

CLUSTERING METHOD IN ENRICHING STUDENTS' VOCABULARY MASTERY AT STUDENTS OF UIN ALAUDDIN MAKASSAR

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ABSTRACT: The objective of paper was to find out whether or not the use of Clustering Method could enrich the students' vocabulary mastery of the second semester students at English Education Department Tarbiyah and Teaching Science Faculty UIN Alauddin Makassar. This research employed quasi-experimental design with two group pre-test and post-test design. The population of this research was the second semester students at English Education Department Tarbiyah and Teaching Science Faculty UIN Alauddin Makassar which is consisted of 78 students. The sample of the research consisted of 60 students which was taken by using purposive sampling technique, 30 students were taken as experimental class and 30 students as control class. The instrument of this research was a written vocabulary used in pre-test and post-test. The result of the data indicated that there was a significant difference between students' post-test in experimental class and control class. The mean score of post-test (69.6) in experimental class was greater than the mean score of post-test (3.8) in control class. The standard deviation of post-test (8.9) in experimental class was lower than the standard deviation of post-test in control class (13.5). From t-test, the researcher found that the value of t-test (1.87) was lower than t-table (2.042) at the level of significance 0.05 with degree of freedom (df) =58. It means that the use of Clustering Method is unable to enrich the students' vocabulary of the second semester students at English Education Department, Tarbiyah and Teaching Science Faculty, UIN Alauddin Makassar.

KEYWORDS: Enriching, Vocabulary Mastery, Clustering Method

A. INTRODUCTION

Nowadays, in this globalization era, the progress of technology and information has developed very quickly. It becomes the agent that guides human to be easier in their information and communication system. Although, the facility obtained by the human connects to how they deliver it and how they understand it using the symbols of language.

As we know that, human language develops as quickly as the development of human itself. Since the first human created until the era that human will find the new era of human being in the universe, language is the only one tool used to communicate each other.

English as the international language used by human around the world, not only in the country which applies it as the first language but also in other country, demands us, the Indonesia to be able to master it. Therefore, Indonesia has to improve and apply English as

the second language so we will be neglected in the communication and information. It is possible that English will be the daily language used by human in the future.

In fact, In Indonesia, English is not categorized into second language but into foreign language which is taught in junior and high schools and included in Indonesia's curriculum. One of the most important components in teaching English besides pronunciation and grammar is vocabulary. We are unable to have a good speaking, listening, reading and writing without having great quantities of vocabulary. According to Graves (1986) ideal vocabulary that must be owned by the novice learner is between 2500 to 5000 words to support language learning. However, this is not owned by most of students in our country because there are several differences between Bahasa and English.

Based on the observation and asking some students in their class on February 25th 2016, vocabulary itself is defined as how they understand the meaning of words, synonym, antonym, and how to use it in the sentences. To use it in sentences, students have to know the class of the word, whether it is noun, pronoun, adjective, adverb, or verb.

Therefore, there are several methods, techniques, approaches, or games to be applied by lecturers or teachers in enriching students' vocabulary mastery. One of them is clustering method which is usually used in improving writing ability. The researcher tried to use this method in enriching students' vocabulary mastery. It will be easier for students to figure the meaning, identify the class of the target word, memorize it, and to use it when they find the right condition based on the context they have known. After doing research at second semester students', the researcher found that the students found difficulties in differentiating among which word is verb, noun or adjective especially when they found complex sentence by using unfamiliar vocabulary for them. Thus, this method was effective in enriching students' vocabulary mastery at second semester students' of English Education Department, UIN Alauddin Makassar.

According to the data taken from English Education Department on March 15th – 28th 2016, the students had problem about using certain words in certain contexts. They were difficult to find out which word class they had to use based on their position. And most of them still needed more comprehension on affixes that mostly changed class of the words. Therefore, the researcher conducted this research in a university. It was in second semester students English education department of UIN Alauddin Makassar where the researcher decided to conduct the research.

Based on the explanation above, the researcher was going to do a quasi-experimental research entitled ***“The Use of Clustering Method in Enriching Students' Vocabulary Mastery at English Education Department, Tarbiyah and Teaching Science Faculty UIN Alauddin Makassar”***.

