THE EFFECTIVENESS OF COMPUTER GAMES IN TEACHING VOCABULARY AT SDN 255 MANCANI

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Abstract: The objective of this research were to find out the effectiveness of computer games in teaching vocabulary and to find out the students' respons in teaching vocabulary using computer games. This research used total sampling where all of population as sample, there were 30 students.This research used vocabulary test as instrument. In collecting data, this research used some procedures namely pre test, treatment, post test and interview. In pre test and post test used vocabulary test. In pre test the students got score in poor classification namely 63,33 % and 36,66 % got fairly poor and mean score 3,0 (poor). This is implies that the students had low vocabulary. In post test, the students got score in very good classification namely 43,33 %, 30 % got good, and 26,66 % got fairly good and mean score 8,2 (good). This is implies that the students got increasing in vocabulary after treatment. In interview, all of the students gave positive respons of using computer games. Based on the findings and discussion of the study, the writer concludes that the computer games is effective method in teaching vocabulary to the students at SDN 255 Mancani.

Keywords: Computer Games, Vocabulary.

Computer is one of shophisticated technologies in education field and it helps the teacher in learning process, especially in teaching. We use computer program to help us in teaching vocabulary namely computer games. Computer games is favorite thing for the people, especially for children because computer games is enjoyable to play. Teaching vocabulary by

using computer games is a method which can help the students in mastering vocabulary and also the students will be interested to study and they will be easy to receive the lesson. Computer games is a good method to apply in a clasroom because the teacher can make the attractive situation, so the students more rilex to receive the material.

Mastering vocabulary is one important thing for the students because by mastering vocabulary they can express their ideas or their opinions, they can describe their feeling and make communication to others. Sometimes the students are worry to converse with others because they don't have a good common vocabulary in their mind and they are fear to make mistake.

Vocabulary has an important role, because vocabulary is one of components in language and it is imposible to study reading, speaking, listening and writing because vocabulary is the key of language. If the students have good vocabulary in their mind, they can understand the meaning of the text and they can converse to others. But in the reality, many students can't understand text and always there is misscommunication, because they don't master vocabulary.

Nowadays, many students don't have a good vocabulary, especially at SDN 255 Mancani. The writer chooses SDN 255 Mancani to do research because based on information from their teacher that the students there have low motivation and they are lazy to memorize vocabulary and open dictionary, so they don't have enough vocabulary. By this research, the writer wants to improve the students ability in mastering vocabulary, because without vocabulary it would be imposible to learn language, so the vocabulary should be given priority attention.

VOCABULARY

Vocabulary is an important thing in learning language. It would be impossible to learn a language without knowing vocabulary. Vocabulary is one of the components of language and there is no language exists without words. More words we know, more ideas we can explore. So, we can communicate the ideas effectively.

Oxford Learner's Pocket Dictionary, New Edition(1995) states that vocabulary is the total number of word in a language, words known to a person; the of a here year old, last of words with their meanings, especially at the back of for teaching a foreign language.

Richard (2002:258) states that

" Vocabulary or word also called a base word or a word family is defined as including the base form (e.g.: make) and its inflections and derivatives (e.g., makes, made, making, maker and markers). Since the meaning of these different forms of the word are closely related, it is assumed that little extra effort is needed to learn them".

Hornby (2004:1974) in advance Learner dictionary of Current English says that vocabulary is :
a. All the words that person knows or use
b. All the words in a particular language
c. The words that people use when they are talking
d. A list word with their meaning especially in a book for learning a foreign language.

Good (1959:642) defines that vocabulary as the words having meaning when heard or seen even though not produced by the individual himself to communicate with others is the words that considered essential for minimal use of language.

Gave (2966:59) states that vocabulary is a sum of words of a language that employed by individual, group or work in relation to a subject. Based on defenitions above, the writer concludes that vocabulary is all words which have a meaning and it is used in language especially in writing, reading, listening and also to speak with others.

COMPUTER GAMES

Prensky (in http://wikipedia.org/wiki/Personal_computer _game/defenition, 2001) states that game is recognised as organised play that gives us enjoyment and pleasure. Juul (in http://wikipedia.org/wiki/Personal_computer_game/defenition, 2001) says that game is a set of activities involving one or more players. It has goals, constraints, payoffs, and consequense. A

game is rule-guided and artifical in some respects. Finally, a game involves some aspects of competition, even if that competition is with one. Hopkins (in http://wikipedia. org/wiki/Personal_computer_game/definition, 2001) states that games all defined as a form of play governed by a certain rules of convention. From this definition, we can see that in the language classroom. Games are meant to be enjoyed, wherever they are played. Games are not just a deversion, a break from routine activities, but they also can contribute to language. Proficiency in some way by getting the learners to use language in the course of the games. Games enable students to achieve goals with recreational activity. Prensky (in http://wikipedia. org/wiki/Personal_computer_game/definition, 2001) states that computer games can be characterised by six key structural elements which when combined together, strongly engage the player. These elements are :

    a. Rules.
    b. Goals and adjectives.
    c. Outcomes and feedback.
    d. Conflict / competition / challenge / opposition.
    e. Interaction.
    f. Representation or story.

