

# The Influence Of Learning Model (Creative Problem Solving Vs. Based Learning) Department of Pancasila Civic Education, Teacher Training and Education Faculty of Nusa Cendana University

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Abstract: Learning is a process to help people in developing themselves and enhance the dignity of man, so man is able to cope with any changes towards a better direction. The learning process that should be centered on the learner is currently not running well that happens is that the learning process is centered on professors lead students to become bored and result in lower learning outcomes it is necessary to apply the learning that is more focused on the activity of students in solving the problems. The purpose of this study were Test the significant influence learning outcomes among students taught by learning model (Creative Problem Solving and Problem Based Learning model of learning. This type of research used in this research is quantitative research by using a quasi-experimental design (quasi-experimental design). In particular, this study used a control group design version 2x2 factorial nonequivalent pretest-posttest control group design. The study population was majoring PPKn Teacher Training and Education Faculty of Nusa Cendana University Kupang. Samples were taken from the third semester students of the academic year 2015/2016 to 25 people per class. The number of active students completed the study were 50 people. The results obtained in this study were no influence learning model to the learning outcomes of students, where students are taught creative problem solving learning model has a higher learning outcomes.

Keywords: creative problem solving, problem based learning, and learning outcomes.

The strategy is an attempt to gain success and success in achieving its objectives. In the world of education strategies can be interpreted as a plan, method, or series of activities designed to Achieves a particular educational goals (Davis, 1971). Learning strategy can be interpreted as a plan that contains a series of activities designed to achieve specific educational objectives. Learning strategy is a plan of action (set of activities), including the use of methods and utilization of various resources or strength in learning which is structured to achieve the goal. In this case the learning objectives. Learning strategy is a learning activity that must be done professors and students so that learning objectives can be achieved effectively and efficiently (Yamin, 2006). On the other hand Dick and Carey (1985) states that the learning strategy is a set of instructional materials and procedures that are used together in the world of education to lead to student learning outcomes.

Civic education is a subject that is taught at every level of education in Indonesia ranging from elementary school to high school. Citizenship education defined broadly to include the process of preparing the younger generation to take on their roles and responsibilities as citizens, and in particular the role of education (including schooling, teaching, and learning) in the preparation of such citizens. One important thing to determine ahead of a nation, then to





produce human resources as subjects in a good development, required capital from the education itself. Especially for subjects Civic Education, in addition to having an abstract nature, a good understanding of the concept is very important. In learning Citizenship Education, especially at the university level, should be developed as an order of social conducive provide opportunities for the growth of the basic values of religion and culture, nationality and patriotism lifetime to master, apply and develop science, technology and art supportive various personal qualities of students. University as an integral part of society needs to be developed as a center for cultivation and empowerment of lifelong learners, capable of exemplary members, build willingness and develop the creativity of learners in the learning process democratic.

In the process of learning in the classroom there is a close relationship between faculty, students, curriculum, facilities and infrastructure. Lecturer has the task to choose a model and learning media appropriate to the learning styles of learners and in accordance with the submitted materials to achieve good learning outcomes.

In fact, until now there are still many difficulties experienced by students in the study subjects Civic Education. The result is the difficulty of students to understand the following concepts as prerequisite concepts not yet understood. According Uzer (2006) Interactions in learning events have a broader meaning, not just the relationship between faculty and students, but in the form of educational interaction. In this case was not delivering a message in the form of the material, but the cultivation of attitudes and values in students who are learning themselves. Teaching is to guide student learning activities so that students have the intention to learn. Thus, the activity of the students is indispensable in the learning activities so that was students who should be actively involved, for students as subjects students who plan and carry out its own student learning.

In fact, often an active lecturer so that students are not given the opportunity to be active, learning is still conventional, trends lecturers who use the lecture method. Studying process is merely enlarged results rote learning or memory (Mansoer, 2006). This is causing saturation of the students; of course, it is also an impact on student learning outcomes is low. This problem must be solved by the lecturers who have a very important role in determining the quantity and the quality of teaching is implemented. Therefore, teachers should think about and plan carefully to improve learning opportunities for students and improve the quality of learning. This requires changes in the organization of the classroom, the use of teaching methods, learning strategies and attitudes and characteristics of the faculty in managing the learning process. Lecturer as a facilitator seeks to create learning conditions, develop teaching materials with good and improve students' ability to listen to the lessons and master the educational goals they achieve.

