

The Difference of Learning Outcome in Economic Lesson

(Using of Cooperative Learning Strategy “the Learning Cell Type” and Expository Strategy in Learning Process in Tenth Grade Student of SMKN 1 Payakumbuh)

Oknaryana¹, Jean Elikal Marna²,

¹ Universitas Negeri Padang, Indonesia, ✉ (e-mail) oknaryana@gmail.com

² Universitas Negeri Padang, Indonesia, ✉ (e-mail) jeanelikalmarna@gmail.com

Abstract

This study intended to find the different learning outcome between active learning strategy “the learning cell type” expository learning strategy. This study was an experimental study held in economic lesson to the tenth grade students of SMKN 1 Payakumbuh in discussion of “macroeconomic problem”. The population of this study was the tenth grade students of SMKN 1 Payakumbuh. While the sample was the student of X AP-2 class as experimental class uses the learning cell strategy and the students of X PM-2 class as control class using expository strategy. The result of this study showed that Z testing of pre-test with nominal $\alpha=0.05$, $Z_{score} = 0.12$ and $Z_{table} = 1.96$ hence $Z_{score} < Z_{table}$. Therefore H_0 is accepted and H_a is rejected, it means that there was significant difference of pretest result between the learning cell class and expository class. This result shows there was significant similar competence of both classes before the using of both strategies. The result of the posttest showed that $Z_{score} 3.21$ and $Z_{table} 1.96$ in nominal $\alpha 0.05$ hence $Z_{score} > Z_{table}$, therefore H_0 is rejected and H_a is accepted. These mean that there was significant difference result of economic learning between student using active learning the learning cell strategy and the student using expository strategy. Based on the result of study, it can be concluded that the learning uses both strategy; learning cell and expository, give the same impact in improving student learning. However the learning cell strategy gives bigger impact in students learning outcomes than expository strategy. Therefore it is recommended for the teacher to use the learning cell strategy as an alternative of learning process.

Keywords: the learning cell, expository

Introduction

In order to prepare a better graduation student for a challenging and uncertain era of globalization, it is necessary to find a right education program based on the real needs in the field. For those reasons, government has programmed *Kurikulum 13* as a follow up of *Kurikulum Tingkat Satuan Pendidikan* (KTSP). This *Kurikulum 13* gives the chance for the student to learn how to grow up and find their true identity through active, creative, innovative, effective and fun learning (PAIKEM, read; *proses belajar yang aktif, kreatif, inovatif, efektif dan menyenangkan*). Active means teacher has to create a situation that can make student become active to ask a question, being curious for everything and active in giving opinion. The Learning Activity model (Britain, 2004) supports high-level sharing of learning processes and activities by reusing learning methods, learning strategies and learning activities. Fun learning strategy can be adapted as a way to give innovative learning. Learning is fun is a key applied in innovative learning. If all of the students have already keep these thoughts in their mind, there will be no more passive students, feel stressed for the homework deadline, feel afraid of the failure, lack of choice, and feel bored in the classes. Creative means using new creation or something difference than before. Creative learning has more meaning rather than just use or apply the curriculum.

Curriculum needs to be criticized and improved in a creative way though it is just a document and standard planning. Therefore there will be creativity in improving competency and creativity of learning process in the class, including the using of environment as a source of study and part of study. Creative learning also means that teacher should create various activities of study to fulfill the various abilities and ways of study of the students. Fun learning means teachers should create fun atmosphere of study to make the students pay full attention to the lesson so they will have a full time to focus on the lesson.

Learning process using PAIKEM method is suitable to applied in economic lesson, so that the lesson that most of the students think as a boring one before, can be a fun lesson. Based on the observation and interview with economic teacher in SMKN 1 Payakumbuh, it is found that most of the students are lack of preparation to face the lesson. This situation makes them hard to understand and master the lesson well; they even rarely ask the question and tend to be passive during the learning process. And they also find difficulties to understand the concept of economic lesson itself. The average result of daily test in economic lesson of tenth grade students in SMKN 1 Payakumbuh, can be seen through the following table:

Table 1 The First Semester Daily Test Score of Tenth Grade Student of SMKN 1 Payakumbuh