B. LITERATURE REVIEW

Fitratullah (2004) pointed out in his thesis *“Using Alphabetic Game to Improve the Students’ Vocabulary at the First Year Student of MAN 2 Pangkep”* that the use of alphabetic game was effective to improve the students’ vocabulary. The procedure of this game is the research provided some alphabets and they tried to arrange some alphabets into a word. The students were interested to play this game because it was enjoyable.

Maslaeni (2002) in her research *“Improving the English Vocabulary of the Sixth Grade Students of SD Negeri IKIP by Using Scrambled Words”* pointed out that the use of scrambled words can improve the vocabulary of the sixth grade students of SD Negeri Kompleks IKIP. The weakness of this research is the ability of the student to follow instruction of researcher was low because they were still young and hard to be controlled but the researcher worked hard to solve the problems so the scramble word was able to improve the students’ vocabulary.

Amiruddin (2004) in his thesis entitled *“Enriching of the Vocabulary of the Second Year Students at SMUN 1 Walenrang Kab. Luwu by Using Jumble Letters”* concluded that the use of jumble letters can enrich the vocabulary command of the second year students of SMUN 1 Walenrang Kab. Luwu. The weakness of this research is the activity of this research was difficult and it was not able to cover the students’ attention. Many students still made another activity out of the research activities.

Nurmiati (2004) in her thesis *“Improving the Students’ English Vocabulary Mastery by Using Whispering Game”* stated that using whispering game was effective to improve the students’ vocabulary and it made the students more active than before because they worked in group through whispered a word from a student to other student. She also suggested that in teaching English students must be given more activities in learning vocabulary that they will have time to receive and produce words.

Nirwati (1996) conducted a research on *Improving the Students’ Vocabulary through Discovering Techniques to the second year students of SLTP Datuk Ri Bandang*. Her research was restricted to the vocabulary items presented were verbs, nouns, and adjectives. She found that the students have positive attitude toward the discovery technique and the vocabulary of the students was improved. The problem in this research is some students were not able to master the vocabulary well because this research provided many kinds of vocabulary such as noun, verb, and adjective. It was not focused on one kinds of vocabulary.

Mula (2000) in his research *“The Using of Scrabble Can Interest the Learners to Learn Vocabulary”* concluded that using a kind of teaching media, such as scrabble can interest the learners to learn vocabulary. All students were active in conducting the procedures of this research so the target to improve their vocabulary was easy to be archived.

From the research findings above, the researcher found some advantages and weaknesses of each technique. Some techniques or methods were easy to run in classroom

and achieve the target because they were interesting and enjoyable for the students. Some methods or techniques have a problem in covering the students' attention. The students' attention was still not able to be covered because the capacity of the students was not suitable to the technique or method.

In the teaching and learning vocabulary process teachers have to catch the students' attention and involve them in learning actively by creating a good atmosphere and variety of methods and techniques in teaching English. To catch this atmosphere, each method and technique can be applied when and where as long as it is suitable for the students need and ability.

Based on the finding above, the research concluded that method or technique in teaching vocabulary was not only interesting and enjoyable but it also could cover the students' attention through making them active in each activity. The research decided to apply Clustering Method in improving students' vocabulary mastery because it was not only enjoyable but it also could cover the students' attention because it was able to expand students' ideas personally by only using one word by giving some themes in the four treatments. Also, by applying CLT method, it did help the researcher in conducting his research to make the learning process more enjoyable. In accordance with Richards (1986) who stated that CLT appealed to those who sought a more humanistic approach to teaching, one in which the interactive processes of communication received priority.

C. RESEARCH METHOD

The method chosen to be applied in this research was quasi-experiment. Quasi-experimental research designs, like experimental method, test causal hypotheses. In both experimental and quasi-experimental designs, the programme/policy was viewed as an 'intervention' in which a treatment – comprising the elements of the programme/policy being evaluated – was tested for how well it achieves its objectives, as measured by a pre-specified set of indicators. A quasi-experimental was designed by definition lacks random assignment, however (White and Sabarwal, 2014).

