

TEACHING VOCABULARY THROUGH CLUSTERING TECHNIQUE AT THE FIRST GRADE STUDENTS OF SMP AL-KAUTSAR BANDAR LAMPUNG

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Abstrak. Tujuan penelitian ini yaitu mencari tipe content words yang paling meningkat setelah siswa diajar melalui teknik clustering dan untuk mengidentifikasi persepsi siswa terhadap pembelajaran kosakata melalui teknik clustering. Subjek penelitian ini adalah siswa kelas satu SMP Al-Kautsar Bandar Lampung. Class VII E sebagai kelas penelitian dan kelas VII G sebagai kelas percobaan. Penelitian ini menerapkan T-test dan one way anova. Hasilnya menunjukkan bahwa penguasaan kosakata siswa meningkat secara signifikan dengan level signifikannya $p < 0.05$. Kata benda adalah tipe content word yang paling meningkat setelah siswa diajar melalui teknik clustering. Sebagai tambahan, peneliti menemukan beberapa efek positive pada persepsi siswa walaupun ada beberapa masalah yang dihadapi selama implementasi teknik cluster. Dapat disimpulkan bahwa teknik cluster memfasilitasi siswa dalam meningkatkan pencapaian kosakata.

Abstract. This research aims to find out which types of content words improves the most after the students are taught through clustering technique and to identify the students' perception towards teaching-learning vocabulary through clustering technique. The subject of the research was the first grade students of SMP Al-Kautsar Bandar Lampung. Class VII E was chosen as the experimental class and class VII G as the try out class. T-test and one way anova were applied in this research. The result indicates that the students' mastery of vocabulary is improved significantly with the significant level $0.00 < 0.05$. Noun was noted as a type of content words which improved the most after the students were taught through clustering technique. In addition, the researcher found some possitive effects on the students' perception even though there were some problems faced during the implementation of clustering technique. This suggests that clustering technique facilitates the students to improve vocabulary achievement.

Keywords: *vocabulary, teaching tocabulary, clustering technique*

INTRODUCTION

Nowadays English becomes an important one and mostly the language used in communication around the world. In Indonesia, the national education has decided English as a foreign language taught in schools from elementary to university. By teaching English in school, students are expected to develop various abilities like understanding what is heard, understanding what is read, expressing ideas in speech correctly and expressing them in writing as well in order to make them be able to communicate effectively and efficiently by using the international language. In learning English, there are four skills that should be mastered by students: listening, speaking, reading and writing. Before they master the four skills, they have to know the vocabulary first to support them in language learning.

Vocabulary is the core component of language proficiency and provides much of the basis for how well learners listen, speak, read, and write (Richards & Renandya, 2002). Therefore, learning language cannot be separated from learning vocabulary. With a limited vocabulary, anyone can also have a limited understanding in terms of speaking, reading, listening, and writing. In addition, it is supported by Wilkins (as cited in Thornbury, 2002) states that without grammar very little can be conveyed, without vocabulary nothing can be conveyed. It implies that even someone has good grammar but it will be useless if they do not know many vocabularies. Knowing a vocabulary involves much more than knowing its dictionary definition. By mastering English vocabulary, the students may be able to choose proper words to be spoken during a conversation with different people, in different environment, and situation. In reading skill, the students require to learn various vocabularies to be able to comprehend what message is delivered by the author in the written material. It is also essential for the students to have numerous vocabularies to write sentences which are good, appropriate, and highly varied. Additionally, in order to be a good listener who can understand what someone or the teacher says, the students are also required to learn various vocabularies.

However, many students who have learned English for several years in school still faced some difficulties when they have to memorize and understand English words. Based on the researcher's preliminary research when the researcher interviewed the English teacher of SMP Al-Kautsar Bandar Lampung, it was found that the students failed to learn English because of the failure in learning the vocabulary. They got difficult in comprehending the material because of inadequate vocabulary also they have difficulties in pronouncing the words because the written form is different from the spoken form in English. In oral form, they produced bad spelling and pronunciation. In addition, sometimes the students lost concentration and became noisy in the middle of the teaching-learning process. It is because the teacher rarely to use various methods and techniques when teaching the English subject in the classroom. Those made the students get bored and unmotivated because of the teaching method did not give more chances to them to internalize the words in their memory.

Those problems above can be made as justification that there are many students who did not have enough vocabulary to master an English. Since vocabulary is

one of the language components which is important to be mastered by the language students, they need an appropriate technique to make teaching-learning vocabulary become effective and motivated. An appropriate technique should be chosen to make the material interesting, challenging and enjoyable so that the teacher can motivate the students to study and help them to lessen their boredom and laziness. There are actually various techniques that can be applied for teaching vocabulary, one of which was the clustering technique.