Classes	Number of Students	Average Score	Highest Score	Lowest Score	Completeness	
					Complete	Uncomplete
X AK 1	39	87.03	100	45	35	4
X AK 2	39	76.84	100	45	29	10
X PB	39	74.95	100	30	35	4
X AP 1	39	53.95	97	15	7	32
X AP 2	39	62.24	100	35	18	21
X AP 3	39	61.79	95	30	10	29
XPM 1	39	74.06	100	48	28	11
XPM 2	39	66.76	100	40	21	18
XPM 3	39	61.22	100	40	13	26

Source: Economic Teacher of SMKN 1 Payakumbuh

From the table above, it can be seen that most of student's learning outcome are not appropriate with the standard appointed in SKM (*standar ketuntasan minimum*). As (Slameto, 2015) said, there are several factors that can affect the learning outcome. They are internal factor that comes from the student itself such as motivation, interest, knowledge, and learning method, and external factor that comes from outside of the students such as curriculum, learning strategy and method, evaluation system, teacher, management, motivation for student, and several kinds of value in learning system.

Based on the statements above, it can be said that learning strategy is one of important factor that can affect the student's learning outcome. Generally, most of the teachers use conventional strategy by giving an assignment. In this kind of strategy, teachers are the main factor in giving the lesson, where the teachers are more active than the students. The students will just listen, pay attention and take a note for every lesson the teachers give to them, and then they will just do the assignment. This situation will make the students less active and lack of motivation in learning. If there is no teacher in the class, the learning process cannot be done. This kind of custom is a bad one and it should be changed. This is also based on the research of (David Colander, 2009), which states that conventional learning methods are only touch on on surface level learning.

Teachers should try hard to make student get involved and have more motivation in every single learning process. If there are more student's involvement in a learning process, there will be more

student's intention to understand the lesson. Nowadays, Cooperative learning strategy has been already applied in learning process in the school. Cooperative learning means learning strategy with a group of students divided into a small group in several levels of ability. In finishing a group's assignment, every student in the group should work together to understand the lesson. (Isjoni, 2010) said that cooperative learning method can be applied to motivate student to be brave in giving their opinion, respect others opinion and sharing ideas. Whereas according to (David W. Johnson, 2014) The cooperative Learning model is a promising model for improving student motivation in a way that is compatible with 21st century requirements.

One of the cooperative learning strategies is *the learning cell*. This kind of cooperative learning strategy points to learning strategy method of study in pairs, where the students ask and answer the question alternately based on the lesson given. Zaini, 2008 stated the learning cell strategy is one of the several best methods that can help students to study in pairs effectively. There are several steps of active learning in *the learning cell*, as stated by Zaini, 2008; they are (1) as a preparation, students are given a task to read an article, and then they should write some questions based on main idea appear in the article. (2) As a beginning of lesson, students are appointed to find a friend in pairs. Student A start to read the first question and it will be answered by the student B. (3) after getting the answer or being corrected or given the additional information, it is student B turn to give a question and the student A should answer the question.(4) if student A has finished in giving a question and the question has already been answered by the student B, they should keep going to ask and answer another question until it is finished. (5) during the activity, the teacher should move from one group to another groups to give opinion, additional information or explanation by asking and giving a question too. (for those who find difficulties to answer the question or need more explanation or additional information.)

One example of conventional strategy is expository strategy. Expository strategy is a learning strategy that is used by giving explanation first, such as definition, fundamental, the lesson concept, and also giving examples assignment of solving problem through speech, demonstration, asking and giving question and task. The student will just follow the concept arranged by the teacher. The purpose of this strategy is to give the whole content of the lesson to the student directly. (Sanjaya, 2010) said, expository learning is a learning strategy that is emphasized to the process of giving a lesson in verbal way by the teacher to a group of students in order to make the student understand the lesson as a maximum as possible. Actually, this strategy is appropriate with economic lesson to make students be more understand about economic lesson, because basically economic lesson is memorizing concept. The procedure to do expository concept as (Sanjaya, 2010) said, are; (1) formulate the purpose to fulfill. Formulating the purpose is the first step the teacher should prepare. The purpose should be formulated in a form of behavior changing oriented in learning outcome. (2) master the subject matter well. It is absolute requirement in using expository strategy. The using of perfect planning lesson will make the teacher be more confidence. Therefore they can manage the class easily, easy to move, be brave to face the students, do not be afraid of the student's behavior that can bring trouble to the learning process, etc. (3) be familiar with any situation that can affect the learning process. Knowing the situation of the class is an important thing in preparation that can make the teacher be aware for every possibility that may happened.

