

## **CHAPTER I**

### **INTRODUCTION**

#### **1.1 Background the of Study**

The use of computer in language learning via computer can help to improve the efficiency of student's learning because of its ability to present information in texts, sounds, animations and pictures (multimedia). In vocabulary learning, through that multimedia, computer can guide and illustrate the meaning of words. Nation (2003) states pictures and demonstration can be used to explain the meaning of new words in young learning classes. In addition, the way of communicating meaning through pictures is also helpful for students to remember when they are combined with verbal information. In such a way, students do not only know both the meaning and the form of words but also know how the words are used. In accordance with "dual encoding theory" (Pavio and Desrochers in Nation, 2003) using pictures combined with a verbal information makes the meaning stored both linguistically and visually.

One of the schools in Surabaya which use computer in their teaching and learning process is Santo Yoseph Catholic Elementary School. In this school, the students get opportunities to learn through computers once a week for forty minutes at the computer laboratory. In order to support the activities using computers, this school collaborates with BSW-Gamedia, (a computer education institute and software provider, where the writer has been working for more than seven years) that provides computer and software. Here, BSW –Gamedia provides twenty-five computers for first through sixth graders, and various

children's educational software for learning, including software for Mathematics, Social Sciences and English.

Related to English software at the school, the most commonly used is for vocabulary learning. This is true according to the theory of language learning that vocabulary is an important element in language learning and should be a central activity in the beginning levels. The theory is also supported by Cameron (2003) who claims that building up a useful vocabulary is central to the learning of a foreign language at primary level. In addition, vocabulary has moved to the centre stage in language teaching in recent years. David Wilkins (in Thornbury, 2002:1) points out the significance of vocabulary learning, "without grammar very little can be conveyed, without vocabulary nothing can be conveyed." Read (as cited in Coady and Huckin, 1997) also states that words are the basic building blocks of the language. Apart from the importance of vocabulary, the reality at the school, however, has showed that the vocabulary software which is commonly used is a computerised picture dictionary. This kind of program focuses only on words, where the students are given a list of pictures with the meaning through translation (Bahasa) in isolation. There is no information about how the word is used and associated. Consequently, many students find difficulties in using the words because they only know the words and the meaning in isolation.

As a matter of fact, focusing only words is effective for increasing words. Students may take a short time for repetition to increase words. As supported by Nation (2003), learning which focuses on language is useful

especially for non-native speakers of English who need to quickly increase their knowledge of low-frequency words. However, Thornburry (2002) claims that only focusing on words makes students have little long term effect. Words are likely to be remembered better if there are some difficulties in interpreting them. This is confirmed by Allen (1983) that in learning a word at a beginner class, understanding the meaning is only the first step, and should take as little time as possible, and much more should be given to use the new words in real communication.

Based on the discussion above, the writer thought that with it is useful to develop supplementary vocabulary software which emphasizes on context rather than words in isolation. The software presents information about the words and how they are used through story, dialogues and songs. Different with traditional learning material such as book, vocabulary software can present the information in the integrated forms of texts, animation, pictures and audio

## **1.2 Statements of the Problem**

In line with the background of the study above, it can be stated that there are some problems in the field as follow:

- Students of Santo Yoseph Elementary school Surabaya found difficulties in understanding words when it is explained only pictures dictionary and its translation.
- Vocabulary software in context was chosen to facilitate the understanding of words; however there was no any vocabulary software

available at PT.BSW Gramedia and the school that is organized to facilitate vocabulary learning in context. In addition, software was chosen because it can present information in the form of texts, animations, pictures and voices. Thus, it is useful to help students learn more interesting and easier than the traditional learning material, such as only a book.

### **1.3 Objectives of the Development**

The objective of this study is providing vocabulary software as a supplementary learning material to help the students of Santo Yoseph Elementary School Surabaya in learning vocabulary.

