society to attain his or her potential as a human being, and enhance the range and quality of the individuals within the group. As early as possible, children are taught with the basics such as counting numbers, spelling names, drawing, among many others. This becomes more complicated once an individual enters a more mature phase of life. In today's competitive world, it is imperative to acquire the right degree of learning to equip oneself with the leverage amidst the competition (Department of Education, 2012).

Having handled learners from Grade six (6) for three (3) school years, it has become apparent to the researcher that, despite having already undergone the basic Mathematics lessons from their primary years, learners still had difficulty in performing mathematical operations. From a professional point of view, this recession of mastery of skills in Mathematics may have been caused by the modular learning modality that left learners feeling stagnant, having no formal teachers to guide them during the pandemic. Though some learners had parents, guardians and/or older siblings to teach them, most did not. This has made them passive towards learning and, therefore, did not develop mastery in skills like literacy and numeracy.

The framework will help create students with stronger mathematical knowledge, skills and value. (Ciriaco, 2012). Dr. Filma Brawner, DOST-SEI Director, added during the 14th Philippine Math Olympiad that the framework of K-12 aims to provide students with mathematical empowerment, among other strengths. It seeks to harness the students understanding of the fundamental ideas of numbers and number concepts, measurement, geometry, probability, data analysis, patterns, functions and algebra (Ciriaco, 2012).

As a person who had grown up being exposed in the classroom/school setting, the researcher instilled in herself the passion of teaching children so that they would learn well and develop the skills necessary for Filipino children, especially in Mathematics. The researcher, though also having trouble in Mathematics during her younger years, did not let difficulties stop her from working hard. With the help of good and understanding teachers, she did so and achieved her dreams. This research problem was chosen because the researcher sees herself in the shoes of the elementary grade learners who have difficulty in Mathematics.

Since the lessons in Mathematics Grade 6 are those that require mastery of the basic Mathematical operations, learners who lack said skills find it very difficult to comprehend the lessons in their Mathematics subject. Because of this, the teacher would have to exert more time and effort to guarantee that the learners mastered their lessons, which in turn would delay classes and waste class time that could be used for other activities. Thus, these premises push the researcher to conduct study and focus on teacher-made window cards to the numeracy performance of the Grade 6 pupils in Mathematics and hoping to improve numeracy skills of the performance of learners specially to those learners who are identified as non-numerates.

This study aimed to Determine effectiveness of Teacher-Made Window Cards to the numeracy performance of the Grade 6 Pupils. The findings of the study served as a basis of a proposed Instructional Supervision plan.

Specifically, this study sought to answer the following questions.

1. What is the numeracy performance of the Grade 6 pupils before the utilization of Teacher-made Window Cards?
2. What is the numeracy performance of the Grade 6 pupils after the utilization of the contextualized Teacher-made Window Cards?
3. Is there a significant difference on the numeracy performances of the Grade 6 pupils before and after the utilization of the Teacher-made Window Cards?
4. What Instructional Supervision plan can be proposed based on the findings of the study?

Statement of Null Hypotheses

Ho: There is no significant difference on the numeracy performances of the Grade 6 pupils before and after the utilization of the Teacher-made Window Cards.

