CHAPTER I
INTRODUCTION

1.1. Research Background

Education in Indonesia is under the spotlight because of the quality of education in Indonesia is still low and become a problem for the government. Government efforts to improve the quality of education such as making changes in the educational curriculum, improve teacher quality and improvement of facilities and infrastructure that supports the education.

Many problems that occur in education in Indonesia, started from educational facilities, quality of teachers, curriculum and educational costs. Education facilities in Indonesia, especially in rural areas of Indonesia is very inadequate. The lack of attention from the local and central government. Then a lot of teachers who do not have the experience and well trained.

One way which done by the government to improve the quality of education is by enhance the curriculum from KTSP become curriculum 2013. Curriculum in Indonesia has been progressing since the period before 1945 the curriculum in 2006 which is valid until the end of 2012. During the process of the curriculum change there is no other purpose than to enhance the the quality of learning and the learning in school design. According to some experts, curriculum changes from time to time, whether in Indonesia or in other countries, due to the needs of people which every year are always evolving and the demands of the times which is likely to change. The development of curriculum is considered as a determinant of the future of the nation. Hence, a good curriculum would be expected to be applied in Indonesia so that will generate a bright future for student which has implications for the progress of the nation.

The function of curriculum in the educational process as a tool to achieve the purpose of education. In this case, it means that the curriculum as an educational tool has critical components and as a support to support its operations properly. Forming components are inter-related to each other. curriculum development components, such as components of purpose, content components,
component methods, and evaluation components. Components are related to each other (Kusuma, 2013).

In Indonesia, the new curriculum will be implemented in 2013 they are a character-based curriculum. There are 18 national character, they are religious, honest, tolerance, discipline, hard work, creative, independent, democratic, curiosity, the spirit of nationalism, patriotism, recognizing excellence, friendship / communicative, love peace, love reading, caring environment, social awareness, responsibility.

Associated with the implementation of Curriculum 2013, a teacher is not only required for mastery of materials, but also had to have the ability to manage the quality of learning in order to be able to present an attractive, creative, challenging, and fun learning for students. And further how important is the teacher can provide meaningful learning for students means how to cultivate a sense of excitement for students to learn, cultivate self-awareness of students to learn because he felt that learning is a must and not a necessity which very useful for the future. The teachers are required to learn, improve and strive to develop their creativity in presenting learning by using a variety of approaches, strategies, methods and models which vary in the learning so the learning objective is expected to be achieved. (Herawati, 2013)

Learning chemistry in school is less precise if only pay attention on product without considering the process that takes place in every learning. It happens due to the lack of constructivist learning models that are applied in high school, most of learning is still dominated by the teacher (teacher-centered), so non-cognitive skills are less honed. With this model students will become passive learners.

The conditions that exist in Madrasah Aliyah 2 Tanjung Pura does not match between expectations with reality, as evidenced by the low of chemistry study results show the students are still not optimal, under KKM or still low. It is seen from results of pure value of midterms (UTS) or final exams (UAS) on academic year 2013/2014 from three classes the average value of class XI IA-1 is 60.83 and the highest 80 lowest 40; class XI IA-2 average value of 59.88 and the
highest 80 lowest 35; class XI IA-3 average value of 60.38 and the highest 75 lowest 40 with KKM is 65 (Data was getting from the direct observation or information from teacher).

The success of a teacher in performing teaching in the classroom can be measured by the success of delivering students to achieve good performance. It is influenced by various factors, such as the selection and the use of media in learning, mastery learning material by teachers, facilities and infrastructure which supports, as well as the readiness and motivation of students to receive the learning.

Results of research carried so far (Sunyono, 2005), is the student learning outcomes are generally low because of students have difficulty in solving problems related to the chemical reaction and chemical materials, because the lack of understanding of chemistry concepts and lack of interest from of students for lessons of chemistry. Moreover, the teachers failed to provide concrete examples from reactions that exist in the environment. Therefore, it required an effort to optimize learning chemistry in the classroom by applying appropriate approaches and methods.

In developing the ability of students, educators should be able to manage learning process. Good learning process and the qualified has a function and purpose to enhance students' understanding of the lessons in class. Learning is said to be successful and qualified, if the student are actively involved in learning process in the classroom, and enhance students' understanding in the classroom. To improve the understanding and activity of students in the classroom, it is necessary to make a good lessons plan.

