

ENHANCING VOCABULARY MASTERY USING A COMPUTER-BASED GAME FOR TEACHING ENGLISH TO YOUNG LEARNERS (TEYL)

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Abstract: In learning English, the students have to master the four English skills. There are speaking, listening, writing, and reading. All these language skills are related to each other. However, vocabulary is considered as one of component of a language. Vocabulary is important for students in learning English in order to make a sentence. And according the preliminary study there are several problems face by students' in learning vocabulary. Such as lack of vocabulary, need an interactive, fun and appropriate media in learning vocabulary. In other aspect teacher still uses the traditional ways in teaching English especially in teaching vocabulary. Based on the background above, the researcher is interested in conducting a research using computer-based game. Especially computer-based game as media in teaching English to young learners (TEYL). Computer-based game is used in this research, since this game is equipped with appropriate visual and context. This game is given to students as a media to learn vocabularies. This research focuses on the implementation and solving students' problem in learning English vocabulary using computer-based game. This computer-based game focused in learning English vocabulary items. It uses text and images. The idea of the game is to move the image with the suitable and matching text, so that student matchs up the image and vocabulary item using installed application.

Keywords : Vocabulary Mastery, Computer-Based game, TEYL

Abstrak: Dalam belajar bahasa Inggris, para siswa harus menguasai empat keterampilan bahasa Inggris. Ada yang berbicara, mendengarkan, menulis, dan membaca. Semua keterampilan bahasa ini saling terkait satu sama lain. Namun, kosa kata dianggap sebagai salah satu komponen bahasa. Kosakata penting bagi siswa dalam belajar bahasa Inggris untuk membuat kalimat. Dan menurut studi pendahuluan ada beberapa masalah yang dihadapi oleh siswa dalam belajar kosa kata. Seperti kurangnya kosa kata, membutuhkan media yang interaktif, menyenangkan, dan sesuai dalam belajar kosa kata. Dalam aspek lain guru masih menggunakan cara tradisional dalam mengajar bahasa Inggris terutama dalam pengajaran kosa kata. Berdasarkan latar belakang di atas, peneliti tertarik untuk melakukan penelitian menggunakan game berbasis komputer. Terutama game berbasis komputer sebagai media dalam pengajaran Bahasa Inggris kepada pembelajar muda (TEYL). Game berbasis komputer digunakan dalam penelitian ini, karena game ini dilengkapi dengan visual dan konteks yang sesuai. Game ini diberikan kepada siswa sebagai media untuk belajar kosa kata. Penelitian ini berfokus pada implementasi dan penyelesaian masalah siswa dalam belajar kosa kata bahasa Inggris menggunakan game berbasis komputer. Game berbasis komputer ini fokus mempelajari item kosakata bahasa Inggris. Ini menggunakan teks dan gambar. Ide dari permainan ini adalah untuk memindahkan gambar dengan teks yang cocok dan cocok, sehingga siswa mencocokkan gambar dan item kosakata menggunakan aplikasi yang diinstal

Kata Kunci : Penguasaan Kosa Kata, Permainan Berbasis Komputer, Pengajaran Bahasa Inggris kepada pembelajar muda

INTRODUCTION

English has become an international language in the world. Most of source of information including book, science, and technology are written in English. So English is very important to be learnt. In Indonesia, English is studied as a foreign language. Because of the importance of English, it is also tested in the National Examination administered by the government. Such as stated by Harmer (2007:17) The number of people speaking this language is about 350 million which is next to the Chinese language.

In learning English, the students have to master the four English skills. There are speaking, listening, writing, and reading. All these language skills are related to each other. The units of a language are vocabulary and grammar. According to Harmer (2004: 33), just the act of writing sentences makes students think about the new grammar or vocabulary in a more considered way than if we asked students to provide instant spoken example.

However, vocabulary is considered as one of component of a language. Vocabulary is important for students in order to make a sentence. According to Chitravelu et. al (2005:241), vocabulary is the words which make up a language constitute. Vocabulary used by someone or students to express the idea in language. Shabaneh et. al (2019) suggest that both sides need to be acquainted with a sufficient amount of vocabulary. It can be said that vocabulary need to understand in the process of communication or more specific in teaching and learning language.