From those statements, it can be concluded that *the learning cell* strategy is better than expository strategy to be used in learning process to improve the student's learning outcome. Thus, writers are interested to do the study entitled: The difference of learning outcome in economic lesson between the using of cooperative learning strategy "the learning cell type" and expository strategy to tenth grade student of SMKN 1 Payakumbuh.

Methods

Based on the problem above, the study will be experimental study. This study will use experimental quantitative approach by giving attention to the experimental class and compare it with control class without attention (Suryabrata, 2010).

This study will use the method of Randomized Post Test Only Comparison Group Design (Sukmadinata, 2010). For the detail information, it can be seen through the following table:

Table 2 Research Design

Kind of class	Pre-test	Treatment	Post-test
Eksperimen	√	X	T2
Kontrol	√		T2

Information:

X= the treatment that will be given to the experimental class (active learning, *the learning cell* type)

T2= final test / post test

This study has been done in SMKN 1 Payakumbuh. The population was all of the research objects; they are all of the tenth grade students of SMKN 1 Payakumbuh. The number of population is stated in the following table:

Table 3 Research Population

No	Class	Number of student	Average score
1	X AK 1	39	87.03
2	X AK 2	39	76.84
3	X PB	39	74.95
4	X AP 1	39	53.95
5	X AP 2	39	62.24
6	X AP 3	39	61.79
7	X PM 1	39	74.06
8	X PM 2	39	62.76
9	X PM 3	39	61.22
	Total	351	68.32

Source: Administration of SMKN 1 Payakumbuh

This study used two samples of class. They were one class for experimental class and the other for the control class. The selection of sampling was done through sampling purposive method. It is a method in taking a sample with certain consideration (Sugiyono, 2015). The writers used X AP 2 class and X PM 2 class as samples, because both of classes have the similar average learning outcomes in economic lesson.

Table 4 Sample of Study

Class	Number of student	Treatment
X AP 2	39	Experimental class
X PM 2	39	Control

Source: Economic Teacher of SMKN 1 Payakumbuh

The treatment given to the sample classes can be seen through the following table:

Table 5 The Strategies used for sample classes

No	The learning cell strategy	Expository strategy
1	Introduction <ul style="list-style-type: none"> • Teacher delivers the purpose of study • Teacher gives apperception • Teacher gives motivation 	Introduction <ul style="list-style-type: none"> • Teacher delivers the purpose of study • Teacher gives apperception • Teacher gives motivation
2	Main activity <ul style="list-style-type: none"> • In the begining of the lesson, the teacher divides the students into several groups (5 to 6 students in one group) • Teacher distribute the teaching material to the students. • Teacher asks the student to read the teaching material then write several questions about the topic of material.(about 10 minutes) • Teacher collect all of the questions from each group. • Teacher discuss the most questionable question of the groups. • Teacher asks some groups to answer the question. • After getting the answer and do correction or giving additional information, teacher may go on with another questions. 	Main activity <ul style="list-style-type: none"> • Teacher explains the lesson • In the middle of lesson, teacher does asking and giving question activity with the students.
3	Closing <ul style="list-style-type: none"> • Teacher ask the student to give the question. • Teachers guides the student to conclude the lesson. • Teacher gives homework. 	Closing <ul style="list-style-type: none"> • Teacher ask the student to give the question. • Teachers guides the student to conclude the lesson. • Teacher gives homework.

Results and Discussion

Hypothesis test

To find whether there are differences of students learning outcome between the using of the learning cell strategy and expository strategy, it can be used Z test. The result of hypothesis test in pre-test and post-test for both samples can be seen through the table below:

Table 6 Hypothesis test of experimental and control class

Kind of test	Z_{hit}	Z_{tab}	Conclusion
Pre Test	0.12	1.96	H_0 is accepted
Post Test	3.21	1.96	H_0 is rejected

Based on the Z test for pre-test with $\alpha = 0.05$, it is found the result of $Z_{hit} = 0.12$ and $Z_{tab} = 1.96$ it means that $Z_{hit} < Z_{tab}$, and H_0 is accepted. It means that there is no significant difference of pre-test for both experimental and control class. This case shows that the ability of both sample classes was similar before the using of learning strategy. Meanwhile the result of Z test of post-test for both sample classes with $\alpha = 0.05$ are $Z_{hit} = 3.12$ and $Z_{tab} = 1.96$, it means that $Z_{hit} > Z_{tab}$ and H_0 is rejected. It can be conclude that there is a significant difference of post-test for both experimental and control class.