II. METHODOLOGY

Design. This study was demonstrated to teachers the possible value of Teacher made Window Cards into the classroom implementing the curriculum. The method used to gather relevant data was Quasi Experimental Research Design for Grade 6 pupils to complete in the 2nd grading period and a study of the numeracy skills based on their test scores before and after Teacher made Window Cards had been introduced and delivered in the classroom during the teaching and learning process. In this study, The researcher used a self-made window cards and the Researcher test questionnaires based on the different learning competencies for Mathematics 6. The topics tested were part of Unit which includes Addition, Subtraction, Multiplication and Division of the Basic Education Curriculum (BEC). For content validity of the chapter test, the researcher will distribute the teacher made window cards to some experienced teachers in the district handling Mathematics 6 and to other Math major teachers. Teachers are requested to examine the item. Majority of the teachers choose the window cards as stipulated in the research instrument. The researcher conducted a pre and post quarterly tests, which covers all aspects of the topic in the fourth quarter to measure the different levels of learning performances. The test includes 40 multiple choice questions culled out from the Grade 6 Learner's computers. The test was crafted and submitted to the Master teachers for validation scientifically and pedagogically, in terms of the technical material, its suitability to pupils and the clarity of its form. After knowing their views and suggestions, few questions were modified then the test will come out in its final form. The main local of the study is in Biliboy Elementary School in Ormoc City District 4 in the Schools Division of Ormoc City. The assessment given to the respondents was carefully validated by the teacher-researcher himself which are the pretest and posttest test performances of the Grade 4 learners, the different steps in conducting the identified approach were undertaken in order to validate their performances before and after the implementation of interactive media learning materials to the respondents. This study is mainly focus on the results of the different test validation to gather data: The pretest scores performance of the Grade 6 learners before the implementation of the Teacher-made window cards in identifying the performance of the respondents, The Posttest scores performance of the Grade 6 learners after the implementation of the Teacher-made window cards as well as the significant difference of the pretest and posttest performances before and after the implementation of the Teacher-made window cards in the delivery of the most essential learning competencies in teaching Mathematics for the 2nd grading Period. In the Quasi- experimental research design, the researcher prepared the different materials which integrating Interactive Strategic intervention Materials. The focus of this study was the Grade 6 learners and those readers who are in the fair and good level of performance in order to improve their performance those on the average level of

performance as well as those learners who were independent learners as well as facilitating in the giving of pretest and posttest to the identified respondents in order to gather necessary data that will be significant in the study; The proposed instructional supervisory Plan was taken based on the findings of the study.

Sampling. There are 18 total number respondents who are included in the study. There were 11 Male and 7 Females with a 18 total number of respondents. The respondents or the grade 6 learners were being identified based on the performance of learners, and the primary means of reach is during the actual conduct of the study as well as during the gathering of data in the school where the study was conducted.. Another way of contacting them are through cell phones of their respective parents.

Research Procedure. The approved and validated research instrument was reproduced considering the number of expected respondents. The researcher informed the school heads, the district supervisor and the other selected Teachers of her intention of testing the pupils. The request was formalized by a letter to the Schools Division Superintendent and a written request to the District Supervisor, the school heads and the teacher explaining the reasons for the conduct of the study. After classifying the pupils through a drawn by lot into the control group and the experimental group, Pre-test for Quarterly Examination will be conducted to collect and compare the levels of learning of the pupils before the intervention. Lessons in 1st Quarter will be prepared on teacher made window cards from the grade 6 learning competencies. After the intervention, Post Test for 2nd Quarterly Examination was administered to collect data from both groups at the same time. The results were analyzed and interpreted in order to find out if there were increased on the performance level from the pretest to the posttest. Then after the posttest and pretest were analyzed, the posttest result was treated statistically using the test for mean difference. The Approval and recommendation from the Office of the Schools Division Superintendent, as well as to the Assistant Schools Division Superintendent in Ormoc City Division being the Chairman of the Schools Division Research Committee through the Senior Education Program Specialist in Planning and Research. After the Approval of the Schools Division Research Committee, the Approved or endorsement letter from the body together with the approved letter of intent were forwarded to the Office of the Public School District Supervisor as well as to the office of the School principal in order to get full support on the conduct of the study as well as to get also approval from their end. The proposed title and design was submitted to the School Division Office for approval. Upon approval, the Division released endorsement to the District Office where the school is located. When the research was approved by the Schools Division Office and District Office, the researcher began the process of data gathering. Validation of the instruments through Experts such as the Master Teacher in Mathematics and in coordination with the school head and lastly to the Education Program Supervisor in Learning Resource was sought. Orientation of the participants was done. Answering and retrieval of the research tool followed. Tallying of results and treatment of data. Analysis and Interpretation of Data. Making of Proposed Enhancement Plan.