Learning Model Creative Problem Solving (CPS) is a learning model that focuses on teaching and problem solving skills, followed by strengthening the skills (Pepkin, 2004) according to Zaenab (2012) model of learning Creative problem Solving (CPS) is a learning model that aims to find solutions and creatively presented. By using this model is expected to generate interest at a time of creativity and motivation of students in studying citizenship, so that students can gain the maximum benefit from both the process and outcomes of learning. Creative Problem Solving has greater functionality, which became the foundation for the development of learning activities in the classroom, student involvement in the development of self-evaluation and development of awareness of their development (Pepkin, 2004). The results of the Hartantia (2013) entitled "Application of Learning Model Creative Problem Solving To Increase Interests and Learning Outcomes Student Class XI. IA Colomadu senior high school, Academic Year 2012/2013 ", it is known that CPS learning model can improve student learning outcomes, case for the application of the model CPS can create interest, creativity, and





motivation of students in the learning process, in order to obtain the maximum benefit from both process and outcome learn. And students are required to be able to solve problems in groups and prosecute individuals participate actively expressing their opinions. It is also reinforced by previous studies (Wisdom, 2009) which implement problem-based learning model of the type of creative problem solving and increased student learning completeness.

Research conducted by Pratiwi (2014) by applying the Creative Problem Solving learning model in class IX Tuntang junior high school results showed that the students seemingly more interested in following the math, because this class is very visible in the number of students who pay attention to the teacher's explanation. Besides that, the students became more active when the learning took place and were able voiced opinions / ideas to solve the problems given that teachers improve student teaching outcomes class IX Tuntang junior high school. This is consistent with one of the advantages of the model CPS is to make students active in learning acting and trained to think critically and creatively, because the issues presented at the beginning and give freedom to the students to find the directions of completion in order to improve learning outcomes (Shoimin, 2014).

This is evidenced by research conducted by Malia Ulfa (2013) with the title "Model of Learning Problem Based Learning to Improve Learning Outcomes", it is known that the application of the model PBL can improve learning outcomes PKN class XI IPS-2 Klakah-Lumajang senior high school where there is a learning outcome. Bungel (2014) in a study of eighth grade students of Palu junior high school by applying the learning model Problem Based Learning (PBL), which aims to improve learning outcomes once applied learning model Problem Based Learning, learning and assessment group. From the final test results of action in the first cycle indicates that there are three students who were able to do with the proper completion, 7 students who reached the KKM and 24 students were able to use the formula in the settlement. The results of the final test action on the second cycle indicates that the student is able to perform the proper completion of the final test results declared by the second cycle of eighth grade students of Palu junior high school has reached minimal completeness criteria (KKM). This is because in learning with PBL will happen meaningful learning.

Students learn to solve a problem, then they will apply the knowledge they have or trying to find the necessary knowledge. This means that the learning is in the context of the application of the concept. Learning can be more meaningful, and can be expanded when students are dealing with a situation in which the concept is applied. In the situation of Problem Based Learning (PBL), students integrate knowledge and skills simultaneously and apply it in a relevant context. That is, what they do in accordance with the real situation is no longer a theoretical so that the problems in the application of a concept or theory they will be found and also during the learning takes place. PBL can improve the ability to think, to grow the initiative of students in work, internal motivation to learn, and can develop interpersonal relationships within the work group (Dasna, 2007).

Learning outcomes of learning outcomes is the result obtained learners are usually expressed in the form of numbers, letters, or words (Arikunto, 2006). Very important learning outcomes specified in the learning process because it is the purpose of a learning process yang intended to help learners achieve the goals set creation of learning environments, activities and learning experiences appropriate. Correspondence between the goals set and what should be learned then need to be made in the framework or taxonomy. Bloom (1956) describes the taxonomy of education in the cognitive dimension. There are six categories in the cognitive dimension proposed Bloom (1956), namely remembering, understanding, applying, analyzing, evaluation and create. Results of study on Pancasila introductory courses in this study are in the category of understanding. Learners are said to understand if it can construct meaning from





material or messages of learning, either orally, in writing or graphics delivered through learning, or other printed material.

