

CHAPTER I

INTRODUCTION

1.1 Background

In psychology and education, learning is commonly defined as a process that brings together cognitive, emotional, and environmental influences and experiences for acquiring, enhancing, or making changes in one's knowledge, skills, values, and world views (Illeris, 2004; Ormrod, 1995). It is also thought of as the way in which information is absorbed, processed, and retained. "Learning Theories" are elaborate hypotheses that describe how exactly this procedure occurs. Learning theories have two chief values according to Hill (2002). One is in providing us with vocabulary and a conceptual framework for interpreting the examples of learning that we observe. The other is in suggesting where to look for solutions to practical problems. The theories do not give us solutions, but they do direct our attention to those variables that are crucial in finding solutions.

There are three main categories or philosophical frameworks under which learning theories fall: behaviorism, cognitive, and constructivism. Behaviorism focuses only on the objectively observable aspects of learning. Cognitive theories look beyond behavior to explain brain-based learning. And constructivism views learning as a process in which the learner actively constructs or builds new ideas or concepts.

Merriam and Caffarella (1991) highlight four approaches or orientations to learning: Behaviourist, Cognitivist, Humanist, and Social/Situational. These approaches involve contrasting ideas as to the purpose and process of learning and education - and the role that educators may take.

Learning is a complex process that happens to every person throughout his life. The learning process that occurs because of interaction between the person with the environment. In this process, there are

two aspects are mutually supportive learning methods. These two aspects are interrelated. Application of a particular instructional method required adjustment of media to be used. In addition to the adjustment method of learning media, it is also very necessary to the purpose of learning, types of tasks, the learning context that includes the characteristic students and also the expected response from the students when learning takes place (Arsyad, 1997)

Teaching and learning process is at the core of the formal education process in schools. In teaching there interaction or reciprocal relationship between students and teachers, where students receive course materials taught by the teacher. Teachers teach by stimulating, guiding and directing students learning students learn the material in accordance with the objectives. Learning objectives in general lesson is that the material presented is fully owned by all students. It can be demonstrated mastery of learning outcomes or student learning achievements obtained.

Along with the passage of time and the current progress of time, a teacher is always trying to reach the perfect learning system. It is not easy to achieve because in general the teachers face challenges that are serious enough about the difficulty of learning the students to follow in earnest. The fact that most students face is indifferent to the on going learning activities or in other words, students' motivation is so low that the failure to reach the limits of graduation to be no real evidence to graduates of a teacher. The low teacher student learning outcomes are not able to create a learning environment in accordance with the developments and advances in technology (Sriwanti, 2008).

Learning is generally defined as relatively permanent changes in behavior, skills, knowledge, or attitudes resulting from identifiable psychological or social experiences. A key feature is permanence: changes do not count as learning if they are temporary. You do not “learn” a phone number if you forget it the minute after you dial the number; you do not “learn” to eat vegetables if you only do it when forced. The change has to

last. Notice, though, that learning can be physical, social, or emotional as well as cognitive. You do not “learn” to sneeze simply by catching cold, but you do learn many skills and behaviors that are physically based, such as riding a bicycle or throwing a ball. You can also learn to like (or dislike) a person, even though this change may not happen deliberately.

For teachers, learning usually refers to things that happen in schools or classrooms, even though every teacher can of course describe examples of learning that happen outside of these places. Even Michael, at age 6, had begun realizing that what counted as “learning” in his dad’s educator-type mind was something that happened in a classroom, under the supervision of a teacher (me). For me, as for many educators, the term has a more specific meaning than for many people less involved in schools. In particular, teachers’ perspectives on learning often emphasize three ideas, and sometimes even take them for granted: (1) curriculum content and academic achievement, (2) sequencing and readiness, and (3) the importance of transferring learning to new or future situations.

In fact that many student in Indonesia specially in Medan that difficult to understand if study chemistry, they still assume that chemistry is difficult and must be avoided, this conception make motivation student to learn chemistry is low, and the effect is student result also decrease. And also learning process in class that still monotonous, and haven’t variation so that cannot to maximize the student potential.

Based on a study conducted by researchers previously showed that, still less the maximum application of multiple media to enhance student learning outcomes, especially computer-based multimedia. Possible factors that influence it is not suitable between computer-based multi media offered by the applied Approach. Therefore in this study to try to matching between Accelerated Learning Approach with the help of computer-based media.

