Improving Students' Vocabulary through Word Map Technique

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Abstrak: Permasalahan dalam penelitian ini adalah apakah penggunaan teknik peta kata dapat meningkatkan kosakata siswa pada mahasiswa semester pertama IKIP Mataram tahun akademik 2014-2015?, dan bagaimana pelaksanaan pengajaran kosa kata bahasa Inggris melalui teknik peta kata?. Sampel terdiri dari satu kelas. Sample diambil menggunakan cluster random sampling. Kerangka penelitian menggunakan penerapan berdasarkan keempat tahap pre-test, kegiatan awal, kegiatan inti, dan post-test. Teknik pengumpulan data adalah data kualitatif yang berupa deskripsi dari angket tanggapan siswa. Hasil dari pre-test adalah 69.39. Hal ini tersirat bahwa yang pertama tidak terpenuhi, tapi kita bisa melihat peningkatan setelah siswa diajarkan dengan menggunakan pemetaan kata dengan nilai rata-rata dari post test adalah 79,39 dan persentase nilai respon siswa dari setiap item, persentase item pertama adalah (77,43 %), persentase item kedua adalah (62,07%), persentase ketiga adalah (65,70%), persentase item keempat (67,03%), persentase item kelima adalah (66,10%.).

Abstract: The questions in this research were "does the use of word maps technique be able to improve students' vocabulary at the first semester students of IKIP Mataram in academic year 2014-2015?" and "how is the implementation of teaching English vocabulary through word maps technique. The sample was one class. It takes by using cluster random sampling. Research Design Implementation deal with forth steps Pre-test, Pre-activity, Whilst activity and Post activity. Technique of Data collectin was Qualitative data were the description form of questionnaire on students' responses. The result of pre test was 69.39. It implied that the first not fulfilled yet, but we can see the improvement after students taught by using word mapping which the mean score of post test was 79.39 and the percentage value students response of each item, the percentage of the first item was (77.43%), the percentage the second item was (62.07%), the percentage of the third was (65.70%), the percentage of the fourth item was (67.03%), the percentage of the fifth item was (66.10%.).

Keywords: Vocabulary, Word Map

Introduction

English is one foreign language in Indonesia that is learned by the students from Junior High School till university. It means English plays very important role at education filed. So, English Department in Indonesia such at English Department of IKIP Mataram should pay attention on it. It means that a teacher or a lecturer needs methods or techniques to make the students understand and motivated in learning English. Some of the techniques, in teaching such as word map, silent way, audio lingual method, communicative learning etc. Teaching English as a foreign language requires the use of effective learning method. According to Richards and Rodgers in Brown, (1994:

14),"Method is an umbrella term for the specification and interrelation of theory and practice." Furthermore they state that virtually all language teaching methods make the oversimplified assumption that what teachers do in the classroom can be conventionalized into a set of procedures that fits all contexts. It means that a set of procedures or the techniques in teaching have an influence to the student's learning result. In learning English language, one of the factors is the poor ability in mastering vocabulary. This is one problem that researcher found in teaching learning process at press students at IKIP Mataram. Vocabulary will help the students to speak English well. Dellar and Hocking in

Thornbury, (2002: 13) stated, "If you spend most of your time studying grammar, your English will not improve very much. You can say very little with grammar, but you can say almost anything with word." The students may get some difficulties in learning a language if they have limited number of vocabularies.

There are many techniques of making the students interested in what they are learning especially in learning vocabulary. In Addition Brown (1994: 48) says that, "Techniques were the specific activities manifested in the classroom that are consistent with a method and therefore in harmony with an approach as well." Selecting technique is very important in delivering material to attract student's attention: the teacher should consider the student's characteristics and his material, which are going to be taught. Young learners have their own particular charac-teristics that differentiate them from adult learners. This characteristic should be known and understood by the teacher to improve the quality of teaching and learning process.

Based on the explanation above the researcher interested in enhancing stu-dents' vocabulary in this research, the researcher will try to apply word maps as strategy in teaching vocabulary. The word map or semantic mapping is one of the most powerful approaches to teaching vocabulary because it engages students in thinking about word relationships (Graves, 2008: 94). The best word maps are colorful and use much pictures and graphics. The word maps are referred to by different names, such as semantic mapping, concept mapping, and word clusters. The technique may be adapted to the nature of vocabulary instruction, the learning outcomes, and students' grade levels. For example, for learning some words, it may be more appropriate to have students explore the synonyms, antonyms, and origin of the words; whereas for other words, it may be more helpful to find examples and non examples of the words. In this case, the researcher will do an action research entitled "Improving Students' Vocabulary through Word Map Technique at the First Year Students of IKIP Mataram in Academic Year 2014/2015"

Research Method

In this study the researcher apply a classroom action research (CAR). The procedure or the steps of research being studied was divided into two cycles activity. The cycle of classroom action research in this study described as follow:

1. **Cycle I**

a. Planning

Planning is a phase which the researcher prepares the instructional strategy/technique to be developed in the study to solve the problem found during preliminary study.