To solve this problem, learning chemistry in high school needs to change its orientation, from teacher-oriented (teacher-centered) student-oriented (student-centered). One of the student-centered learning is the method of discovery. Bruner assume that discovery methods accordance with the search of knowledge actively by humans. Starts to look for solutions and the accompanying knowledge, generating knowledge that is really meaningful for students. (Effendi, 2012)
The discovery meant that students find the concept through the guidance and direction of teachers because in general most students still need the basic concepts to be able to find something. Teachers have the most important influence on the progress of students in the learning process. In the method of guided discovery, teachers act as facilitators who guide students through the questions that lead students to connect prior knowledge with the knowledge that he is getting. Students are encouraged to think independently, analyze its own, that can find the concepts, principles, or procedures based on learning materials that have been provided by the teacher.

With this method, the teacher recommends students to make educated guesses, intuition, and trial and error. Through conjecture, intuition, and trial and error is expected that students not only receive direct concepts, principles, or procedures that already exist in the teaching and learning activities, but students are more focused on aspects of seeking and finding concept, principle, or mathematical procedures. (Effendi, 2012)

To generating an invention (discovery), students should be able to connect mathematical ideas they have. To connect these ideas, they can represent the idea through pictures, graphs, symbols, or words that become simpler and easier to understand. Familiarizing students with discovery learning, indirectly also familiarize students representing information, data or knowledge to generating an invention (discovery). (Effendi, 2012)

The research about discovery learning model toward chemistry subject not many be found. Research was done by Hilmina (2011) shows that this model of teaching is good to increase the achievement of student in MAN 12 west Jakarta, In this research, she got the research result that the achievement of the student is significantly increase. The result show that the average of student who have taught by using discovery learning model increase from 68,09 % to 74,81 % in the teaching of colloidal system. Another research was done by sulistyowati (2012) The analysis result of chemistry problem solving ability show experimental group which have chemistry problem solving ability with good minimally category 81%
while control group 41%. Based on the result of research can be concluded that
guided discovery learning effective toward to chemistry problem solving

Research about salt hydrolysis in Indonesia for educational aimed have
been done by researchers. One of the research is Wahyuni (2012) with the title
“The Effect Of Learning Cycle Teaching Model And Worksheets Toward
Chemistry Learning Outcomes Of Students”. Based on the results it could be
concluded that the learning outcomes of students who receive learning cycle
teaching model and worksheets is higher than students who receive learning with
conventional method, which the increases of learning outcomes in experimental
class is 73% and in control class is 60.98%.

Based on the description above, the researcher is interested to focus on
conducting the educational research with the aim to know the influence of
discovery learning model. Therefore, the researcher conduct the study with the
title “The Influence of Discovery Learning Model Toward The Student’s
Achievement With Creativity And Cooperation In Teaching of Salt
Hydrolysis“.

1.2. Problem Identification

Based on the background above, we can identify some problem such as:

1. Is the quality of education in Indonesia still low?.
2. Does teachers tend to use methods lectures which make the learning process
   very monotonous and boring?.
3. Is Teaching and learning activities is focused on teacher (Teacher centered)
   and cause less social interaction with students in other words only after
   achievement of curriculum goals alone?.
4. Are the teacher's teaching methods less appropriate to the material being
   taught?.
5. Are there still not many teachers count the character that can develop during
   the study?.
1.3. Problem Limitation
Problem limitation of this research as follows:
1. The model that is used in this research is discovery learning model toward the student’s achievement at second semester in academic year 2013/2014
2. The subject is chemistry with salt hydrolysis as the material in teaching and learning
3. The student’s achievement to be measured in this study is cognitive aspect of level C1, C2, C3, C4
4. The student’s character which be measured in this study is creativity and cooperation

1.4. Problem Formulation
Based on the background above, problem formulation of this research are:
1. Is student’s achievement who have learning with discovery learning model higher than student who have learning with conventional method?
2. How many percentage the character of creativity can be developed to the student who have learning with discovery learning model
3. How many percentage the character of cooperation can be developed to the student who have learning with discovery learning model

1.5. Research Objective
This research was conducted to know:
1. The comparison of student’s achievement who have learning with discovery learning model and student who have learning with conventional method
2. The percentage of character of creativity can be developed to the student who have learning with discovery learning model
3. The percentage of character of cooperation can be developed to the student who have learning with discovery learning model
1.6. Research Benefit

The expected benefit of this research are:

1. As information for teachers about discovery learning model as model of teaching to improve student’s achievement in chemistry

2. Produce an innovative learning model that can enhance student learning activities, student’s achievement, creativity, and cooperation behavior optimally

3. For education, as an input to improve the learning process and improve the quality of education in school