Ethical Issues. The right to conduct the study was strictly adhere through the approval of the Schools Division Superintendent, Public School District Supervisor as well as the approval of the School Principal where the study were conducted. Orientation of the respondents both the learners and the teachers including the School Principal was also done. In the orientation, specially to the parents and or guardian, the process of the study was discussed in order for them to know how and why the study will be done and to reiterate that this study is purely focus on the improvement of the performance of the learners. The need for other data that was needed in the study such as the performance of the school in general based on the different performance indicators, a written permission was sought to the principal confidentiality and anonymity and will be discussed requiring them not to write names on the tools and have to writer pseudonym instead.

Treatment of Data. The following statistical formulas were used in this study:

The quantitative responses were tallied and tabulated. The data was treated statistically using the following statistical tool.

Weighted Mean. This was utilized to assess the numeracy performance of the Grade 6 pupils.

T-Test for Mean Difference- This tool was used to calculate the significant difference of the literacy skills performance of the Grade 6 pupils in Mathematics.

III. RESULTS AND DISCUSSION

TABLE 1
PRE-TEST PERFORMANCE OF GRADE 6 PUPILS IN NUMERACY

Score Range	Description	PRETEST	
		Frequency	%
33-40	Excellent	0	0
25-32	Very Good	0	0
18-24	Good	4	22
9-16	Fair	9	50
1-8	Poor	5	28
Total		18	100
Weighted Mean		11.28	Fair

Table 1 shows the Pretest Performances of the grade 6 learners in the Mathematics subject for the 2nd grading period. In the field of education, improving students' academic performance depends critically on the ongoing search for creative and efficient teaching strategies. The use of teacher-made window cards in mathematics instruction, with a focus on numeracy skills for Grade 6 students, is one such approach that has attracted attention. To ensure that students understand the fundamentals of mathematics, numeracy—a crucial component of mathematical proficiency—requires a thorough and interesting teaching strategy. This research attempts to shed light on how well teacher-made window cards support students in Grade 6 in their numeracy abilities while also offering insightful information for instructional supervision.

A student's mathematical journey reaches a critical turning point when they enter Grade 6, when success in the future depends on having a strong foundation in numeracy. Understanding the value of cutting-edge teaching resources, teacher-made window cards provide a special and engaging way to review mathematical ideas. With the help of these thoughtfully crafted educational cards, teachers can accommodate a wide range of learning preferences while offering a tactile and visual aid that helps students understand operations and relationships with numbers. The purpose of the study is to determine how these window cards' integration affects Grade 6 students' numeracy abilities.

The pretest results of Grade 6 students' numeracy performance are shown in Table 1, which groups students into distinct score ranges and provides corresponding frequencies and percentages. The lack of students in the "Excellent" and "Very Good" categories suggests that the cohort does not include many high achievers. Rather, the majority of the students—50% of them—fall into the "Fair" category. A moderate amount is classified as "Good" (22%), while a lesser amount is classified as "Poor" (28%). The data presentation shows how the Grade 6 cohort's numeracy skills are distributed, displaying a wide range of proficiencies.

The weighted mean of 11.28 and the 50% frequency both show a central tendency towards the "Fair" category when the data is analyzed. The lack of pupils in the top two groups points to a general lack of high-achieving numeracy

abilities in the group at baseline. A subgroup experiencing difficulties with numeracy is indicated by the comparatively higher percentage in the "Poor" category. The distribution emphasizes the necessity of focused interventions, especially for individuals who don't fit into the "Fair" category. The frequency breakdown also highlights the diversity within the Grade 6 cohort by providing insights into the distribution of proficiency levels.

Comprehending the implications of the distribution is central to the pretest data interpretation. The category "Fair," with a weighted mean of 11.28, indicates that Grade 6 students have an average level of numeracy proficiency. The way students are distributed among the categories suggests that a large percentage of them are beginning from a baseline where they have both strengths and weaknesses. A significant portion of the cohort falls within the numeracy skills central tendency, as indicated by the higher percentage in the "Fair" category, which is consistent with the moderate mean. While the "Poor" category indicates a subgroup in need of more support and concentrated attention, the "Good" category indicates a subset of students with a comparatively stronger foundation.

