The Effect of Contextual Teaching and Learning (CTL) Models on learning outcomes of Social Sciences of the material of forms the face of the earth on Class VII of Junior High School

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Abstract. This study discusses the application of Contextual Teaching and Learning (CTL) model to Social Science subjects on the material of Earth Forms of class VII students of Junior High School. The purpose of this research is to see the effect of Contextual Teaching and Learning model to outcome learning Social Science of the material of Earth Forms in class VII students of the Junior High School. This type of research is Classroom Action Research. The subject of this research is the students of class VII.C of the Junior High School of Kartika XX-6 Kendari which registered the academic year 2015/2016. This research is planned in 2 cycles with the implementation of action following the class action research with procedure consist of planning, implementation of action, observation and evaluation, and reflection. The result of this research is there is a positive effect of Contextual Teaching and Learning models to outcome learning Social Science of the material of Earth Forms in class VII students of the Junior High School.

Keywords: Student Learning Outcomes, Contextual Teaching and Learning, Student and Teacher Activity

Introduction

Almost throughout history for hundreds of years it has been believed that the planet's shape (including the planet Earth) is spherical in its poles. It has been taught to people all over the world through formal education bench on geography subjects. It can also be seen as an artificial Earth in the form of globes or globe. However, for some time we have also heard arguments about the shape of the Earth.

We as humans, along with animals and plants live on Earth that is on the surface of the earth. The surface of the Earth is also often referred to as the world. In this world, we recognize the various forms of the Earth's surface. Some of the Earth's surface forms are water and land. In miniature globes, we also notice that there are two colors in the Earth's surface, which are blue and brown or yellow. The blue color represents water and brown or yellow symbolizes the land. In this article discusses the ability Students learn the shape of the face of the earth and what methods are suitable for use by teachers to teach the material.

Many students may be able to present a good level of memorization of the material it receives, but in reality they often do not deeply understand rote knowledge and do not involve students in following the learning process. Most of the students are unable to relate what they learn to how they can use it. Teachers in addition must be clever in mastering the class also must be skilled in presenting and delivering each subject matter, so that students indirectly in following the learning process feel interested and not quickly feel bored in receiving any learning materials provided by the teacher. In addition to mastering the method of learning, each teacher needs to understand each

model of learning to be used in accordance with the type required in each learning activity, so that teachers can design and implement learning well.

Based on the results of preliminary observation of the learning process of teachers in Social Science subjects are generally still using the lecture method. Students are only passive in receiving lessons, thus resulting in low student learning activities in the classroom. Similarly, students' learning outcomes in social science lessons are generally still low categories. This can be seen from the results of Student learning on the material forms of the face of the earth that of 38 students there are 78% get a low score. The low learning outcomes of students are caused by several factors, among others, the method of teacher learning is still using lectures and regular questioning without any variation of learning models that foster student learning motivation.

The problem faced by students is that they can not connect between what they learn and how the knowledge will be used. This is because the way they gain information and self-motivation has not been touched by methods that can really help them. The students find it difficult to understand academic concepts (the concept of the form of the face of the earth), because the teaching methods used by teachers are limited to lecture methods. Here, of course, students know that what they learn today will be very useful for their future lives, when they are in the community or at work later. Therefore a method that can really give an answer to this problem is needed. One method that can better empower students is the contextual approach (Contextual Teaching and Learning).

Contextual Teaching and Learning (CTL) is a learning system that matches the performance of the brain, to construct patterns that embody meaning, by linking the academic content with the context of everyday life of the learners. It is important to apply so that the information received is not only stored in short-term memory, which is easily forgotten, but can be stored in long-term memory so that it will be appreciated and applied in the job task. This is in accordance with Yetti Ellyana [5] that the application of contextual learning will greatly help teachers to relate subject matter with real-world situations and motivate students to form relationships between knowledge and apply them in daily life as family and community members. Then, Selvianiresa and Prabawanto [3] said that the CTL approach is an approach involving active students in the learning process to discover the concepts learned by linking the material with the knowledge they possess and the students experience in daily life. Furthermore, Johnson [2] says that learning with CTL approach, students are invited actively to be able to connect the content of the material to the context of everyday life of the students, so that it can bring understanding and intact meaning.