In teaching and learning there are several techniques are used by teachers for young learners, such as teaching vocabulary through lists, translation, synonyms, antonyms, contexts, and so on. Unfortunately, some techniques above are not interesting for young learners. Those techniques are too traditional to teach young learners in this globalization era.

From that reason in teaching and learning process needs an appropriate media that interactive, enjoy and fun such as computer game. As Harmer (2007) stated that because children love discovering things, and because they respond well to being asked to use their imagination, they may well be involved in puzzle-like activities, in making things, in drawing things, in games in physical movement or in songs.

Based on the preliminary study, the researcher did interview to the English teacher, he found some information related to the students' problems in vocabulary. The first problem is that students are lack of vocabularies. Moreover, students are needed

an interactive, fun and appropriate media in learning vocabulary. The second is that the teacher often uses the traditional ways in teaching.

McLaren, B. (2017) said that educational game has been shown to foster superior performance on learning outcomes as compared to a more conventional instructional approach. So in teaching and learning English especially the use of purposes and appropriate games are the mainly point to run the teaching and learning process well. The newest activity as game using a computer is more efficient to force the student interest in teaching and learning English.

In which certain features of video-games produce meaning, particularly concerning their ability to execute a series a rules with which the player interacts Popovich (2019). It can said that by using a games student can produce various output in the relation of process on teaching and learning English such as ability in vocabulary by its activity in games.

Based on the background above, the researcher is interested in conducting a research using computer game. Especially computer-based game as a media for Teaching English to Young learners (TEYL). Computer-based game focused in vocabularies uses in this research, since this game is equipped with appropriate visual and context. This game gives to students as a media to learn vocabularies. With this idea, this research sets out to find out that computer-based game can help to enhance

This research focuses on the implementation of computer-based game as the media for Teaching English to Young Learners (TEYL) to enhance students vocabulary mastery. The subject for this implementation is the seventh grade students of MTS Sunan Giri in academic year 2018/2019.

This research can also be useful and helpful for the teacher for Teaching English to Young Learners (TEYL) through computer-based game, especially installed application in computer as a media to enhance student vocabulary mastery.

For Teaching English to Young Learner (TEYL) we can use Computer-based game as an interactive material for students. By playing game, student learn about vocabularies that are played in the game. Since the purpose of Teaching English to Young Learner (TEYL) level is to introduce English as an International language to students, so the most important thing for teacher in TEYL is introduce vocabularies first to the students. Vocabularies are the main aspect of language. Slatterly and Willis (2001) proposed the characteristics of young learners under seven years old in learning vocabularies;

1. They acquire through hearing and experiencing lots of English, in much the same way they acquire first language.
2. They learn things through playing; that are not consciously trying to learn new words or phrases.
3. They love playing with language sounds, imitating, and making funny noises.
4. They are not able to read and write in L1; important to recycle language through talk and play.
5. Their grammar will develop gradually on its own when exposed to lots English in context.

