# The Influence of the Discovery Learning Model assisted with Image Media and Motivation Against Civics Learning Outcomes of Students in Class IV of Public Elementary Schools 055980 Aman Damai 2017/2018

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Abstract -This study aims to find out: (1) Student learning outcomes that are taught by the discovery learning model assisted with higher image media than students who are taught using the expository model. (2) To find out the learning outcomes of Civics students who have high motivation are better than students who have low motivation. (3) To find out the interaction between learning models and learning motivation in influencing learning outcomes. This study uses a quasi-experimental method. The sample of this study consisted of all fourth grade students of Public Elementary School 055980 Aman Damai, Sirapit Subdistrict, Langkat Regency, totaling 50 people consisting of Grade IVa 26 People who were taught by discovery learning model assisted with media images and class IVb 24 people using expository models. Used data in the form of multiple choice tests and learning motivation questionnaire. The design used in this study is a factorial 2 x 2 design with 2-lane ANAVA technique. The results of this study indicate: (1) PKn student learning outcomes that are taught with the Discovery Learning model assisted with picture media are higher than students who are taught using the expository model. Sig. 0,000 <0,05, (2) There are differences in civics learning outcomes of students who have high motivation better than students who have low motivation Sig. 0,000 <0,05, (3) There is an interaction between learning models with learning motivation in influencing learning outcomes shown Sig. 0,000 <0,05

Keywords - Discovery Learning, Learning Motivation, Learning Outcomes

## I. INTRODUCTION

The direction and purpose of Citizenship Education subjects is to focus on the formation of citizens who understand and are able to exercise their rights and obligations to become intelligent, skilled and characterized Indonesian citizens as mandated by the Pancasila and the 1945 Constitution. So the focus of education is not just having cognitive abilities only, but also focuses on students' skills and more importantly to realize behavioral change towards attitudes and the formation of good student behavior, good citizenship behavior and understanding the responsibilities of rights and obligations as citizens, as well as in goals Civics learning. To realize that goal is not an easy thing, so it is needed a determination from various parties, especially from teachers and students in order to achieve togetherness the same goals and vision in creating integrated achievement of goals. From the students 'side, they will be able to master the material faster by the teacher, if the teacher presents the material through a learning strategy or technique that is able to arouse students' learning motivation. The consequences of the teacher should be more innovative in choosing strategies and using media to motivate students. will have the ability to recognize and understand the character and culture of the nation and make citizens who are ready to compete in the international world without leaving national identity. [1] Through Civics, every citizen can be introspective about the development of information and communication technology today which has positive and negative impacts. Civics are also useful to equip students to have a high level of discipline within themselves to survive in a state that is always changing, uncertain and competitive. In the scope of learning in schools, to improve the quality of education and teaching can be done by choosing a strategy in delivering learning material in order to obtain an increase in student learning outcomes. One strategy that can be done is by guiding students to be actively involved in the learning process and help students develop according to their intellectual level will further strengthen students' understanding of the concepts being taught. In this case the ability of the teacher is needed to master the learning strategies and models that are applied, because it plays a role in helping more effective learning. But it is not easy to fulfill that commitment, there are some difficulties and obstacles encountered when learning in school. In particular Civics lessons, generally faced by teachers when teaching Civics are: (1) The low attention of students in attending lessons; (2) Intensity of answering and asking low; (3) student saturation is very visible; (4) Low motivation; and (5) Low learning outcomes [2]. From the teacher factors that become obstacles are also: (1) Still prominent learning activities that are only teacher-centered; (2) Teachers still tend to use conventional strategies; and (3) The habit of teachers teaching without media. In absolute Civics learning activities requires the existence of a learning strategy to support the achievement of the expected Civics goals, the success of learning objectives is determined by many factors including the teacher's factors in implementing the learning process, because the teacher can directly influence, fostering and improving students' intelligence and skills. [3] To overcome the above problems and to achieve the educational goals to the fullest, the role of the teacher is very important and it is expected that the teacher has a good strategy and way of teaching and is able to choose the right learning model and in accordance with the subject concepts to be presented. which can be used by teachers in improving student learning outcomes is the Discovery Learning Model The purpose of this study as a whole is to see: students' learning outcomes that are taught by the Discovery Learning model assisted with picture media are higher than students who are taught using expository models, learning outcomes PKn students who have high motivation are better than students who have low motivation, and know the interaction between learning models with learning motivation in influencing learning outcomes. [4].

