

CHAPTER I

INTRODUCTION

1.1. Background

Today science becomes an important concern worldwide. Due to the progress of a nation can be measured from the level of mastery of science. Chemistry, as a part of science is also one discipline to be mastered. For that chemically active learning, engaging and quality are needed. Competency Based Curriculum is a curriculum that emphasizes the concept of capacity to perform tasks with certain performance standard, so the results can be felt by students, such as mastery of a particular set of competencies, Nurhadi (2004). Education is not only focused on the mastery of the material, but at also emphasized the mastery of skills (characters). Than Students must also have the ability to do something by using scientific principles and processes that have been mastered, Learning to Know, and Learning to Do must be achieved in teaching learning activity ,Wina Sanjaya (2010). Furthermore when researcher done observation in SMAN 2 Kisaran, student learning outcomes in subjects chemistry is still relatively low, based on the results of observations with the chemistry teacher was found from 43 students only 15 people (35%) were valued at a minimum completeness criteria established 82. The low of student learning outcomes are caused by some things, such as the low student interest, an explanation of material carried by the student teachers have not fully understood and the lack of discussion groups.

Motivation in learning process is very important in attainment achievement. Moreover according Sugihartono dkk (2007).Motivation is a condition that can caused certain behavior and give direction in behavior. High motivation in learning process can we see from spirit of student that not surrender to get a success. Next, according Sunyono (2006) Decreasing student achievement was caused of difficulty in understanding the concept of chemistry & low interested in chemistry lesson. The low activity, interest, & chemistry student learning outcomes can be caused by several factor , among others : (1) student are

given no direct experience in observing a material, so that student assume chemistry is abstract & difficult to understand and don't get motivation. (2) The model was used to teach are less variable & are not innovative, so make the bad condition like sleepy, bore, or even noisy. So, needed a creative teacher to create learning.

Trianto (2009) says that "Students will be easier to find and understand of difficult concepts if they were discussions with his friend." This is reinforced by recognition of teachers that students consider difficult chemistry courses. Next, the application of learning models that variation can increasing learning process and all at once as indicators in increasing quality of education. In a learning process, have two part that very important things such as the model of teaching and learning media. These two aspects very related. Selection of one models in teaching will be affect the type of appropriate media , although there are various aspects that must be considered in choosing the media, Arsyad (2002). In this case, the model that used not only using the model-based approach to teacher centered but student centered. Good model in teaching must be appropriate with characteristics of subject matter that will be explain. So, created of model and media very needed .In research Gultom. A & Silitonga P.M (2009) State the cooperative learning type STAD has yielded academic gains, such as increased student achievement & social gains, such as improved intergroup relation, acceptance of academically handicapped classmates & increased self esteem, so cooperative learning model STAD type are effective approaches to the direct style of instruction in class room & build the student centered learning condition. It means learning fully on student activity because changed the paradigm teacher activity that dominant become student active that dominant. Furthermore on Surbaktini.H.P (2012) in her thesis result shown that cooperative learning model STAD type is effective to be implemented on learning chemistry. Next, Slavin (1995) Cooperative learning models involves small groups during the learning process takes place. Group members work together as a team in completing tasks and solving problems given by the teacher to achieve common goals. In this model every student has the same responsibilities in the group. This is because the

individual assessment at the end of the implementation model. Values that obtained by each member will be averaged to determine the success of students studied by group.

Media is communication tool that can be used to transmit information from the source to the students participating in learning activities, Situmorang dkk (2001). Existence of learning media can help student in study. We know that chemistry lecture is a lesson that difficult categories. The categories of Learning media such as book, hand out, and module. One of media that always used is module. In research, Hardila.V (2012) in her thesis result with entitled The Influence of Critical Thinking Developments in Learning Salt Hydrolysis Concept Through Chemistry Modules to Increase Student's Achievement Grade XI. It means the influence of module can development of motivation and activity on student. The results of her research on the experimental class (used learning module) is 74% higher than the control class (without used learning modules) is 61%. From the data, module is effective & able to increase student achievement on learning chemistry. Moreover according to Arsyad (2009) Module is a learning material that can be used by students to learn independently. it is easily Understood by the student. Thus, a good selection of modules will be able to help student learn and understand the topic of discussion roommates is learn by the student. Next ,Silaban (2010) research in the master program about book analysis, the correspondence of the suitability about content with standard competence and basic competences also other components from five books roommates has been analyzed is not enough because there are some materials roommates is not suitable with the indicator. From the result of his research, the conclusion was taken from book A: 82%, B 70% of book, book C 65% D 88% book and eBook 75%. Thus, it is suggested noticing the suitability of the content from the arrangement of materials systematically so the readers will read the book based on the Standardization of BSNP. So book can increase the motivation and interest of learning activity.

