CHAPTER II

REVIEW OF RELATED LITERATURE

This chapter discuss about the literatures that related to the the focus of research study. In this research is focus on the comparison of students perceived learning between screen book and printed book at sixth semesters on English department in University of Muhammadiyah Gresik.

2.1 Screen Book

2.1.1 Definition of Screen Book

Today the development of internet contributes to the aspects of life. Growing Internet led to many concept-based "e" (electronic), such as e-banking, e-shopping, e-learning and much more. At the same time, the book is essentially held directly by hand can be accessed via the internet or accessed through screen-based electronic devices are referred to as e-books.

There are different definitions in the various sources about e-book or screen book. Jenny (2008) stated that e-books displayed in electronic format that can be viewed, accessed, published on desktop computers or handheld devices based on screen technology. In general, textbooks can only be turned back sheet of paper but, e-book has different advantages which this book is served in electronic or digital versions that have other functions than just printed book. Screen-based technology can access and display screen book easily and quickly. Many devices based on screen technology that can access them are personal computer, mobile phone,

gedged, tablet, laptop and some other. Electronic books can be read on various display technologies (Jenny, 2008).

Basically the book remains the same content only appearance is different because of the development of technology. In the past few years, electronic devices that can access the internet and display various data formats are standalone computer devices. However, today digital devices are already shifting its existence with portable devices that can be taken anywhere and can be accessed anywhere like smart phones and laptops as said by Auradha and Usha (2006) that e-books are defined as a means that are transformed in digital form and accessible via private portable devices and are usually available on the internet. Not only accessible through digital devices but also can be downloaded as information in portable devices. Landoni (2003) states that e-books are a kind of portable digital information. E-books are also defined as books that can be downloaded to portable devices (Annand, 2008).

Based on the exposure of previous research on the definition of screen book, it can be conclude that the e-book is a book that can be access through digital or electronic device which is screen-based technology. The screen book is the e-books which can be accessed using the device screen-based technologies (Rockinson, Courduff, Carter, Bennett; 2012). Based on these definitions, that the e-book is a book based on the screen so, the e-book can be call as screen book.

2.1.2 Types of Screen Book

Rockinson, Courduff, Carter, Bennett (2012) determined the types of e-book into two types. These are page fidelity e-textbooks and reflowable digital e-textbooks. Both types of screen book has the characteristics and types of different book formats.

Page fidelity e-textbooks are simply scanned pictures of the print version of the book. An example of this is a PDF file with no dynamic media, no active web links, and no capability to manipulate font or pictures. Page fidelity e-textbooks can be cumbersome and are often unavailable on handheld mobile devices (Jeong, 2012; Nelson, 2008; Chesser, 2011). This type is the most frequently used in educational shutter.

Reflowable e-textbooks use a flexible format system that includes dynamic media and allows the user to modify both the layout and interactive features of the e-textbook to suit the display medium (Chesser, 2011). Some format example of this type is HTML, PDB, LIT, etc.

There are two types of screen book these are page fidelity e-textbooks and reflowable e-textbooks. But, the most frequently used in education area is page fidelity. Because this type is simple format and can not edited and manipulate.

2.1.3 The Advantage of Screen Book

Reading screen books comes with many advantages for users rather than reading printed books. According to Rukancı and Anameriç (2003),

screen books depending on the technology, can provide sufficient interaction between teachers and students. This can attract students with different learning styles. In addition, some screen books are equipped with audio visuals so that learning becomes fun and more optimal.

Another advantage of screen book is that some books even in large quantities can be incorporated into one Portable Electronic Device (PED). Students only need to bring PED to class and do not have to carry some books that can weigh in kilos grams. Students claim that screen book is useful for learning (Behler & Lush, 2010). Lecturers often explain their learning materials using projectors and very rarely ask students to open books directly. The use of this projector can also be used to display the screen book in the learning so that students more easily find the sentence of the book in question in the explanation of lecturers. The advantage for lecturers is the screen book can be displayed through the computer projector screen. It helps the involvement of students in interacting in the classroom (Adeel Khalid, 2014).

Shortly, some of the benefits among others is the screen book does not use paper so easy to carry anywhere because it is portable, accessing is much easier. Smyth & Carlin (2012) stated that accessibility, remote access, flexibility, searchability, cost, choice and environment are also become the advantage of using screen book. Then, while saving costs, space and trees (Letchumanan & Tarmizi, 2010) into consideration also in using the screen book to be a benefit.

