

Determining Homework-Academic Achievement Relationship in Basic Mathematics

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Abstract— This study determines the effects of homework on the academic achievement of the learners in Mathematics at Don Vicente Rama Memorial Elementary School, Cebu City during the school year 2018-2019. The researchers utilized a quasi-experimental research design aided with a 40-item standardized questionnaire taken from the Philippine Department of Education. The study a non-probability sampling technique where in 2 out from the 12 sections were chosen to represent as the control and experimental groups. Each group has 40 students. These groups were pre-tested and post-tested. The study utilized the paired-sample t-test and the t-test for independent samples in the analysis of data. The findings revealed that the learners from the two groups have significantly improved their performance in the posttest. However, the learners from the classroom with homework have performed significantly higher than the group without homework. Furthermore, the parents are very positive about the nature of giving homework to the learners in Mathematics. Thus, the researchers safely conclude that homework plays an important role in enriching the learners' learned concepts which directly contribute to their academic achievement in the class.

Keywords— Academic Achievement, Basic Mathematics, Homework, Quasi-Experimental.

I. INTRODUCTION

Homework is a set of tasks assigned to the learners by their school teachers intended to perform during non-school hours (Cooper et al., 2012) and has proven to improve academic achievement of the learners with particular characteristics (e.g., Dettmers et al., 2010; Fernández-Alonso et al., 2015; Rosário et al., 2015a). This definition specifically includes a quantity of reading to be performed, writing, or typing to be completed, math problems to be solved, materials to be studied before a test, or other skills to be learned. Epstein and Van Voorhis (2001) and Rosário et al. (2015) specified the two purposes of homework, the instructional and the non-instructional objectives. In the Philippines, learners are provided by their teachers tasks to complete after school hours most of the time these intend to enrich the skills of the learners or prepare them for the next lesson.

The instructional purpose of homework seeks to provide learners the opportunity to review the materials that has already been presented in the class and to integrate the learned skills and concepts (Becker & Epstein, 1982; Lee & Pruit, 1979). On the other hand, non-instructional purpose of homework includes establishing communication between parent and child (Gonzalez et al., 2001). Even though studies have pointed out the positive purposes of homework, global issues on the effects of homework have been arising. For instance, a Time magazine cover in 1999 speaks to us the sentiments of parents to their kids for they thought that too much homework is hurting their kids. This pushed some academicians to take some actions to eliminate this burden on the kids and made a "no-homework policy" (Reilly, 2016).

The Department of Education (DepEd) in the Philippines has ordered the school heads of all public primary schools to refrain from giving learners homework during weekend so that they can have time with their families and for the pupils to enjoy their childhood and spend quality time with their parents without having to worry about doing lot of homework through DepEd Memorandum Order 392, series of 2010 (Aurelio, 2023). In addition, Villano (2010) of Philstar Global reported that DepEd secretary Armin Luistro asked teachers to limit homework delivery to a reasonable amount. These movements toward limitation up to removal of homework to learners could also have some negative impacts to their academic performance. Moreover, Benjo Basas, president of the Teachers' Dignity Coalition, said that the memorandum is unnecessary and violates the academic freedom of educators to give their learners the best education possible.

Additionally, in a random interview the teachers stressed that need to improve the performance of the learners, hence they are working diligently to plan lessons and learning-promoting activities. A natural step in today's classroom is the corresponding role of assigning homework. Teachers feel that in the specific content area, the completion of these homework will strengthen and enhance learner skills. Thus, they would be interested in learning of ways to help increase the consistency with which learners complete these assignments.

To study the relationship between homework and achievement, researchers performed extensive research. A significant number of studies have shown the positive effects of completing homework on the academic achievement of learners across several topics (see, for example, the meta-analyses by Cooper, Robinson, & Patall, 2006, and Fan et al., 2017). Futhermore, Nuňez et al. (2015) pointed out that learner homework behaviors and academic achievement are significantly correlated to each other. In addition, Epstein and van Voorhis (2001) asserts homework as a natural school and home connector. In these ways, homework is one of the most common school activities involving teachers, learners, and parents (Rosário et al., 2015). However, the report of the Organization for Economic Cooperation and Development's Program for International Student Assessment (OECD PISA) in 2009 says the opposite that after around four hours of homework per week, the additional time invested in homework has a negligible impact on students' performance (OECD, 2014).