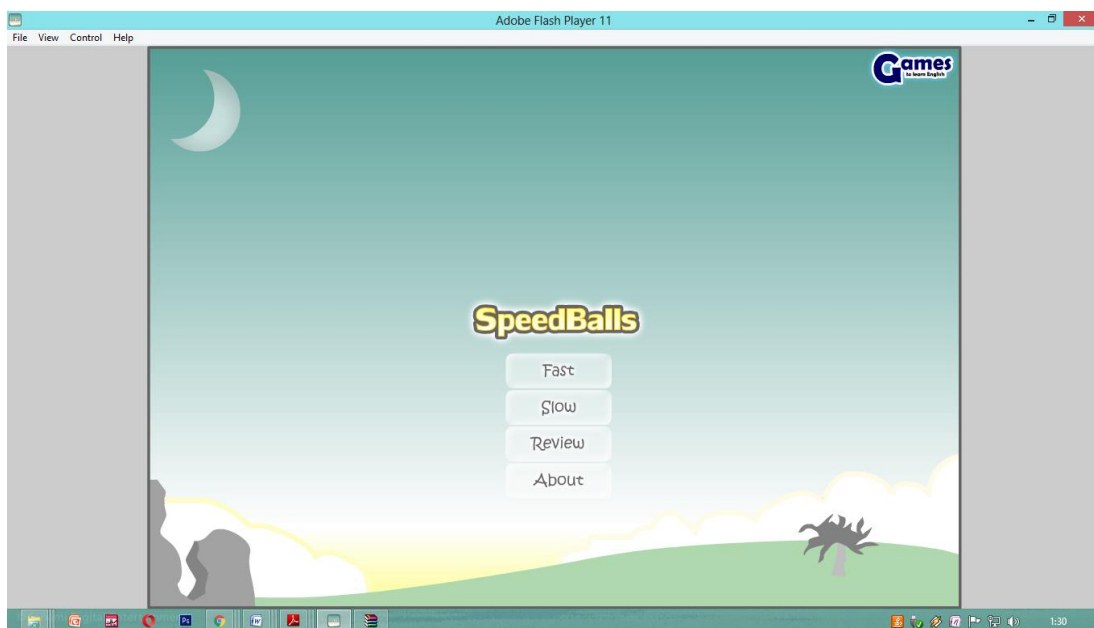
A computer-based game is application that is designed for play and fun. The game is constructed with certain rules and instruction to achieve specific goals usually through several levels. In facts, people or children spend hours to play and finish a computer game. It indicates that computer-based game is very engaging and attractive. Teachers can use this application to teach and drill a vocabulary skill for Teaching English to Young Learners (TEYL). Bu using Computer-based game students are expected to be more interested in learning English especially learning vocabulary through a installed application game.

While playing games, learners do not think of their worries and escape daily routines, which gives them space to enjoy themselves Wechselberger (2013). It is means that by using a game student can feel enjoy while they are learning a language. As Sweetser & Wyeth (2018) stated delight is usually stimulated by the challenge which games provide to players. Student can improve their capability with their competence by playing a game in the objective to finish the game with the higher score.

Computer-Based Game for Learning Vocabulary : Speed Balls game

This is a game for learning English vocabulary items. It only uses text and images. The idea of the game is to move the image to the matching text so that student matchs up the image and vocabulary item. Student can select from a range of content items to play with. Then to play the game student have to read the words and look at the images and then drag the images over the text hole. The game continues until the timer runs out or after student completes all the items. The timer gets quicker and quicker as students progress and they have to be quick to continue to play. If the tome goes too quickly then the student can choose to play in slow mode instead by clicking on the slow button options.

Figure 1. A main page of the game.



Student can choose several level in every stage as needed as possible to simplify in using this game for enhance their vocabulary.

Figure 2. Content page of the game.



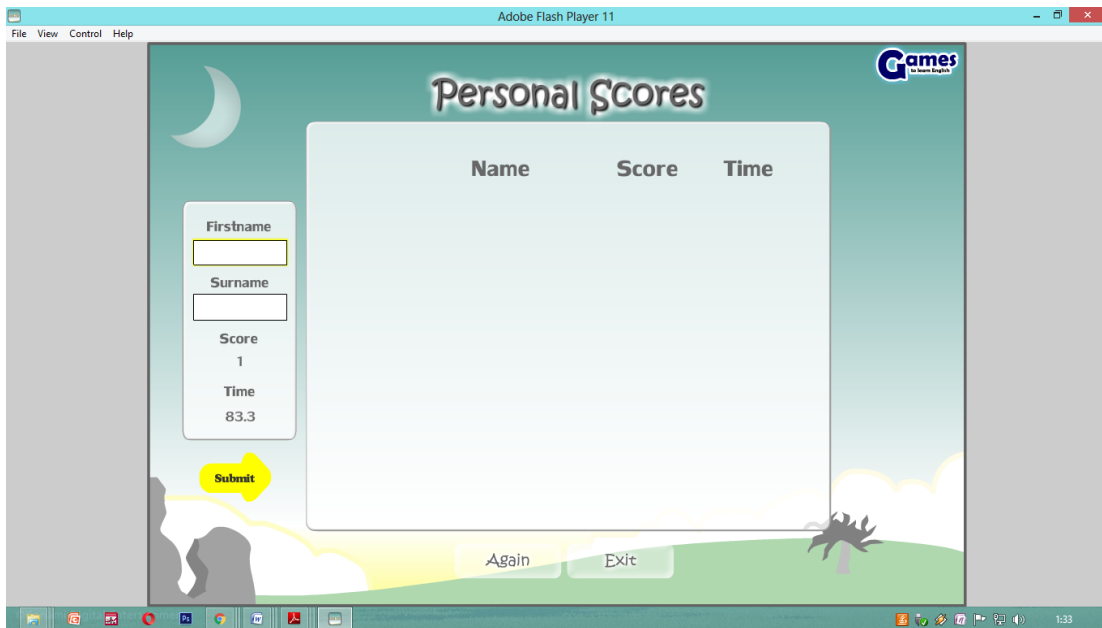
Student can select the appropriate content with the various objects in an attractive visualisation.

