

CHAPTER IV

RESULTS OF DEVELOPMENT

A. Development Process

1. Development Finding and Procedure

a. Development Procedure

The researcher begins the developing by choosing good software exercise, it is chosen based on the criteria of good software exercise by Chad R. Fisher, Cinoy Ravindran, and Richard. A. Demillo. Those are:

- It should be functionality for many people.
- It is part of technology that can be used for in future, and also suitable with other system in your house.
- It has an up to date version, so the software can make new enhancement to the product.
- It should be able to be implemented in education.
- It should be free of charge. It means, software can be used without spending money.
- It can be operated on and off line.
- It should have accrediting products by ISO.
- It should have configuration automatic system.

Comprehension, Matching, and Portal maker. They are taken by the researcher with downloading from language online, after that they are installed to the computer or laptop one by one.

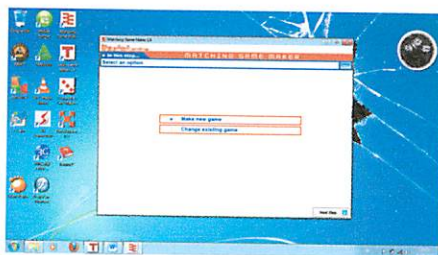
In developing the software, the researcher creates five example of vocabulary exercise in every activity. All of the questions are taken from the course book that is used by students at the school. The writer chooses chapter I in eight great of junior high school. The title of the book is “English in Focus” by Artono Wardiman, chapter I it is about my favorite animals and plants. This book is selected based on curriculum and study literature to some English book at the market. The writer does not do content validity because the questions are taken and created from type of question in the course book. The researcher creates three examples of activities in this study, such as follow:

I. The first is Tetris game maker.

The researcher creates exercise, it is created for exercising vocabulary by answering question based on the picture. There are some criterions good software exercise that are used by the writer to creating Tetris game maker exercise.

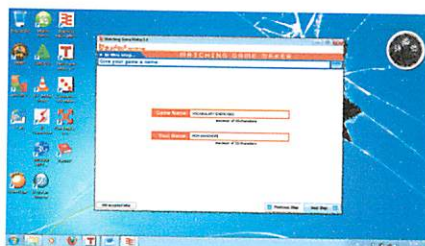
	The product can be operated in all kind of windows or no.
The software output should be correct	To get the good output , the researcher takes the questions from the course book

Step 1



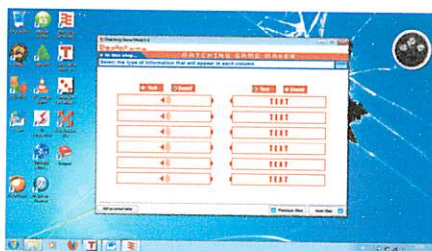
The first step in matching game maker, there are two categorizes creating new task and change an existing task that has been made before. You can select one of them, and you can go to the next step by clicking next step at the corner.

Step 2



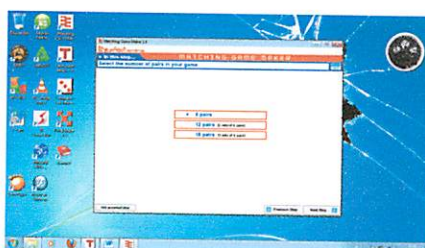
The second step, you write the name of task and your own name.

Step 3



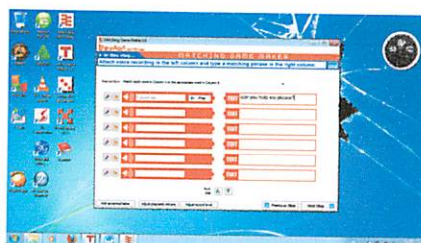
The third step, you select the type of information that want to appear in each column, you can select matching task between text and sound or sound and sound.

Step 4



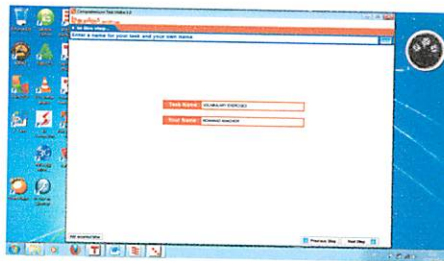
The fourth step, you can select the number of pairs in your game, there are three number 6 pairs, 12 pairs, 18 pairs.

Step 5



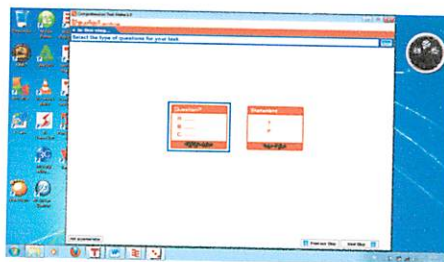
The fifth step, you can attach voice recording with your own voice. And also you can take the sound from folder with mp3 format in the left column, after that you can type a matching

Step 2



The second step, you write the name of task that want to create. And also you write your own name.

Step 3



The third step, you select categorize of questions for your task.

There are two types multiple choice and true-false

Step 4



The fourth step, you type the information or text for your task.