Most of the studies (Fan et al., 2017; Nuňez et al., 2015) indicated that doing homework greatly contributed to secondary learners' academic achievement but uncertainly contributed to elementary learners' academic standing. Hence, the effect of homework on elementary levels (specifically, intermediate level) needs to be explored. Accordingly, Copper (2001) invites the researchers to conduct more studies on the contribution of homework to the academic undertakings of the learners. Thus, a quasi-experiment is conducted to determine the effects of homework on the intermediate level learners' academic performance in basic Mathematics.

II. RESEARCH METHODOLOGY

Design

The study utilized the quasi-experimental research utilizing the pretest-posttest non-equivalent groups design (Cook & Campbell, 1979). A quasi-experimental design was a research design wherein there is the presence of the control group and experimental group however no randomization. The control group was the group without homework given. On the other hand, the experimental group was the group in which homework was given every day. Besides, each group had been pre-tested and post-tested in Basic Mathematics. Moreover, the study primarily determines the effectiveness of homework in improving the learners' performance in Basic Mathematics.

Environment

The study was conducted at Don Vicente Rama Memorial Elementary School. The said school belongs to DepEd, Division of Cebu City. The school has one of the biggest populations of elementary public school learners in the division.

Participants

The participants of the study were Grade IV learners. These participants were taken from the two out of the eight Grade IV sections of the school. The sections were chosen using a non-probability sampling technique. There are 80 learners from the two sections in which there were 40 learners per section. Section A was assigned as the control group and section B as the experimental group.

Instrument

The study used an adapted questionnaire from the Department of Education Learning Portal (DepEd, 2022). The questionnaire was standardized instrument provided by the Department of Education Republic of the Philippines for the public elementary schools. The questionnaire was a multiple-choice type with 40 questions. The questionnaire that was used in the pre-test was the same questionnaire that was used in the post-test.

Data Collection

The researchers assigned the learners into two (2) groups, the control and experimental groups, and conducted the pre-test in Mathematics. The result from the pre-test was then analyzed to determine if the two groups were comparable. The two groups prior to the start of the experiment must have no significant difference in their learners' performance.

The delivery of the lessons was then started. In the experimental group, the teacher gave homework after the delivery of the lesson and for the next day prior to the introduction of the new topic the homework was checked. There were cases that the teacher will let the learners from the experiment group read some articles at home which have connections to the new topic to be introduced. On the other hand, there was no homework given to students from the control group. All the activities like reading articles were done in school and during the allotted time for the subject. These were routine activities made until the end of the duration of the experiment. The experiment lasted for two months. After the thorough experiment, the researchers conducted a post-test to the two groups in Mathematics. The results in the pre-test and post-test were then analyzed.

Data Analysis

The study utilized the paired-sample t-test and the t-test for independent samples. Paired-sample t-test was used to determine if there was significant improvement on the students' performance in both groups after the experiment. On the other hand, T-test for independent samples was used to determine if the performance of the students from the two groups was significantly different or not before and after the experiment.

III. RESULTS AND DISCUSSION

Pre-Test Performance in Mathematics of the Learners Immersed in a classroom with and without Homework

The pre-test performance of the learners deals with their performance prior to the start of the experimental process. The pre-test performance in basic Mathematics of the learners immersed in a classroom without and with homework is shown in Table I and Table II, respectively.

Furthermore, the pre-test performances of the learners in Mathematics are assessed in relation to the six (6) competencies: identifies the multiples and factors; identifying proper fraction, improper fraction and mixed number; adding and subtracting similar and dissimilar fractions; reading and writing decimal numbers through hundredths; differentiating prime from composite numbers; and finding the GCF and LCM of two numbers.

Table I reveals that the learners who are immersed in a classroom without homework had performed the highest of MPS 47.25 in the competency, adding and subtracting similar and dissimilar fractions. However, the learners have performed very low of MPS 27.50 in the competency, differentiating prime from composite numbers. These indicate that the learners have are more knowledgeable on the topics related to fractions than the concepts under number theory such as composite and prime numbers. Martin (2011) stressed that Mathematics teachers must only give the definitions of such but also provide various applications for concept mastery. Furthermore, Duzenli-Gokalp

and Devi Sharma (2010) averred that conceptual and procedural understanding of the learners helps in dealing with the addition and subtraction of fractions.