Learning contextual teaching and learning model has advantages such as: (1) learning becomes more meaningful and real, meaning that students are required to be able to capture the relationship between the learning experience in school and real life; (2) learning is more productive and able to cultivate the strengthening of the concept to the students because the contextual teaching and learning model embraces the flow of constructivism, which assumes the students can find and build their own knowledge. Through the philosophical foundation of constructivism students are expected to learn through "experience" rather than "memorize". The weakness of contextual teaching and learning model is the teacher must be able to manage the learning as well as possible so that the learning objectives that have been set can tecapai with a maximum.

Based on the description, the question of this research is whether the Learning Contextual Teaching and Learning (CTL) model has a positive influence on the social science learning outcomes on the material of the face of the earth in Class VII of Junior High School?

Method

This type of research is Classroom Action Research. The characteristic of this research is the repetitive action to make improvements in the teaching and learning process. Classroom Action Research is done by applying the learning model of contextual teaching and learning as an alternative action to improve learning outcomes students of Social Sciences on the material of forms the face of the earth.

The subject of this research is the students of class VII.C of Junior High School Kartika XX-6 Kendari which registered the academic year 2015/2016. Factors investigated in this research are: (1) Student factor, that is seeing the increase of activity and learning result of student in studying IPS specially on the material of earth face forms based on contextual teaching and learning model, and (2) teacher factor: that is seeing activity teaching teachers in preparing and implementing learning based on contextual teaching and learning model.

This research is planned in 2 cycles with the implementation of action following class action research procedure consisting of: Planning, Implementation of action, Observation and evaluation, and Reflection. The data in this study were analyzed by using qualitative and quantitative descriptive analysis. Qualitative descriptive analysis is used to explain student's learning activity and teacher's ability during the learning process, while quantitative descriptive analysis is used to present the percentage of teacher's teaching activity in managing learning, the percentage of student learning activity and the percentage of students'.

In determining the percentage of teacher learning activities and student learning activities using the formula:

$$Percentage\ of\ teacher\ /\ student\ activity = \frac{Total\ earnings\ score}{Maximum\ score} x100\% \quad [3]$$

While the value of students' understanding of the concept of the form of the face of the earth using a range of values for the test description is a scale of 0 to 100, by the formula:

$$Value = \frac{Earning\ score}{Maximum\ score}\ x\ 100\% \quad [4]$$

To determine the percentage level of mastery of learning achievement using the formula:

$$Persentage\ of\ mastery = \frac{Total\ of\ mastery\ student}{Total\ student} x100\% \quad [3]$$

The criteria indicator of this research is the learning process of CTL is said to have a positive effect on the learning outcomes of social science on the material of earth face forms if the students' learning mastery has reached at least 75%.

Results and Discussion

There are three things that are disclosed in the results of this study are: (1) the results of student activities on CTL learning process, (2) the results of teacher activity on CTL learning process and (3) student learning outcomes on the concept of the form of the earth based on learning CTL.

1. Outcomes of Student Activity

Based on the observation results can be obtained percentage of student activity results in CTL learning process in the cycle I and cycle II can be seen in Table 1.