2.1.4 The Disadvantage of Screen Book

Every thing has advantages and disadvantages. Not least about the screen book which also has shortcomings. Martinez & Conaway (2012) said that the lack of comfort and familiarity of students against control features such as scrolling to find a particular page. Students also complained that holding a screen book using electronic devices is more awkward than holding a printed book (Martinez & Conaway, 2012). Certainly some people will have difficulty in this case but it can happen due to lack of students' habits in using their electronic devices or lack of experience reading students using their electronic devices. If students are accustomed then it can be overcome. Using technological devices takes only time to get to know and familiarize them.

The weakness of the screen book stated by Connell, 2012; Kang & Wang & Lin (2009) was reading screen book longer than reading printed book altough not significant. Some unaccustomed students may experience something like this but the speed of reading can be trained with experience in reading. Certainly need practice to read it. The speed of reading also needs to be considered because this is one component of good reading in reading ability.

In a study conducted by Hasan (2011) states that the disadvantages associated with the use of screen books tend to have a very strong effect on health such as screen radiation and brightness in technology devices can affect eye health such as fatigue, eye irritation and various other complaints. In all, weakness is what more can be regarded as a weakness

because of course the reader must have experienced it. But it can be prevented by using technology tools wisely.

2.2 Printed book

2.2.1 Definition of Printed book

The most familiar book format is the printed book. Books are considered the most important tool used to transfer knowledge and assess information and academic education programs since the invention of the printing press (Chen, 2002). The printed book is knowledge or information that is concise and printed with paper and paperboard. Traditional paper-based textbooks (Rockinson, Courduff, Carter, Bennett, 2012) is the other name of printed book. The only media needed for this book is the paper (Mohammed & Shima, 2015). Thus, the printed book is a printed book in paper form and can be held directly by hand.

The only media needed for this book is paper; The type of paper may vary according to the type and texture in accordance with the purposes of use, whether used for magazines or books. The survey conducted by Nutting & Baker (2013) states that students at the time indicated a strong preference for printed books while students currently feel comfortable with their electronic devices.

Then, the definition of printed book is a book that printed in papers and it can held by hand directly without using some technoligical tools. Another researchers said that it can be called as traditional textbook. In

this study the printed book that used is the screen book (pdf format) that printed in the form of paper.

2.2.2 Types of Printed book

There is no various type of printed book. Based on it is definition, the type of printed book is only based on paper text which is can hand held. The only difference type of printed book is the size of the book.

2.2.3 The Advantage of Printed book

Although currenly there are a lot of screen books are available, students' preference for printed books still dominates (Walton, 2007). Some students are still fond of printed books with a variety of underlying reasons. Indeed it can not be denied. Students who prefer to read screen books may differ from students who prefer to read printed books. In a previous study, students could read screen-based books in a chapter or less but often print other chapters because of eye fatigue factors (Nelson & O'Neil , 2001). This is still often the case because some people have the disadvantage of understanding without holding it directly.

Walton (2007) reported that students prefer to use hard copy, to research, read textbooks, or to read casually. It may be that books used for casual reading in printed book formats are still widely used, but today more and more students use screen books for their research and learning. So it can be said that this is not in accordance with the fact that occurred in recent years.

It can be conclude that printed books can be accessed through publishers, printing presses and libraries. In the library of course has books no harm to the reader, and not cause stress, no need special reading device, incompatible with disabled or with special needs. Students prefer printed book books rather than screen books because of tactile interactions with books (Abram, 2010). Tactile interaction is a direct relationship that can be done through touch like reading a printed book then, the reader will hold the book directly without any intermediaries.

2.2.4 The Disadvantage of Printed book

There is a weakness in paper-based or printed book format. In the wide scope of a book is difficult to update because to update the print requires re-examining, reprinting, redistribution and retransformation again (Rockinson, Courduff, Carter, Bennett, 2012). This weakness can result in harm to the publisher of the book. In publishing a book, the book must be absolutely certain to avoid the above weaknesses.

Many students complain that printing books is high enough to make students feel reluctant to spend their money. To search for information from a printed book, they have trouble exploring all the books manually. It causes the effectiveness of education to be low. The absence of interactivity in the printed book so-called as a silent teacher. The use of printed books in the classroom also makes students have a closed mindset where students only stick to the printed book provided without looking for other reference sources.

