

## **CHAPTER I**

### **INTRODUCTION**

This chapter provides the general explanations of the research. Which consist of backgrounds, research questions, research objectives, scopes of research, product specifications, research benefits, and definition of terms.

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

Education is a process to foster and deliver students to find themselves. As described in Law No. 20 Year 2003 article 1, point 1, that education is a conscious and planned effort to create an atmosphere of learning and learning process so that learners actively develop their potential to have spiritual strength, self-control, personality, attitudes, and required skills, nation society and country. Learning it self has the meaning of the process of changing behavior through experience.

According to the Seels & Carey (1994) ideal learning will be implemented properly in the role of optimally system components learning. The learning system components include humans, media technology, learning strategies, learning environment, learning resources, and learning. Therefore, the need for increased intercultural equivalent technology developed by the competence of the teachers, so that the learning process runs with optimal. In addition, on a 21st century education system will undergo a change of paradigm that is: (1) from learning terminal to lifelong learning, (2) from learning focusing mastery of knowledge to holistic learning, (3) from the view of teacher-student relationship (4) from teaching emphasizing scholastic (academic) knowledge to emphasis on the balance of the focus of values education; (5) from illiteracy-fighting campaigns to campaigns against technology, culture, and computer blindness, (6) from the appearance of an isolated teacher to the appearance of the work team, (7) from the exclusive concentration on competence to the cooperation ones. A paradigm shift is occurring, the impact of rapid technological development, education will be left behind if it does not follow the developments, therefore, the need for technology that helps the learning process.

Today, the development of information technology is extremely rapid, demand for higher technology, consumerist culture that make technology increasingly searching for and utilized either positively or negatively. The world of education, the existence of

information technology is very helpful in terms of delivering the message of learning and can easily get needed information from anyone, anywhere and anytime, in this case, the information technology is electronic learning (E-Learning) namely network and computer-based learning, a concept that is very good for helping improve the flexibility of learning.

The development of E-Learning in this period has been designed to support and facilitate the process of teaching and learning. This product is commonly referred to with a Learning Management System (LMS). Some examples of the LMS is Moodle, ATutor, Dokeos, Sakai, WebCT, LAMS, and many more that can be found in the era of technology. The variety of functions that can be utilized from the LMS is to support the learning process such as facilitating the formation of material in the form of text, audio, video, discussion, quiz, forum, teleconference, and assignment. In addition, the utilization of LMS could be complementary in the world of education. Modular Object-Oriented Dynamic Learning Environment (Moodle) is a LMS that is an open source that can be easily modified by users and is not paid and is accessible through the site <http://moodle.org> for download. This LMS is popular for use in designing an Internet-based distance learning. Moodle application is very easy to modify virtual class as needed.

In the rapid development era of information technology, schools should have developed and used computer-based learning systems, to improve effectiveness and flexibility in learn and learning process. Educators must be capable of using information technology in accordance with the development and the demands of the times. In addition, at this time the Government has been instructed to educators in order to properly utilize technology as a tool to clarify the material to learners, especially at the moment, schools are already have computer facilities are supported by a network of the internet. Not only that, the speed of internet access in Indonesia is already highly developed rapidly from year to year.

Referring to the AECT 1994 definition of theory and practice in design, development, utilization, management, and evaluation of processes and resources for learning. In the definition, there is a development area in the process of translating design specifications into physical includes: printing technology, audio-visual technology, computer-based technology, and integrated technology. In the definition of the development, there is a computer-based technology which includes multimedia learning and electronic learning (E-Learning). The learning process was not optimal in the classroom becomes one of the most vital issues and needs a solution as soon as possible.

Therefore, the needs of development for E-Learning as an effort to improve the quality and help education process in the digital era.

Based at the preliminary study in Leonardo Vocational High School it showed that the limitations of learning time and space in the class become an obstacle for educators to give knowledge to the learners. This makes problems for educators in delivering the material in details. This limitations have a lot of complainant from educators and learners. In addition, the utilization of E-Learning at the moment still to be maximized and still not using the tools to clarify the message because educators only used E-Learning and asked the learners to download and study the material. In addition the development of E-Learning at the moment still do not consider to the principle of learning used to build a good E-Learning system so that the E-Learning system developed a lot of exciting content addition but not in accordance with the context of learning that it can cause disturbances in the process of understanding the material. Moreover, from the preliminary study, researcher obtained information that online-based learning facilities has not been available. Some learning materials that has been packaged in the online form only uploaded on the school website, and still many educators who have not utilized the school website. School websites contain only information about the school, from school profiles, mission visions, teacher data, etc. Moreover the school has an Internet network and computer laboratory that is sufficient.