### II. METHOD

This research was conducted using Quasi Experiment Method (Quasi experimental Method) because this study directly tested the effect of a dependent variable and tested the hypothesis of a causal relationship, and also the class used for this study was available. The groups studied included groups that used the Discovery Learning model and groups that used the Expository model. This research is a quasiexperimental research that uses research designs 2x2 factorial design with 2-way variance analysis (ANAVA) techniques as presented in the table below:

Table 1. Design experiment design 2 x 2

Learnin g	Model Pembelajaran (A)		
Motivati on	Learning Model Discovery Learning Assisted with Picture Media (A1)	Expository Learning Model (A2)	
High (B1)	A1B1	A2B1	
Low (B2)	A1B2	A2B2	

Information :

A: Student Learning Model

B: Learning motivation

A1: Discovery learning model

A2: Expository model

B1: Motivation of students is high

B2: Motivation of students is low

A1B1: Average learning outcomes learned by discovery learning models assisted with high-motivation image media

A1B2: Average learning outcomes learned by discovery learning models assisted with low motivational image media

A2B1: Average learning outcomes learned by expository models that have high motivation

A2B2: Average learning outcomes learned by lowmotivated expository models

This research was carried out by submitting a proposal. Before being given Civics learning, the two treatment classes were first given a pre-test or initial test to determine students' abilities.

- 1. Determine the experimental class which will be used as the research class as an experimental class (Discovery Learning Model) and control class (Expository Model)
- 2. Determine Material taught to students as research material
- 3. The teacher conducting the experiment is the fourth grade teacher
- 4. Preparation of learning program plans and preparing material
- 5. Compile instruments in the form of pre test, post test and research guidelines
- 6. The learning process is carried out by Discovery Learning model for experimental class and expository model as control class.

a. Learning Implementation with the Discovery Learning Model

1. Initial Activities

This activity contains a teacher's explanation and shows a film to motivate students in Civics learning and then apperception.

2. Core Activities

a. The teacher gives the material to be taught using the media of images presented with infocus

b. Students observe the images displayed

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c. The teacher divides students into 4 groups of students asked to find out about the diversity of ethnic groups, nations and cultures in Indonesia

d. Next the student communicates every result he has found with each group advancing forward

3. Closing Activities

The teacher draws conclusions and rewards groups and individuals who are actively involved in the learning that has been done

b. Learning Implementation with Expository Learning Models 1. Initial Activities

This activity contains a teacher's explanation for the objectives to be achieved, providing positive input

2. Core Activities

a. The teacher provides material to be taught using understandable language

b. The teacher gives questions to students that are related to experiences that are owned by previous students

c. The teacher concludes the results of the material described earlier

3. Closing Activities

The teacher assigns each student the material that has been explained by the previous teacher.

# III. RESULT

Posttest data of student learning outcomes in the control and experimental classes were analyzed based on high motivation and low motivation. This analysis serves to see the influence of student motivation on student learning outcomes. Data on student learning outcomes based on student motivation in the control and experiment class can be seen in Table

Table 2. Postes Result Student Learning Outcomes Experimental Classes Based on Student Motivation

Experiment Class				
High motivation	Low Frequency motivation		Frequency	
80-83	1	72-76	2	
84-87	4	77-81	4	
88-91	4	82-86	3	
92-95 4		87-91	1	
96-99	2	92-96	1	
amount	15	amount	11	
Mean	88,53	Mean	78,55	

Data on student learning outcomes based on student motivation in the control class and experiment (combined) based on high student motivation and low motivation are shown in Table Table 3. Posttest Student Learning Outcomes by Motivating Students in Both Classes

High motivation	Frequency	Low motivation	Frequency
72-76	6	60-65	5
77-81	3	66-71	2
82-86	6	72-77	11
87-91	6	78-83	3
92-96	6	84-89	1
		90-95	1
Amount	27	Amount	23
Mean	84,29	Mean	73,04

Based on the table shown that student motivation affects the value of student learning outcomes. Students whose motivation is high have an average value of learning outcomes of 84.29 and students whose motivation is low have an average value of learning outcomes of 73.04, meaning that students with high motivation have higher learning outcomes than students with low motivation. Testing the hypothesis in this study to see whether or not there is interaction between the variables under study. Testing this hypothesis using SPSS 20 with two-way ANOVA technique with the criteria of Fcount> Ftable at a significant level, the proposed hypothesis can be received. Based on the data obtained from the student motivation test, the total score and the average score of each group are shown in Table

Table 4. Number of Students with High and Low Motivation

		Value Name	Amount
Learning	1	Control	24
model	2	Experimen	26
Student	1	Low	23
motivation	2	High	27

Based on the table, it was found that the total number of students with high student motivation was 26 students while the total number of students with low motivation was 24 students. Anava statistics are shown in Table.