The breakdown of the score range offers particular insights into the distribution of numeracy abilities. The lack of students in the top two categories suggests that higher-level numeracy skills need to be fostered through interventions. The cohort appears to have some foundational skills, but they need to be reinforced and improved, as indicated by the majority of them falling into the "Fair" category. A subgroup with a stronger baseline is identified by the "Good" category, which may be used as a guide for efficient teaching techniques. With 28% of students falling into the "Poor" category, this underscores a critical area in need of focused support to close foundational gaps and improve performance.

There are important educational implications for the pretest data. The Grade 6 cohort's diverse range of numeracy skills is indicated by the central tendency towards the "Fair" category, indicating the necessity for instructional strategies that address these differences. The lack of high achievers suggests that advanced students may be lacking in difficult and engaging materials. The fact that there is a subgroup within the "Poor" category emphasizes how crucial remedial interventions are in addressing underlying issues. Teachers can use this information to modify their lesson plans and introduce differentiated teaching strategies to meet the needs of their students.

The outcomes of the pretest provide a basis for the following analysis of the efficacy of window cards created by teachers. Future studies could investigate focused interventions to improve the numeracy skills of students in the "Poor" category and go deeper into understanding the particular difficulties these students face. Further research may also look at how these interventions affect students in Grade 6's general mathematical competency over the long run.

In conclusion, a thorough grasp of the numeracy performance of Grade 6 students is provided by the presentation, analysis, and interpretation of the pretest data. The knowledge gathered from this data not only informs instructional strategies but also provides a foundation for the next study on the efficacy of window cards made by teachers, with important implications for both future directions in research and educational practice.

TABLE 2
POST TEST PERFORMANCE OF GRADE 6 PUPILS IN NUMERACY

Score Range	Description	POST TEST	
		Frequency	%
33-40	Excellent	6	33
25-32	Very Good	9	50
18-24	Good	3	17
9-16	Fair	0	3
1-8	Poor	0	0
Total		18	100
Weighted Mean		29.50	Very Good

Table 2 shows the Posttest Performances of the grade 6 learners in the Mathematics subject for the 2nd grading period. Based from the results given by the grade 6 learners. The numeracy posttest results for Grade 6 students are shown in Table 1, which also includes corresponding frequencies and percentages. The students' performance is divided into various score ranges. The distribution of the posttest results shows a noticeable shift, in contrast to the pretest. The majority of students (50%) now fall into the "Very Good" category, with 33% classified as "Excellent." The lack of students in the "Fair" and "Poor" categories suggests that the cohort's overall numeracy proficiency has improved. The category of "Very Good," with a weighted mean of 29.50, highlights the improvement in the overall performance of Grade 6 students and suggests further research directions.

Pupils in Grade 6 have significantly improved their numeracy skills, according to an analysis of the posttest data. The change toward higher categories, especially with 50% of the responses falling into the "Very Good" range, suggests that the intervention—likely the teacher-made window cards—had a beneficial effect. The lack of pupils in the lower performance groups indicates that the fundamentals of numeracy have been successfully improved. The statistically significant rise in the percentage of students rated as "Excellent" indicates that a sizable proportion of the class attained a higher proficiency level. This upward trend is reinforced by the weighted mean of 29.50, which shows a general shift in the direction of greater numerical accomplishments.

The posttest data interpretation is characterized by an improvement in numeracy performance. The weighted mean of the pretest was 11.28 (Fair), whereas the posttest showed a shift to 29.50 (Very Good), indicating the effectiveness of the intervention (presumably the teacher-made window cards). The lack of pupils in the "Fair" and "Poor" categories points to effective remediation and focused assistance. The proportion of pupils falling into the "Very Good" and "Excellent" categories has increased, suggesting a significant advancement in numeracy abilities. This interpretation is consistent with the notion that the teaching approach improved the students' overall mathematical competency in Grade 6.

