The use of guided discovery learning method to improve participation in answering reading comprehension questions

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Abstract – This research was done by using Classroom Action Research method to solve the problems faced by the students. This research was conducted to the eleventh Grade Students of SMA BO Pontianak in academic year of 2017/2018. Here, the researchers used purposive sampling as the sampling technique by choosing eleventh grade which consisted of 26 students. Techniques of data collecting were observation technique and measurement. To analyze the data, the researchers used qualitative and quantitative analyses. In qualitative data analysis, the researchers analyzed the displayed data, and drawing conclusion. While in quantitative data analysis, the researchers analyzed the data from the test which calculated by percentage of the students' participation during each cycle in three cycles. In the initial cycle, the students' participation was 21.30%. Meanwhile in the second cycle, the participation of the students was 45.62%. In the last cycle, the students' participation was 60.60%. The researchers concluded that Discovery learning method was effective in improving the students' participation in responding to the teacher's questions. Therefore, discovery learning method could help the teacher in teaching and learning process because this method encouraged students to learn actively.

Keywords: classroom action research, discovery learning, reading comprehension

1. Introduction

As participation is crucially important, McGregor (2007) "argues that a good teaching presents tasks and learning that require active participation". It means that expected teaching condition is indicated by presenting tasks for students, and the activeness of the students in participating during the lesson hours. Otherwise, without participation of the students, the classroom is meaningless.

Cohen (2004) says "the more the students' participation, the more the students' gain in learning" (p.180). By participate more in learning process, the objectives of teaching is able to reach. Participating students shows that the lesson is alive. By having alive class, the more students will gain the understanding about the lesson on the day. So, no doubt that the students' participation is very necessary.

Cooper (2011) argues that "it is not unusual for a few students to monopolize classroom interaction while the rest of the class looks on" (p.115). Absolutely, this is not an expected student where good teaching process requires all students are to participate wholly instead of partly. In some common classes, there are only few students who are always active in participating to the teacher's questions. However, this is not a good situation for learning. What is expected in a good classroom is a good number of students participating during the lesson.

In SMA BO, the students are actually able to understand the questions proven by their capability in translating the questions well. It means that the problem is the students' concept of searching for the information in the text. In this case, the teacher needs to improve the students' participation in order to reach the objectives of learning English by apply a certain method to encourage students to participate in responding the teacher's questions, so at least, the students have their wish to think more on self-effort instead of waiting the teacher search the answer for the them. There must be applicable method to encourage the students to form their own way of thinking so that the students can be independent learners. In line with Lloyd (1998) claims that "the independence-oriented learning tendency is one of the most effective approach to reduce the students' failure". It means that, a good technique of searching the information from the text to participate.

The description of SMA BO shows that the school is supporting to the application of good teaching and learning. At the same time, viewing the importance of students' participation in learning, the significant role of the participation in reaching the objectives in learning, it is obvious that an improvement is necessary and possible. There must be an appropriate method to apply in teaching and learning for the improvement purpose, one of the methods is "Discovery Learning Method"

Westwood (2008) says, "the discovery method motivates learners to be independent learners". By practicing this method in the classroom while teaching, it in turns make a positive participation of the students. In other words, discovery method is potential to apply to teach the students, so they can be more active to respond the teacher's questions.

Westwood (2008) then adds that discovery method is characterized by the dominant of students' activeness in teaching and learning process. It is also described that most students-centered methods such as; problem-based learning, project based learning, resource based learning, and computer-assisted learning are concerned not only with knowledge but also with the development of effective learning strategies, often encompassed by the expression 'learning how to learn' According to Ormrod (2000), the concept of discovery learning is requiring students to investigate a topic, issue or problem by active means, obtain pertinent information, interpret causes and effects where relevant, and arrive at conclusion and solutions. According to Adkisson et al (2006), "this discovery method emphasizes to have their strategy and encourage them to have active learning" (as cited in Westwood 2008). It is clear that this discovery method is able to improve the students' activeness and participation. Therefore, it can be said as potential method to apply an appropriate teaching.