E-Learning development that takes into principles of the effectiveness of E-Learning was initiated by Epignosis LLC., using such tools are expected to assist in clarifying the content of the material. The tool is the voice, musical instruments, pictures, video, text or use of language that is appropriate to the material being taught. There are principles expressed by Epignosis LLC., known as principle 1), multimedia is the effort to use text tools and images for clarify the message, 2). Contiguity when words and images are presented more closely in one screen, will make the presentation of text and images are merged closely in one screen, 3). Coherence is remove the tools that are not in accordance with the material, 4). Modality use tool help animation and narration as efforts to clarify the material, 5). Redundancy is use of audio and text excessively will damage the explanation of the graph, 6). Personalization by using everyday language will improve the understanding of learners.

## **1.2 Research Questions**

This research proposes two questions to be answered, they are as follows.

1. How is the process of the development E-Learning media by using principles of Epignosis LLC. E-Learning effectiveness?
2. How is the quality of E-Learning media by applying the principles of E-Learning effectiveness Epignosis LLC.?
3. How far English learning media with the use of E-Learning media by applying the principles of E-Learning effectiveness Epignosis LLC. is considered good?

## **1.3 Research Objectives**

Based on the research problems above, the aim of the research is as follows:

1. To describe the process of developing produce E-Learning media by applying the principles of E-Learning effectiveness Epignosis LLC.
2. To find out the quality of English learning media with the use of E-Learning.
3. To find out the feasibility of E-Learning as a media of learning by applying the principles of E-Learning effectiveness Epignosis LLC.

## **1.4 Scope of the Research**

This research is limited to the development of E-Learning by using the principles of E-Learning effectiveness from Epignosis LLC. In addition, this research is also limited to the material of English class X Electronics Industry of Leonardo Vocational High School, Klaten. in even semester academic year 2017/2018. This research itself was aimed to support their study with E-Learning. It focused on only developing E-Learning platform as media in learning English. The E-learning was adapted from grade X Syllabus SMK which the topic is about procedure text.

## **1.5 Research Benefit**

This research was expected to give benefits both theoretically and practically. Theoretically, the result of this research might help other researchers as their references

in conducting the similar research and the E-Learning could be used as the example for develop another apps. Then, for practically, it would be useful for teacher to teach with technology, she or he can improve their competence in teaching English especially in using technology in teaching English. Moreover, this online media and research gave beneficial for students to comprehend the materials easily and made them be more excited and have high motivation in study.

## **1.6 Definition of Terms**

In order to assist the readers to understand the topic discussed, the terms used in this study are defined as follows:

### **1.6.1 E-Learning**

A learning system based on formalised teaching but with the help of electronic resources is known as E-learning. While teaching can be based in or out of the classrooms, the use of computers and the Internet forms the major component of E-learning. E-learning can also be termed as a network enabled transfer of skills and knowledge, and the delivery of education is made to a large number of recipients at the same or different times. Earlier, it was not accepted wholeheartedly as it was assumed that this system lacked the human element required in learning.

### **1.6.2 Epignosis LCC.**

Epignosis LCC is a leading technology vendor specializing in E-Learning solutions. The first product eFront is web-based open-source learning management software. The software is available in a fee-based commercial Educational and Enterprise version as well as a free Community edition. eFront was created by Greek company Epignosis in 2002 as part of a funded EU project. By 2004 SCORM support was being built into the software. After several years of development, the software was released under the open source model to help "improve the quality of the product and make it known to the learning community", followed by a move to the United States.

### **1.6.3 Vocational High School**

Vocational High School is an education system developed from the concept of vocational education (vocational education). Vocational High School is a career-focused school that prepares and trains students for specific occupations.

### **1.6.4 Website**

Website is an information page provided via the internet, so that can access throughout the world as connected to the internet network.

### **1.6.5 Multimedia principles**

Multimedia principles occur when images and words are presented simultaneously in a lesson because learners have the opportunity to construct from verbal and pictorial mode, in addition, can generate relationships between the two models.