TABLE I. Pre-test Performance of the Learners in a Classroom without

Homework in Mathematics									
Competencies	MPS	Interpretation							
Identifies the multiples and factors of a	16.25	Did not Meet							
given number up to 100	40.23	Expectation							
Identifying proper fraction, improper	40.50	Did not Meet							
fraction, and mixed number	40.30	Expectation							
Adding and Subtracting Similar and	17.25	Did not Meet							
Dissimilar fractions	47.23	Expectation							
Reading and Writing Decimal Numbers	25 12	Did not Meet							
through Hundredths	55.42	Expectation							
Differentiating prime from composite	27.50	Did not Meet							
numbers	27.50	Expectation							
Finding the GCF and LCM of two	22 50	Did not Meet							
numbers	33.30	Expectation							
Overall Performence	28 40	Did not Meet							
Overall reflormance	56.40	Expectation							

Note. n = 40. MPS- Mean Performance Score. 90-100% - Outstanding; 85-89% - Very Satisfactory; 80-84% - Satisfactory; 75-79% - Fairly Satisfactory; 74% and below – Did not Meet Expectation.

In general, the overall pre-test performance in basic Mathematics shows that the learners who are immersed in a classroom without homework did not meet the expected performance. This implies that the learners who underwent the pre-test do not have the necessary knowledge and skills for them to pass the examination in all the stipulated competencies in Mathematics. According to studies, most of the learners performed low in the examination due to lack of knowledge and non-mastery of concepts on the topics tested.

FABLE II.	Pre-test	Performance	of the	Learners	in a	Classroom	with
		Homework	in Mat	hematics			

Competencies	MPS	Interpretation
Identifies the multiples and factors of a	52 22	Did not Meet
given number up to 100	55.55	Expectation
Identifying proper fraction, improper	42.50	Did not Meet
fraction, and mixed number	42.30	Expectation
Adding and Subtracting Similar and	50.75	Did not Meet
Dissimilar fractions	50.75	Expectation
Reading and Writing Decimal Numbers	26.25	Did not Meet
through Hundredths	30.25	Expectation
Differentiating prime from composite	20.00	Did not Meet
numbers	30.00	Expectation
Finding the GCF and LCM of two	22.00	Did not Meet
numbers	33.00	Expectation
Overall Performance	42.50	Did not Meet
Overall Performance	42.50	Expectation

Note. n = 40. MPS- Mean Performance Score. 90-100% - Outstanding; 85-89% - Very Satisfactory; 80-84% - Satisfactory; 75-79% - Fairly Satisfactory; 74% and below – Did not Meet Expectation.

The knowledge of the learners to the topics being tested greatly affects their performance scores. Lack of knowledge may trigger the learners to guess the correct answer which may lead to incorrect ones. Aside from that, the learners' lack of knowledge on such leads to their failure in the examination.

Table II reveals that the learners who are immersed in a classroom with homework have performed the highest of MPS 53.33 in the competency; identifies the multiples and factors of a given number up to 100. However, the learners have

performed very low of MPS 30.00 in the competency, differentiating prime from composite numbers. This implies that learners have prior knowledge in identifying multiples and factors of numbers not greater than 100. However, the greatest deficiency in the concepts of prime and composite numbers is found.

In general, the overall pre-test performance in basic Mathematics shows that the learners who are immersed in a classroom with homework did not meet the expected performance. This explains that learners in this group have not mastered the Mathematical competencies tested in the pre-test. In addition, Adeyemo and Babajide (2014) indicated that the use of the Mastery Learning Approach (MLA) guides learners in the mastery of content which allows them to be engaged in unlimited opportunities. However, if pre-requisite contents were not properly taught or delivered by the teachers, the experiences of the learners challenging with the new lessons.

The insufficient background of the pre-requisite knowledge of the learners on the tested contents made their examination challenging. Challenging in the sense that they find the examination hard and only critical analysis will be applied worse if guessing will be used. With such, the performances of the learners are expected to be low which clearly shows their insufficient knowledge of the topics assessed.

Post-Test Performance in Mathematics of the Learners Immersed in a Classroom without and with Homework

The post-test performance of the learners deals with their performance after the experimental process. The post-test performance in basic Mathematics of the learners immersed in a classroom without and with homework is shown in Table 3 and Table 4, respectively. The raw score, the mean performance score, and the mean percentage score are shown to clearly present the performance of the learners. There are 40 learners who are involved in the said post-test.

