The Effect of the Take and Give Learning Model on Learning Outcomes and Learning Motivation Elementary School Students

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Abstract. The purpose of this study was to determine the effect of the take and give learning model on learning outcomes and learning motivation of elementary school students. The subjects in this study were 50 grade IV students at SD Negeri 106177 Tungkusan. This research method is a quasi-experimental design pretest and posttest. Instruments and data collection techniques in the form of motivational questionnaires and learning achievement tests. The data were analyzed using a two-way ANOVA, but previously tested for normality and homogeneity of the research data. The results of the study show that 1) there is a difference in the increase in mathematics learning outcomes of students who are taught through the take and give learning model and students who are taught through the ordinary learning model; and 2) there are differences in increasing the learning motivation of students who are taught through the take and give learning model with students who are taught through the ordinary learning model.

Keywords: Take and give, learning outcomes, learning motivation

1 Introduction

Teachers are the key and at the same time the initiate of accomplishing the mission of instructive recharging, they are at the central point for organizing, coordinating and making an air of educating and learning exercises, to attain the objectives and mission of national instruction. One of the teacher's endeavors in achieving instructive goals is to supply teaching that's up-to-date and in understanding with desires of understudies. Instructors have to be apply learning models that offer assistance understudies accomplish their learning objectives.

The utilize of the learning demonstrate utilized by the educator who is considered to be able to maximize learning is in reality not certain to be able to maximize understudy exercises which have an affect on learning results in learning, the reason is that amid the method of carrying out learning utilizing this learning demonstrate, the instructor has not connected it legitimately not however in understanding with the characteristics understudies and fabric (Hasairin, 2018).

According to Manalu, et al (2021) a teacher can choose one of several strategies that we know that can be used in the learning process and the strategy used is expected to have a good influence on the progress of students in learning activities to achieve the goals to be achieved.

A lesson that requires a assortment of educating procedures is arithmetic since until presently there are still issues in learning science. Concurring to IMD WCY (2014: 3) the learning results of Indonesian understudies at the universal level are still slacking behind compared to other nations. This will be seen from the comes about of the overview. World competitiveness your book Indonesia is at level 37 out of 60 nations. Conditions that are not much diverse can be seen from the comes about of a think about conducted by the Program for Universal Understudy Appraisal (PISA) and the Patterns Universal Arithmetic and Science Think about. Tohir (2019) expressed that the comes about of the 2018 Program for Worldwide Understudy Appraisal (PISA) ponder were discharged at the conclusion of 2019. That Indonesia's 2018 PISA positioning has diminished when compared to the 2015 PISA comes about.

Mathematics is known as human life with the implies to prepare considering. It turns out that it's not as it were that that arithmetic is essentially instructed for the attitude of understudies so they can unravel issues and think inventively, fundamentally, consistently, logically, efficiently, and have the capacity to work together in groups (Eviliasani, et al, 2018: 334). Concurring to Abdurrahman (2009: 252) from different areas of ponder that are instructed in schools, arithmetic may be a field of consider that's considered the foremost troublesome by understudies.

Based on information obtained from Mrs. A, S.Pd, class IV teacher at SD Negeri 106177 Tungkusan for the 2022/2023 academic year, out of 50 students, only 30 students (70%) have achieved the Minimum Completeness Criteria (KKM), while 10 students (30%) have not yet reached KKM, so it can be concluded that grade IV mathematics scores at SD Negeri 106177 Tungkusan have not been completed classically.

Factors that cause low math scores in class IV SD Negeri 106177 Tungkusan are students' lack of understanding in learning mathematics so that students are less daring to ask questions, students lack motivation, the learning media used by the teacher is lacking, the learning model used by the teacher is less varied or monotonous, and does not involve students are active in the learning, so that learning mathematics is not interesting and less attractive to students.

Concurring to Purwanto (2014: 46) learning results are instructive accomplishments for understudies who take portion within the instructing and learning prepare, at that point Mulyasa in Istarani (2016: 34) states that learning results are the comes about gotten by a individual after taking learning exercises. This implies, the learning results are acts of behavior as a entire to know human potential. In the mean time, learning inspiration is the driving drive from inside the person to carry out learning exercises to extend information and aptitudes and encounter (Iskandar, 2012: 181).

Student motivation is the most calculate deciding the victory of tall learning results. Understudies who are profoundly spurred in learning will likely get tall learning results as well, meaning that the higher the inspiration, the higher the learning results they get. In arrange for understudy learning results and inspiration to move forward in arithmetic lessons, one way to overcome typically to utilize an curiously learning show for understudies.