The application of the discovery learning has been explored by several various studies. According to Bells (2010) claims "discovering skill is crucial in this 21st century". This idea describes the open of the information system on all over the world, everybody may know information and knowledge by only searching on the internet or any literatures. However, one has to have his or her own curiosity on what he wants to know about and of course the concept on how he or she answer his or her curiosity. In line with Bayram (2003) argues "the discovery method gives significant impact to the students' motivation to learn".

2. Method

Since the scientific analysis on the study need to be defined, it is necessary to present a definition of action research. Burns (2010) defines that "CAR (Classroom Action Research) is part of a broad movement that has been going on in education generally for some time which is done in a classroom". It means that classroom action research is a research that is supposed to be conducted in the classroom.

2.1 Research design

Collecting data started by choosing the appropriate and effective technique to obtain the valid data of this research. To collect the data, the researchers use these following techniques, they are measurement and non-measurement. Measurement technique is related to the collecting data in form of numbers and score. As this classroom action research uses qualitative and quantitative data.

2.2 Participants

The researchers chose the subject of research is through purposive sampling. The researchers choose this class because the problem of students' participation in responding to the teachers' questions. The sample of the research was the class of XI IS of SMA BO Pontianak. The class consisted of 26 students. This class was chosen because the class had the problem where the students were lack of participation.

2.3 Data Collection

To get the data, the researchers use oral test and documentation. Documentation in this research is intended to restore the authentic circumstances during the research. Ary (2010) argues that documentation will help the reader understand the report. Observation checklist in this research was used to check the significance points and aspects of the students' participation in responding to the teacher's questions. There were only 2 choices in filling the observation checklist which were Yes or No. Then, the last tool of collecting data was the field note. The researchers put this tool of data collecting at the end of the lesson plans in three cycles.

2.4 Data Analysis

For the quantitative data analysis tools of data collection were videos recorded during the research then were analyzed to interpret the data to be the research findings. The students' participation in responding to the teacher's questions is presented in percentage.

Meanwhile, for the qualitative data analysis, observation checklist and field note were deployed to focus on unexpected things happening during the research are recorded in the field note. Then, the data also become the considerations of planning the next cycle.

3. Results and Discussion

There were only 6 students participate to answer the first questions. For the questions number 2, there were only 5 students who participated to respond the question. There were only 6 students raised their hands up indicating the participation to respond to the question number 3. The number of the students who answer the question number 4 were 4 students. There were only 5 students who participated to answer the question number 5. Three students were absent from the meeting during the cycle one. The total of the students' participation individually 490 points. This total is divided by 23 attending students. Then, the average for each student's

participation percentage was 21,304 %. There were eight students even did not participate at all. In this cycle, the lowest percentage of individual students' participation was 0%. The highest percentage of the students' participation was 100%.

In the second cycle, for the question number 1, there were only 8 students who participated in responding to the teacher's question. For the question number 2, there were ten students who participated to respond the teacher's question. For the question number 3, there were 8 students who participated to respond the question. There were only four students who raised their hands up trying to respond indicating their participation to the question number 4. For the last question, there were 5 students who participated to respond.

In the second cycle of the second meeting, for the question number 1, there were only 11 students who participated in responding to the teacher's question. For the question number 2, there were 11 students who participated to respond the teacher's question. For the question number 3, there were 12 students who participated to respond the question. There were only twelve students who raised their hands up trying to respond indicating their participation to the question number 4. For the last question, there were 11 students who participated to respond.

The total percentage of the students' participation was 1050. There were three students were absent in the second cycle. There were 23 students attending this cycle, so the total percentage of the students' participation was divided with present students. So, 1050/23. The average percentage of the students' participation was 45,65%. There was a significant improvement from the previous cycle. The improvement of the students' participation can be seen. In can be seen from the video, there were still four students having no participation in this cycle. There were two students participating most with the percentage of participation 87,5%. It can be said that the students' participation was improved.