Based on the description above, the writer is interested in conducting research with the title "The Effect of Learning Model (Creative Problem Solving versus Problem Based Learning) The Department of Student Learning Outcomes Civic Education Majors, Teacher Training and Education Faculty of Nusa Cendana University".

# Formulation of the problem

The problems were created by the researchers in this study is: Is there any influence learning model (Creative Problem Solving Model versus Learning Problem Based Learning) on student learning outcomes?

# **Research purposes**

The purpose of this experiment is to test the effect of significant learning outcomes among students taught by learning model (Creative Problem Solving and learning model Problem Based Learning)

# **RESEARCH METHODS**

# **Place and Time Research**

This research was conducted at the Department of Citizenship Education the Faculty of Education of Nusa Cendana University Academic Year 2015/2016 in September to complete.

### **Research subject**

The subject of this research is Student Education Department Semester III citizenship. These subjects were then divided into two groups: the experimental class and control class random (random). Number each - each group is 25 people so there were 50 people in total subjects. Before learning activity begins, all students were included in this study are given tests to determine the learning style of the student's learning style both in the experimental class and the control class

### **Research variable**

Which become variables in this study are:

1. The independent variable (X)

The independent variable in this research is the application of learning models Creative Problem Solving (CPS) and the application of learning models Problem Based Learning (PBL).

- Dependent variable (Y)
   Dependent variable in this study is the result of learning student of Department of Civics.
- 3. Control Variables include:
- a. The time required in the learning process is controlled by equalizing the number of lessons.
- b. Lecturer control by setting its own investigators as a lecturer.





#### **Research Design**

This study design is a real experimental study (rue experiment) research design pretestposttest control group design that is shown in Table 3.1 below:

### Tabel.1. Research design

Sampel	Pre test	treatment	Post tes
Class Experiment	$T_{1}$	$X_{1}$	$T_2$
Class control	$T_2$	X 2	$T_2$

#### Data analysis technique

A statistical analysis is usually used to test whether a hypothesis is rejected or accepted. In this study, the data obtained in the form of quantitative data, so it must be analyzed using statistical equations.

The statistical test used is the prerequisite test analysis (homogeneity and normality test), test the ability of the initial sample, and test research hypotheses.

1. Test requirements analysis

a. Normality test

Normality test is done to prove that the population in this study follows the normal distribution model. The equation used is:

$$X^{2} = \sum_{i=1}^{k} \frac{(f_{i} - f_{e})^{2}}{f_{e}}$$

 $f_e$  is obtained from the product of the number of data (n) with extensive opportunities or below the normal curve for the interval in question. To look for opportunities (area), use the equation:

$$Z_i = \frac{X_i - \bar{X}}{S}$$

 $H_o$  testing criteria is rejected if the real level  $\alpha$  for testing. In other cases the hypothesis was accepted.

**b.** Homogeneity test

To determine whether or not a homogeneous population variance test was used Bartlet (Sudjana, 2005: 262). The aim is to facilitate the units needed in Bartlet test are tabulated as follows: List prices are needed to test Bartlet

Sampel	Dk	1/dk	Si <sup>2</sup>	Log Si <sup>2</sup>	Dk Log Si <sup>2</sup>
1	n <sub>1</sub> -1	1/(n <sub>1</sub> -1)	$S_1^2$	$\log S_1^2$	$(n_1-1) \text{ Log } S_1^2$
2	n <sub>k</sub> -1	1/( n <sub>k</sub> -1)	$\mathbf{S_k}^2$	$\text{Log } S_k^2$	$(n_1-1) \text{ Log } S_1^2$
Jumlah	$\sum n_1$ -1	$\sum \left[\!\!\left[\frac{1}{n_i-1}\right]\!\!\right]$	-	-	$\sum (n_i - 1) \log {S_i}^2$

Table 2. Test Bartlet

(Source: Sudjana, 2005: 262)





**2.** Ability Test Similarity Initial Sample

To find common ground prior knowledge of students from both groups of samples, the test used is a test of the two parties.