In addition, Quasi-experimental research was used in situations where was not feasible or practical to use a true experimental design because the individual subjects were already in intact groups (e.g. organizations, departments, classrooms, schools, institutions). In these situations it was often impossible to randomly assign individual subjects to experimental and control groups.

Quasi experiment has three primary reasons why it was applied in a research: 1) To meet the practical requirements of funding, school administration, and ethic.

2) To evaluate the effectiveness of an intervention when the intervention has been implemented by educators prior to the evaluation procedure having been considered. 3) When research wants to dedicate greater resources to issue. This research was much like true experimental design. The disparity was just in random assignment, yet the quasi experiment is lack of random assignment of participant. The control and experimental group was chosen by researcher itself or by the administrator.

This research applied Nonequivalent Control Group Design as the design. This design is exactly like pre-test post-test control group design except that there is no random assignment into group (Sugiono, 2014: 79). A group of subject who receives a treatment, experimental group, is compared to control group who does not receive a treatment. Therefore, the researcher had two groups of people as the sample, one was in the control group and another was in the experimental group. Furthermore, they were chosen without random.

This design conducted pre-test, treatment, and post-test. In this design, the researcher did not compare the yield of pre-test and post-test but compared pre-test of control group with pretest in experimental group. This was applied also in post-test. No comparing the pre-test with post-test but comparing the post-test in the control group with experimental group.

D. FINDINGS AND DISCUSSIONS

The findings of the research were based on the results of the data analysis. The data analysis was used to collect data. The vocabulary test consists of pre-test and post-test. The pre-test was given to find out the initial students' vocabulary before presenting Clustering Method, and the post-test was given to find out the improvement of the students' vocabulary after giving the treatment.

1. The Classification of Students' Pre-test in Experimental Class and Control Class

The following table shows the distribution of frequency and percentage of final score of students' vocabulary at the second semester, English Education Department Tarbiyah and Teaching Science Faculty UIN Alauddin Makassar in pre-test in experimental and control class.

Table 1
The Distribution of Frequency and Percentage Score of
Experimental Class Score in Pre-test

No.	Classification	Score	Frequency	Percentage
1.	Very Good	91 – 100	0	0%
2.	Good	76 – 90	2	6,7%
3.	Fair	61 – 75	19	63,3%
4.	Poor	51 – 60	5	16,7%
5.	Very Poor	Less than 50	4	13,3%
Total			30	100%

Table 1 above shows the rate percentage of score of experimental class in pre-test from 30 students, none of the student got very good score. There were 2 (6,7%) students got good score, 19 (63,3%) students got fair score, 5 (16,7%) students got poor score, and 4 (13,%) student acquired very poor score.

Table 2
The Distribution of Frequency and Percentage of Control Class Score in Pre-test

No.	Classification	Score	Frequency	Percent
1	Very Good	91 – 100	1	3,3%
2	Good	76 – 90	9	30%
3	Fair	61 – 75	14	46,7%
4	Poor	51 – 60	3	10%
5	Very Poor	Less than 50	3	10%
Total			30	100%

Table 2 shows the rate percentage of score of control class in pre-test from 37 students, there is 1 (3,3%) of the student got very good score, 9 students (30%) got good score, 14 students (46,7%) got fair score, 3 students (10%) got poor score, and 3 students (10%) acquired very poor score.

2. The Classification of Students' Post-test Scores in Experiment and Control Class

The following table shows the distribution of frequency and percentage of final score of vocabulary mastery at the second semester students, English Education Department Tarbiyah and Teaching Science Faculty UIN Alauddin Makassar in post-test in experimental and control class.

Table 3
The Distribution of Frequency and Percentage of Experimental Class Score in Post-test

No.	Classification	Score	Frequency	Percentage
1.	Very Good	91 – 100	0	0 %
2.	Good	76 – 90	5	16,7%
3.	Fair	61 – 75	10	33,3%
4.	Poor	51 – 60	15	50%
5.	Very Poor	Less than 50	0	0%
Total			30	100 %

While, the rate percentage of score of experimental class in post-test from 30 students as table 2 above shows that there was no student got very good score, 5 (16,7%) students got good score, 10 (33,3%) students got fair score, 15 (50%) students acquired poor students and 0 (0%) students acquired very poor score.