Furthermore, the post-test performances of the learners in Mathematics are assessed in relation to the six (6) competencies: identifies the multiples and factors; identifying proper fraction, improper fraction, and mixed number; adding and subtracting similar and dissimilar fractions; reading and writing decimal numbers through hundredths; differentiating prime from composite numbers; and finding the GCF and LCM of two numbers.

TABLE III. Post-test Performance of the Learners in a Classroom without Homework in Mathematics

Home work in Mathematics								
Competencies	MPS	Interpretation						
Identifies the multiples and factors of a	70.00	Did not Meet						
given number up to 100	70.00	Expectation						
Identifying proper fraction, improper	19.00	Did not Meet						
fraction, and mixed number	48.00	Expectation						
Adding and Subtracting Similar and	66 50	Did not Meet						
Dissimilar fractions	00.30	Expectation						
Reading and Writing Decimal Numbers	27.50	Did not Meet						
through Hundredths	57.50	Expectation						
Differentiating prime from composite	40.00	Did not Meet						
numbers	40.00	Expectation						
Finding the GCF and LCM of two	28.00	Did not Meet						
numbers	38.00	Expectation						
Overall Derformen as	51.12	Did not Meet						
Overall Performance	51.15	Expectation						

Table III reveals that the learners who are immersed in a classroom with homework have performed the highest of MPS 70.00 in the competency; identifies the multiples and factors of a given number up to 100. However, the learners have performed very low of MPS 37.50 in the competency, reading and writing decimal numbers through hundredths. Better performance in the concepts of multiples and factors of numbers not greater than 100 compared to other mathematical competencies due to its complexities. In which this competency only requires simple recall and understanding of such.

TABLE IV. Post-test Performance of the Learners in a Classroom with Homework in Mathematics

Competencies	MPS	Interpretation
Identifies the multiples and factors of a given number up to 100	86.25	Very Satisfactory
Identifying proper fraction, improper fraction, and mixed number	56.00	Did not Meet Expectation
Adding and Subtracting Similar and Dissimilar fractions	68.25	Did not Meet Expectation
Reading and Writing Decimal Numbers through Hundredths	65.21	Did not Meet Expectation
Differentiating prime from composite numbers	63.75	Did not Meet Expectation
Finding the GCF and LCM of two numbers	56.00	Did not Meet Expectation
Overall Performance	66.75	Did not Meet Expectation

In general, the overall post-test performance in basic Mathematics shows that the learners who are immersed in a classroom without homework did not meet the expected performance. The results further indicate that the performance of the learners in the Mathematical competencies tested has slightly improved in the post-test. This implies the instruction done by the teacher significantly contributes to the increase in performance of the learners in Mathematics. According to Wood and Gentile (2003), although the results showed a slight improvement in the learners' performance, it is still explained that there are better ways to learn than by traditional methods of instruction. Olatoye (2008) pointed out that traditional methods (reading, laboratory, and recitation methods) do not tend to foster critical and creative thinking and the ability to solve problems.

The use of traditional method in teaching still contributes to learners' knowledge and understanding of the content. They tend to listen to the expert teacher who taught them about the topics and learn the process by the exercise provided. This phenomenon is only applicable to learners who are responsible for their own learning and who are eager to understand the concepts behind every topic taught. The researchers observed that there were learners who never opened their books or even notes of the lesson after the Math class. With this, they did not give importance of practice which greatly contributes and strengthens one's knowledge and understanding about the topic. Brabeck, Jeffrey, and Fry (2017) stressed that deliberate practice is not the same as rote repetition. Deliberate practice involves attention, rehearsal and repetition and leads to new knowledge or skills that can later be developed into complex knowledge and skills.

Table IV reveals that the learners who are immersed in a classroom with homework have performed the highest of MPS 86.25 in the competency; identifies the multiples and factors of a given number up to 100. This indicates that the learners have performed significantly better in this competency.

Seeger et al. (2018) stressed that engagement strategies lead to a better understanding of the concepts on multiples and factors.

However, the learners have performed very low of MPS 56.00 in the competencies, identifying proper fraction, improper fraction, and mixed numbers and finding the GCF and LCM of two numbers. Furthermore, the results explain that the learners encountered difficulty in understanding concepts of fractions, GCF and LCM of two numbers.