 $H_0: \mu_1 = \mu_2$ : There is no difference between the initial ability of students taught by learning model Creative Problem Solving (CPS) and the students taught by learning model Problem Based Learning (PBL).

 $H_1: \mu_1 \neq \mu_2$  There is a difference between the initial ability of students taught by applying the learning model Creative Problem Solving (CPS) and the students taught by learning model Problem Based Learning (PBL).

Statistical equations used are:

 $t \frac{\dot{X}_1 - \dot{X}_2}{S\sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$ 

$$S^{2} = \frac{(n_{1} - 1)S_{1}^{2} + (n_{2} - 1)S_{2}^{2}}{n_{1} + n_{2} - 2}$$

Testing criteria: accept H<sub>0</sub> if -t<sub>1</sub> values  $-\frac{1}{2}\alpha < t < t_1 - \frac{1}{2}\alpha$ , where t1- $\frac{1}{2}\alpha$  t obtained from the distribution list by dk = (n<sub>1</sub> + n<sub>2</sub> - 2) and opportunities (1 -  $\frac{1}{2}\alpha$ ). For prices of other t H<sub>0</sub> rejected.

3. Research Hypothesis Testing

a. For the first hypothesis (Test Two Parties)

1)  $H_0$ :  $\mu 1 = \mu 2$ : There is no difference in learning outcomes of students taught by learning model Creative Problem Solving (CPS) and the students taught by learning model Problem Based Learning (PBL).

2) H<sub>a</sub>:  $\mu 1 \neq \mu 2$ : There is a difference in student learning outcomes are taught using learning model Creative Problem Solving (CPS) and the students taught by learning model Problem Based Learning (PBL).

Statistical equations used (Sudjana, 2005: 239) is:

$$t = \frac{\overline{X_1} - \overline{X_2}}{S\sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$
$$S^2 = \frac{(n_1 - 1)S_1^2 + (n_2 - 1)S_2^2}{n_1 + n_2 - 2}$$

Testing criteria: accept H<sub>0</sub> if  $-t_1$  values  $-\frac{1}{2}\alpha < t < t_1 - \frac{1}{2}\alpha$ , in manat  $1 - \frac{1}{2}\alpha$  t obtained from the distribution list by dk = (n<sub>1</sub> + n<sub>2</sub> - 2) and opportunities (1 -  $\frac{1}{2}\alpha$ ). For prices of other t Ho rejected.

Testing criteria accept  $H_0$  if t is obtained from the distribution list to and opportunities for the prices of other t is  $H_0$  rejected.

# **RESULTS AND DISCUSSION**

### **Description Data Research**

This research was conducted with the subjects is the third semester students Department of Citizenship education. The subjects who began the study amounted to 50 people and are divided into two groups each - each numbering 25 people. The first group is the experimental





class is a group totaling 25 people using learning method creative problem solving (CPS). The second group is control classes using problem-based learning method.

Descriptive Statistics							
	Ν	Minimum	Maximum	Mean	Std. Deviation		
CPS Method	25	60	90	77.00	7.500		
PBL Method	25	60	90	74.60	7.895		
Valid N (listwise)	25						

From the test results obtained by descriptive results of the study showed that the average learning outcomes learning methods CPS is higher than the PBL learning method. CPS learning method gives an average of 77.00 while the PBL learning method gives a mean of 74.00

# **Test Prerequisites**

Normality test

Test for normality in this study used analysis Kolmogorov-Smirnov (KS-Z). Normality test calculations performed using SPSS 16 for windows.

Table 4 Summary of Normality	Test Distribution	n Data class I	Experiment
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One-Sample Kolmogorov-Smirnov Test				
		Unstandardized Predicted Value		
N		25		
Normal Parameters <sup>a</sup>	Mean	77.0000000		
	Std. Deviation	.55044053		
Most Extreme Differences	Absolute	.255		
	Positive	.255		
	Negative	191		
Kolmogorov-Smirnov Z		1.274		
Asymp. Sig. (2-tailed)		.078		
a. Test distribution is Normal.				