In this study, researcher using Modules as a source of learning because module is one of strategies of active learning process, in this process are not only

as listeners but they are also active in the learning process. The using of this module only makes teachers act as facilitators so the student are active in the learning process. Then, in this process researcher will be change the paradigm about teacher activities (teacher centered) that dominant become student active (student centered) that must dominant. So with the changed of learning style will make the student become more appreciate .Thus, it makes student be Able learn by Themselves with using module. They can learn anytime and anywhere Independently. Concerning with the problems of learning above, the writer is interested to conducting research with titled **"The Implementation of Cooperative Learning Model Student Team Achievement Division (STAD) Type by using Learning Module to Increase Student Achievement in Salt hydrolysis Topic"**.

1.2 The Identification Problems.

Based on the background Explained above, there are some problems are identified to make the research be focused, they are:

1. Student still less understanding of concept in chemistry lecture, can see in score that they have is low and not appropriate with Criteria Completeness Minimum (KKM) standard.
2. Student still less understanding of concept learning process that can influenced spirit in learning process because the motivation not optimal.
3. Teaching learning process always using conventional method, so must using variation models in teaching learning process .
4. Student achievement in learning process and indicator to increasing quality of education very less, so we must attention the media that used.

1.3 The Problem Statement

The formulation of the problem in this research is:

1. Are the student learning outcomes that taught by Cooperative Learning model *Student Team Achievement Division (STAD)* type that Integrated with Learning Module is significant higher than student learning outcomes taught by Direct Interaction Method that Integrated by using Module ?
2. How the effectiveness of student's learning outcomes using Cooperative Learning model *Student Team Achievement Division (STAD)* type that integrated with Module compare with student learning outcomes taught by Direct Interaction Method that Integrated by using Module on subject salt hydrolysis ?

1.4 The Scope of the Study

Based on the scope of the problem that has been described above, seen so many problems arise. Therefore, the discussion of issues that need to be examined more focused issues.

1. In this research is limited to Senior High School chemistry class XI on the subject salt hydrolysis.
2. To know the increasing of student achievement with Cooperative Learning model *Student Team Achievement Division (STAD)* type Integrated with Learning Module.
3. The topic of Salt hydrolysis : Including definition of salt hydrolysis, salt from a strong acid and strong base, salt from weak acid and strong base, salt from strong acid and weak base, salt from a weak acid and weak base, salt hydrolysis in daily life.

1.5 The Objective of the Study

The purpose of this research is:

1. To investigate the student learning outcomes that taught by Cooperative Learning model *Student Team Achievement Division (STAD)* type that

Integrated with Learning Module higher than student learning outcomes taught by Direct Interaction Method that Integrated by using Module media.

2. To investigate the effectiveness of student learning outcomes using Cooperative Learning model *Student Team Achievement Division (STAD)* type that integrated with Module compare with student learning outcomes taught by Direct Interaction Method that Integrated by using Module media on the subject salt hydrolysis.

1.6 The Significances on the Study

The expected benefits of this research are:

1. For student, as a source in learning so can increasing motivation , activity and interest in learning activity.
2. For teacher, can improving the quality of teaching and learning process to make it more attractive, effective, efficient, interactive in an effort to improve student learning outcomes, particularly on the subject salt hydrolysis.
3. For researcher, as an information and reference materials, researchers who want to study further about Cooperative Learning model *Student Team Achievement Division (STAD) Type* by using media module in improving student learning outcomes.

1.7 Operational Definition

1. *Cooperative Learning Type (STAD)* is cooperative learning students are placed in learning teams consisting of 4-5 people. From Cooperative learning type STAD from above, so can be understood that the type STAD cooperative learning model applied to the student centered approach. And than this model can change the paradigm about teacher centered become student centered. (Isjoni,2009)
2. Direct Interaction is used to describe a lesson where the teacher has control. Unfortunately, teachers and student teachers and students often mistake direct instruction for the only way to teach.

3. Module is a learning material that can be used by students to learn independently. Module will be Able to help student learn and understand about topic of discussion. The advantage of module are the students can concentration and do learning activities by themself, both under the guidance or without a teacher guidance he students really become center point of teaching and learning and so on.(Andi Prastowo,2011)
4. Learning outcome is the result if person has studied will happen new behavior to that person, example from don't know to be know, from don't understand to be understand. Learning outcomes that will be achieved by students can influenced by many factors, such as business / learning activities that doing by the students themselves and the circumstances that show business / student activity at the time of study.(Oemar Hamalik, 2008)
5. Salt hydrolysis is Reaction between salt and water solvent so that the salt solution becomes acidic, basic, or neutral. There are three of salt hydrolysis reaction such as: Hydrolysis of salt of weak acids and strong base, Hydrolysis of salt of strong acids and weak base, Salt hydrolysis of weak Acid and Weak base.(Sunardi, 2008).