Computer games could be played on variety of desktop computer platform. Could be linked together with sometimes hundreeds or players playing at the same time and could be used for other purposes (such as office applications).

Based on the explanation above, Ithe writer concludes that computer games is one of the important technologies that we can use as media in teaching language because computer games can make students enjoyable in studying while playing method in a classroom.

4.2. Why use computer games for learning ?

Many reasons are citied for why computer games engage the users. Some of the reasons given are listed below :

  a. Hopkins (in http://wikipedia.org/wiki/Personal_computer _game/function, 2001) states that They are seductive, they use technology to represent reality or embody fantasy. Rich visual and spatial aesthetics draw you into extravagant fantasy worlds that never theless seem very

real on their own therm. These excite awe and also pleasure where environments have recognicable features.

b. Mitchell (in http://wikipedia.org/wiki/computergame literature, 1996) state that games are played to win or achieve a goal. They key to motivation is winning while remaining challenged. The motivate via fun, part of the natural learning process in human development and instant, visual feedback. This is true both of 'mini-games', where players achieve quick outcomes and of complex games, such as fantasy or simulation games, which have goals and subgoals.

c. Unlike many other game environments, complex computer games provide a complete, interactive virtual environment.

d. Ambience information creates an immersive exerience, sustaining interest in the game.

Based on the explanation above, it can be concluded that computer games should be used in learning because by computer games the teacher will get lessons objective and computer games will give motivation for the students, so they will have confidence to study especially in learning vocabulary.

The advantages of computer games according to Carrier (1980:6), as follows :

a. Computer games can be used to change the pace of a lesson and so maintain motivation.

b. Computer games can be used to functuate long formal teaching units and renew students energy before returning to more formal learning.

c. Computer games can change the role of the teacher from that a formal instructure to that manager organizer of activities that students enjoy participating. This can be useful in reducing teacher-students distance or conflict.

d. Computer games can increase teacher-students comunication and so reduce the domination of the classroom by the teacher.

From the explanation above, It can be concluded that the use of computer games in learning process is very important,

useful, appropriate, effective way in facilitating the students in a teaching.

In playing games, the teacher should look for an alternative activity in order to respone the students in boredom. One important thing to formulate in this case is the teacher should organised the class in varied activities. There are four main types of computer games, namely : matching games, spelling games, guessing picture, and jumble games.

METHODOLOGY

In doing this research, the writer took some literature from printing materials such as books and also browsed from the internet. The research design used in this research is pre experimental design with one group pre-test and post-test design. This research consist of two variables namely :

      a. Independent variable. The independent variable is computer games as teaching media.

      b. Dependent variable. The dependent variable is students ' vocabulary.

The writer used vocabulary test which used in pre test and post test. The pre test was intended to see the ability of students' vocabulary in adjective, verb, and noun, while post test was administrated to know the effectiveness of computer game in teaching vocabulary. The test consist 50 items which relate to adjective, verb, and noun.

The population of the research was taken from the fifth year students of SDN 255 Mancani in 2007/2008 academic year, there were 30 students there. The research used all total sampling, where the research took all of them as experimental class. The writer took the fifth year class of SDN 255 Mancani. It consist of only one class. There were 30 students there.

FINDINGS AND DISCUSSION

The next table shows about the students ' score in multiple choise, matching words, translating words, and complete the sentence in pre test.

No.	Students	Multiple	Matching	Translating	Complete	Total	Students '