Some activities dealing with the planning were:

1. Arranging a schedule of classroom action research

Before the researcher starts this classroom action research, the researcher makes any instrumental used to apply classroom action research such as designing a lesson plan.

b. Acting

The second step after planning was acting, to implement the instructional strategy/technique that has been planned in a lesson plan.

The following are some activities dealing with implementation or action:

1. Pre-test
2. Pre-activity
3. Whilst activity
4. Post activity

c. Observing

Observing classroom action research was conducted to know and to get complete description objectively the improvement of the process of the learning and the effect of the action in the form of data.

d. Analysis and Reflecting

The results of the observation are submitted and analyzed in this stage. The problems are analyzed, whether the technique improve the students' vocabulary in teaching and learning process.

Instrument of this research was test and questioner. Kind of test used was in term of multiple choices, the test consist of 20 items with 5 options. The last instrument of this research was questionnaire deals with the five statements to know responses of students after they were taught daily vocabulary by using word maps technique.

In this classroom action research the researcher uses quantitative and qualitative data. The quantitative data were in the form of numerical data. The data were taken from students' score of pre-test and post test while qualitative data in the form of questionnaire.

Qualitative data were the description of the process of teaching and learning using word maps technique. The qualitative data were in the form of questionnaire which given by the re-searcher for asking the students' responses after they were taught vocabulary using word maps technique. There were five statements that students fill in, on the table of questionnaire within five frequencies such as; Very Agree = Sangat Setuju (SS), Agree = Setuju (S), Doesn't Know = Tidak Tahu (TT), Disagree = Tidak Setuju (TS), and Very Disagree = Sangat Tidak Setuju (STS).

Five statements of questionnaire were:

a) Learning English using word maps technique is more enjoyable than usual.
b) Learning English using word maps technique helps me to understand the material more easily.
c) Learning English using word maps technique makes sense of happiness in learning.
d) Learning English using word maps technique helps me to remember the lesson more easily.
e) Learning English using word maps technique can train my creativity.

In analyzing of quantitative data the researcher measure the average of students' vocabulary score per action in one cycle. It is used how well students' performance during learning about vocabulary. The one measure of mean score of students can be expressed in symbols as:

$$M = \frac{\sum X}{N}$$

Where: M = the mean score of the students

$\sum X$ = the Individual score

N = the number of students

(Sugiyono, 2001)

In order to get the description of the qualitative data, the researcher analyzes the data by using the formula of percentages correction as follows:

$$NP = \frac{R}{SM} \, x \, 100$$

Where: NP = score

R = the number of score

SM = the maximum score

Discussion

1. The Result of Preliminary Observation

Preliminary Observation was carried out to observe the process of teaching and learning vocabulary activity at first semester students of E Class before implementing the action.

The pre test was done before the Classroom Action Research; it was conducted on Thursday, April 29th 2015. There were 20 questions in form of multiple choices, in which the students carried out the test during 40 minutes. To get the result of pre test; firstly the researcher calculated the mean score:

Table 1. Students' Mean Score of Pre Test Cycle 1

No	Students' Name	Score
1	W	85
2	I	80
3	S	75
4	T	60
5	N	65
6	Y	70
7	M	65
8	Mu	75
9	Ya	60
10	Me	80
11	In	80
12	Ah	70
13	Af	65
14	I M	65
15	Mu.M	85
16	Re	80
17	Ti	60
18	Sa	60
19	Ro	65
20	Da	65
21	An	70
22	Met	60
23	Tan	65
24	Ek	85
25	I M W Y	65
26	O	70
27	Ti N	70
28	Fir	60
29	Win	75
30	Ek. A	65
31	Kurn	70
32	Pao	60
33	Ha	70
34	N A s	60
35	Nunu	80
36	G do	65
37	Ad	75
38	Her	70
39	M W F	65
40	Kut	75
41	A Lut	60
Total score		**2845**

$$M = \frac{\sum X}{N}$$

$$M = \frac{2845}{41}$$

M = 69.39

2. Finding for the first cycle

a. Planning

1) The researcher and collaborator decided the topic (standard competency and basic competency) that would be delivered to the students by using word mapping strategy with the collaborator.

2) The researcher made the lesson plan with the collaborator

3) The researcher prepared materials and media.

4) The researcher prepared worksheet.

5) The researcher prepared instrument post test.

b. Acting

First Month (start Friday, 1st and Monday, May 2015 at 08.30 am – 09.40 am) two times a week.