In the other hand, it is also contribute to future impact in the use of printed books is a residue that is so large that it affects the environment. The more paper use the more trees are cut down. Causing environmental pollution. Lack of printed book not only impact on us but also on the environment.

2.3 Students Learning

Media technology in education has been used in the classroom for teaching and learning activities. The learning becomes a measure of student success in taking the material taught by the teacher. Bloom (1956) conceptualizes that student learning should include three dimensional processes: cognitive, affective, psychomotoric. Meaning that learning consists not only of knowledge about a material but also about the feelings, attitudes and trends of experience associated with the learning materials. Throughout the literature, learning is often used as a measure to determine the effectiveness of educational strategies and tools, and the score most commonly used to measure learning.

Cognitive learning is conceptualized to various aspects including understanding, knowledge, synthesis, application and evaluation (Bloom, 1956). The term cognitive in learning is often used that is by measuring the score of achievement tests or student ratings (Frith & Kee, 2003). Such measures for high-end students may not be a valid measure even though the test scores are considered to be the correct and important measure (Rockinson,

Courduff, Carter, Bennett, 2012). If only measure the cognitive dimension then it can be said to be too narrow.

There is a limited view by using score in learning operations (Rockinson, Courduff, Carter, Bennett, 2012). Score are not always a good reflection of what the higher education students have learned (Rovai, Wighting, Baker, & Grooms, 2009) for example morning and afternoon students who have different times in receiving learning even though the material is the same. Afternoon students have a concentration of mind that is torn between learning and work so that the impact on the value they get but does not mean the afternoon students do not have the same ability of understanding but the time is different. Because of that the value of students is not so a benchmark of student success.

The second dimention is affective. It includes emotions, attitudes and opinions stemming from the beliefs experienced during learning (Anderson & Krathwohl, 2001; Rovai et al., 2009). Then, the perception of students learning is one of the dimension inside of affective. The perception of learning is usually interrelated with the influence and perceived change in behavior. It continues to lead to changes in behavior (psychomotor dimensions) so that basically the dimensions are interrelated. Students' perceptions of higher education on their learning can assess their learning more accurately in the course. Although the psychological theory of learning states that there is a relationship between cognition and context (Thelen, Schoner, Scheier, & Smith, 2001).

Pace (1990) supports the validity of the student self-reporting learning steps based on research over time and diverse populations. This is reinforced

by the Chesebro & mccroskey (2000) statement that the current research shows self-report continues to be a valid learning measure even though the higher education students sometimes underestimate their learning but previous experience makes them have a solid basis for evaluating learning.

In student learning include cognitive, affective and psychomotor dimension then this research only focuses on affective dimension that is related to emotion and feeling of student to screen book and printed book in English department at Muhammadiyah Gresik university.

2.3.1 Students Perceive Learning

Perception of learning is one of the branches of the affective dimension which contains the motivations, feelings and emotions of learners about the material, the media, the learning environment and the conditions outside of the learners which are all related to the learning experience. Affective learning involves changes in feelings, attitudes and values that shape thinking and prefereces. Hinton and Shek (2001) explain that affective characteristics consist of motivation, initiative, compassion, service, empathy, honesty, commitment, optimism, respect and confidence.

Student perceptions are beliefs or opinions that students have as a result of being aware of or paying attention to something. Student perceptions are the result of direct experience in the educational context (Struyven, 2000). This experience can be very different from the experience of the teacher or the experience of the parents in the

educational context. Students in this case, build their own world. But not all students experience the same educational context. Thus, students' perceptions may differ between different student groups. And because of the different personal characteristics and individual history, not every student experiences the same educational context in the same way, so that individual differences in student perceptions can occur.

In short, sudent Perceive learning closely related to affective learning in learning because it involves the feelings received by students in response to a particular problem or focus.

2.4 Self Report Measure

A self-report measure is a paper-and-pencil instrument whose items yield numerical scores from which inferences can be made about how individuals differ on carious aspect of self such as personality traits, self-concept, learning styles, attitudes, values and interests. Unlike tests, these measures generally ask individuals to reveal whether they have the traits, thoughts or feelings mentioned in the items. Despite this difference self-report measures and tests are very similar in construction and administration. Therefore, although we frequently use the term test when explaining various measurement concepts and practices the explanation applies as well to seld-report measures unless otherwise indicated.