In the first meeting of the third cycle, in the meeting, the researchers recorded a video to see the students' participation in responding the teacher's questions. From the video, it could be seen that for the question number 1, there were 12 students who actively participated in responding to the teacher's question. For the question number 2, there were 9 students who participated. For the question number 3, there were 15 students who participated in responding to the question number 3. There were 12 students who participated in answering the questions number 4. To the question number five, there were 17 students who raised their hands up indicating they participated actively.

In the third meeting of the third cycle, when the students were asked the question number 1, there were 15 students who participated to respond. For the question number 2, there were 14 students who actively raised their hands up. To the question number 3, there were 13 students who participated in responding the question of the teacher. For the question number 4, there were 13 students responded to the teacher's question by raising their hands up indicating they were participating.

In the third cycle, four students were absent. Three students in the first video, and one student in the second video. In this cycle, the students' percentage of participation was improved. Based on the analysis of the recorded videos on the third cycle, the total percentage of the students participating was 1333,33%. This number is divided by the presenting students. So, 1333,33/22 students. Therefore, the average of the students' participation individually was 60,60%. The students' participation in responding to the teacher's question was improved significantly from the second cycle. There were six students participating most in the third cycle, the percentage was 88,88%, meanwhile only one student who did not participate at all or 0% participation. The last cycle showed the percentage of the students' participation in responding to the teacher's questions was 60,60%.

Table 1 The summary of the Students' Participation Percentage

REMARKS	CYCLE 1	CYCLE 2	CYCLE 3
Total	490	1050	1333,33
Percentage	21,30 %	45,62%	60,60%

By reflecting the students' score in each cycle, the researchers found that some students were still hard to especially of both cycle one and cycle two. Because of that, the researchers arranged some strategies to be implemented in the class. The improvement of the students can be described in the chart as follows.
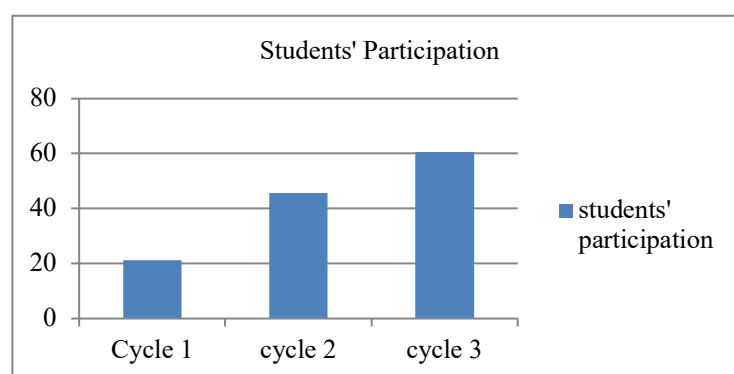

Chart 1 The Improvement of the Students' Participation

The discovery learning method was considered successful in this research. Itwas shown by the improvement of the students' participation in responding the teacher's questions from the first cycle to the third cycle, as well as their activeness in learning. As mentioned in the previous part of this chapter, the researchers have done three cycles. The mean frequency of students' participation in responding the teacher's questions was improved significantly.

Based on the observation checklist of students' performances and also the field note, there were some important improvement of students.The students were becoming more enthusiastic in two last cycles to begin the lesson. In the first cycle, they got confused toward the process, it made them not interested involved in learning activities and autmatically, the were motivated to participate more actively in the lesson. In the 2ndcycle, the students did not get much more confused but they still did not focus on the study, because some of them made little noise. That was why their performance was not maximal. In the last cycle, they were not confused anymore. They had known very well what to do in the second cycle. It made their performance was very well. It did not like cycle one and cycle two.