Table 1: Average Percentage of Student Aktitvitas in CTL Learning Process

No	Aspects Observed	Percentage of student activity	
		Cycle I	**Cycle II**
	A. Preliminary activities		
1	Students listen to the motivation of the teacher	57,5	82,5
2	Students prepare textbooks according to the teacher's direction	62,5	80,0
3	Students pay attention and respond to apersepsi from teacher	55,0	82,5
	B. Core activities		
4	Students listen to the topic / material submission	70,0	82,5
5	Students review the material / topics taught by reading textbooks and other reading sources	67,5	80,0
6	Students join their respective groups	70,0	80,0
7	Students collect information on the topic / material taught to feed the given model	67,5	75,0
8	Students ask questions to teachers	62,5	87,5
9	Students discuss problem solving in groups	65,0	92,5
10	Students present the results of their discussion	72,5	92,5
11	Students reach the contents of other group presentations	62,5	82,5
12	Students ask things that have not been understood	55,0	75,0
	C. End activities		
13	Students and teachers draw conclusions on learning outcomes	62,5	80,0
14	Students listen to the next material and the task given by the teacher	70,5	82,5
	Mean	**64,3**	**82,5**

Based on the result of percentage of student activity in table 1, it can be seen that there is an increase of student activity from cycle I to cycle II, that is the average of percentage activity of cycle I is 64,3% (enough) and cycle II is 82,5% (high). These results show that in the first cycle students are not accustomed to follow the model of Learning CTL so that Student activity is still lacking. While cycle II, generally Students are familiar with the process of Learning CTL so that high student activity. More details can be seen in Figure 1 below.

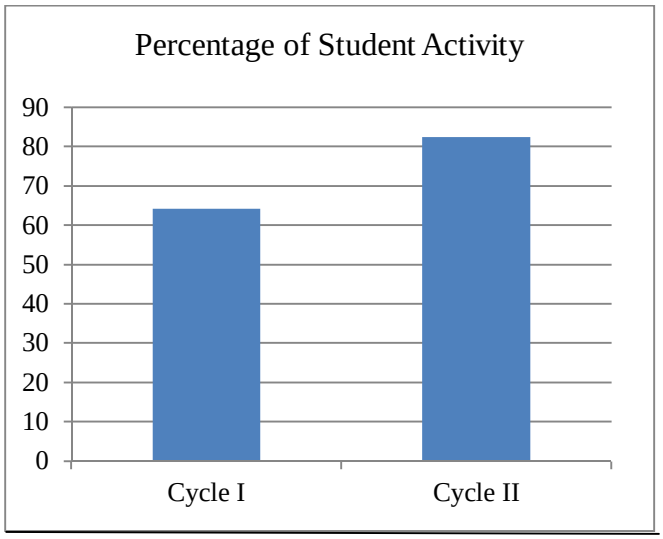

Figure 1: Percentage of Student Activity

2. Outcomes of Teacher Activity

Based on the results of observations can be obtained percentage of teacher activity results in CTL learning process in cycle I and cycle II can be seen in Table 2.

Table 2: Average percentage of teacher activity in CTL learning process

No	Aspek yang Diamati	Percentage of teacher activity	
		Cycle I	Cycle II
	A. Aspects Observed		
1	Motivate students to engage in activities in the learning process	62,5	75,0
2	Ask students to prepare textbooks	75,0	75,0
3	Providing apresepsi questions to generate and know the initial knowledge of students	62,5	75,0
	B. Core activities		
4	The teacher puts forward the topic / material to be taught	75,0	75,0
5	The teacher asks students to review the material / topics taught by reading textbooks and other reading sources	62,5	100
6	The teacher divides the students into discussion groups of 5-6 people in a group	75,0	100
7	The teacher divides the Student Worksheet and and explains to the students how to work on the Student Worksheet	62,5	100
8	Teachers give each group a chance to ask if there is an unintelligible problem relating to a given task	75,0	75,0
9	Teachers help students to process and analyze information from literature / teaching materials both individually and in groups on the problem-solving process that has been done by showing the props (modeling) in the form of pictures, videos and the environment	62,5	75,0

10	The teacher asks the students if there is a problem in the group to discuss the settlement with their group mates	75,0	100
11	The teacher asks each group to present the results of their discussion	75,0	75,0
12	Teacher Please invite other groups to disprove the content of the presentation	50,0	75,0
13	Teachers with students reflect on the knowledge that students have just accepted	50,0	75,0
	C. End activities		
14	Teachers with students make the conclusions of learning outcomes	50,0	75,0
15	Teachers assign individual assignments to students	62,5	100
	Mean	**65,0**	**83,3**

Based on the percentage of teacher activity in table 2, it can be seen that there is an increase of teacher activity from cycle I to cycle II, that is the average of percentage activity of cycle I is 65% (enough) and cycle II is 83,3% (high). These results indicate that in the first cycle teachers have not been accustomed to apply the model of learning CTL so that teacher activity is still lacking. While cycle II, generally teachers have been able to apply the process of learning CTL so that high teacher activity. More details can be seen in Figure 2 below.

