

THE IMPLEMENTATION OF THE 5E MODEL STAGES TO BUILD STUDENTS' VOCABULARY

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Abstract: There are stages of human to learn something. In early ages, they will learn simplest things to the complicated ones. A learning process of human is started with and introductory and it tries to connect with their prior knowledge to the new one. Children begin to curious about what they want to know and start to make some questions about what they want to know. In the process of finding the answers of their own questions, they will interact with others and try to share the knowledge in this process. The result of this study illustrates that the implementation of the 5E model in teaching vocabulary that can enhance the students' vocabulary achievement and successfully encourages them to actively and enthusiastically take part in the teaching-learning process of vocabulary through group task.

Key words: implementation, vocabulary, vocabulary course, and 5E model.

Vocabulary is an important component in communicative competence. It is crucial for language production and comprehension (Coady & Huckin, 1997). Vocabulary meaning is not only implied by definition, but also fits into the world. State (2005) stated that vocabulary knowledge expands and deepens over the course of a lifetime. The role of vocabulary is recognized in the first language situation and happens in second language setting.

According to curriculum, Balikpapan Foreign Language Academy (ABA Balikpapan) set up the vocabulary beyond its context. The instructional pedagogy asked students to look up words in a dictionary and use the words in a sentence. This condition put the students in a situation that they were not get indirect exposure to words. This condition creates a situation where the instruction given is inadequate. Meanwhile, the adequate vocabulary instruction should be more than just a definitional knowledge. It should make students actively engaged in using and thinking about word meanings and in creating relationships among words. In other words, it is important

that vocabulary instruction provides students with opportunities to encounter words repeatedly and in more than one context.

The common problems that in vocabulary class swing to lack of students' motivation and lack of the students' engagement in the vocabulary materials given. Those problems have impact on the students' difficulties in gaining new words. The students often encounter lack of exposure of new words and find that the vocabulary instruction is not meaningful. It seemed a waste of time for them and they still encountered similar problems in comprehending the word meanings and in gaining new words.

The problem found in vocabulary course is that the second-semester students are poor or weak in vocabulary comprehension. It is indicated by the result of the low scores obtained from their mid and final test. There are many aspects that may cause this problem. Firstly, Balikpapan Foreign Language Academy has the lack of facility. It is only a small private institution under the Alkon Kalimantan Foundation. This foundation has many sections or departments, and this academy is the newest

of department. This academy is only one department to support the other departments. The main priority are the other departments which run on technical factory supports, company employee safety equipment, and certification training for the employee in technical fields mainly in gas and oil exploration-production companies. The facility that is available only language laboratory but there is no special room designed for vocabulary class.

Secondly, there are only a small number of students. These students lack background knowledge in English language. Some of them are the employee from many technical factories who enroll in this institution only to add their capabilities in speaking in order to be able to communicate in English to bring it into the practice on their fields. Some of them are unemployed who wants to learn English in order to find jobs in Balikpapan, where some of the companies required English for second language communication. The condition of them as workers cause the time for teaching learning to be handled in the evening till night. The students must spend rest of their energy to learn after the hard work, so it makes them more difficult to concentrate in grasping the material given. This condition also affects their attendance.

Thirdly, the students' motivation also become of the problem which were derived from many aspects such as low motivation and lack facility. There were four classes in the process of teaching and learning, which contain small number of the students about 12 to 15 students in each class. It seemed to discourage the students' motivation as they demand more classmates. In fact, the location of this institution, which is in the remote area, may affect to the students' attendance also. There is lack of public transportation.

Fourthly, the method of teaching is teacher-centered. The vocabulary instruction that is not interesting and not asking students' involvement may cause the low of students' motivation. The use of the traditional meth-

od in which all activities in class tend to be teacher-centered becomes a problem for students because all the activities tend to be dictated by the lecturers. Then, the students have lack opportunities to learn constructively. The weakness of this method is the students only gain information from the lecturer only, where all the information sources about vocabulary are only dictated by the lecturer. The students may not get involved actively in the class activity, because they only respond if the questions are delivered by the lecturer. The students do not develop a constructive thinking, as their ideas are only to respond in a passive way. This traditional instruction may cause students often get low score on the vocabulary test. The low scores in vocabulary test are the signs that vocabulary instruction should be revised.

This traditional method in teaching vocabulary in Foreign Language Academy of Balikpapan should be changed in order to reach its objective to build students' vocabulary. The students could be exposed to find new words and find the topic, which was meaningful to them, so it created the atmosphere where they can learn constructively and they did not have any limitation to gain new sources of information. By using the method their vocabulary was improved, so their scores in vocabulary test also were increased as well.