Figure 3. Some of layers from the game.



During play a game student can definitely matching the correct vocabulary with the suitable pictures.

Figure 4. Result of the game.



After finish the choosing content from the game, the result directly appear with the score of the vocabulary task game.

RESEARCH METHOD

The method used in the research is Classroom Action Research (CAR). The choice of CAR is related to the purpose of the research. It nearly always arises from some specific problems or issues arising out of professional practice. It is therefore very problem-focused in its approach and very practical in its intended outcomes (Wallace: 2000). It is appropriate method used to solve the problem in this class because "Action research is practical" (McNiff and Whitehead, 2005:2 cited in Emilia, 2010:105).

There are several activities in each cycle. Kemmis & McTaggart (1998) mention the activities in the action research: planning, acting, observing, and reflecting.

Research Procedures

This research included several cycles depend the improvement of the result of the study. Every cycle have four activities: planning, acting, observing, and reflecting.

Planning

In this step, the researcher plans an acting that would be given to the students in the class in the next meeting. This step design after the researcher found the needed information. He would be helped by the partners to monitor the instructional process in the class and discuss together with the teacher after monitoring. The researcher also makes a lesson plan, prepared observation form, and designed teaching material, and worksheets.

Acting and Observing

In this step, the teacher implement the planning of the research and the researcher watch the instructional process and give the attention to the way how the teacher implemented her planning by ticking the observation form and worksheets. In this step, the teacher works in prepare class and use the time effectively as possible. This observation is important phase in analyze everything that happened in the class during implementing the instructional planning in each cycle.

Reflecting

In reflecting step, teacher and researcher discuss together and reflecting instruction by analyzing observation forms, and the worksheet in each cycle. They analyzing the weaknesses and solved some problems that finding in previous step and looked for other strategies that used in the next step. This revision aims to enhance vocabulary mastery in the next step.

Test

Test consisted of pre-test, test 1, test 2 (if necessary), test 3 (if necessary), and post test. Pre-test and post-test conducted before and after cycles indicated the score whereas tests carried out in each cycle pointed out the improvement.

The following indicator make to measure students' score improvement by the teacher. The scale is described in table below.

The Measurement of Students Achievement

The percentage of correct answer	Grade	Level of achievement
93 – 100	A. Outstanding	Outstanding
85 – 92	B. Very good	Above average
75 – 84	C. Satisfactory	Average
70 – 74	D. Weak	Below average
Below 65	E. Fail	Insufficient

FINDINGS AND DISCUSSIONS

Findings

The Result of Cycle 1

This part concerns with the results of cycle 1 covering the findings obtained from four stages namely planning, implementing, observing and evaluation, and reflecting. Before implementing the action in the class, the researcher made some preparations for teaching, and the observation guide in the form of checklist containing the indicators being observed dealing with the teacher and the students' activities in the process of teaching and learning vocabulary through Computer Based Game. In addition, prepare the criteria of success for individual and classical and constructed the vocabulary test items as pre-test before for this cycle.