Discussions

From the hypothesis test that has been done before, it can be concluded that there is difference outcomes of student's learning in economic lesson focusing on macroeconomic problem using active learning strategy "*the learning cell type*" held in SMKN 1 Payakumbuh. Moreover, from the data analysis that has been done before, it can be seen that the average score of experimental class is higher than control class. This case proves that the learning process using *the learning cell* strategy gives bigger impact than using expository strategy.

The learning cell strategy will encourage the students to be more active and responsible to prepare them self before the learning process by reading and understanding the teaching material. This case is because every student will be ready for every question that will be appeared in every learning process. Meanwhile, the expository strategy makes the student lack of responsibility in understanding teaching material, because student will just listen to the explanation of the teacher. If the activeness of student is improved, the learning outcome will be higher in the final test. This is in line with (Odagboyi Isaiah Amedu, 2017) opinion, in cooperative learning, peers help learn from each other and build good communication among themselves. Students with different cultures, experiences, and modes of learning comes together to achieve success toward common goals by assuming the responsibility of each progress. This case is in line with the theory stated by (Zaini, 2008) that *the learning cell* strategy is one of the best strategy to help student learn effectively where they can ask and answer the question alternately.

This case also has been proved by the previous writer, Maiyusri, who has used the learning cell strategy in mathematic lesson. Through the using of this strategy, the learning outcome of seventh grade students in SMP 2 Payakumbuh has been higher and the atmosphere of the class became more fun.

According to Prayekti, 2016, expository learning is the learning done by the teacher without taking into account the ability and intelligence of students. Expository learning by teachers makes students lazy and they tend to sit quietly listening to very limited explanations and activities, students can't discuss with class to argue material, or they can't talk to their friends or ask the teacher about something they have not understood. (Sanjaya, 2010) stated that expository strategy has several weaknesses, they are:

1. This strategy only can be used to the student with good listening ability. This problem can be solved by using *the learning cell* strategy because the student will learn how to prepare a question and answer it to make them be more understood to the material.
2. This strategy cannot be used to solve the problem of difference kind of student's ability, knowledge, interest, talent, and also way of study. While the learning cell strategy has several

kinds of method to solve those problems, such as speech, discussion, and asking and answer question activity.

3. Most of the activities of this strategy are just giving a speech by the teacher to explain the teaching material. It will make the student hard to improve their ability in socializing, interpersonal relationship, and critical thinking. However, *the learning cell* strategy gives the chance to the students to work in a group, so the student can socialize with the friend in the group or other groups.
4. The success of this strategy is fully depended on the ability of the teacher such as preparation, knowledge, confident, spirit, enthusiastic, motivation, and speaking ability to manage the class. However in the learning cell strategy, it is not only depended on teacher's ability itself, but also the ability of teacher to manage groups of study.

The teaching material will be limited too, because the learning process is just in teacher center where the teacher is more active than the students.

If the strategy of learning is different, the learning outcome will be different too. Therefore, it can be concluded that the student's learning outcomes become higher in economic lesson focusing in macroeconomic problem when using *the learning cell* strategy to the tenth grade student of SMK 1 Payakumbuh.

Conclusions

Based on the result of study and discussion, it can be concluded that:

1. The learning outcome using learning cell strategy is higher than the expository strategy in tenth grade student of SMKN 1 Payakumbuh, in economic lesson focusing in macroeconomic problem. The average score for experimental class is 78.05 and 72.29 for the control class.
2. The learning cell strategy is a new strategy of learning process for the students, but it can be used to improve student understanding in learning process.

Based on the conclusion above, the writers give the following advices:

1. The principle of SMKN 1 Payakumbuh should introduce the learning cell strategy to all the teachers, especially to economic teacher, by giving a seminar or other way to introduce this strategy.
2. The teachers of SMKN 1 Payakumbuh, especially economic teacher, should use this strategy, because this strategy can improve student learning outcome especially in discussion of macroeconomic problem.
3. To get the perfect result of using this strategy, the learning should be supported with complete facilities like, media of teaching, learning source, conducive class, and the teacher who can well manage the class.
4. It is necessary to have more study about the using of this learning cell strategy to find whether there is the same effect for another lesson or not.

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