In general, the overall post-test performance in basic Mathematics shows that the learners who are immersed in a classroom with homework did not meet the expected performance. Even though the performance of the learners has improved significantly yet deficiency in the performance was still observable. Adeyemo and Babajide (2014) emphasized the need for methods to implement solutions that ensure and improve the learners' better academic achievements, teaching methods which engage learners into learning meaningful experiences.

The use of homework encourages students to review their previous lessons and enrich their understanding of such. In this manner, the learners are expected to have deepened knowledge on the previous topics which may help them to easily understand and comprehend the present or new content.

Difference in the Pre-Test Performance of the Learners Immersed in a Classroom with and without Homework

The difference in the pre-test performance in Mathematics of the learners immersed in a classroom with and without homework is determined if they differ significantly at α level of significance, 0.05. The mean, standard deviation, and t-test for independent samples are employed to perform the analysis.

TABLE V	. Difference in	the Pre-test	Performance	of the Learner	s Immersed in a	Classroom	with and	without	Homework

	Groups	n	MPS	SD	t-value	p-value	Decision	Interpretation	
	With Homework	40	42.50	4.50	006	222	Eail to Daiget He	Not Conificant	
	Without Homework	40	40.00	4.48	.990	.322	Fall to Reject Ho ₁	Not Significant	
lota Laval of Significance	a 0 05								

Note. Level of Significance α 0.05

Table V indicates that there is no significant difference in the pre-test performance in Mathematics of the learners who are immersed in the classroom with and without homework since p-value (0.322) is greater than α level of significance, 0.05. This explicates that the two groups (experimental and control groups) of learners have performed similarly in the pre-test. Also, the results reveal that the two groups of learners are comparable to each other. Furthermore, the results imply that



the control group and the experimental group have similar baseline knowledge on the Mathematical competencies tested. Schalich (2015) stressed that the learners from the two groups have analogous performance in the pre-test which indicates that they have performed comparably prior to the intervention.

TABLE VI. Difference Between the Pre-test and Post-test Performance of the Learners Immersed in a Classroom without Homework											
	Observations	n	MPS	SD	t-value	p-value	Decision	Interpretation			
	Pre-test	40	40.00	4.48	5 16	000	Deiget He	Cignificant			
	Post-test	40	51.13	4.81	-3.40	.000	Reject Ho ₂	lo ₂ Significant			

Note. Level of Significance $\alpha 0.05$

TABLE VII. Diffe	erence Between th	ne Pre	-test and	Post-tes	t Performa	nce of the I	Learners Imme	rsed in a Classroor	
	Observations	n	MPS	SD	t-value	p-value	Decision	Interpretation	
	Pre-test	40	42.50	4.50	12.02	000	Deiget He	Cionificant	
	Post-test	40	66.75	5.46	-12.95	.000 R	Reject Ho ₃	$\mathbf{K} = \mathbf{K} \mathbf{H} \mathbf{O}_3$	Significant

Note. Level of Significance $\alpha 0.05$

The comparable performances of the learners from the two (2) different groups prior to the start of the experiment strengthen the validity of the experiment. The comparable performances entail that the performance of the learners are the same which clearly indicates that biases in grouping is eliminated. With this, the posttest results will be associated as the effects of the teaching methods used by the teacher.

Difference between the Pre-Test and Post-Test Performance of the Learners Immersed in a Classroom without Homework

The difference between the pre-test and post-test performance in Mathematics of the learners immersed in a classroom without homework is to determine if they differ significantly at α level of significance, 0.05. The mean, standard deviation, and paired-sample t-test are employed to perform the analysis.

Table VI shows that there is a significant difference between the pre-test and post-test performance in Mathematics of the learners immersed in a classroom without homework since pvalue (0.000) is less than α level of significance, 0.05. This indicates that the performance in Mathematics of the learners has significantly increased in the post-test of MPS 20.48 compared to their performance in the pre-test of MPS 16.00. This implies that the conventional instruction utilized by the teacher contributed to the improvement in the Mathematics performance of the learners. Lessani, Yun, and Abu Bakar (2017) stressed that Mathematics teachers are still utilizing the traditional method of teaching without giving homework to the learners for it is still considered to be an effective strategy in delivering one's lesson. The effectiveness of direct instruction is still inevitable. Nobody can easily replace the effectiveness of the teacher as an instructional agent of the classroom. However, the delivery of the method is not sufficient if learners will not participate and deal with some activities which enhance their knowledge and skills.