### **1.4 Expected Product Specifications**

The vocabulary software to be developed has the following specifications:

- (1) This software is developed as a supplementary learning resource. It can complement the existing software and course books.
- (2) This software has some components that are useful to help the students of Santo Yoseph Elementary School Surabaya to learn vocabulary easily, such as:

#### **a. Motivating on First Screen**

According to Dick and Carey (1985), the first factor that should be considered in the instructional module is an approach to gain the

attention of the learner into the program. An attractive color scheme, a cartoon and an interesting story can be used to get learner's attention and interest to use the software. In this developed vocabulary software, the first screen uses pictures and animations to arouse motivation because they can represent the meaning of words (Allen, 1983). Wright (1989) also states that pictures contribute to attract student's interest and motivation, as a sense of the context of the language, and as a specific point of stimulus in teaching and learning language.

#### **b. Learning Objective**

Good software should have clear information that should be communicated to students, such as the title and the content of the software. So that they know what they are going to learn, and what they should achieve after learning (Boling, 1999). Dick and Carey (1985) also states that as a pre-instructional activity, the information should be stated in the beginning of the instructional material; as a result, students will understand what the material is about.

#### **c. Organization of the Software**

Information should be sequentially organized: from easy to difficult, from first to final step or orderly based on the recommended strategy. This is in accordance with Beatty's (2003) and Dick and Carey's (1985)

suggestion that the overall organization of the information should be hierarchical with topics and sub-topics or the learning strategy.

#### **d. Content**

The content of the software should be related to the learning objectives and it is supposed to be appropriate with the student' needs. The content in this developed software is divided into three parts or themes (**action verbs, clothes, and seaside**). These themes are chosen for the following reasons; first, they are three out of nine themes of vocabulary learning materials that are taught in the school. Second, based on the student's polling, those are the most themes that the students want to learn. Third, based on the writer and instructor computers of PT.BSW Gramedia Surabaya's observation, there are no vocabulary software from PT. BSW Gramedia Surabaya that represent these themes. Fourth, based on the writer and the graphic designer discussion, the three objects are easy to design in the form of animation and pictures.

#### **e.Feedback**

Feedback is a continuous process of providing information about an activity during the activity itself (Nadler as cited in Rothwell and Kazanas, 1992). It tells students whether their work is right or wrong. Giving feedback in students' learning is necessary to assess their ability and to motivate them to learn the language. The feedback in this

developed software is in the form of animation and voice. The animation is attractively designed so that the students will be interested. Also, the voice is added as a notice to make the students know whether their work is wrong or right.

#### **f. Aesthetic**

The role of aesthetic is to motivate student's attitude towards the program (Loanou, 2002). Interesting activities, pictures and animation can be used to attract the students to use the software again and again.

#### **g. Navigation**

Navigation assists students to move around the system, through one part to other parts of the software (Morariu as cited in Beatty, 2003). Software for young students should have strict control. It forces students to finish their work before going to other parts of the software. Also it helps students in order not to get lost in the software (Boling and Soon, 1999 in Egbert and Smith, 1999).

#### **h. Media integration**

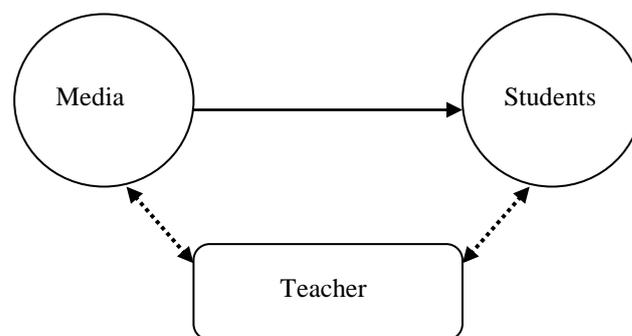
Media for presenting the information (e.g. pictures, animation, text, and audio) should run smoothly in the software. Integrated media (e.g., pictures or animation and audio) must be easily seen and listened, so that students learn easily and effectively.

### i. Help option

Help option is available along with the instruction in the software to help students manage the software (Loannou, 2002). The help option is available to inform students about what they have to do in every activity of the software.