Table 5. Two-Way Anava Test Results

Motivation	Learning Mo	Average	
(B)	Discovery learning (A <sub>1</sub> )	Ekspositori (A <sub>2</sub> )	
High (B <sub>1</sub> )	88,53	78,55	84,29
Low (B <sub>2</sub> )	79,00	68,00	73,04
Average	84,30	73,50	

Test results from the Table can be stated as follows:

a. Discovery learning learning models have an effect on student learning outcomes. The average value of student learning outcomes using discovery learning learning model of 84.30 is better than expository learning of 73.50.

b. Student motivation is high and low student motivation gives different results, in this case student learning outcomes with high student motivation is 84.29 better than low student motivation that is 73.04. Based on these data it can be seen that student motivation affects student learning outcomes.

c. There is an interaction between discovery learning models and expository learning with students' motivation for student learning outcomes.

Then, from each factor the subject is seen whether there are similarities in variance between groups as in Table.

Table 6. Intergroup Homogeneity Test

F	Free degree 1	Free degree 2	Signifikan
0,594	3	46	0,622

Based on the table, it can be seen that Fcount is 0.594 with a significant 0.622 greater than 0.05 so that the variance of the two homogeneous groups can be expressed and two-track testing is carried out.

Descriptively based on 2-way ANOVA statistics with Univariate General Linear Model (GLM), obtained the average student learning outcomes in both classes are presented in Table.

Tabel 7. Statistik Deskriptif Anava Dua Jalur

Descripti	ve Statistics			
Depender	t Variable: Learning out	comes		
Learning mode	Motivation	Mean	Std. Deviati on	N
F1 '4	Motivation Low	68	4,01	12
Eksposit ori	Motivation High	78,55	3,73	12
	Total	73,50	4,87	24
Discover	Motivation Low	79	5,73	11
у	Motivation High	88,53	4,75	15
learning learning	Total	84,30	7,15	26
Total	Motivation Low	73,04	5,73	23
	Motivation High	84,29	4,75	27
	Total	78,66	8,18	50

Based on the table shows that the learning outcomes of students who have high motivation are better than students who have low motivation in the experimental class. The results of 2x2 factorial anava used to test hypotheses can be seen in Table :

Table 8.Two-Way	Anava Test Results
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Result	Num ber of squa res	Free degr ee	Squared average	F	Signi fican ce
Learning model	2167, 10	1	2167,10	95,37	0,00
Student motivatio n	1037, 77	1	1037,76	38,18	0,00
Learning Model * Motivate students	625,6 8	1	625,68	22,87	0,00

Based on the table, the results of the two-way ANOVA test are presented, then used to answer the hypotheses proposed in this study. Following is the description of the results of the hypothesis test.

- $H_0$  : PKn learning outcomes of students who are taught with the Discovery Learning model assisted with picture media are lower than students who are taught using the expository model?
- $H_a: \mu A_1$ : PKn learning outcomes of students who are taught with discovery learning models with the help of image media are higher than students who are taught using the expository model?

The hypothesis proposed by Ha was accepted, namely the PKn Learning Outcomes of students who were taught with discovery learning models assisted with higher image media than those taught with the expository model. This is because the sig value. 0,000 5 0,05, in other words PKn student learning outcomes with discovery learning learning model assisted by picture media are better than using expository models.