The students got involved more actively in the class, successfully finding the information on the text and the ability of students was improved inevery cycle. They know the way to find the information in the text by using guided question in the discovery learnin gsheet. The improvements also could be seen from the result of the students' performance. Çakırs (2016, p. 68) states specifically focused on the type of questions teachers asked, particularly, open ended questioning. It can be said that by asking significantly more open ended questions, teachers gave their students more opportunities to participate in class. In the first cycle, thestudents' performance was categorized as a poor performance, in the secondcycle, the improvement was good performance, and the last cycle the result of student performance was really significant.

The students' performance increased to be better which was categorized as a very good performance.

4. Conclusion

Discovery Learning Method was applied to solve the problems of the students which was lack of participation in responding to the teacher's questions. First, the teacher asked the students what they know about the topic of the title of the text being discussed. After explaining the materials, the teacher asked the students to make a group consists of two students. Then, in this group of two, the students were asked to read the text they have to discuss. After that, the students were asked to write down questions and what they understood from the text. In applying this technique, the students were asked to explore more on the thought of others and elaboration between the students to think on the answer. They were guided by using guided questions to find out the answer to help the students think directly on the text and the answer. The last, the students were asked to synthesize their answer with their friends to respond to their own questions. When the researchers found that the students finished with their exploration and discovery with the texts, the researchers then asked the students several questions. These questions were asked to the students to invite the students to participate in responding to the teacher's questions.

After using and applying the Discovery Learning Method technique on the students, it could be seen that the number of participations' frequency of the students improved from cycle to cycle. The improvement was happening gradually and significantly. It would be proven by the students' percentage of responding the teacher's questions was improved from cycle to cycle. In the first cycle, the mean percentage of participation of the students was 21,30%. It was categorized very poor participation and score was getting better form cycle to cycle. Meaning that, there was a significant improvement from cycle one to cycle two. In the last cycle, the students showed very good progress. The average or mean percentage of participation in responding the teacher's questions of the students in the third cycle was 60,60%.

Teaching reading by using Discovery learning method absolutely asked the active involvement of the students. The students had to work together to think to discover to find out the problem solution to the questions the writer given. The students had to think both individually and cooperatively. The characteristics and the strengths of the Discovery Learning Method made the students were able to work in group to create cooperative learning among the learners. The Discovery Learning Method technique is appropriate technique to be applied for the students who have problems in responding to the questions on narrative text comprehension. The students are expected to build their vocabulary breadth in learning English since vocabulary is one of the main fundamentals in learning foreign language. The Discovery Learning Method technique is able to encourage the students to work together to respond to the problem, since the technique empowers the cooperative learning through the discussion in pair and in square or in group of four students. In line with Akanmu (2013) recommends "Guided Discovery Learning Strategy was found helpful in learners' ability to extract a simple figure from a complex one since it was more interactive"

It is suggested that before the use of the Discovery Learning Method technique, the teacher is suggested to prepare lesson plan well to make the teaching run well. The Discovery Learning Method technique is recommended for English teacher as alternative teaching technique in improving the students' reading comprehension in education texts. In the Discovery Learning Method technique, the teacher is suggested to prepare media to make the teaching and learning process easier. The Discovery Learning Method technique is the technique needed by the teacher to be good facilitator and instructor. The teacher's role as facilitator is to facilitate the students in learning and guide the students to respond to the problems. As the instructor, the teacher can give instructions to the students systematically to the students to work together in form of pair as well as square.

Suggestion to the teacher to use the technique in teaching the other skills. For other researchers, the suggestions are It is suggested to the other researchers to conduct another research regarding to the use of the Discovery Learning Method technique. It is suggested to the other researchers to do a research on the use of Discovery Learning Method technique in teaching the other skills. Other researchers are suggested to conduct a research on the use of Discovery Learning Method in teaching aspects or elements of reading. The other researchers are suggested to read this research to see the gap with research opportunity in future.

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