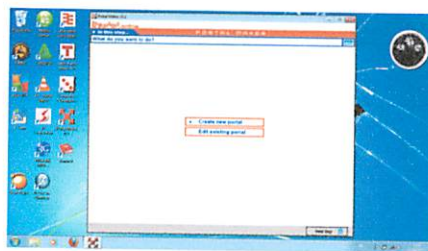
After that you add the comprehension questions. You can type your text and question including multiple choices, to go next step you can click next question or previous question to come

back to the question before. After that you can save your task by clicking make comprehension task.

IV. The fourth is portal maker

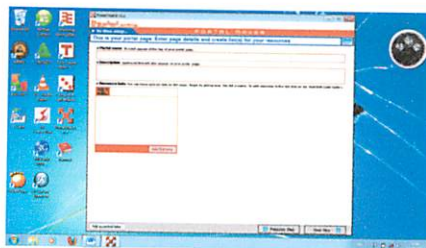
The researcher collects all of the activity in to a software namely portal maker, so it helps the researcher to share the exercise. And also the students can do the exercise what they want. There are some steps to create portal maker.

Step 1



The first step select what do you want to do, there are two activities creating new portal and edit existing portal

Step 2



In this step write your name and description portal, after that type your list name and add or edit resources, you can enter the file up to six lists.

Question number 3



Question number 4



Question number 5



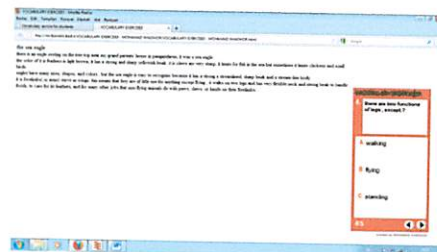
Question number 6



Question number 3



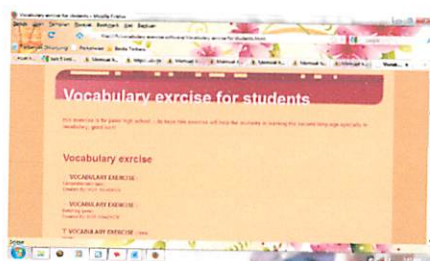
Question number 4



Question number 5



The fourth portal maker, the researcher creates a web portal to make easy when distribute to students, he links three kinds of activity Matching, Tetris and Comprehension in portal pages, so the vocabulary exercise has interesting design. By collecting in portal maker the students can choose which exercise they want to do.



d. Evalauation

Based on the result of developing procedure, this study produces three kinds of activities. First Tetris game maker is created by the researcher based on criterion good software exercise. It is saved in off line, so the product can be operated efficiently.

Second matching game maker is created by combining between sound and text. The researcher gives instruction, and also he takes questions from the course book. So the output is correctly.

Third comprehension task maker is created by combining text and question. The researcher creates reliable exercise between text, picture and sound. The product is also portable for other windows.

Those exercises have function for many people and any level, and also suitable with other system¹. It can be used for a long

¹ Fisher . R. Chad “*Software Evaluation Criteria*” (<http://EzineArticles.com>, accessed on may 20, 2012)

time, because it is software vendor that can be implemented in education. It also includes some instruction error message². The researcher takes the question from English course book, so it has validity and reliable with other data. In the end it is easy to be learned and used³. The exercise can be operated in and off line.

B. Trying Out The Product

1. Trying procedure

Based on trying design in chapter III, the writer does trying out the product in C class of eight grade students SMPN 2 Tanggulangin. During testing the product the researcher involves two teachers and 36 students. There are 20 female and 16 male of students, totally there are 36 students in C class. But only 34 students join in testing product, because there are two students who were absent. The testing takes place at laboratory of computer, its' 36 computers in the laboratory.

The testing has done in 90 minutes, before doing the testing. The writer installs four different windows on those computers. So it is known that can be operated in different windows version. Because all the computers in this school use windows XP, so the writer only installs 27 computers with three kinds of windows those are windows 7, 2000 and

² Richard. A. Demillo. A. Jefferso Cffutt. *Constraint based automatic test data generation*. Page 3

³ Ravindran. Cinoy. *Basic and criteria for good software programming*. (<http://ezinearticle.com>, accessed on 15 august, 2012)



number 2 about implementation technology in education, number 4 about the total cost of ownership, number 5 about the software vendor. Based on criteria good software exercise by Cinoy Ravindran, the researcher creates question number 7 about the product is easy to be used, number 8 about the product is easy to be understood, number 9 about the portable of the product in different windows.

Based on criterion good software by Philip Hubbard, the researcher creates question number 6 about the feedback or error message. Students and teachers also give suggestion, advising and opinion to the product. The result of questionnaire students' response states in table 1 of appendix 2, and the result of students' response in the form of percentages states in table 3 of appendix 3.

2. Evaluation

a. Evaluation process of trying

Based on testing product, the writer evaluates the process of testing. Because the researcher tests only once in field testing, so the researcher prepares well before testing the product, the product can be operated well in four different windows versions. Based on teachers' statement after testing, they said that during testing process, the students are very active in doing the exercise. They also interests in doing exercise different with situation at the class, they give suggestion to the product, such as, the written of the text is too small, the text need modification to be more interesting. In

In the research and development, trying out the product is very important thing. The results of questionnaire have calculated in percentages in Table 5 of appendix 3. The researcher explains the result of questionnaire, such as follow.