## **IV. DISCUSSION**

The results obtained in this study indicate that the discovery learning model influences student learning outcomes. This can be seen from the average value of student pretest in the experimental class was 58.3 and after being given treatment using the discovery learning model assisted with media images, the students' posttest value was 84.3. This is because the stages of discovery learning learning model can improve student learning outcomes. Based on the results of the test the second hypothesis shows that student learning outcomes that have high motivation that is equal to 84.29 is

better than students who have low motivation that is equal to 73.04. This is because indicators of motivation that have a strong influence on student learning behavior. Students are human beings who are young and need to be guided to become adult humans. Each student has different characters and talents. Therefore, each student is a unique person, which makes it different from the others. The teacher must accept each student as they are, with all the shortcomings and strengths. This will form a high sense of self-esteem in students. The teacher also needs to find something (talent or strength) in the student that can make him feel important. Creating a sense of security and fun for students to explore and express their full potential. Students are creatures who have curiosity. To fulfill his curiosity, he will explore the surrounding environment. To be able to improve Civics learning outcomes for students, teachers need a learning model that is able to describe and present the subject matter in detail and sequentially, besides that the model is expected to empower students to find their own abilities and knowledge needed. Teachers must also be able to formulate learning materials with appropriate learning models. Besides that teachers are also expected to recognize student learning motivation.

This is in accordance with the opinion of Degeng and Bundu (2006: 48) who argued that in addition to the characteristic learning model factors also need to be considered in the discovery learning activities require curiosity, activity, hard work and willingness. [5] Discovery Learning as an innovative learning model emphasizes contextual learning through complex activities. In this discovery learning model focuses on learning that lies in the core principles and concepts of a scientific discipline. [6] Involving students in investigations in problem solving and meaningful task activities, and giving students the opportunity to work in groups in constructing their own knowledge. This study was conducted to analyze the interaction between discovery learning learning models and student learning motivation and then its influence on learning outcomes. From some of these research results can provide an overview that learning outcomes of groups of students who have high motivation given with discovery learning model is different from the group of students given expository model. [7] Learning haisl of students who have high motivation given the discovery learning model is significantly different and significant with groups of students who have low motivation given an expository medel. The results of this study also provide an overview of the interaction between groups of students who are taught with low motivation discovery learning models with groups of students taught with an expository model that has rendag motivation. This shows that the learning model and learning motivation are very influential in improving student learning outcomes. In using technology science community approach, the one recommends learning in using constructivism strategies [8]. Discovery learning model is a learning model through discovery. This model emphasizes the importance of understanding structures or important ideas for a discipline, through active involvement of students in the learning process.

Jerome Brunner (Hosnan, 2014: 281) revealed that the discovery learning model is a model that encourages students to ask questions and draw conclusions from general principles in practical examples of experience. [9] Learning discovery is learning that occurs as a result of students manipulating, structuring and transforming information so that it finds new information. In learning discovery, students can make estimates (conjucture), formulate a hypothesis and find the truth by using an inductive process or deductive process, making observations and making problems (Hosnan, 2014: 281). [10] The discovery learning model is understanding concepts, meanings, and relationships, through an intuitive process to finally arrive at a conclusion. Discovery learning occurs when individuals are involved, especially in the use of mental processes to find several concepts and principles. learning Discovery through is done observation, classification, measurement, prediction, and determination. Roestiyah (2001: 20) suggests discovery learning model is a teaching model using discovery techniques. Discovery learning model is a mental process in which students assimilate a concept or principle. [11] The mental process, for example observing, classifying, making predictions, explaining, measuring, making conclusions, and so on. In this technique students are allowed to find themselves or experience the mental process itself, the teacher only guides and gives instructions. Discovery learning model is a teaching model that regulates teaching in such a way that the child acquires knowledge that he has not previously known, not through notification, partially or entirely found by himself.

In discovery learning learning activities or learning are designed in such a way that students can find concepts and principles through their own mental processes. According to Budiningsih (2005: 43) discovery learning learning models try to lay the foundation and develop ways of scientific thinking, students are placed as the subject of learning, the role of the teacher in discovery learning model is the learning guide and learning facilitator. [12] Bruner's basic idea is the opinion of Piaget which states that children must play an active role in learning in class. Whereas according to Robert B. Sund (in malik, 2001: 219) the discovery learning model is understanding concepts, meanings, and relationships, through an intuitive process to finally arrive at a conclusion). Discovery occurs when individuals are involved, especially in the use of mental processes to find several concepts and principles. Cisco is carried out through observation, classification, measurement, prediction, determination, and inferiority. This process is called cognitive process while discovery itself is the mental process of assimilating concepts and principles in the mind. [13] According to Sardiman (2012: 145) in applying discovery learning learning models the teacher acts as a mentor by providing opportunities for students to actively learn, as the teacher's opinion must be able to guide and direct student learning activities in accordance with the objectives. This condition aims to change teacher oriented teaching and learning activities to become student oriented. [14] In discovery learning model learning materials are not presented in the final form, students are required to carry out various activities to gather information, compare, categorize, analyze, integrate, reorganize materials and make conclusions.

