

CHAPTER I

INTRODUCTION

A. Background

Technology always develop every time, technology helps us to do everything, even in education. Technology today can influence education system, the way of teaching and how student get the information. Using technology hopefully can make every student has a change to get proper education. The current generation of students, commonly referred to as “NetGen” learners, grew up surrounded by technology and bombarded by continuous technological advancements. Computers, multimedia, the Internet, cell phones, and computer games were and continue to be a central and intuitive part of their life (Pergola and Walters). That situation not happen in all school, some school have not use technology in their learning process. In Indonesia, only some school that has been integrated between learning process at school and technology that using internet.

The development of multimedia technology has changed the way people learn, obtain various information as well as in interpreting information (Ziden and Rahman, 2013). The use of the interactive learning environment begins with an instructor uploading a set of lecture slides and setting up an interactive learning session. This task may include adding quiz questions and the lecture session preferences prior to entering the classroom. The instructor has an expanded user interface that provides access to these administrative functions such as uploading slideshows, creating quizzes, and enabling or disabling interactive features (Chao, Parker and Fontana, 2011). Student can access the materials or information every time and everywhere as long as there is an internet. This is a good idea if we develop this concept into Indonesia education system because children in Indonesia can access the materials before they are come into the classroom.

In learning science concept, sometimes the student find difficulty in learning. By using this web-based learning, the student can choose the time for learn and they can use their own gadget to access the materials. Web-based learning also can increase the student motivation in learning. Today, some student lazy to learn because the traditional method that use is not match with the development of technology.

In this research the authors try to find out the effect of Edmodo towards student cognitive and motivation while learning thermal physic. Edmodo is an educational technology that teacher, student and parent can use. By this application, teacher can share information, materials of teaching, task for the student, and also exam.

Teacher can track student performance and give score to the student. The student can access the materials every time, chat with their friends and doing online quiz. This research will try to measure student students' cognitive that is measured in this research involves level cognitive, understanding (C2), applying (C3) and analysing (C4) based on Taxonomy Bloom (Anderson et al., 2001).

To teach thermal physic, Edmodo can be used as an additional media, teacher can put all materials on the Edmodo and the student can access it before start the class or at home. In this topic teacher will do some classroom activity and quiz. There are some sources that teacher will put in Edmodo, there are video, articles, question and quiz. Teacher will ask the student to access Edmodo before come to classroom. Student can easily access the source of the lesson and can repeat it every time student need. There are several advantages if teacher use Edmodo than the other media, Edmodo is easy to use for teacher and student, teacher can put note, quiz, polling, alert and student can access it everytime. By using Edmodo, the student can improve their motivation in learning, while the motivation increase, the student cognitive will increase too.

B. Research Problem

The research problem of this study is “Is there any Effect of Edmodo as Web Based Learning towards Student Cognitive and Motivation in Learning Thermal Physic?”

Elaborating the research problem, there are some research questions that are derived from, there are:

- a. How is the Effect of Edmodo as Web Based Learning Towards Student Cognitive in Learning Thermal Physic?
- b. How is the Effect of Edmodo as Web Based Learning Towards Student Motivation in Learning Thermal Physic?

C. Research Objectives

This research objective is specified as follow:

- a. To analyse the effect of Edmodo as web based learning toward student cognitive in learning thermal physic.
- b. To analyse the effect of Edmodo as web based learning toward student motivation in learning thermal physic.

D. Limitation of Problem

In order to make the research become more focused, the problem is limited as follow:

The analysis of the implementation of edmodo in learning thermal physic in this study is investigated in term of the implementation of Edmodo in home and school on an activity as lesson plan, of which the contribution of it can be seen from students' cognitive and students motivation.

E. Research Benefit

The results of this study are expected to provide the following benefits:

- a. For teacher, by this research teacher can improve their teaching by using web-based learning as a media, teacher also can share their knowledge; teacher to teacher, teacher to student using web-based learning.
- b. For student, by this research student can find another way to learn and try new way using internet or web-based learning.
- c. Another researcher, this research can be used as a reference and for another research in the future.

F. Organization Structure of Research Paper

In order to get organized structure of paper, this research paper is arranged based on the following organization structure:

1. Chapter I : Introduction

This chapter describes about the background of the research and continue to the problem proposed as well as its limitation. This chapter also explains the research objective and also research benefit for other researcher that has the same field of study.

2. Chapter II: Literature Review

This chapter explains some literatures and supportive theories of the research. The information about web-based learning, Edmodo, student cognitive on Taxonomy Blooms, student motivation using ARCS model by Keller and the thermal physic as the topic.

3. Chapter III : Methodology

This chapter explains about method and design that used in this research, population and sample that used, operational definition, assumption, how the data are be collected, the instruments used, the research procedure and scheme.

4. Chapter IV : Result and Discussion

In this chapter, the data that has been collected are discussed and analyse as a result of the research.

5. Chapter V : Conclusion and Recommendation

This is the last chapter of this research, all of research questions are concluded based on the result. The suggestion of this research comes from difficulties and obstacle while doing this research.