The posttest data's score range distribution suggests that most students have advanced to higher levels of numeracy proficiency. The noteworthy proportion in the "Very Good" category denotes a group that has outperformed the baseline and developed a solid understanding of mathematical concepts. The fact that there are no students in the lower categories indicates that the intervention was successful in closing foundational gaps and distributing higher-level numeracy skills among Grade 6 students in an equitable manner.

The posttest results have important significant impact to learners development. The improvement in numeracy

performance suggests that the teaching method—likely the teacher-made window cards—was successful in raising the students' level of mathematical proficiency in Grade 6. Teachers can use this achievement as a springboard to continue refining and implementing creative teaching strategies. The fact that there are no students in the lower categories supports the idea that specialized instruction plays a major role in improving academic performance by demonstrating that focused interventions can effectively close foundational gaps. Although the posttest results demonstrate the success of the intervention, more investigation is needed to pinpoint the precise elements of the teacher-made window cards that were responsible for this improvement. The creation of comparable tactics for different grade levels or subjects may benefit from an understanding of the subtleties of the intervention's effects. It would also be beneficial to look into the sustainability of the observed improvements over the long run in order to inform future practices in education. There is strong evidence of the beneficial effects of the teacher-made window cards on the numeracy performance of Grade 6 students from the presentation, analysis, and interpretation of the posttest data. The weighted mean of 29.50 and the significant shift towards higher categories highlight the intervention's effectiveness and provide insightful information for future research directions and educational practice.

TABLE 3

TEST OF DIFFERENCE BETWEEN THE SCORES IN THE PRE-TEST AND POST-TEST OF GRADE 6 PUPILS IN NUMERACY

Aspects	Test Scores		Computed T	Critical T	Decision	Interpretation
GRADE 6 Pupils in Numeracy	Pre Post	11.28 29.50	2.187	0.934	Reject H_0	Significant

Table 3 presents the test of difference between the test scores in the pretest and posttest performances gained by the Grade 6 learner before and after the teacher-researcher integrated the teacher-made window cards in Teaching Grade 6 Mathematics. The results of a test measuring the difference between Grade 6 students' numeracy pretest and posttest scores are shown in Table 3. The posttest mean score increased to 29.50, a significant increase from the pretest mean score of 11.28. With a critical t-value of 0.934, the computed t-value is 2.187. The null hypothesis (H_0), which proposes a significant difference between the pretest and posttest scores, is rejected based on the statistical test. With the support of statistical analysis, this presentation offers an understandable numerical depiction of the increase in numeracy performance. Interpreting the outcomes of statistical tests is a part of the data analysis process. The null hypothesis is rejected because the computed t-value of 2.187 is greater than the critical t-value of 0.934. This suggests that there was a statistically significant difference in the numeracy pretest and posttest scores of Grade 6 students. The significant improvement in numeracy proficiency is indicated by the mean scores rising from 11.28 to 29.50. The calculated t-value surpassing this threshold, which is 0.934, indicates the critical t-value, which indicates the significance of differences. This suggests that the teacher-made window cards were an effective intervention.

The results in table 3 implied that the null hypothesis was rejected, indicating that the intervention was the cause of the observed improvement in numeracy performance rather than a random event. The noteworthy rise in average scores between the pretest and posttest suggests that sixth-grade students' numeracy abilities significantly improved. The idea that the teacher-made window cards had a statistically significant impact on the mathematical proficiency of Grade 6 students is further supported by the computed t-value being higher than the critical t-value, which further reinforces the robustness of the observed improvement.