Difference between the Pre-Test and Post-Test Performance of the Learners Immersed in a Classroom with Homework

The difference between the pre-test and post-test performance in Mathematics of the learners immersed in a classroom with homework is determine if they differ significantly at α level of significance, 0.05. The mean performance score, standard deviation, and paired-sample t-test are employed to perform the analysis.

Table VII indicates that there is a significant difference between the pre-test and post-test performance in Mathematics of the learners immersed in a classroom with homework since p-value (0.000) is less than α level of significance, 0.05. This explains that the performance in Mathematics of the learners has significantly increased in the post-test of MPS 26.95 compared to their performance in the pre-test of MPS 17.00. This implies that the instruction added with homework employed by the teacher contributed much to the improvement in the Mathematics performance of the learners. Nuňez et al. (2015) and Hong, Mason, Peng, and Lee (2015) suggested that the homework activity of the learners is strongly linked to their academic performance regardless of their level of education.

TABLE VIII. Difference in the Post-test Performance of the Learners Immersed in a Classroom with and without Homework

Groups	n	MPS	SD	t-value	p-value	Decision	Interpretation
With Homework	40	66.75	5.46	5 (2)	000	Daire of Had	C::C
Without Homework	40	51.13	4.81	5.624	.000	Reject Ho4	Significant

Note. Level of Significance $\alpha 0.05$

The homework activity contributed to the performance of the learners in the posttest. Homework engages learners to meaningful experiences in which it encourages them to apply the knowledge and skills they have learned in the classroom through constant and deliberate practice. Deliberate practice (DP) pertains to the activities purposely designed to enhance performance (Gobet & Campitelli, 2007). In addition, Campitelli and Gobet (2011) asserted that DP occurs when an individual intentionally repeats an activity to improve his performance. This explicates the willingness of the learners to perform the tasks provided by the teacher for them to do at home. With this, the importance in doing the tasks must be emphasized by the teacher for the learners to perform it at home without their direct supervision. Yet, if parents' responsibilities to their child's learning are strengthened, then supervising the child while doing the tasks at home will be done by the parents.



Difference in the Post-Test Performance of the Learners Immersed in a Classroom with and without Homework

The difference in the post-test performance in Mathematics of the learners immersed in a classroom with and without homework is to determine if they differ significantly at α level of significance, 0.05. The mean performance score, standard deviation, and t-test for independent samples are employed to perform the analysis.

Table VIII reveals that there is a significant difference in the post-test performance in Mathematics of the learners who are immersed in the classroom with and without homework since p-value (0.000) is less than α level of significance, 0.05. This explains that the two groups (experimental and control groups) of learners have performed significantly different from each other. Also, the results reveal that the learners' high improvement is shown in the group wherein homework is evident every after school. Kukk and Piht (2015) and Painter (2003) have indicated that homework increases learners' level of knowledge in a particular subject. In addition, Kidwell (2004), Painter (2003), and Kukk and Piht (2015) stressed that homework helps the subject to be practiced, used, and confirmed, cultivates independently study habits which build discipline and willpower, and increases interest in the subject.

The tasks provided by the teachers for the learners to perform at home or during non-school hours have proven to improve academic achievement of the learners (Fernández-Alonso et al., 2015). These tasks help learners enrich their understanding about the lessons taught in school. The completion of homework does not only develop learners' understanding about the concepts taught in school but also provides the parents and the child an avenue to interact and strengthen relationships. Parents are given the chance to share their knowledge or ideas with their child which may motivate the child to perform well in his life as a learner.

Parents' involvement in the education of the child has been proven by several studies as a very effective factor to the education of the learners. Chen (2008) asserted that parental involvement is a key to learner success. In this case, learners achieve more in school when their parents are involved in their education.

IV. CONCLUSION

Based on the findings, the researchers safely conclude that homework plays an important role in enriching the learners' learned concepts which directly contribute to their academic achievement in the class. Mathematical concepts need to be deepened through additional tasks after school for full understanding. Thus, homework is necessary for building a complete conceptual understanding of Mathematics wide coverage. In addition, the findings affirm the Scaffolding Theory of Vygotsky which states that with the assistance of the teacher or knowledgeable other, the learner learns. The giving of homework encourages parents and knowledgeable others to guide or assist the child until the child can independently learn.

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