A study about a method of vocabulary instruction should be done. A new method of vocabulary instruction should be implemented in vocabulary class. This new method or strategy should encourage students' active involvement in vocabulary class and this method should help students to relate their prior knowledge in order to foster an independent vocabulary learning process. This new strategy included constructivism method in vocabulary learning. The constructivism approach can raise students' engagement and involvement in the instructional process, because the students have opportunities to expand their vocabulary knowledge. The information to

gain the knowledge was not being limited. It is adjusted to their efforts in gaining information and their needs.

A new method in teaching vocabulary should be implemented in vocabulary class at Balikpapan Foreign Language Academy. It is 5E model vocabulary teaching. This model should replace the lecturing traditional method during this action research. This 5E strategy supported students to learn constructively where the students and drew students' active involvement in vocabulary activities. 5E Model Vocabulary Teaching consists of five stages of engage, explore, explain, elaborate, and evaluate.

This 5E model is adopted from Biological Sciences Curriculum Study (BSCS). This method is not only applicable for the content subject, because many of American high schools use this method for many subjects, even in English subject. For example; Nichols, S (2008) has implemented this 5E method in vocabulary class for the beginners by using ping pong balls and at the end of the meeting the students will a write paragraph by using a vocabulary written on the balls. The superiority of this 5E model is that any lecturer can implement this model to any class by adjusting to the lesson material and the students' need on the field.

Research in science courses which had proved that this strategy is very effective in increasing students' motivation. The students can explore and gain information according to their needs. The lecturer should facilitate the students' activities in the process of teaching-learning and giving clarification needed. The 5E Model is also often called inquiry learning (questioning learning). The 5E Learning Stage involves learning something new, or attempting to understand something familiar in greater depth. This model makes students use both their prior experience and the first-hand knowledge gained from new explorations.

These 5E learning stages make the students to learn in constructive ways, where they

will learn vocabulary based on their needs and capability. They will gain the information sources according to their efforts. They will process and interpret the information according to their ways of thinking and how far their effort to involve in discussion activity in their groups. The students will not have limit to gain new words as long as they need them; the lecturer will only become a facilitator in the learning process.

Each "E" represents part of the process of helping students sequence their learning experiences to develop a connection between prior knowledge and new concepts. The lecturer serves as a facilitator to help the students in constructing new knowledge based on deep inquiry and decision-making. The 5E consists of 5 stages. The first stage is *the engagement stage* where is the lecturer engages students in a new concept using short activities or questions that promote curiosity and draw out prior knowledge in order to reveal students' pre-existing knowledge. The second stage is *the exploration stage* where students find their new ideas but also conduct activities, such as; group discussion, hands-on activities, role playing, analogies, which are intended to reveal students' pre-existing knowledge and give them chance to explore their own questions and implement a preliminary investigation of the exercises given. The third stage is *the explanation stage* where the lecturer has an opportunity to introduce a concept, process, or skill so that the students imply their understanding of the concept of knowledge. The fourth stage is *the elaboration stage* where the students try to promote their newly structured knowledge into a deeper and broader understanding in order to elaborate on their conceptual understanding and skills. The last stage is *the evaluation stage* where the students' comprehension and abilities are assessed, so the lecturer is able to monitor how his/her students have progressed in accomplishing course objectives.

In addition, with respect to the students'

problem of their low vocabulary achievement, the problem of this study is formulated as follows: How can the 5E model be implemented to build the vocabulary of the second-semester students at Balikpapan Foreign Language Academy? In line with the problem of the study, this study is intended to describe how the implementation of the 5E model can build the vocabulary of the second-semester students of Balikpapan Foreign Language Academy.

METHOD

The design employed in this study was classroom action research. This design was chosen for a reason that the main thrust of this study was to build the vocabulary of the second-semester students of Balikpapan Foreign Language Academy through the implementation of the 5E model. Kemmis and McTaggart (1988:48) claim that action research centres on action as a basis for improvement of practice and increasing understanding about practice in a collaborating group.

This classroom action research applied collaborative approach. The collaborative classroom action research was employed since it was directed to develop a strategy in order to solve the classroom problems and to find out the most suitable technique in the teaching of vocabulary. In this study, the lecturer-researcher acted as a lecturer and the collaborator acted as an observer. The lecturer-researcher had collaboration with one of the English lecturers at Balikpapan Foreign Language Academy who helped in preparing several activities such as designing a plan of action, observing and monitoring the action process.

The setting of the research is Balikpapan Foreign Language Academy which is located at Jl.Strat II Balikpapan, East Kalimantan Province. This academy had been chosen by the lecturer-researcher as the setting of the study because he is one of the lecturers there. So, hopefully this research brought advan-

tages to his institution. In addition, he found problems in his class when he teaches in the academy, so he decided to take the academy as the setting of the study in order to solve the problems.