Clustering technique is listing word in the form of a bubble diagram and the list of the word is developed from a word which is connected to the related words. Fulwiler (2002:37) states that cluster starts by writing out a general topic area in the center of a sheet of paper and putting a circle around it. Then, it can be seen how many possibilities one can think of and cluster them around the central idea in smaller circles. In this case, the clustering technique was expected to be a way to encourage students' vocabulary mastery and make the students more motivated to learn English.

There are many researchers who have done some studies dealing with clustering technique. Among others is Hapsari (2013). Her research was intended to find out the most interesting topic from three topics given and to know the students' problem during the teaching-learning vocabulary process using clustering technique. For the result, she found that there is a significant increase in students' vocabulary achievement of the three topics given by the teacher after being taught through clustering technique.

Another research was conducted by Oktavia (2014). The research was conducted to compare students' vocabulary achievement between those who were taught through Clustering Technique and Derivational Exercises. The result of this research is the researcher found that Clustering Technique was better than Derivational Exercises in improving students' vocabulary achievement in learning vocabulary. In Clustering Technique class, the students were easily finding related words based on the topic given by the teacher.

Based on the previous research above, the researcher assume that clustering technique can increase the students' vocabulary mastery because this technique will be easier for the students to figure the meaning of the target word, to memorize it, and to use it when they find the right situation based on the context clues they have known. It is also fun so that the students will find that learning a language is enjoyable. Thus, this technique can effectively be used in teaching vocabulary.

According to the explanations above it can be put forth that clustering is a technique for developing the target words into new words related to them and put them into bubble diagram. Clustering technique seems to be important to find out the new words, so that they can recall and remind the vocabulary that they have learnt. By implementing clustering technique in learning the vocabulary, students can develop their vocabulary by clustering them with the linking word.

METHOD

This research was a quantitative and qualitative research that were conducted at SMP Al-Kautsar Bandar Lampung. The study adopted a quantitative approach to find out types of content word improves the most after the students are taught by using Clustering Technique and a qualitative approach to collect data of learning challenges faced by students in learning vocabulary through clustering technique. The participants of this study were the first year students of SMP Al-Kautsar Bandar Lampung in academic year of 2018/2019. There were eight classes but the researcher only took one class that has been experimented. The sample in this study was chosen randomly from the population of cluster which is usually called cluster random sampling. The reasons of choosing the participants is that the students had enough English vocabulary since they had studied English in Elementary School.

In order to get the data which was needed for the research, the researcher tried to used an appropriate instrument to measure the result of the research. The data in this study were collected by administering two instruments, namely vocabulary tests and questionnaire. The vocabulary test in this research used to measure the students' vocabulary mastery that consist of try out, pretest, and post-test. While the questionnaire developed to know the students obstacles during the teaching learning through clustering technique. In this study, the researcher used multiple-choices with four options (a, b, c, and d) in vocabulary test and open ended questions in the questionnaire consist of 8 items to allow respondents to respond on their own word. The questionnaire was translated into Indonesian before it was administered.

In this study, nine steps were used by the researcher: 1. Identifying the Problem, 2. Determining the Population and Sample, 3. Administering the Try-out Test, 4. Administering the Pretest, 5. Conducting the Treatments, 6. Administering the Posttest, 7. Delivering the Questionnaire, 8. Conducting the Interview, 9. Analyzing the Data. The quantitative data were analyzed by using SPSS program and qualitative data were analyzed by running descriptive analyses.

RESULT OF THE RESEARCH

The focus of this research is intended to find out which types of content word improves the most after the students are taught through clustering technique and to identify the students' perception towards teaching-learning vocabulary through clustering technique. The researcher used vocabulary test and questionnaire. In this part, the data is calculated by using SPSS 16 to show mean score of pre-test and post-test, the improvement of students' vocabulary achievement from pre-test and post-test, significant difference between the pre-test and post-test score and the analysis of the students' perception toward the clustering technique.

Table 1
The Improvement of Each Content of words from the Pre-test to the Post-test

No.	Content of Words in Vocabulary Mastery	Total Answered		Gain	Percentage		Gain	Significant Level
		Pre-test	Post-test		Pre-test	Post-test		
1.	Noun	223	257	34	74.33%	85.67%	11.34%	0.020
2.	Verb	211	241	30	70.33%	80.33%	10.00%	0.074
3.	Adjective	203	228	25	67.67%	76.00%	8.33%	0.320
4.	Adverb	180	203	23	60.00%	67.67%	7.67%	0.547

The table above showed the improvement of each content of words that was achieved by VII E students of SMP Al-Kautsar Bandar Lampung. It was found that the improvement of noun got the highest gain score among the others that is 34 (11.34%) and the lowest improvement was adverb that is 23 (7.67%). It can be concluded that clustering technique had good effect on achieving nouns.

In testing the hypothesis, *One Way Anova* was used and also statistically tested by using statistical computerization (SPSS16). The table below served the data of *One Way Anova* in the pre-test and post- test.