		choise	words	words	the sentence		skor
1	**01**	3	3	3	2	**11**	**2,2**
2	**02**	3	1	2	4	**10**	**2,0**
3	**03**	3	3	4	2	**12**	**2,4**
4	**04**	2	3	2	1	**8**	**1,6**
5	**05**	2	5	3	1	**11**	**2,2**
6	**06**	3	6	3	1	**13**	**2,6**
7	**07**	3	9	4	5	**21**	**4,2**
8	**08**	2	6	6	1	**15**	**3,0**
9	**09**	4	6	6	4	**20**	**4,0**
10	**10**	2	3	4	4	**13**	**2,6**
11	**11**	8	8	2	2	**20**	**4,0**
12	**12**	4	8	5	4	**21**	**4,2**
13	**13**	1	5	6	0	**12**	**2,4**
14	**14**	2	9	3	1	**15**	**3,0**
15	**15**	4	5	1	1	**11**	**2,2**
16	**16**	5	1	3	1	**10**	**2,0**
17	**17**	4	4	3	2	**13**	**2,6**
18	**18**	8	8	3	1	**20**	**4,0**
19	**19**	8	6	3	1	**18**	**3,6**
20	**20**	3	9	5	1	**18**	**3,6**
21	**21**	5	5	5	4	**19**	**3,8**
22	**22**	1	7	5	2	**15**	**3,0**
23	**23**	5	5	5	3	**18**	**3,6**
24	**24**	5	3	3	1	**12**	**2,4**
25	**25**	3	8	3	2	**16**	**3,2**
26	**26**	4	9	3	1	**17**	**3,4**
27	**27**	6	6	5	4	**21**	**4,2**
28	**28**	7	1	1	1	**10**	**2,0**
29	**29**	2	2	1	0	**5**	**1,0**
30	**30**	3	8	4	3	**18**	**3,6**

Table 5: the students' total score in pre test.

From the table above, we can see that in pre test the hight score is 4,2 and the low score is 1,0. It shows that the students ability in vocabulary is still low.

The next table shows about the students ' score in multiple choise, matching words, translating words, and complete the sentence in post test.

No.	Students	Multiple choise	Matching words	Translating words	Complete the sentence	Total	Students' skor
1	01	7	11	12	7	37	7,4
2	02	8	12	12	6	38	7,6
3	03	8	14	14	10	46	9,2
4	04	6	11	10	8	35	7,0
5	05	9	13	13	10	45	9,0
6	06	8	11	10	6	35	7,0
7	07	8	13	14	8	43	8,6
8	08	9	13	14	7	43	8,6
9	09	8	14	15	9	46	9,2
10	10	7	12	12	8	39	7,8
11	11	9	13	13	9	44	8,8
12	12	8	11	10	6	35	7,0
13	13	7	12	14	9	42	8,4
14	14	7	13	13	9	42	8,4
15	15	7	11	12	10	40	8,0
16	16	6	10	12	7	35	7,0
17	17	6	11	11	7	35	7,0
18	18	10	12	13	9	44	8,8
19	19	9	12	12	9	42	8,4
20	20	8	14	14	9	45	9,0
21	21	9	13	15	9	46	9,2
22	22	8	14	12	10	44	8,8
23	23	9	14	14	10	47	9,4
24	24	7	10	12	7	36	7,2
25	25	9	13	14	9	45	9,0
26	26	9	14	14	9	46	9,2

27	27	9	11	13	9	42	8,4
28	28	9	11	12	9	41	8,2
29	29	7	12	10	7	36	7,2
30	30	8	12	12	8	40	8,0

Table10 : the students' total score in post test.

Based on the table above, we can see the students' result in post test. In post test the high scoreis 9,4 and the low score is 7,0. This is implies that there is significant of the students' result in pre test to post test. The next table shows the students' result and mean score in pre test and post test.

No.	Students	The Result of	
		Pre Test (X)	Post Test (Y)
1.	01	2,2	7,4
2.	02	2,0	7,6
3.	03	2,4	9,2
4.	04	1,6	7,0
5.	05	2,2	9,0
6.	06	2,6	7,0
7.	07	4,2	8,6
8.	08	3,0	8,6
9.	09	4,0	9,2
10.	10	2,6	7,8
11.	11	4,0	8,8
12.	12	4,2	7,0
13.	13	2,4	8,4
14.	14	3,0	8,4
15.	15	2,2	8,0
16.	16	2,0	7,0
17.	17	2,6	7,0
18.	18	4,0	8,8
19.	19	3,6	8,4

31

20.	**20**	3,6	9,0
21.	**21**	3,8	9,2
22.	**22**	3,0	8,8
23.	**23**	3,6	9,4
24.	**24**	2,4	7,2
25.	**25**	3,2	9,0
26.	**26**	3,4	9,2
27.	**27**	4,2	8,4
28.	**28**	2,0	8,2
29.	**29**	1,0	7,2
30.	**30**	3,6	8,0
	Total	**88,6**	**246,8**
	Mean	**3,0**	**8,2**

Table 11 : The students' result and mean score of pre test and post test

Table above shows the result of pre test and post test. It also shows the mean score, which is significantly different betwee the pre test and post test. In pre test, the mean score is 3,0 (poor) and in post test, the mean score is greatly increase become 8,2 (good).

The next table shows about the classification of students'

score.