There are numerous learning models that can be utilized in an exertion to create understudy learning victory and inspiration to memorize mathematics. One learning demonstrate that's anticipated to be in line with the characteristics of science and the current educational programs desires is the agreeable learning show of the Take and Provide sort. This learning show is coordinated so that learning targets can be accomplished effectively and viably in a cheerful climate even though examining troublesome and troublesome things within the learning prepare. The Take and Allow learning show is helped by utilizing learning media within the frame of cards containing the fabric to be examined.

The Take and Give learning demonstrate must meet a few criteria, to be specific reasonableness, clarity, precision and complexity. Understudies are truly put as learning subjects. The teacher's part in learning with the Take and Allow learning show is as a facilitator. The teacher's errand is to select a issue that must be displayed to the class to illuminate. But it is additionally conceivable that the issue to be fathomed is chosen by understudies. The teacher's following assignment is to supply learning assets for understudies in arrange to unravel issues. Educator direction and supervision is still required but intercession in understudy exercises in issue understanding must be decreased.

Based on the background of the problems above, this study aims to determine the effect of the take and give learning model on learning outcomes and learning motivation of fourth grade students at SD Negeri 106177 Tungkusan.

2 Research Method

This type of research is quantitative with a quasi-experimental type with a pretest posttest control gather plan, which points to see the impact of the autonomous variable on the subordinate variable and to discover out whether there's an impact or something forced on the subject, to be specific understudies.

The sample in this think about was taken as a entire populace, to be specific as numerous as 50 understudies comprising of 25 understudies in lesson IV-A and 25 understudies in course IV-B. The test course is course IV-A by applying the Take and Grant learning show, whereas course IV-B is the control lesson which is instructed utilizing conventional learning. The investigate plan can be seen within the taking after table:

2.1 Headings, tables and figures

Table 1. Research design.

Class	Treatment		
Experiment (*Take and Give*)	O_1	X_1	O_2
Control (Typical)	O_1	-	O_2

Information :
O1 : The initial pretest test was carried out to find out the results of students' mathematics

learning before given treatment.

X1 : Learning with Take and Give

O2 : The posttest final test was carried out for students' mathematics learning outcomes after being given treatment.

Instruments and information collection methods in this ponder are surveys and tests. The information gotten will be analyzed. The information examination methods in this think about are 1) normality test; 2) homogeneity test; and 3) two-way anava test.

3 Result and Discussion

The test was carried out on student learning outcomes twice with the assumption that pretest means before learning is carried out and posttest means after learning is carried out using a learning model. The student mathematics learning achievement test consists of 5 questions in the form of descriptions, both pretest and posttest, with the maximum score for each item being 20.

Information on understudy learning results within the exploratory and control classes will be tried for ordinariness and homogeneity. The ordinariness test for the information pick up gather for students' arithmetic learning results employments the Kolmogrov-Smirnov test with the SPSS 25 program. The decision-making rules are as takes after:

In case the esteem of Sig. (2-tailed) < 0.05, at that point H0 is rejected and Ha is accepted. Alternately, on the off chance that the esteem of Sig. (2-tailed) > 0.05, accepted H0 and Ha rejected

Table 2. Test for Normality of Student Learning Outcomes Data.

	Tests of Normality					
	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	Df	Say.	Statistic	df	Say.
N_Gain_Percent Control	.103	25	.200[*]	.957	25	.359
Experiment	.173	25	.052	.945	25	.192
[*]. This is a lower bound of the true significance.						
a. Lilliefors Significance Correction						

Based on the table over, it was gotten a significant esteem for Shapiro-Wilk that learning the Take and Provide learning show and standard learning had a importance esteem more prominent than 0.05, to be specific 0.359 > 0.05 for the exploratory lesson and for the control lesson the Ngain centrality esteem was 0.192 > .05 at that point the learning information Take and Give and conventional learning are normally distributed.

The test to discover out the homogeneity of the pick up information on students' arithmetic learning results to begin with appears that the Ngain information are normally distributed on the fluctuation of the exploratory and control bunches. The criteria for testing utilizing the Livence test are (Priyatno, 2008) as takes after:

In case the significance value is > 0.05 at that point the variance of the information bunch is homogeneous.

In case the significance value is <0.05 at that point the variance of the information gather isn't homogeneous.

Table 3. Homogeneity Test of Variance of Experimental and Control Groups.

		Levene Statistic	df1	df2	Say.
Test of Homogeneity of Variance					
Mark	Based on Mean	.627	1	48	.433
	Based on Median	.419	1	48	.520
	Based on Median and with adjusted df	.419	1	46.917	.520
	Based on trimmed mean	.550	1	48	.462

Based on the table above, it is found that the significance of the Levene Statistical Test is 0.627, which is 0.433. The research data was declared to be normally distributed and homogeneous, meaning that the research data met the requirements for a parametric statistical test with two-way ANOVA. Following are the results of the two-way Anova test:

Table 4. Two-way Anava Test for Students' Mathematics Learning Outcomes.