There has been an improvement in the overall numeracy performance, as evidenced by the posttest score range and frequency distribution. The posttest results showing no students in the "Fair" or "Poor" categories indicate that the intervention was successful in filling in the foundational gaps and moving students up to higher proficiency levels. The increased frequencies in the "Very Good" and "Excellent" categories indicate a notable advancement, demonstrating that a considerable proportion of the Grade 6 class has attained excellent numeracy abilities. The test results' statistical significance has important educational ramifications. The effectiveness of the teaching approach—likely the teacher-made window cards—is demonstrated by the improvement in numeracy performance that has been observed. This achievement can serve as a model for teachers looking to integrate similar cutting-edge techniques into their lesson plans. The importance of the results also emphasizes how customized interventions could close foundational gaps and improve students' overall academic performance. Even though the current study shows how effective the intervention is, more research could focus on the precise processes by which teacher-made window cards affect students' numeracy abilities. Future educational interventions could benefit greatly from an examination of the long-term sustainability of the observed improvements as well as any potential variations in effectiveness across various student demographics or learning styles. Table 3, all serve to support the beneficial effects of the teacher-made window cards on the numeracy performance of Grade 6 students. The effectiveness of the intervention is confirmed by the statistical significance of the difference between pretest and posttest scores, which has important implications for future research directions and educational practice.

IV. CONCLUSION

Based on the findings of the study, it shows that the drill cards is significantly effective in improving the performance of the grade 6 learners in the delivery of the different learning competencies in Mathematics subject. Furthermore, The fact that there are no students in the "Fair" or "Poor" categories indicates that the intervention was successful and highlights the usefulness of focused interventions in closing foundational gaps. This result not only emphasizes the commitment and hard work of teachers and students, but it also shows how flexible and effective the instructional strategies used were. The higher frequencies found in the "Very Good" and "Excellent" categories stand out in particular because they show that a sizable portion of the student body has significantly improved in their numeracy skills. This encouraging development is not only good news for individual student performance, but it also demonstrates the efficacy of the larger educational strategy, which has helped to raise the cohort of Grade 6 students' overall numeracy proficiency to an impressive level.

V. RECOMMENDATIONS

1. The instructional supervisory plan should be utilized by the Grade 4 teachers to further enhance the skills or performance of the learners in Mathematics particularly on the different mathematical operations.
2. The Teachers Instructors ought to keep using cutting-edge tactics that have helped students' numeracy skills significantly improve, like creating their own window cards. In order to accommodate different learning styles in the classroom, this may entail combining a variety of teaching methodologies and individualized approaches.
3. The Master Teachers should always give technical assistance and provide comprehensive validation of assessment crafted and participate in cooperative planning meetings with other teachers to exchange effective teaching strategies and create a group resource bank.
4. The School Principal should give teachers continual opportunities for professional development so they can improve their ability to apply cutting-edge teaching techniques. Workshops, seminars, and training sessions

centered on the newest pedagogical developments in mathematics education may be the main focus of the School Head. Provide funds to enable the ongoing use of efficient teaching resources and tools, such as window cards created by teachers and give access to the tools and resources they need to keep creating a vibrant and stimulating learning environment.

5. The school Head should promote the application of data-driven decision-making techniques for ongoing evaluation of the effects of educational interventions. Analyze student performance data on a regular basis to pinpoint areas that require improvement and to help you decide how best to allocate resources and support professional growth of teachers as well as to supply the learning gap of learners.
6. The Education Program Supervisor should speak up in favor of the DepEd policies that encourage the use of cutting-edge teaching strategies in math classes. Strive to establish a policy environment that is encouraging and supportive of experimenting with effective teaching methods.
7. The parents should encourage their child to take an active role in learning Mathematics competencies. Keep yourself updated on the instructional strategies being employed, and facilitate their learning process by creating a welcoming environment for practice and inquiry. Keep lines of communication open with teachers so you are aware of your child's development and any areas where extra help might be needed. Work together with teachers to support learning at home.
8. Furthermore, the researcher allows future researchers to provide a more nuanced understanding of their impact on numeracy skills, conduct additional in-depth investigations into the particular components of the successful intervention, including the role of teacher-made window cards.

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