The subjects of the research were the second-semester students who were taking Vocabulary Course. They were chosen as the subjects because based on the lecturer-researcher's preliminary study, the students of ABA Balikpapan did not have sufficient vocabulary (weak / poor students in vocabulary comprehension). They also easily forgot the words' meaning. Thus, the students of Vocabulary Course were taken as the subjects of the study. In this class, the lecturer-researcher tried to solve the students' problem by implementing a strategy in the process of vocabulary teaching.

The research design of this study is collaborative classroom action research, which focuses on a particular group of students in a certain classroom. It was implemented in two cycles contain of six meetings. The classroom action research employed in this study follows Kemmis' model. Each cycle consisting of four stages: (1) planning, (2) implementing, (3) observing, and (4) reflecting. The cycle continued when the criteria of success would not achieved and there would be re-planning, acting, observing and reflecting (Kemmis 1988, cited in McNiff, 1995).

In order to gain feedbacks from the students about the implementation of the 5E model, the lecturer researcher must issues the questionnaire at the end of the action research. The purpose of the questionnaire is to gain findings of the students' feedbacks about the improvements of the 5E model in the future implementation of the 5E model.

The questionnaires were given to students when the implementation of the strategy was finished. The questionnaire was used to provide information on students' attitude and response towards learning vocabulary using the 5E model vocabulary teaching. The

questionnaire provides 8 statements of close-ended with ordered responses. The students' responses were only giving tick (✓) for the first question to sixth question. The tick sign would put into four different options; *strongly agree*, *agree*, *disagree* and *strongly disagree*. Seventh to eighth question was asking about students' opinions by their own statements. To facilitate students in comprehending the questionnaire, the questions were typed in bahasa Indonesia; therefore the answers should do in bahasa Indonesia as well. The items and the number of students responding to each item are presented in Appendix 8. All items are discussed in the following based on students' opinions.

Question 1 was confirming students' agreement of the 5E model vocabulary teaching was interesting or not. All of the students responded to '*strongly agree*' option. Question 2 was confirming students' agreement that by using this 5E strategy, they could find new words and able to memorize them. 4 students responded to '*strongly agree*' option, meanwhile two of them responded to '*agree*'. Question 3 was confirming students' agreement that by using this 5E strategy, their motivations were increased better compared to the lecturing method. All of the students responded to '*strongly agree*' option. Question 4 was confirming students' agreement that by using this 5E strategy, the students' ability in comprehending vocabulary increased. 4 students responded to '*strongly agree*' option, meanwhile two of them responded to '*agree*'. Question 5 was confirming students' agreement that by using this 5E strategy, the students found new experience in discussion as a teamwork. 5 students responded to '*strongly agree*' option, meanwhile only one of them responded to '*agree*'. Question 6 was confirming students' agreement that by using this 5E strategy, the students became more confident in delivering questions or in responding to the questions. 2 students responded to '*strongly agree*' option, meanwhile 4 of them responded to '*agree*'. Question 7 was confirm-

ing students' opinion about the weakness of the 5E model, most of them confirmed that the time was too limited, so they had to do the task in a rush, meanwhile one of them gave response that the cloze test was not easy. Question 8 was confirming students' opinion about the improvement of this method in the future. Most them gave responses that the time allocation should be added and multiple choices were preferred than the cloze test. One of them gave opinion that conversation should be added, but it was not the relevant answer, since conversation material was to check speaking ability.

FINDINGS

By utilizing the scoring rubric, the calculation of first criterion was 4 students can gain 40 selected words. Because the post-recognition exercise consisting of 60 questions, therefore, there was exist one selected word in each question. It meant that in the post-recognition exercise there were 60 selected words. If the students could answer 40 questions correctly, meant that his or her score would be 6.6. In the first cycle, the percentage were only 50% of the students could gain 40 of 60 selected words, meanwhile the criterion of success set up by 60% of the students (4 out of 6 students) can gain 40 selected words. It meant that the first criterion of success was not achieved. The second criterion stated that 70% of the students (5 out of 6 students) can gain score up to 6.0. Meanwhile, in the first cycle, the percentage of the students score were only 50% of the students could gain score up to 6.0, meanwhile the second criterion of success set up 70% of the students (5 out of 6 students) can gain score up to 6.0. It meant that the second criterion of success was not achieved either. Based on the result gained for the first cycle, it was further analyzed that the improvement of the students' achievement was still unsatisfactory.

Based upon the data acquired from the students' achievement in the first cycle and the

teaching and learning process, the implementation of the 5E model had not met the criteria of success yet. The failure of applying the 5E model to improve students' vocabulary comprehension on word meaning in the first cycle was likely led by some motives.