Table 4
The Distribution of Frequency Percentage of
Control Class Score in Post-test

No.	Classification	Score	Frequency	Percentage
1.	Very Good	91 – 100	1	3,3%
2.	Good	76 – 90	14	46,7%
3.	Fair	61 – 75	9	30%
4.	Poor	51 – 60	4	13,3%
5.	Very Poor	Less than 50	2	6,7%
Total			30	100 %

While, the rate percentage of score of control class in post-test from 37 students as table 4 above shows, 1 (3,3%) of the students got very good score, 14 students (46,7%) got good score, 9 students (30%) got fair score, 4 students (13,3%) got fair score, and 2 student (6,7%) acquired poor very poor score.

Based on the table 3 and 4, it can be concluded that the rate percentage in post-test was higher than the rate percentage in pre-test.

3. The Mean Score and Standard Deviation of Experimental Class and Control Class

After calculating the result of the students score, the mean score and standard deviation of both classes can be presented in the following table

Table 5
The Mean Score and Standard Deviation of Experimental Class
and Control Class in Post-test

Class	Mean Score	Standard Deviation
Experimental	69,6	13,5
Control	63,8	8,9

The table above shows that, the mean score of experimental class in post-test was (69,6) and the standard deviation of experimental class was (13,5), while the mean score of control class in post-test was (63,8) and its standard deviation was (8,9). It means that, the mean score of control class was lower than mean score of experimental class.

The significant score between experimental and control class can be known by using t-test. The result of t-test can be seen in table 6 as follows:

Table 6
Distribution the Value of T-test and T-table in Post-test

Variable	T-test Value	T-table Value
Post-test	1.87	2.042

The table above shows that t-test value was lower than t-table. The result of the test shows there was no significant difference between t-table and t-test ($2.042 < 1.87$), it means that, t-table was higher than t-test.

The result of the t-test statistical analysis shows that there was no significant difference between the experimental class who got treatment by using Clustering Method with control class that was got treatment by Conventional Method, even though different both of them were not high enough. The statement was proved by the t-test value (1.87) which is lower than t-table value (2.042), at the level of significance 0.05 and the degree of freedom $(N_1 + N_2) - 2 = (30 + 30) - 2 = 58$.

Based on the finding above, it can be concluded that using Clustering Method to enrich the students' vocabulary mastery of the second semester students of English Education Department Tarbiyah and Teaching Science Faculty UIN Alauddin Makassar was not effective. There are several interferences that made Clustering Method was not effective. Interference: "Interference theory" is drawn from psychology in explaining the reason people forget the information stored in the brain. It is explained by Papathanasiou (2009) that "as similarity increases between targeted information and other information learned either before or after the targeted information, the difficulty of learning and remembering the targeted information also increases". According to Postman (1963) "A basic assumption of interference theory is that forgetting is a function of the conditions of transfer between successive habits. When incompatible responses are associated with identical or similar stimuli, three basic processes are assumed to occur. (1) There is unlearning or extinction of the old associations during the acquisition of the new ones, so that the availability of the old associations is reduced. (2) Extinguished associations recover spontaneously over time, much like conditioned responses, with the result that there is a progressive shift in the balance of strength in favor of the older habits. (3) There is competition between available old and new habits at the time of recall, with the stronger of the competing responses achieving dominance". They also got less difficulty in modifying the words they had found, identifying the class of words, and using it in appropriate context. The students found it easier to learn vocabulary in the classroom. The students were more active and enthusiastic to join the meaningful and contextual activity. They learned to share and co-operate each other in communicative activity in the classroom. Related to the researcher's research in experimental class, most of students' previous knowledge has been reduced by the new knowledge. For instance, in the pre-test, there was part to modify words to make a correct sentence. It was, *I can't say that work usually ___ me, but this particular job is very tiring*. From the sentence, they had to modify the word "tiring" to complete the sentence but they filled it by word "tire. It meant that they forgot their prior knowledge about the third person singular (work), has to add inflectional -s or -es if it meets verb in present tense.