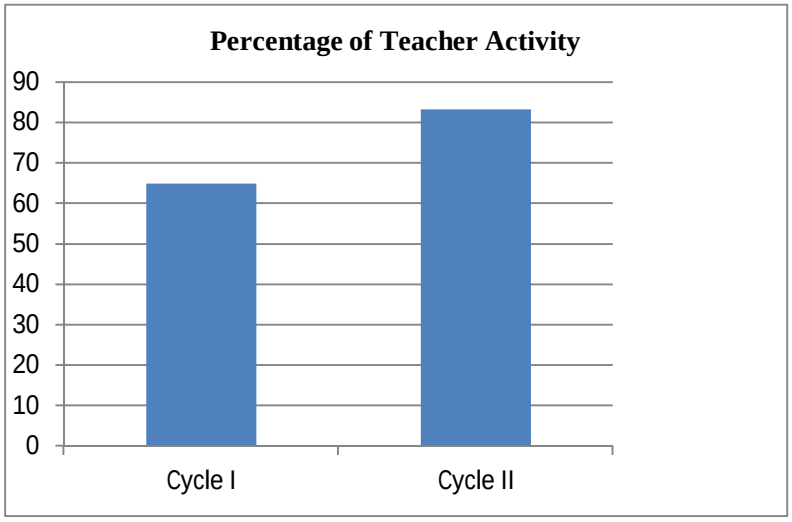

Figure 2: Percentage of Teacher Activity

3. Outcomes of Student learning

Based on the results of Student learning on Social Sciences with the material form of the earth's surface the average, maximum, and minimum value of Students on social science lessons based on CTL Learning can be seen in the following Table 3.

Table 3: Average, maximum, and minimum scores on social science lessons based on CTL Lessons

No	Type of Evaluation	Value	
		Cycle I	Cycle II
1.	Value Min	9	43
2.	Value Max	95	100
3.	Mean	65.0	80.8

Based on table 3, it can be seen that the average of the students' learning outcomes on the material of the earth surface increased from cycle I to cycle II. This can be seen from the average value of Students in the first cycle is 65 with a minimum value of 9 and a maximum of 95. While the average value of Students in cycle II is 80.8 with a minimum value of 43 and a maximum value of 100. For more details can be seen in Figure 3 below.

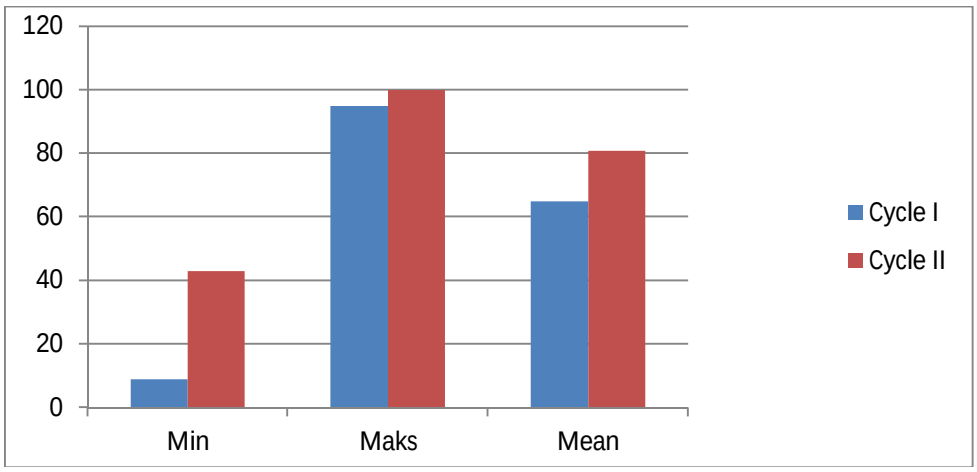

Figure 3: Average, maximum, and minimum scores on social science lessons based on CTL Lessons

