

CHAPTER 1

INTRODUCTION

1.1 Background of the Study

The use of information and communications technology (ICT) in education is a relatively new phenomenon and it has been the educational researchers' focus of attention for more than two decades. Educators and researchers examine the challenges of using ICT and think of new ways to integrate ICT into the curriculum. (Salehi, 2012, p. 1)

Information Communication and Technology (ICT) is becoming increasingly important in our educational system. For example, ICT has challenged the conventional teaching methods, transformed instructional practices and contributed to emerging new instructional methods (Tezci, 2011; Kubiato and Haláková, 2009). With its prospects, ICT has become an important component of educational reform and an integral part of school curriculum. (Angeli, 2008, pp. 2-3)

The United Nations Educational, Scientific and Cultural Organization (UNESCO), mentioned that to be successful live, learn, and work in a knowledge-based and information-rich society complex, students and teachers must utilize technology effectively. Teacher responsible for creating a classroom environment and setting up opportunities, facilitate the

use of technology to learn, and communicate for students. For that, UNESCO (2008) through the ICT-CST project, set the standard ICT competencies for teachers. For example in the field of curriculum and assessment, one of the competence of teachers related to ICT is (1) adjusting a special curriculum standard with specific software and computer applications and explains how these standards are supported by the application. (2) Assist students in the mastery of ICT skills in relation to their learning materials, and (3) Using ICTs to assess mastery material, with feedback on student learning progress through assessment formative and sumative. (Supriyono, 2013, pp. 2-3).

In educational system of Indonesia, the use of ICT are integrate in all of subject which has *Standar Kompetensi Lulusan dan Standar Isi* based on the principle of learning used is “*Pemanfaatan Teknologi, Informasi dan Komunikasi dalam meningkatkan efisiensi dan efektivitas pembelajaran*” (Permendikbud, 2012, p. 13).

The use of ICT is needed as media acquisition in English classroom learning which integrated in classroom activities. When choosing and implementing teaching- learning strategies, approaches, or models and media, students are trained and must be able to integrate technology (Belmawa, 2017).

Meanwhile, there are problems of media acquisition in learning process which integrated information and communication technology capabilities. According to the previous study stated that the biggest obstacle today is the teachers have not been able to

design and produce learning media based on information and communication technology to be used in English learning classroom. A lack of teacher collaboration and pedagogical support, as well as a lack of experience among cooperating teachers (Ertmer and Otterbreit-Leftwich 2010); Insufficient time to master new software or integrate ICT during a class period (Almekhlafi and Almeqdadi 2010); Low software competence and habitual ways of conceptualizing what and how students should learn (Goktas, Yildirim and Yildirim 2009); A lack of specific knowledge about technology and how to combine it with the existing pedagogical content knowledge to support student learning (Shan, 2013, pp. 2-3)

During the learning activities, teachers rely on lectures, discussions, laboratory practices, text-based, and field visits in the learning process. Whereas for the implementation of the 2013 curriculum all subjects are already integrated with ICT to create a meaningful learning (Firdayani, 2014, p. 4).

The first conception of meaningful learning can be tracked down from Wertheimer's study. He stated that meaningful learning or so he called sensible learning occurs when "the transition takes place from blindness or ineptness to orientation, understanding, mastery, and when mind develops". Meaningful learning occurs within "knowledge construction, not reproduction; conversation, not reception; articulation, not repetition; collaboration, not competition; reflection, not prescription" Jonassen, et al., (2003, p. 15). In addition, Jonassen, et al., (2003) and Howland, Jonassen & Marra (2012)

explain there are the five attributes of meaningful learning, that are active; constructive; intentional; authentic; and cooperative. To create a meaningful learning with technology, teachers need to understand a set of knowledge. This knowledge refers to Technological Pedagogical and Content Knowledge (TPACK) (Chen, 2008, p. 27)

Technological Pedagogical and Content Knowledge (TPACK) is the basis of good teaching with technology and requires an understanding of the representation of concepts using technologies; pedagogical techniques that use technologies in constructive ways to teach content; knowledge of what makes concepts difficult or easy to learn and how technology can help redress some of the problems that students face; knowledge of students' prior knowledge and theories of epistemology; and knowledge of how technologies can be used to build on existing knowledge and to develop new epistemologies or strengthen old ones. (Koehler, 2009, p. 13)

When build on existing knowledge and develop new epistemologis, Teacher needs to integrate ICT with meaningful learning. Integration refers to the process of synthesizing technology with lessons and instructional delivery in order to provide engaging learning experiences for children (Dias, 1999). While various perspectives exist regarding the progression and implementation of integrating technology in meaningful learning environments. The prevailing view is one where the integration of technology occurs along a continuum with various stages or levels of synthesis being attained over time and in

diverse settings. Some of the earliest work in this field can be attributed to Sandholtz, Ringstaff, and Dwyer (1997). Their work divides the stages of the integration continuum into five categories: Entry, Adoption, Adaptation, Appropriation, and Invention.

According to the discussion above, this study will focus on investigating what kinds of ICT tools which use in learning activities how those ICT tools used in learning activities relevance with the five dimensional of meaningful learning. This study conducted by English Teacher at SMP Islam Tugasku, Pulomas, Jakarta Timur.

1.2 Research Question

The research questions of this study are:

- a. What kinds of ICT tools use in English Learning Activities?
- b. How those kinds of ICT tools in learning activities lead to the five dimensional of Meaningful Learning in English Classroom?

1.3 Purpose of Study

This study is aimed to:

- a. Finding out the common ICT tools used in English learning activities
- b. Finding out the common ICT tools in learning activities which lead to the five dimensional of Meaningful Learning

1.4 Scope of the study

This study discussed about the common ICT tools used in English learning activities as reflected in 2013 curriculum design. Also, this study described how the common ICT tools in learning activities lead to the five dimensional of Meaningful Learning by Howland using adapted and modifier Technological Integration Matrix by Florida Center for Instructional Technology which conducted by English Teachers at SMP Islam Tugasku, Pulomas, Jakarta Timur.

1.5 Significance of the study

This study is expected to provide benefits both theoretically and practically. Theoretically, the results of this study can give beneficial information for other researchers who are interested in conducting further research in this area. Practically, this study was expected to establish a general reflection of teacher's ability in designing and implementing the use of ICT-based learning activities to promote Meaningful Learning. Hence, it may become a consultative tool and media towards the development of Teacher professional development program. Also, this study expected to enhance Teacher's creativity in using ICT for improving their learning materials as integrated in 2013 curriculum. This study also expected to provide information for students who used ICT as their media helper to enhance their performance when integrate ICT in English classroom activities.