One-Sample Kolmogorov-Smirnov Test				
		Unstandardized Predicted Value		
Ν	N			
Normal Parameters <sup>a</sup>	Mean	74.6000000		
	Std. Deviation	1.52752523		
Most Extreme Differences	Absolute	.253		
	Positive	.253		
	Negative	203		
Kolmogorov-S	Kolmogorov-Smirnov Z			
Asymp. Sig. (2-tailed)		.082		
a. Test distribution is Normal.				

# Table 5 Summary of Normality Test Distribution Class Data Control

Based on the tables 4 and 5 were showed that between the variables are normal. From the analysis we value KS-Z distribution experiments class group has a value of 1.274 with sig > 0.05, it can be said to be variable in the control class are normal. For group control class value KS-Z has a value of 1.263 with sig > 0.05, it can be said to be variable in the control class has a value that is normal

Homogeneity test

Homogeneity test in this study was using levenne's statistics. Calculation of homogeneity test was performed using SPSS 16 for windows. Variance between groups said to be homogeneous if the value of the data's statistical significance levenne more than 0.05 (sig > 0.05). However, if the value levenne's statistical significance of less than 0.05 (sig < 0.05), the variance between the data group is not homogeneous. Below is presented Table 6 summarizes the variance homogeneity test data group.

# Table 6 Results Testing Homogeneity Class Experiment

Test of Homogeneity of Variances					
eksperimet					
Levene Statistic	df1	df2	Sig.		
3.334	6	13	.033		

### Table 7 Results of Testing Homogeneity Control Class

Test of Homogeneity of Variances					
PBL Method					
Levene Statistic	df1	df2	Sig.		
1.312	2	22	.289		

Based on table 6 and 7 results homogen test data using levenne's statistical test showed sig> 0.05 it shows that the distribution of data between the control group and the experimental class is homogeneous or equal Hypothesis testing

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Analysis of variance of two lanes is intended to prove the hypothesis proposed in the study. As described in Chapter 1, there are three hypotheses in this study. The following will discuss the results of each test research hypotheses.

Hypothesis testing

Hypotheses for variable learning method (A)

- H<sub>0</sub>: There is no difference in learning outcomes CPS teaching methods and learning methods PBL
- H1: there are differences in learning outcomes and learning methods CPS PBL

Tests of Between-Subjects Effects							
Dependent Variable: 1	Learning Outcames						
Source	Type III Sum	of Df	Mean Square	F	Sig.		
	Squares						
Corrected Model	12296.612ª	4	3074.153	22.851	.000		
Intercept	413205.128	1	413205.128	9447.951	.000		
Metode	1324.099	1	1324.099	27.071	<mark>.020</mark>		
Error	4646.628	95	48.912				
Total	482886.000	100					
Corrected Total	16943.240	99					
a. R Squared = .726 (Adjusted R Squared = .714)							

Table 8 Results of the analysis of two paths faktortial

Results Test playing Effects on variable learning methods showed that the value of F test method of learning for the 27 071 with a value of significance (P < 0.05), then H<sub>0</sub> rejected and H<sub>1</sub> accepted meaning means there are differences in learning outcomes for students who are taught by teaching methods for Creative Problem solving with students being taught by using the method of Problem Based Learning. The analysis also shows that there are differences in the effect of group learning method based on the value pretest and posttest on methods of learning methods Creative Problem Solving for learning outcomes with value of F test of 4,550 with a value of significance (P > 0.05, so it can be concluded that there is the influence of learning outcomes based post test the value pretest and learning methods).

### DISCUSSION

Research conducted at the Department of Citizenship Education the Faculty of Education at the University of Nusa Cendana III semester student introductory course on Pancasila. This research was conducted by using the application of learning methods Creative Problem Solving in the experimental class and learning methods Problem Based Learning in the control class. In the treatment of both the students and the students of the experimental class control class in the implementation process will be student results that include a cognitive domains. Rate cognitive aspects assessed in this study assessed use problems.

Before being treated first tested the ability of the initial sample either the experimental class or the control class. The data used in the initial test sample power parity was obtained using the initial capability test sample. Based on the results of the analysis were showed that there is no difference between the initial ability of students taught by applying the Creative Problem Solving learning methods with which students are taught using learning methods Problem Based Learning in the course Introduction to Pancasila.