The first thing to consider was reminding the students that they should do the task in sequence according to the 5E model vocabulary teaching. Lecturer should forbid them not to discuss in the *explore stage*, but encourage them to discuss in the *explain stage* or in the *elaborate stage*. Lecturer would notice and emphasizes that the group-work can be done only in the *explain stage* and *elaborate stage*. In the evaluation stage, lecturer should emphasizes the students not to do the task in group work, but for individual task only. In this first cycle, it seemed that students were still in adaptation process to follow the procedure in the 5E model. Even though the students' score results were increased significantly, however the criteria of the success of this study had not been fulfilled yet. By looking their achievements in this first cycle, the lecturer-researcher became optimistic that in the second cycle the targeted criteria of success would be achieved. It was only need some revisions on the materials and time allocation. The materials should be designed to fit more with the time allocation on the 5E model stages, and more encouragement for the students to obey the time allocation for each stage in the 5E model vocabulary teaching.

The scenario of the teaching learning process of the second cycle was intended to improve the result of the first cycle. It was designed based on the reflection of the finding on the first cycle. Preparation of the action was conducted for preparing the implementation. At this step the researcher prepared the lesson plans for teaching learning processes.

The application of the 5E model vocabulary teaching in Cycle Two had been revised and this 5E strategy met some improvements based on the condition and the result on the

class in the first cycle. This improvement procedure was done only in the second cycle; it was done to improve the implementation of the 5 E model. It was based on the findings in the first cycle, after the lecturer researcher found the students' problem in the 5E model implementation in the first cycle. It is a very crucial steps in the second cycle based on the findings of the first cycle in the field.

Findings from Cycle 2

The learning result was known by post-recognition exercise students' scores at the end of this second cycle. The results of the students' scores were obtained by comparing the pre-recognition exercise scores with the post-recognition exercise scores. Post-recognition exercise was used to evaluate the development of the students' learning result.

The post-recognition exercise was given at the end of the second cycle. It was administered for ninety minutes. The format of the post-recognition exercise consists of 30 questions of short answer, 10 questions of cloze test, and 20 questions of multiple choices. The material of the post-recognition exercise was adapted from Balikpapan Foreign Language Academy Vocabulary Compulsory Textbook.

By using the scoring rubric the calculation of first criterion is 4 students can gain 40 selected words. Because the post-recognition exercise consisting of 60 questions, therefore, there was existing one selected word in each question. It meant that in the post-recognition exercise there were 60 selected words. If the students could answer 40 questions correctly, meant that his or her score would be 6.6. There were all students could answer up to 40 question correctly shown by the scores up to 6.6 were for all students.

The calculation of the first criterion is the percentage were 100% of the students could gain 40 of 60 selected words, meanwhile the criterion of success set up by 60% of the students (4 out of 6 students) can gain 40 selected words. It meant that the first criterion of suc-

model vocabulary teaching could increase and build students' comprehension on vocabulary. However, the lesson material should be adjusted to the students' level and the students' need. It should be contextual to gain students' motivation and involvement to tasks given.

CONCLUSION

The 5E model can be implemented to build the vocabulary of the second-semester students at Balikpapan Foreign Language Academy. The 5E model had been succeeding being implemented for the second-semester students at Balikpapan Foreign Language Academy. The implementation of the 5E model should follow these steps. First, 5 stages inside the 5E model should be followed as a sequence of a process in teaching-learning in vocabulary class by any lecturers who want to implement this model. Second, the material chosen should be contextual, adjusted to the students' needs, and adjusted to the students' level. Third, time allocation for each stage inside the 5E model should be adjusted to the activities given.

The implementation of the 5E Model of

Vocabulary Teaching in teaching vocabulary could enhance the students' comprehension on vocabulary. Their vocabulary is improved because they had motivated to be involved in the tasks given, and then their vocabulary size is increased which is proved by their vocabulary achievement.

Regarding the implementation of the 5E teaching model, it can be applied in all types of courses, not only content courses. The important thing is the application of the stages in 5E, where both the lecturer and students follow the stages in a sequence. By following the sequences, students will follow the process to learn gradually, from the beginning phase to the end phase. Students draw their prior knowledge in *engage* stage; make new exploration of ideas in *explore* stage; discuss their findings in *explain* stage and share information, apply their new knowledge in *elaborate* stage by fostering teamwork, and measure their progress of achievement in *evaluate* stage. Also, the cooperative learning in *explain* and *elaborate* stages are not only to emphasize the importance of teamwork, but also to help the weak students to gain, to learn from others, and to share information from their peers.