In line with Postman, Gairns and Redman (1986) assumed that the activities undertaken prior to learning may have a detrimental effect on our ability to absorb new input, while activities undertaken after periods of learning can interfere with the effective

consolidation and retention of new input” (p.89-90). In this study, it refers to the notion of lexical interference. Interference can happen with the words learned before or the words learned at the same time or the words learned after. Specifically in this study, it refers to the difficulty that occurs when learning related words at the same time. The researcher found in the both experimental and control class, in answering post-test to modify adjective word “*sweet*” to verb to complete the sentence: *If your tea isn't sweet enough, add sugar to ... it.* They only understand that “*sweet*” only has one word class. To complete the sentence, they added the word “*make*” before “*sweet*”. In fact, there is the verb form of the word “*sweet*”, it is “*sweeten*” by adding derivational suffix –en to modify it into different word form.

Moreover, studies from psycholinguistics, Channel (1990), provided evidence that human mind tends to take account of semantic similarity. For example, slips of tongue, which are one kind of speech error made by native speakers, indicate that many wrong words occur when the intended word shares some meaning with the wrong word. Far from being random mistakes, in fact the wrong word and the intended word were from the same semantic field. In case with the post-test to translate and identify word “*compete*”, they had problem in differentiating it with word “*complete*”. They considered it should be “*complete*”. So the researcher explained the difference between both of those words.

In the Clustering Method, classroom much vocabulary is not taught in the form of word list of isolated words any more, but taught in different ways. Vocabulary teaching focuses on developing communicative proficiency rather than commanding the forms of the target language. Clustering makes learners acquire vocabulary knowledge naturally, rather than learning intentionally. Apart from it, the modified target language input which is gotten from conversational interactions between the teacher and learners enables them to get better understanding of vocabulary knowledge.

Also, in conducting research, the researcher found several obstacles. They were the time that the researcher conducted the research was not too effective because the researcher started his research when the class of the students’ was over. Also, most of students asked permission to go out and did not attend all of the steps in the research.

To conclude this research, it was shown that all data found and discussed in this chapter referred to the acceptance of the null hypothesis. It means that Clustering Method is not effective to enrich the students’ vocabulary of the second semester students of English Education Department Tarbiyah and Teaching Science Faculty UIN Alauddin Makassar.

E. CONCLUSION

Based on the findings, there are two conclusions as follow:

1. The use of applied Clustering method in the class is not effective to enrich students’ vocabulary. The total score of students in Experimental class in the post-test is 2088 and 1914

for Control class. In addition, the mean score in post-test for Experimental class is 69.6 and 63.8 for Control class. The data above shows that students' competence in Experimental class is higher than in Control class. The t-test for both classes in post-test is 1.87 compared to the t-table with 2.042 for α 0.05 with degree of freedom (df) = 58. Since the score of t-test is lower than the score of t-table, null hypothesis (H_0) was accepted and alternative hypothesis (H_1) was rejected. It means that the clustering method which was applied in the Experimental class is not effective to enrich vocabulary mastery. Students' score in the pre-test in Experimental class is lower than in the post-test.

2. Based on the observation in the students' pre-test and in the classroom, most of the students could not differentiate between word compete and complete. They considered them as one same word. Moreover, there were forget about their prior knowledge about adding inflectional suffix *-s* or *-es* for the third person singular when they meet verb in the present tense in modifying word. It was in the pre-test. There was part to modify words to make a correct sentence. It was, *I can't say that work usually ___ me, but this particular job is very tiring*. And the last, they did not realize that sweet has more than one word classes if they are modified. It means that we can modify word "*sweet*" which has adjective class into verb class by adding derivational *-en* to modify it into verb class. It was on post-test, *If your tea isn't sweet enough, add sugar to ___ it*. To complete the sentence, most of them added the word "*make*" before "*sweet*".

Recomendations

In relation to the conclusion above, the researcher proposes the following offers:

1. Using more subjects in a more control manner is more suitable for quasi-experimental design and may yield results that can be better generalized to the whole population of second semester students of English Education Department Tarbiyah and Teaching Science Faculty UIN Alauddin Makassar.
2. With only a few subjects under investigation, the application of classroom research such as action research may be better in observing more deeply into individual's performance in Clustering Method to enrich students' vocabulary mastery.
3. Adding games in teaching process may be an alternative ways to make learning process more excited.

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