Tests of Between-Subjects Effects

Dependent Variable: Mathematics Learning Outcomes

Source	Type III Sum of Squares	Df	Mean Square	F	Say.
Corrected Model	9521.833[a]	5	1904.367	17.603	.000
Intercept	147849.281	1	147849.281	1366.626	.000
CLASS	169.639	1	169.639	1.568	.017
CAME	4071.694	2	2035.847	18.818	.000
CLASS * THU	140.363	2	70.181	.649	.528
Error	4760.167	44	108.186		
Total	292540.000	50			
Corrected Total	14282.000	49			
a. R Squared = .667 (Adjusted R Squared = .629)					

Based on table above, from the calculation of the two-way ANOVA test above the normalized gain of student mathematics learning outcomes, it can be seen that the frequency in the Take and Give learning model and the ordinary learning model is 0.649 with a significance value of 0.528 greater than the intensification level of 0.05 so that H0 accepted, in other words, there is a difference in the improvement of students' mathematics learning outcomes taught through the take and give learning model with students taught through the ordinary learning model. Thus it can be concluded that the improvement in students' mathematics learning outcomes by using the Take and Give learning model is better than students who are given the usual learning model.

Students' motivation to learn mathematics in this study was divided into two parts, namely the experimental class and the control class. Where the experimental class applies the Take and Give learning model and the control class uses the usual learning model. The questionnaire distribution data uses checklists from statements with the answer choices "SL" = "Always",

"S" = "Often", "KK" = "Sometimes", "TP = "Never". The questionnaire values are qualified into positive and negative values for positive answers with SL = 4, SR = 3, KK = 2, TP = 1, while the negative ones also apply vice versa.

The material taught in this study is a flat shape in mathematics subjects that are treated with the Take and Give learning model and the ordinary learning model. This study is a test given after being given about the treatment in class IVA and IVB SDN 106177 Tungkusan with the aim of knowing how students' motivation to learn mathematics which can be presented in the following table:

Table 5. Results of Students' Motivation to Learn Mathematics.

No	Total score	Category Student Learning Motivation	Frequency	
			Experiment	Control
1	76-100	Height	17 Students	2 Students
2	51-75	Currently	8 Students	13 Students
3	26-50	Low	-	10 Students

The results from the table above show that there were 17 students who obtained high scores in the experimental class, while there were 8 students, while there were no students who received low motivation. Whereas in the high category control class there were 2 students, 13 students who were moderately motivated and 10 students who were low.

Information on the results of student learning inspiration were tried for normality and homogeneity. The comes about of the typicality test for understudy learning motivation data appear that the centrality esteem on the Shapiro-Wilk test within the exploratory lesson is 0.178 (0.178 > 0.05) whereas within the control course it is 0.72 (0.72 > 0.05) so that based on the test the typicality of the exploratory course and control lesson information is normally distributed. At that point, the comes about of the homogeneity test of understudy learning inspiration information appear that the Based on Cruel centrality esteem for students' mathematics learning inspiration is 0.150 <0.05, so it can be concluded that the variance of student learning motivation within the test lesson and control course is homogeneous.

Furthermore, the Man-Whitney test was carried out to find out the average difference in motivation to learn mathematics between the application of the Take and Give learning model and the ordinary learning model.

Table 6. Test Results of Students' Mathematics Learning Motivation

Ranks				
	Class	N	Mean Rank	Sum of Ranks
Motivation to learn	Experiment	25	35.58	889.50
	Control	25	15.42	385.50
	Total	50		

Test Statistics[a]	
	Motivation to learn
Mann-Whitney U	60.500
Wilcoxon W	385.500
WITH	-4.904
Asymp. Sig. (2-tailed)	.000
a. Grouping Variable: Kelas	

Based on Table 4.17 above for the Man Witney test results that the U value is 60,500 with a W value of 385.50. When converted to a Z value, the value is -4,904 and a significant asim value of 0.000 <0.05 if the Asymp. Sig. (2-tailed) smaller than the critical limit of 0.05. So there is a significant difference between the two groups or which means that Ha is accepted. This explains that students' motivation to learn mathematics in the experimental class is higher than the control class, meaning that the learning carried out in the experimental class by applying the Take and Give learning model is higher than that in the control class which is applied by the usual learning model.

4 Conclusion

Referring to the results and discussion of the research, it was concluded that 1) there were differences in the improvement in the mathematics learning outcomes of students who were taught through the take and give learning model and students who were taught through the ordinary learning model; and 2) there are differences in increasing the learning motivation of students who are taught through the take and give learning model with students who are taught through the ordinary learning model. Therefore, teachers should use the Take and Give learning model in teaching mathematics subject matter to improve student learning outcomes.

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