The most common characteristic of self-reports is that learners classify or deduce their own activities. Advantages of the report itself. In applying its own report, the instrument used is questionnaire. By using questionnaires,

learners are not disturbed during their learning activities and questionnaires are easily performed in large-scale testing. The disadvantage is that learners can not remember exactly what they did (Veenman 2005). Because in the questionnaire there are usually many questions that allow students can not remember it with precision.

This is reinforced by the statement of Pace (1990) supports the validity of student self-reporting learning steps based on research over time and diverse populations. In this research, self –report used in researching the student's perceive learning of two format books. Chesebro & McCrosskey (2000) said that the current study shows that the report itself continues to be a valid measure of learning. The format itself and the Likert type instrument are the methods of measuring regular learning strategies (Van Hout-Wolters 2009; Veenman 2011).

Then, it can be conclude that self report measure is kind of questions which is used to extract information related to the opinion of something and this use is useful for measuring students perceived learning of two types of book formats.

2.4.1 Types of Self-Report

2.4.1.1 Questionnaire

Questionnaires are a type of self-report method which consist of a set of questions usually in a highly structured written form. Sugiyono (2008: 199) questionnaire is a technique of data collection conducted by giving a set of questions or written statement to the

respondent to be answered. Questionnaires can contain both open questions and closed questions and participants record their own answers.

2.4.1.1.1 Open Questions

This type are questions which provide a limited choice (for example, a participant's age or their favourite type of something), especially if the answer must be taken from a predetermined list. Such questions provide quantitative data, which is easy to analyse. However these questions do not allow the participant to give in-depth insights.

2.4.1.1.2 Closed Questions

questions which invite the respondent to provide answers in their own words and provide qualitative data. Although these type of questions are more difficult to analyse, they can produce more in-depth responses and tell the researcher what the participant actually thinks, rather than being restricted by categories.

2.4.1.2 Interview

Interviews are a type of spoken questionnaire where the interviewer records the responses. Interviews can be structured whereby there is a predetermined set of questions or unstructured whereby no questions are decided in advance. The main strength of self-report methods are that they are allowing participants to describe

their own experiences rather than inferring this from observing participants.s

2.5 Previous Study

In conducting this research, the researcher took the previous study by Rockinson, Courduff, Carter, Bennett (2012), Levine & Clark (2006), Adeel Khalid (2014), Rovai & Baker (2005).

Rockinson, Courduff, Carter, Bennett (2012) at the title of research "Electronic versus traditional print textbooks: A comparison study on the influence of university students' learning" whose finding stated that learning can be impacted by both the format of the text through which the text is consumed. In the other hand, measuring only the cognitive dimension of learning is narrow.

The second is from Rovai & Baker (2009) at the title of research "Development of an instrument to measure perceived cognitive, affective, and psychomotor learning in traditional and virtual classroom higher education settings" the researchers stated that grades and test scores are deemed valid measures and are important to examine but, they may not be the most valid measure for higher education learners.

The third previous study is Levine & Clark (2006) at the title of research "Electronic books and the humanities: a survey at the University of Denver" they were stated that almost students argue the students easier to understanding the content by hand held book or printed book format.

The fourth, previous study is Adeel Khalid (2014) at the title of research "Text Books: ebook Vs. Print" : the results indicate that a large number of students and faculty members are not aware of the ebook option available for their courses. However this trend seems to be changing rapidly that a majority of the students' still preferred printed version of the book. The top reasons for their preference included availability and ease of use in terms of taking notes, highlighting, and finding particular sections.

Based on the previous studies above, in learning book is important to affecting students learning style. It is depending on the type of book used. Although this time has entered the digital age, but research studies related to the students preference of screen books and printed books still conclude that students still prefer to the printed book for several reasons related to tactile interaction.

The research on 2009 stated that measuring students learning through grades and test scores are deemed valid measures and are important to examine but, they may not be the most valid measure for higher education learners. It is because measuring only the cognitive dimension of learning is narrow (2012). For higher education students' perceptions of their learning may more accurately assess their learning in a course. Based on the explanations above, the researcher focus on comparing students perceived learning towards screen book and printed book at six semesters of English department in University of Muhammadiyah to knowing which format of book that students prefer and what are the factors behind.