The teaching and learning process by using computer based game or in this research using an application named "Speed Balls" it may cover fun activity and joy. This application is free and downloadable for everybody who want to use id. Speed Balls application covered 26 main stages of students' vocabulary games activity. It consist the content such as Personal, Food 1, Animals 1, Body 1, Clothes 1, Letters, Furniture, Kitchen, Food 2, Animals 2, Body 2, Clothes 2, Numbers 1, Sport, Transport, Jobs, Stationery, Verbs 1, Adjectives, Computer, Traffic, Garden, Hospital, Nature, Positions, and colors. In this research only used several content depend on the need and use of the vocabulary with the appropriate vocabulary for student in Junior High School. In accordance the student only practice and play a game with several content such as Personal, Food 1, Animals 1, Body 1, Clothes 1, Furniture, Kitchen, Food 2, Animals 2, Body 2, Clothes 2, Sport, Transport, Jobs, Stationery, Computer, Traffic, Garden,

Hospital, Nature, and Positions. The researcher skip 5 content that might be not too appropriate with the student need and assessments.

Before apply a cycle 1 the researcher arrange a pre test that consist 20 items test about vocabulary. It applied as usual by distributed a paper of pre test in the beginning of cycle 1 phase. After it the researcher gets the score off all student works. Next the cycle 1 phase, in this phase the researcher observed the process of teaching and learning through Computer Based game namely "Speed Balls". The researcher give the computer unit to each student. Then the student follows the direction in applying Speed Balls game. The student need to practice every contents served in Speed Balls game. It contains several activity with 2 main point stage in speed (slow and fast). For the cycle 1 phases (30 minutes beginning) all the student practice and finish the content from Speed Balls game in slow options. After finish then the student continue in fast options until all the content was done. In the end of this step, the researcher asked the students to analyze and conclude the vocabulary they get from the Speed Balls game.

Based on the results of observation as describe above, the researcher made reflection. The students gave the positive responses to the teaching and learning process using computer based game. But some of them still had problem in operate the application because it is the first time the student use this application. And it can be seen also from the students' answer in pre test. Besides, the researcher found that the first trying using this application is not enough well. Based on the weaknesses found in the implementation of cycle 1, the research was continued to cycle 2.

The Result of Cycle 2

In this cycle the researcher replay all the activity such as in cycle 1. The researcher asked the students to operate and apply a Speed Balls game on the computer. The student must finish all content already choose before in two stage (slow and fast). The content same as the content apply in cycle 1. It consist Personal, Food 1, Animals 1, Body 1, Clothes 1, Furniture, Kitchen, Food 2, Animals 2, Body 2, Clothes 2, Sport, Transport, Jobs, Stationery, Computer, Traffic, Garden, Hospital, Nature, and Positions. The student have 60 minutes to finish all the Speed Balls game activity.

The same as in the previous cycle, the researcher observed the activities during the process of teaching and learning through computer based game. It was done as the process of evaluation. In the last stage of this cycle, the researcher made reflection by distributed the post test paper. The post test consist 20 items test about vocabulary. The researcher give 30 minutes to finish post test items. After that the researcher collected and compiled all the score from the students post test.

The summary of the students' percentage of success in pre test and post test can be shown below. In addition, it presents the result of the students' vocabulary dealing with their responses about the implementation of computer based game namely "Speed Balls" in teaching and learning English in classroom.

Table 5.1. The percentage of success for individual in the pre test and post test

No	Students	Pre test	Post test
1	A	70	80
2	B	70	80
3	C	50	100
4	D	50	90
5	E	50	100
6	F	70	80
7	G	50	90
8	H	70	80
9	I	50	100
10	J	70	80
11	K	50	100
12	L	50	90
13	M	60	90
14	N	50	100
15	O	70	80
16	P	50	90
17	Q	50	90
18	R	50	100
19	S	50	100
20	T	60	100
21	U	60	100
22	V	70	100
23	W	50	100
24	X	50	100
25	Y	80	100

By observing the students' vocabulary mastery from pre test to post test, it actually improve well. There was significance development in the students' vocabulary mastery using computer based game.

The Result of the Observation Sheet

At the first meeting, the researcher did not find difficulties to fill the observation sheets. Almost all of the items could be finished except the last activity. Because the time was over, the teacher could not give comments about implementing the computer based game and there was not opportunity to the students to ask their difficulties in their work. The teacher only closed the class by greeting. For the second meeting, the observer could fill the observation sheets complete.