1) The researcher implemented the teac-hing learning process based on the lesson plan. 2) The researcher taught describing kinds of transportations, by introducing some new words firstly through word mapping and gave an example of word mapping. 3) The researcher asked the students to make description a kind of some simple words by transportations, through word mapping individually.

Second Month (Monday, 1st June 2015 at 08.30 am – 11. 30 am) two times a week

1) The students continued their first mapping task and revise with their lecturer. 2) Lecturer divided them into four groups to make word mapping. 3) Students have to find many words that are related to the some words such as: name of animals, mammalians, plants and so on. that by using picture or without pictures minimum -/+10 words.

Third Month (Friday 3th 2015 at 08.30 am – 11. 30 am) two time a week

1) The students continued their second meeting mapping task and revise with their lecturer.

2) Students have to find many words that were related names of animals, minimum -/+10 words.

Last Meeting (Tuesday, July 1St 2015 at 08.30 – 10.40)

1) Reviewed the material and student task.

2) Collected their word mapping.
3) Post test cycle 1

c. Observing

All at once with the action, the researcher and collaborator collected the data post test cycle 1 as follow:

Table 2. Students' Score of Post Test Cycle 1

No	Students' Initial	Score
1	W	90
2	I	95
3	S	90
4	T	85
5	N	75
6	Y	75
7	M	75
8	Mu	80
9	Ya	75
10	Me	95
11	In	95
12	Ah	90
13	Af	80
14	I M	65
15	Mu.M	95
16	Re	90
17	Ti	65
18	Sa	80
19	Ro	85
20	Da	70
21	An	70
22	Met	80
23	Tan	75
24	Ek	95
25	I M W Y	70
26	O	60
27	Ti N	65
28	Fir	75
29	Win	95
30	Ek. A	70
31	Kurn	85
32	Pao	60
33	Ha	75
34	N A s	65
35	Nunu	95
36	G do	65
37	Ad	95

38	Her	60	
39	M W F	80	
40	Kut	95	
41	A Lut	75	
Total score		**3255**	

$$M = \frac{\sum X}{N}$$

$$M = \frac{3255}{41}$$

$$M = 79.39$$

Table. 3 Mean Score of Pre- Test and Post Test Cycle 1

No	Students' initial	Pre test' scores	Post-test' score
1	W	85	90
2	I	80	95
3	S	75	90
4	T	60	85
5	N	65	75
6	Y	70	75
7	M	65	75
8	Mu	75	80
9	Ya	60	75
10	Me	80	95
11	In	80	95
12	Ah	70	90
13	Af	65	80
14	I M	65	65
15	Mu.M	85	95
16	Re	80	90
17	Ti	60	65
18	Sa	60	80
19	Ro	65	85
20	Da	65	70
21	An	70	70
22	Met	60	80
23	Tan	65	75
24	Ek	85	95
25	I M W Y	65	70
26	O	70	60
27	Ti N	70	65
28	Fir	60	75
29	Win	75	95
30	Ek. A	65	70
31	Kurn	70	85
32	Pao	60	60
33	Ha	70	75

34	N A s	60	65
35	Nunu	80	95
36	G do	65	65
37	Ad	75	95
38	Her	70	60
39	M W F	65	80
40	Kut	75	95
41	A Lut	60	75
Total score		**2845**	**3255**
Mean		**69.39**	**79.39**

Based on the result of post test the mean score of the class increased in which there no one student got score A (95), 3 students got score A- (85), 5 students got score B+ (80), 6 students got score B (75), 7 students got score B-(70), 11 students got score C+ (65) and the last were 9 students got score C (60) on pre test before teaching by using word mapping. After teaching by using word mapping we can see the result on post test there were 13 students got score A (95), 3 students got score A-(85), 5 students got score B+ (80), 8 students got score B (75), 4 students got score B- (70), 5 students got score C+ (65) and 3 students got score C (60). It mens that there ware some improvements from pre test means score. It could be seen on mean score of pre test (69.39) to maen score of post test 1(79.39)

Table. 04 Criterion scoring

PEMBOBOTAN NILAI	
86-100	A
81-85	A-
76 – 80	B+
71 – 75	B
66 -70	B-
61 – 65	C+
56 – 60	C
41 – 55	D
≤ 40	E

It Taken from Information Technology (IT) IKIP Mataram 2013.