After the data is analyzed using statistics, data analysis for the first hypothesis on cognitive obtained as in Fig.1 below







Fig.1 Graph citizenship Education Student Learning Outcomes

In Fig.1 it can be seen that there is a difference in student learning achievement among students in the experimental class is taught using instructional methods Creative Problem Solving with students in control classes taught using learning methods Problem Based Learning. In Figure 1 can also be seen that the learning outcomes of the third semester students Department of Citizenship Education the Faculty of Education University of Nusa Cendana in control classes taught using learning methods Problem Based Learning lower than students in the experimental class taught using learning model Creative Problem solving or cognitive learning results of the experimental class is higher than the control class. The results showed that the Creative Problem Solving learning model that can improve student achievement of learning outcomes. The results are consistent with research conducted by Rahman (2015) about the influence of the model CPS to the understanding of concepts and learning outcomes of students of class VIII Banjarmasin junior high school, by applying the learning model CPS on classroom experiments and models of problem based learning to control classes showed understanding concepts and learning outcomes of students in the experimental class is higher than the control class. CPS method was more emphasis on the process of the invention by the students so that the students' learning process will be stimulated to achievement. Through the application of the method will act CPS students and student learning will be based proxies on. Creative Problem Solving learning model to make students play an active role during the lecture because of activities performed on the stages of learning methods Creative Problem Solving creatively encourage students to engage in learning. Lecturers only served to condition the learning environment, prepare all that is necessary, and guide students when difficulties. Students demonstrate creative behaviors and active in implementing the learning activities such as finding a solution to the problems given to excavate and construct knowledge already possessed, experimenting in earnest as directed experiments, analyze experimental results based on observation and be able to explain the suitability of predictions with experiments have been done. By looking at the various activities that demonstrated the students during the learning takes place, it means the process of student learning can be considered successful because students are able to perform various physical activities and psychological.

In the control class, students are taught with the application of learning methods Problem Based Learning, lecturer first introduced the problem / issue to students to lure students to answer this question, after which the lecturer forming students into groups and encourage students to gather information to answer the question. After that the students in groups find solutions to these problems and then present the results of the discussion in the classroom. After the students presented the results of the discussion the lecturer will ask a few questions that correspond to the learning objectives that must be accomplished students. This question is given



on an ongoing basis to the students so that teachers can determine whether the learning objectives have been achieved by the students. In asking the question if there are students who cannot answer the question, the lecturer will ask follow-up questions to other students, but the question is still related to the previous question. At the end of lecturers will then conclude with student learning. In the process of discussion is likely to occur tense, however, can be socialized. In general, students will learn (think-working), so that they can train themselves in the confidence. With this technique, students will participate actively, but there is an element of tension and tired quickly. Although students active in observation but when lecturers conducting the assessment and evaluation of students tend to be difficult to answer questions asked teachers so teachers should explain the answers to these questions that lead students there who are not listening to the explanation of lecturers in addition students also considered the question by lecturers will be at your own responsibility by lecturers.

Application of the method of learning will have an effect on student learning outcomes. Appropriate learning methods and in accordance with the characteristics of learning materials. In this study learning method CPS influence on learning outcomes. Descriptive mean learning outcomes with teaching methods CPS higher than PBL method.

Pancasila introductory courses give students the opportunity to exploit the students in developing patterns of thought. CPS application of learning methods in addition to providing opportunities for students to develop themselves also provide opportunity for lecturers to be active in serving students. Lecturer as facilitator is expected to be able to improve the ability to master the material.

# CONCLUSION

Based on the results of research and discussion can be concluded as follows: There is a learning model Influence (creative problem solving Vs problem based learning) to student results. Citizenship learning outcomes on student experimental group (learning model creative problem solving) higher than the control group student learning outcomes (learning model of problem-based learning).

# SUGGESTION

The advice can be given based on the results of the study are

1. For research utilization

- The learning model creative problem solving can be used as an alternative learning for faculty in an effort to improve learning outcomes Citizenship.
- 2. For advanced research
- Need to do further research on other subjects by applying the learning model creative problem solving, need to be designed also research on other factors that may impact or direct influence on student learning outcomes such as student motivation, quality of interpretation and response to student and also need to be modified blend learning techniques in the application of learning models are varied.

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