On the next meeting, the researcher could fill the observation sheets complete. They also could be finished the last activity. In this phase the students had a lot of time since all of them had already understood what they should do in each step. So the teacher only needed to announce the length of the time they had in each step and

remind them about the next step. For the fourth meeting, the observer could fill the observation sheets complete.

The Result of the Students' Questionnaire

The researcher gave 8 items whose 2 options. "Yes" and "No" on the questionnaire to know the students' responses dealing with the implementation of computer based game in teaching and learning English.

The results of each item can be seen as follows:

1. The question was = Are you interest in the learning writing using Computer based game (Speed Balls)?

There are 25 students answered "Yes". The percentage was

$$\frac{1 \times 25}{1 \times 25} \times 100 \% = 100 \%$$

100 % is categorized very strong.

2. The question was = Is the use of Computer based game (Speed Balls) in teaching and learning English attractive?

There are 25 students answered "Yes". The percentage was

$$\frac{1 \times 25}{1 \times 25} \times 100 \% = 100 \%$$

100 % is categorized very strong.

3. The question was = Is the implementation of Computer based game (Speed Balls) easy?

There are 23 students answered "Yes". The percentage was

$$\frac{1 \times 23}{1 \times 25} \times 92 \% = 92 \%$$

92 % is categorized very strong.

4. The question was = Do you enjoy this activity?

There are 25 students answered "Yes". The percentage was

$$\frac{1 \times 25}{1 \times 25} \times 100 \% = 100 \%$$

100 % is categorized very strong.

5. The question was = Can you get new vocabulary items using of Computer based game (Speed Balls)?

There are 25 students answered "Yes". The percentage was

$$\frac{1 \times 25}{1 \times 25} \times 100 \% = 100 \%$$

100 % is categorized very strong.

6. The question was = Can you review your vocabulary items that you have get using Computer based game (Speed Balls)?

There are 21 students answered “Yes”. The percentage was

$$\frac{1 \times 21}{1 \times 25} \times 100 \% = 84 \%$$

84 % is categorized strong.

7. The question was = Do you think that by this activity you can improve your vocabulary?

There are 25 students answered “Yes”. The percentage was

$$\frac{1 \times 25}{1 \times 25} \times 100 \% = 100 \%$$

100 % is categorized very strong.

8. The question was = Do you think that by this activity you can increase your motivation and interest in learning English ?

There are 25 students answered “Yes”. The percentage was

$$\frac{1 \times 25}{1 \times 25} \times 100 \% = 100 \%$$

100 % is categorized very strong.

Discussions

From the data on this research is known that there is improvement or enhancement between cycle 1 and cycle 2. Or we can say there is different score between student score on pre test and post test. From that score almost all the student achieved an improvement score. So it concluded that the use of computer based game can enhanced student vocabulary mastery.

From the other data instrument such as questionnaire, the result is mostly student agree that computer based game in teaching vocabulary are interesting, attractive, easy to implemented, enjoy, can get new vocabularies, can review and memories more vocabularies, improve the vocabularies and increase the motivation.

CONCLUSIONS AND SUGGESTIONS

Conclusions

First, the students feel enjoy and fun during teaching and learning English using computer based game, so it gave them had many opportunities to explore their knowledge and solve their problem especially in vocabulary.

Second, the student can maintain and elaborated technology and activity during learning English especially in compiling new vocabulary. The application apply are

suitable and appropriate with students' levels of English competence, so they can easily discuss the content of the new vocabulary.

Third, it is important to introduce the objective of the study to the students' before guiding them to implement the computer based game. Teacher may use Bahasa Indonesia while introducing the computer based game guideline to save the limited time and to make the students understand the application perfectly.

Fourth, teacher should guide, observe and monitor the students' activities during the class to make sure that they are following the procedure of the computer based game and help them whenever they are having difficulties.

Suggestions

Since most the teachers use monotonous teaching and learning techniques in most English lesson. Teacher should apply various kinds of teaching techniques in the English class to provide students learning experience.

Teacher should carefully plan the teaching and learning activities, especially using technology to face the modern era that will be used. The application should be in the students' levels of English competences. Teacher must be explaining the procedures of the computer based game or the other application uses.

It is suggested for the students to use Speed Balls application while study a new vocabulary since the activities of it can be used as the guide to improve their English skills.

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