The third question is about students' response to the software that is needed in learning vocabulary, 29,41% of students really need this software, 67, 65% of students need this software and only 2,94% of students do not need this software, the researcher

The fifth question is about students' response to the software that can be used in continuously, 20,59% of students recognized that this software is really able to used continuously, 61,76% of students stated that it can be used and 17,65% of students stated that it can be quite used, the researcher conclude that it can be used continuously based on 61,76% of students' response. The sixth question is about students' response to the feet back and wrong message, 44,12% of students are very satisfied, 41,18% of students are satisfied and only 14,70% of students are less satisfied, the researcher concluded that students are very satisfied to the feet back and wrong message.

[illegible]

students' response in understanding the software, 23,53% of students are very easy, 58,82% of students are easy and 14, 70% of students are quite easy, the researcher concluded that this software is very easy to be understood and learned.

The ninth question is about students' response about application the software in all windows version, 8, 82% of students stated that it is really able to use, 58,82% of students recognized that it can be used and 32,52% of students recognized that it is quite able to use, the researcher concluded that this software is able to use in all windows version. The last question is about students' response about using in of line, 26, 47% of students recognized that it is really able to use, 61,76% of students said that it can be used and 5, 89% of students said it is quite able to use.

Based on the total of students' and teachers' answer, the researcher concludes. 32% of students say that the product is very good, 54% of students are agree that the product is good, 13% of students give response that the product is not good, and only 1% of students say that the product is not very good.

From those, it can be concluded that the software is very suitable and feasible to be applied in learning vocabulary, because vocabulary exercise software is applied in their activity. They can learn vocabulary that combining with technology as part of their live. Furthermore, the software is easy to be used and learned, it is

The researcher also evaluates teachers' and students' suggestion, opinion and advising after testing the products. There are some shortages that need to be revised. Those are, the written text is too small, it is need to modification to be more interesting, the listening section is be better using native speaker, the voice of software is not clear. Question and answer are not correlated yet.

Based on testing the researcher does evaluating the shortages of products from student's and teacher' suggestion. There are some shortage, those are:

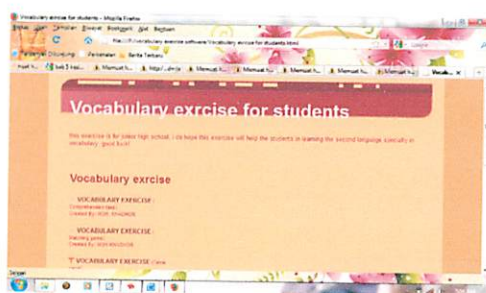
- [illegible]

From those shortage, he completes with some additional and adaptation to his products based on students' and teachers' suggestion, opinion and advised.

1. The text is written bigger than before.
2. The text is written more attractive font by using times new romance font for exercise.
3. The voice in listening section is changed by using native speaker.
4. The materials of listening section are taken from authentic material of course book, so it is more correlation between question and answer.
5. The text is created more interested by giving color and arranged the layout to be more interested.

These are the screen short of the software after getting revision:

1. Portal maker





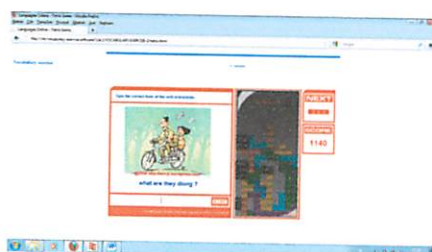
Question number 5



Question number 6

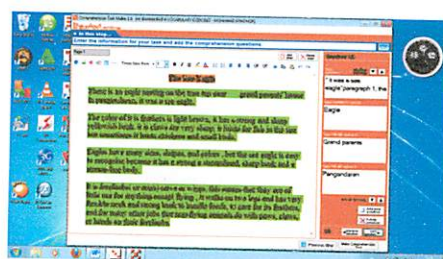


Question number 7

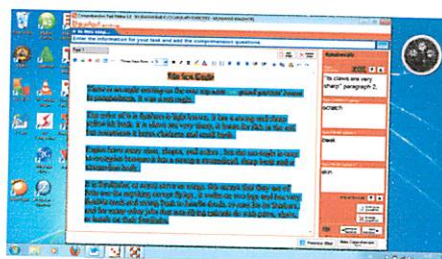


4. Comprehension task maker

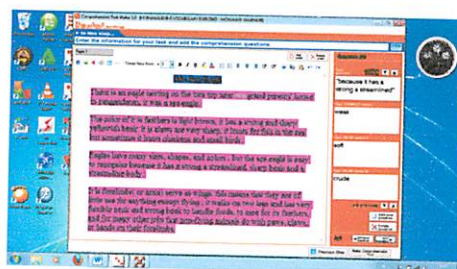
Question number 1



Question number 2



Question number 3



Question number 4