Furthermore, based on the value of Student mastery of Social Science lesson with material form of the earth through CTL Learning can be seen in the following Table 4.

Table 4: The value of Student mastery of Social Science lesson with material form of the earth through CTL Learning

No	Type of Evaluation	Complete		Not Complete	
		Frequency	Percentage	Frequency	Percentage
1.	Cycle I	18	50,0	18	50,0
2.	Cycle II	28	78,0	8	22,0

Based on table 4, it can be seen that the mastery of the students' learning outcomes in the form of the earth's surface increases from cycle I to cycle II. This can be seen from the percentage value of students' mastery in the first cycle is 50%, while the value of student mastery in cycle II is 78%. For more details can be seen in Figure 4 below.

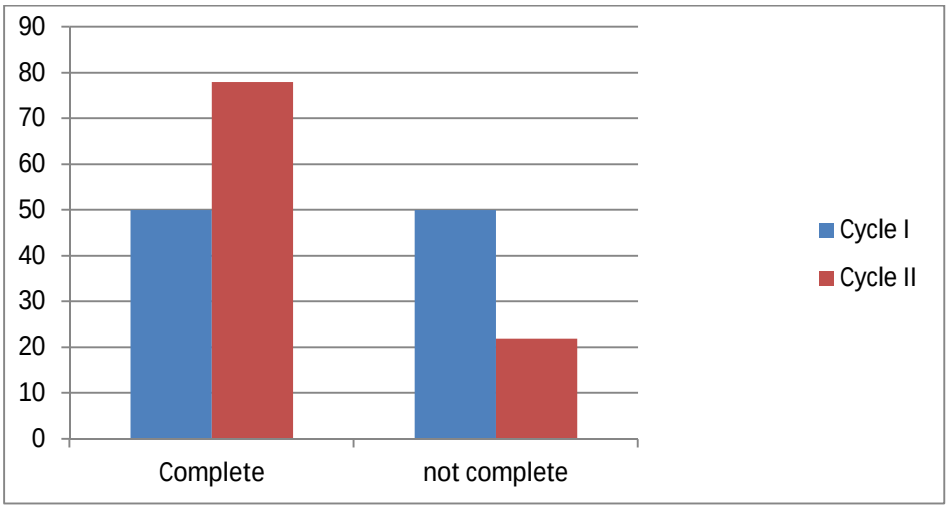

Figure 4: The value of Student mastery of Social Science lesson with material form of the earth through CTL Learning

Based on the result of the research, it can be seen that there is a positive effect of CTL learning model on the learning result of Social Sciences with the material of earth form. It is seen descriptively that the learning activity of students follow the CTL learning process increased from cycle I to cycle II, and teacher activity in applying CTL learning also increased from cycle I to cycle II. Similarly, seen from the mastery of student learning and average student learning outcomes in Social Science lessons with the material form of the earth has increased from cycle I to cycle II.

Conclusion

Based on the results of research and discussion can be concluded that: (1) Student learning activity follows CTL learning process increase that is percentage in cycle I: 64.3% and cycle II: 82.5%, (2) teacher activity apply CTL learning process increase that is percentage in cycle I : 65% and cycle II: 83.3%; (3) the average of the students' learning outcomes in Social Science lesson with the material of the form of the earth surface is increased ie the average value in cycle I: 65 and cycle II: 80.8, and (4) mastery of learning outcomes Students in the lesson IPS material form the face of the earth is increased the mastery of the cycle I: 50% and cycle II: 78%.

Reference

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