Table 2
The Analysis of Hypothesis

ANOVA

Value					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	411.750	7	58.821	12.688	.000
Within Groups	333.800	72	4.636		
Total	745.550	79			

Table above shows that the result of the computation of the value of two-tailed significance is 0.000. It means that H_1 is accepted and H_0 is rejected since $0.00 < 0.05$. Therefore, it can be concluded that there was a type of content word improves the most after the students were taught through clustering technique

In addition, to know about the students' perception towards teaching-learning vocabulary through clustering technique, the researcher gave questionnaire and also interviewed the students. There are 6 open questions in the questionnaire and interview. From the result of the questioner and interview, it revealed that the students had good perception in learning vocabulary using the clustering technique and the students have improved their vocabulary achievement after being taught through clustering technique.

DISCUSSION

Having done the research, the researcher observed that the students were interested in learning vocabulary using Clustering Technique. This was indicated by their enthusiasm during their learning process, that they more actively involved in making the cluster. In activities, the students were divided into some groups. According to the researcher experiences, when she taught the students in the class, the teaching and learning process run actively. This might be because clustering technique lets the students involved in making a connection between context clues given and the existing vocabulary they have in their mind and then they have to make the whole words in a kind of bubble diagram which shows the connection between the new words and the remaining words they known (Nation, 1990:97).

From the result of the post test in table 1, it can be seen that the students got better result in the post test that the pre test. The mean score of the post test is 77.41, if it is compared to the pre test score where the mean score is only 68.08. From the result above, it can be concluded that the students can improve their vocabulary mastery through Clustering Technique. It can be seen from the result of studentss score from pre test (T1) to post test (T2) where the lowest score has improved from 50 (T1) into 65 (T2) and the highest score has improved from 87.5 (T1) into 90 (T2). The number of the students who who have not reached English's minimal mastery criterion or got less than 72 in the pre test is 16 (53.3%) students and the number of the students who got less than 72 in the post test is 23 (90%). It can be said that there is a improvement on the students' achievement in vocabulary.

In addition, the mastery of noun increased the total correct answer from 223 to 257, verb increased from 211 to 241, adjective increased from 203 to 228, and adverb increased from 180 to 203. The highest increase was in noun because it had the highest improvement among three others. Recognizing the noun is often the most important step in understanding the sentence or the text because all the sentences must have a noun. So, the students were more familiar with the noun that made them easily understood and comprehended the words.

From the data analysis, the researcher describes about the research finding. Based on the result of data analysis, the researcher found that using clustering technique contributes a positive influence to increase students' vocabulary mastery which is measured from their ability in answering the vocabulary test related to the material. Basically, from the first until last meeting of the treatment the researcher did not have any difficulties to use this technique. Fortunately, the students were not passive and they showed their enthusiastic while teaching and learning process. It was proven when the explanation was given, the students are actively involve in making a connection between context clues given and existing vocabulary they have in their mind and then they have to make the whole words in a kind of bubble diagram which showing the connection new word and remain words. By using clustering technique can improve students' vocabulary achievement is that the topics given by teacher were commonly found in their daily life; for example human and animal body part, things around us and kinds of occupation. Those words become the core word and the task of the students is to find out other words that are related to those words.

To sum up, the teaching vocabulary through clustering technique is effectively used to teach English vocabulary to the first year grade students of junior high school, because this technique can make the teaching and learning activity become lively, enjoyable, fun and interesting for students.

CONCLUSION AND SUGGESTION

Conclusion

Based on the result of data analysis and discussion, the content words improve the most is noun with the increase 11.34%, followed by verb 10.00%, adjective 8.33%, while adverb has the lowest score of improvement gain 7.67%. The content of word that mostly improve students' vocabulary achievement after being taught through using clustering technique is noun, because noun is likely more common in naturalistic setting and noun often use a simple frames, different with another type of content word like verb, adjective, and adverb that use a complex frames, making the comparison of learning across studies more difficult.

In addition, the use of clustering technique in the process of teaching-learning vocabulary has good perception from the students. It can be proved from the result of the questionnaire that all students agreed if the technique helped them in gaining the noun, 28 students agreed in verb, 26 agreed in adjective, and 25 agreed in adverb. It also can be seen from the ability of the students in making cluster of the words, and the ability to mention the content word that belong to every word they found which impacted to their score.

Suggestion

In this research, the researcher gives some suggestions in order to be successful in teaching vocabulary through clustering technique. First, it is suggested for the English teachers to implement clustering technique in teaching vocabulary because the technique is recommended to help the students in developing and increasing their vocabulary mastery. Teachers are also suggested to construct the cluster pattern for more specific purposes. For example, teachers can make clustering technique of certain word based on its function, definition, or based on its synonym or antonym so that the result of cluster the words will be well organized. Second, it is suggested for future researchers who will intend to conduct research with the same technique should try to implement this technique on different levels of students, for example in elementary school students, senior high school students, or even university students. The researchers are also suggested to find the other way to make class active with efficient time. For example: by changing their result of making cluster with the other groups, and then each of group can give comment and suggestion to the other groups' work.

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