Classification		Pre test	Post test
Excelent	**(9,6 – 10)**	**0**	**0**
Very good	**(8,6 – 9,5)**	**0**	**13 (43,33 %)**
Good	**(7,6 – 8,5)**	**0**	**9 (30 %)**

Fairly good	(6,6 – 7,5)	0	8 (26,66 %)
Fairly	(5,6 – 6,5)	0	0
Fairly poor	(3,6 – 5,5)	11 (36,66 %)	0
Poor	(0,0 – 3,5)	19 (63,33 %)	0

Table 12. Students' score classification in pre test and post test.

Based on the comparison table above, we can see that in pre test, most of students got score in poor namely 19 and 11 got fairly poor. This fact implies that most of students had low ability in vocabulary before the treatment.

In post test, there was a significant increase of students' score. There were 13 students got very good, 9 students got good, and 8 students got fairly good. This implies that the students could improve their vocabulary throght computer games. In general, we can see that it is effective to use computer games in teaching vocabulary.

From the result of T-TEST, it is found that "t_o" is bigger than "t_t" ($t_o > t_t$").

$$37,64 > 2,045$$

This isindicated that $h_o \geq h_i$ so, null hypothesis is reject, therefore using computer games is effective in teaching vocabulary at elementary school.

In this part, the writer gave a question to the students about the response of using computer games in teaching vocabulary.

The question is *Bagaimana pendapat mu belajar vocabulary menggunakan computer games?*

we can see the students' answer on the table below.

No.	Students	Students' answer

1.	**01**	*belajarnya asyik*
2.	**02**	*Menyenangkan*
3.	**03**	*Bagus*
4.	**04**	*Bagus*
5.	**05**	*Seru*
6.	**06**	*Lucu*
7.	**07**	*Asyik*
8.	**08**	*Menyenangkan*
9.	**09**	*menyenangkan*
10.	**10**	*belajarnya lebih santai*
11.	**11**	*belajarnya tidak tegang*
12.	**12**	*lebih santai*
13.	**13**	*lebih menyenangkan*
14.	**14**	*belajarnya seru*
15.	**15**	*bagus*
16.	**16**	*bagus*
17.	**17**	*asyik seru*
18.	**18**	*belajarnya seru*
19.	**19**	*lucu*
20.	**20**	*menyenangkan*
21.	**21**	*bagus*
22.	**22**	*belajarnya lucu dan santai*
23.	**23**	*asyik dan menyenangkan*
24.	**24**	*seru bermain gamesnya*
25.	**25**	*lebih santai dan seru*
26.	**26**	*asyik dan lucu*
27.	**27**	*belajarnya tidak tegang*
28.	**28**	*bagus*
29.	**29**	*gamesnyaseru*

30.	**30**	*gamesnya asyik*

Table 14 : the students' response of using computer games.

Based on the students' response above, all of the students gave positif respons, this is implies that the using of computer games in teaching vocabulary is a good method because the students enjoy and more easy to understand the lesson.

In pre test and post test there were four kinds of tests, namely multiple choise, matching words, translating words and completing the senstence. In the pre test, the students' result was low especially vocabulary related to the adjectives and verbs, so their score was low. And in the post test the students ' score got increasing from the pre test.

Based on the comparison of the pre test and the post tests' result, we can see that in the pre test most of students got score in poor classification namely 19 (63,33%) and 11 (36,66%) got fairly poor and no one got good. This fact implies that most of the students had low ability in vocabulary before the treatment. And in the post test there was a significant increasing of students' score. There were 13 students (43,33%) got very good, 9 students (30%) got good, and 8 students (26,66%) got fairly good, no students got fairly poor and poor. This implies that the students got improving in vocabulary after treatment.

The result of test shows that mean score between the pre test and the post test were significantly different. In the pre test mean score is 3,0 (poor) and in the post test mean score is greatly increase becomes 8,2 (good).

Based on the result of data analyisis, the writer found out that using computer games is effective significantly in increasing students' vocabulary

Based on the students' respons, all of the students gave a positif respons of using computer games in teaching vocabulary. This is show that computer games is a good method in teaching vocabulary in elementary school.

From the writers' research, in teaching process, using computer games are interesting, the students enjoy getting material, and the situation of classroom to be creative and fun.

CONCLUSIONS

Based on result of data analysis and discussion, the writer concludes that :

1 Computer games is effective significantly in improving vocabulary of the fifth year students at SDN 255 Mancani. It can be proven by the students' result in pre test and post test with mean score 3,2 in the pre test and 8,0 in the post test.
3. Computer games is an appropriate method to teach English in elementary school because the classroom situation to be attractive, interesting and the students enjoy getting the material and also the students relax during treatment process.

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