Then the researcher calculated the class percentage that passed pre test and post test, using the following formula:

$$P = \frac{Fx}{N} 100\%$$

Pre test 1

$$P = \frac{21x100\%}{41}$$

$$P = 51.21\%$$

Post test 1

$$P = \frac{33x100\%}{41}$$

$$P = 80.48\%$$

The data showed that mean score of pre test 1 was 69.39. There were 21 students or 51.21% of the students who got the score over to the grade B- to A-(70-95), in the meanwhile the other 20 students were under score C and C+ (60-65). It implied that the first criterion has not fulfilled yet, but we can see the improve-ment after students taught by using word mapping strategy which the mean score of post test 1 was 79.39. There were 33 students or 80.45% got the score over to the grade B- to A-(70-95)

d. Reflecting

1) Discussing the result of the action

80.45% of the students or 33 students got the score B (70) to A (95) after the implementation of Word Mapping strategy; it has given satisfactory result on the improvement of students' vocabulary achievement. It was not needed to be revised.

3. The Result of Questionnaire

The students' response after learning vocabulary through word mapping can be seen from the questionnaire. The questionnaire was given to the students in the first semester students of IKIP **Mataram on Tuesday, July 14ᵗʰ 2015**. This questionnaire has five categories. Each of categories is describe below:

a. Students' Response toward Word Mapping Technique

There were 5 items that deliver to know the students' response toward word mapping; they were items 1, 2, 3, 4, 5, with five options (Very Agree, Agree, Does not Know, Disagree, and Very Disagree). The first option has value 4, the second option has value 3, the third option has value 2, the fourth option has value 1, and the fifth option has value 0. To know good response of the students after they were taught by word mapping technique, the researcher and the teacher determined 70% as the value find out good response of the students.

Questionnaire Cycle 1

Where:

a. The first item: showed the value of this item was 4 x 17 = 68 (68: 75 x 100: 10= 9.06%), 3 x 13 = 39 (39: 75 x 100: 10 = 5.2 %), 2 x 6 = 12 (12: 75 x 100 = 10: = 6.2%), 1 x 5 = 5 (7: 75 x 100 : 10 = 0.66%), 0 x 0 = 0 (0 x 70 : 100 : 0 = 0%). The percentage value of this item was 9.06% + 5.2% +6.2% + 0.66% + 0% = 77.43%.

b. The second item: showed the value of this item was 4 x 17 = 68 (68: 75 x 100:10 =9.06%), 3 x 15 = 45 (45:75 x 100:10 = 6%), 2 x 8 = 16 (16: 75 x 100:10= 64.87%), 1 x 1 = 1 (1: 75 x 100:10 = 0.13%), 0 x 0 = 0 (0 x 75: 100:10 = 0%). The percentage value of this item was 9.06% + 6% + 64.87% + 1.3% + 0% = 62.07%.

c. The third item: showed the value of this item was 4 x 12 = 48 (48: 75 x 100: 100 = 6.4%), 3 x 13 = 39 (39: 75 x 100:10 = 5.2%), 2 x 7 = 14 (14: 75 x 100:10 = 53.57%), 1 x 4 = 4 (4: 75 x 100:10 = 0.53%), 0 x 5 = 0 (0 x 75 : 100:10 = 0%). The percentage value of this item was 6.4% + 5.2% + 53.57% + 0.53% + 0% = 65.70%.

d. The fourth item: showed the value of this item was 4 x 15 = 60 (60: 75 x 100:10 = 8%), 3 x 12 = 36 (36: 75 x 100:10 = 4.8%), 2 x 7 = 14 (14: 75 x 100:10 = 53.57%), 1 x 5 = 5 (5: 75 x 100:10 = 0.66%), 0 x 2 = 0 (0 x 75: 100:10 = 0%). The percentage value of this item was 8% + 4.8% + 53.57% + 0.66% + 0% = 67.03%.

e. The fifth item: showed the value of this item was 4 x 14 = 56 (56: 75 x 100:10 = 7.46%), 3 x 11 = 33 (33: 75 x 100:10 = 4.4%), 2 x 7 = 14 (14: 75 x 100:10 = 53.57%), 1 x 5 = 5 (5: 75 x 100:10 = 0.66%), 0 x 4 = 0 (0 x 75: 100:10 = 0%). The percentage value of this item was 7.6% + 4.4% + 53.57% + 066% + 0% = 66.10%.

Based on the computation of the data, the researcher categorized the values into two levels as follows:

a. 50% to 60% was classified as Good Enough.

b. 63% to 75% was classified as Good.

Therefore, there were more students who give the good response toward word mapping as technique in teaching Vocabulary. They were enthusias-tic to learn vocabulary through word mapping. Besides that, there were less of the students who felt word mapping pursued their vocabulary learning. It more proof that word mapping could be alternative way in learning vocabulary to make them remember the word easily, and can help them to find the new words to improve their vocabulary.

Conclusion

In conclusion, this study was successful in improving students' vocabulary by using word mapping technique. In addition, the students were more active and participated in the teaching learning process of vocabulary. Therefore, word mapping technique can be alternative technique for teachers or lecturers in teaching vocabulary which can make the students remember new words easily.

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