According to research ever have done by Erdiana Gultom (2006) which uses Computer-Based Multimedia she got the data, there are differences in learning at students achievement with

computer - based multimedia is 84% and 71% is based media handout. Average chemistry student learning outcomes are taught by using cooperative learning type of Think-Pair-Share by Susan Ardian Ningsih get the data 14.48% higher than the average student learning outcomes with the conventional lecture method 12.43%. By using guided discovery method to use props with (Ramadhani) test results obtained by the end of grade test experiments 75%. By using flash media and taught by our media concept (Annazili) with the results obtained in Experiment 1 class is 7.98 ± 0.75 and 7.64 ± 0.86 a class experiment.

Addressing the above problems, the need for the efforts made by teachers to use teaching strategies that make learning more enjoy so as to motivate students to learn. One is to apply Accelerated Learning strategies of type four stages of learning. According to Nicholl, and Rose, (2002): "Accelerated Learning attempts to integrate a variety of games and activities, emotions and music, relaxation, visualization, role playing, colors, concept maps, positive thinking and the emotional atmosphere of fun, so learning becomes more meaningful activities with stronger memory".

Accelerated learning is important today, since technology is rapidly producing new solutions in business. Children today have to learn at rapid speeds to keep up with technology, as well adults must learn quickly also. Accelerated learning programs open the doors to help adults gain. The programs offer courses or training to help you stay up to date. The problem is technology is speeding, so the accelerated learning courses change rapidly to help you stay ahead of the game.

The accelerated learning courses help you to develop important skills, such as creativity, logic thinking, and absorbing information. The concept of accelerated learning came into view when technology seen the need for our demands to absorb what we learn quicker and think logical while creating sufficient skills to handle the rapid changes. Courses today offer you the opportunity to adapt to rapid changes. You learn innovative

ways to successfully approach learning. The programs help you to adapt to home studies combined with programs in the upcoming web business. Online you will find links to courses that open the door to learning accelerated programs to develop skills, designed to teach pre-school kids develop skills to prepare for their future. Rather the parents can use the learning from the courses to advance their children's skills. The courses build motivation. You learn multi-intelligence strategies in creativity, logic and learning. Using accelerated methods, the courses walk you through learning new languages. You find it easy to learn, and will develop skills to learn quickly.

Visual means to learning by observing and picturing (learning by observing and describing). Intellectual intention is learning by problem solving and reflecting (learning by problem solving and reflection).

There fore the researcher interest to do the research in SMA N 1 Berastagi by using the Accelerated learning to increase student achievement. Based on explanation above researcher interest to do the research with the title : **“Implementation of Accelerated Learning Approach to Increase Student Achievement in Teaching Colloid Topic at SMA Negeri 1 Berastagi Student Grade XI School Year 2011/2012”**.

1.2 Problem Identification

1. Using of Multimedia that still low in learning
2. System constructivism that haven't maximal
3. Teaching and learning in class still monoton and not optimal for students
4. Accelerated Learning Approach that haven't familiar in teaching.

1.3 Problem Statements

1. Does the student learning outcomes using the Accelerated Learning Approach more than the Conventional methods in SMAN 1 Berastagi class XI school year 2011/2012 on the topic colloid.

1.4 Problem Limitation

Based on the research title and based on problem identification above, so researcher scoped the problem until using the Accelerated Learning Approach to increase student achievement in SMAN 1 Berastagi student grade XI school year 2011/2012, especially in the developing of Colloid Topic.

1.5 Research Objectives

1. To know the student achievement in learning chemistry that taught by using accelerated learning approach in student grade XI school year 2011/2012, especially in the developing of colloid topic.
2. To know the student achievement in learning chemistry that taught by using conventional method in student grade XI school year 2011/2012, especially in the developing of colloid topic.
3. To know are significant different between student achievement in teaching chemistry that using Accelerated Learning Approach with conventional method in SMA N 1 Berastagi student grade XI school year 2011/2012 in colloid topic.

1.6 Research Benefit

1. As the reference for chemistry teacher about alternative accelerated learning approach and applying in learning process.
2. As the enjoying learning for student.
3. As alternative approach for teacher in choosing learning approach to increase student achievement.
4. Perception to another researcher about accelerated learning.

1.7 Operational Definitions

Accelerated learning is learning about the brain and learning. This study allows to use different learning methods and media. Accelerated learning is trying to integrate a variety of games and activities, emotions and music, relaxation, visualization, color, concept maps, a fun positive way of thinking so that learning becomes more meaningful to apply the four basic steps, namely the technique of preparation, delivery techniques, techniques of training and performance techniques.