High learning motivation can activate student learning activities. High motivation can be found in the nature of student behavior as stated by Sugihartono et al (2007: 78), among others, "first, the quality of student involvement in learning is very high, second, the presence of feelings and affective involvement of students who are high in learning, and third, the existence of the efforts of students to always maintain or maintain so that they always have high learning motivation. "[15] So that it can be concluded that the characteristics of high learning motivation arise can be seen from the persistence in him in carrying out the task, not despairing when facing difficulties, being interested in various problems and solving them, happy to work independently, bored with routine tasks, able to maintain opinions, and not easy to let go of things that are believed. The results obtained in this study indicate that there is an interaction between discovery learning and expository learning models and motivation for student learning outcomes. This is seen from the sig value. amounting to 0.00 <0.05 and the average value of student learning outcomes in the experimental class is 84.30 and for the control class is 73.50. This clearly shows the difference in learning outcomes between the two classes after getting treatment. The results of the interaction between discovery learning learning model and motivation in this study is significant at 0.00 <0.05, meaning that the improvement in student learning outcomes in the experimental class is better than in the control class. Discovery learning learning model emphasizes deeply on cognitive, affective, and psychomotor aspects in depth on students, students play an active role in each learning process by discovering and exploring learning materials themselves. In discovery learning learning models, students are fully involved in the learning process which means students are motivated to express their ideas and design ways to test these ideas.

The results of this study have supported some of the results of previous research conducted by: 1) Kartiani and Khairat (2011: 201-216) which concluded that there was a positive relationship between the learning model and learning motivation in improving student learning achievement. The findings of this study also show that the learning outcomes of groups of students who have high learning motivation given the discovery learning model is different from the group of students given with the expository model. [16] Student learning outcomes that have high motivation given the discovery learning model are significantly different and significant with groups of students who have low motivation given an expository medel. The results of this study also provide an overview of the interaction between groups of students who are taught with a low motivation discovery learning model with groups of students taught with an expository model that has rendag motivation. This shows that the learning model and learning motivation are very influential in improving student learning outcomes. Based on the opinions of experts above, it is concluded that discovery learning model is a learning process that requires students to find a concept that has not been known before by doing an observation and research from the problem given by the

teacher which aims to make students play the role of learning actively involved in learning in class

# V. CONCLUSIONS AND RECOMMENDATIONS

Based on the discussion that has been explained, it can be concluded that: PKn learning outcomes of students who are taught with the Discovery Learning model assisted with picture media are higher than students who are taught by using expository students in grade IV SD Negeri 055980 Aman Damai. This can be seen based on the average value of students who are taught using the discovery learning model assisted with media images obtained by 84.30 and for the expository model by 73.50. So it can be stated that the learning outcomes learned by the DiScovery Learning model assisted with picture media are better than the learning outcomes that use the expository model. There are differences in student learning outcomes between students who have high motivation and students who have low motivation. This can be seen from the research data which shows that the average value of student learning outcomes that have high motivation is 84.29 and low motivation is 73.04, which means the average value of students who have high motivation is better than students who have low motivation. So it can be concluded that motivation influences the learning outcomes of 055980 Aman Damai Elementary School students. There is an interaction between learning models and motivation towards learning outcomes of 055980 Aman Damai Elementary School students. The results of the interaction in this study show that there is a significant difference between the average learning outcomes taught with discovery learning models assisted with high-motivated image media and low-motivated expository models, discovery learning learning models assisted by low-motivation image media and low motivational expository models and expository models with high motivation and low motivational expository models.

Based on the conclusions that have been stated, in accordance with the results of the research obtained, the researcher gives suggestions:

1. For the next researcher, it is suggested before starting the learning process, it is first explained to students how the discovery learning model implementation is assisted with picture media, so that during the implementation of the learning the students already understand what will be done and do not take time for other learning phases.

2. The next researcher is advised to pay attention to the allocation of time in the discovery learning process so that it can achieve the learning objectives optimally.

3. Educators in teaching using discovery learning learning models assisted with picture media are better applied to students who have high motivation because it can improve student learning outcomes.

4. For further researchers it is expected to be able to apply discovery learning learning models in improving student learning outcomes through various other moderator variables, such as naturalistic intelligence, learning styles, or any other moderator variables.

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