### j. Practicality to use the program

Another important software component is practicality to use the software. The software should be easy to use. Students can use the software without the help from teachers. However, they can ask for help from the teacher if it is necessary. The role of the teacher is as a facilitator. The use of computer as a learning material in the class (Supratno,2010) can be seen as follow:



————— : Main communication

..... : Consultative (if necessary)

Teacher : The role of teacher (Facilitator)

**Picture 1.1 The Use of Computer as a Learning Material in Class**  
(Reference: Supratno: 2010)

### **1.5 Significance of the Development**

The product developed in this study is intended to help grade four students of Santo Yoseph Elementary School Surabaya to learn vocabulary effectively and with fun. The product of the development is expected to complement the existing computer - based learning media. The interactive vocabulary software can be used as a supplementary learning material in the teaching and learning English process especially at Santo Yoseph Catholic Elementary School Surabaya. This product can also be used by other schools. Students are expected to improve their vocabulary by learning through the product developed in this study.

### **1.6 Assumptions and Limitation of the Development**

The development of the vocabulary software is based on some assumptions as follows:

1. The students of Santo Yoseph Catholic Elementary School Surabaya are familiar with software as a learning material.
2. Santo Yoseph Catholic Elementary School Surabaya supports the implementation of the developed software.

Limitations of the development are:

1. The vocabulary software is developed based on the need analysis of the students and the teacher at Santo Yoseph Catholic Elementary School Surabaya, so it might be inappropriate to be used in other schools.
2. The software is developed to be used by children only.
3. The content is limited to certain topics (based on school's curriculum).

## 1.7 Theoretical Framework

The developed project is based on Behaviourism, a theory of learning that is based on the study of human behaviour. According to behaviourism, there are three important elements in learning, these are a stimulus (information), a response (the learner's reaction to the stimulus) and reinforcement (the self-satisfaction of target language use) (Skinner 1957; Brown in Richards and Rodgers, 2003). Further discussion on behaviourism is presented in chapter II.

## 1.8 Definition of Key Terms

The key terms used in this study are defined as follows:

### 1. Vocabulary Software

It refers to the program that contains a set of instructions which need to be loaded into the computer for it to be able to work and be used as a media for language learning.

### 2. Supplementary Learning Material

Books and any other materials used to complement the course book.

### 3. Santo Yoseph Catholic Elementary School Surabaya

The school was founded in 1975 by Karya Pendidikan Konggresi Suster – Suster Cinta Kasih Santo Carolus Borromeus. In 1984, Karya Pendidikan Konggresi Suster-suster Cinta Kasih Santo Carolus Borromeus became YPKB Surabaya Borromeus Karolous Educational Foundation (Yayasan Pendidikan Karolus Borromeus). Then in 2002, YPKB Surabaya merged with Tarakanita Foundation to become

Tarakanita Foundation Surabaya. Santo Yosef Catholic Elementary School Surabaya is located on Jalan Joyoboyo no.19 Surabaya. It is in one location with Santo Yoseph Catholic Junior High School. The school has great concern with English and tries to improve the English ability of its students: English laboratory, library and media room are provided for the students to learn English easily and independently.

### **1.9 Organization of the Thesis**

This thesis is divided into two parts: (1) the thesis and (2) the software as the product of the development. The first part, the thesis itself, comprises five chapters: Chapter I, Introduction, presents background of the study, statements of the problems, objectives of the development, expected product specifications, significance of the development, assumptions and limitations of the development, theoretical framework, definitions of key terms and organization of the thesis. Chapter II deals with review of related literature. It covers the roles of computer in language learning, computer as a supplementary learning material, the behaviourism learning theory, vocabulary learning theory and the previous related studies. Chapter III deals with the procedure of the development which consists of procedures of prototype development and product try-out. Chapter IV deals with the report on the process and result of the development. Chapter V, the last chapter, presents discussion and suggestions.

The second part is the product of this study, i.e., the interactive software for the students of Santo Yoseph Catholic Elementary School in Surabaya to learn English. The software is appropriate to use because it has been revised based on the evaluation by experts (an instructional technologist, English Subject and software designer) and the students.