

## SCIENTIFIC APPROACH IN TEACHING SPEAKING USED BY THE ENGLISH

### TEACHER AT SMA ISLAM BATU

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**Abstract:** This study investigates scientific approach in teaching speaking used by English teacher at SMA Islam Batu. Therefore, the purpose of this study is to describe the implementation of scientific approach in teaching speaking used by English teacher at SMA Islam Batu.

This study used descriptive qualitative as research design. The subject of the study is the English teacher of X MIA 1 at SMA Islam Batu. Besides, the instruments used in this study were a semi-structured interview, observation, and documentation.

Based on the result of data analysis, the English teacher at SMA Islam Batu implemented five steps of scientific approach in teaching speaking. The teaching activities were conducted in two meetings to apply five steps of scientific approach. The first meeting implemented 4 steps (observing, questioning, experimenting, and associating), and the next meeting, associating step would be continued before doing communicating step. Moreover the students followed the learning activities well. However, the teacher has some problems such as difficulty in analyzing the activity which refers to every steps of scientific approach. Scientific approach is good for the students, because it makes them have Higher order Thinking Skill (HOTS) by solving complicated problems.

Moreover, the teacher used authentic assessment to evaluate students. He assessed three aspects such as knowledge, skill, and attitude. He assessed student's knowledge by giving task. Then, there are five aspects to assess skill such as pronunciation, grammar, vocabulary, fluency, and comprehension. Finally, there are nine aspects that assessed student's attitude such as enthusiasm, honesty, discipline, responsibility, cooperation, politeness, self-confidence, curiosity, and tolerance.

**Keywords:** *scientific approach, teaching speaking*

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## **Introduction**

English has become language of international communication. It is important for all people able to communicate with English. It has been taught since they have begun to enroll for the school. There are four skills that are taught by the teacher such as: reading, writing, listening, and speaking. Speaking is the important one among three other skills. According to Brown (2003:48), speaking consists of producing systematic verbal utterances to convey meaning.

In learning activities the existence of curriculum is very important. Moreover, curriculum is also such a plan and procedure in learning activities that is part of a system in the school. 2013 Curriculum is the newest curriculum in Indonesia which has already been applied by some targeted schools in Indonesia that are chosen by the government.

In 2013 Curriculum the elements of curriculum is changed. The element of curriculum includes standard contents, standard process, and standard assessment. Besides, in 2013 Curriculum the standard assessment uses authentic assessment. It assesses cognitive, affective, and psychomotor aspect based on the process and result learning. 2013 Curriculum emphasizes on modern pedagogical dimension in learning, using inquiry and scientific approach. Moreover, scientific approach referred to learning includes observing, questioning, exploring,

associating, communicating.

The theoretical explanation above is supported previous research conducted by Herlina (2012), who studied about contextual teaching and learning approach used by the English teacher at SMAN Probolinggo. She found that there are seven components that implemented: constructivism, questioning, inquiry, learning communicative, modeling, reflection, and authentic assessment.

The research was carried out before 2013, when 2013 Curriculum had not applied yet. In this research, the researcher analyzes the scientific approach used in teaching speaking. Besides, she chooses speaking skill because it is the important one in mastering English in order to communicate with foreigner. In addition, SMA Islam Batu applies 2013 Curriculum in teaching speaking. Moreover, this study investigates the implementation of scientific approach in teaching speaking.

## **The 2013 Curriculum**

The 2013 Curriculum is the newest curriculum in Indonesia, which has already been applied by some targeted schools in Indonesia that are chosen by the government. In the 2013 Curriculum, education development strategy can be applied by improving educational achievement through students active competency-based, learning effectively by curriculum, and improving the competence and professionalism of

teachers, and giving additional period for teaching. Because in 2013 Curriculum emphasizes on modern pedagogical dimension in learning, the teaching activity should use a scientific approach. Scientific approach includes observing, questioning, exploring, associating, and communicating.

### **The Characteristic of 2013 Curriculum**

According to The Decree of Ministry of Educational and Culture No. 69 2013 about 2013 Curriculum, the characteristics of 2013 Curriculum is:

1. Developing spiritual and social skill, curiosity, creativity, cooperation between cognitive and psychomotor.
2. School is a part of society which provides many learning experiences. Moreover, the students should apply what they have learned in the school to the society. Besides, they use society as learning resource.
3. Developing cognitive, affective, and psychomotor and applying them in any situation in the school and society.
4. Giving more time to develop cognitive, affective, and psychomotor skills.
5. Competencies are revealed in the form of core competencies, which are further detailed in every subject.
6. Core competence becomes organizing elements of basic competence, in which all basic competences and learning process are

developed to achieve in core competency.

7. Basic competency is developed based on principles of accumulative, reinforced, and enriched the subjects and education level.

### **The Structure of 2013 Curriculum**

The structure of 2013 Curriculum describes about conceptualism the content of curriculum in form of subjects, the position of subjects in curriculum, distribution of subject in semester or a year, the burden of students in study every subjects and every weeks. The structure of curriculum is the application from concepts of organization in learning system and the burden of students study in learning system.

### **Core Competence**

Core competency is a translation or standard operational competencies of graduates in form of quality that should be had by students who finish their study in particular education. Core competency is designed into four groups, those are religious attitude (core competency 1), social attitude (core competency 2), knowledge (core competency 3), and skill (core competency 4).

### **Basic Competence**

Basic competency is competence each subject for class that derives from core competency. Basic Competency is

the content or competency consists of cognitive, affective, and psychomotor that sourced by core competency. Students should master those competencies. They are developed based on the characteristic of the students, initial capability, and characteristic of subjects.

### **Scientific Approach**

Scientific approach is a learning that adopts scientific steps in developing knowledge through scientific method. Some people believe that trough scientific approach, the knowledge, attitude, and skill. In implementing the 2013 Curriculum, it emphasizes on modern pedagogical dimension, and uses scientific approach. Scientific approach is referred to observing, questioning, exploring, associating, and communicating. Specifically, scientific approach involves these criteria:

- a) The material should be based on logical facts or phenomenon.
- b) Teacher must encourage and inspire the students to think critically, analytically.
- c) Students are encouraged to be able to identify things and solve the problems.
- d) Teacher must encourage and inspire the students to understand, apply, and develop the way of thinking which is rational. It is hoped that they can respond the materials objectively.
- e) The teaching and learning materials are based on the concept, theory, and

empirical facts.

- f) Learning purpose is formulated in simple, clear, and attractive presentation.

### **Steps In Scientific Approach**

There are five steps in scientific approach according to Ministry of Education and Culture (2013), namely: observing, questioning, exploring, associating, and communicating. First, observing is a fundamental way of finding out about the world around us. Second, questioning is one of the ways to develop knowledge in the form of concept, principle, procedure, theory and law, and meta cognitive thinking. Thirdly, exploring is a kind of activity that aims to internalize or explore the knowledge and skill that just learnt. Fourth, associating is the process of thinking logically and systematically over the empirical facts that can be observed to obtain a conclusion. Finally, communicating means point out the result of the study or presents all knowledge and skill that understood by students.

### **Research Method**

Qualitative research was employed to analyze the implementation of scientific approach in teaching speaking used by English teacher at SMA ISLAM Batu. The research subjects were the English teachers in Class X Science at SMA ISLAM Batu as the informants to get data about the scientific approach in teaching speaking. To collect the data some instruments were used. They were interview, observation and

documentation.

A semi-structured interview was given to the English teacher to know the implementation of scientific approach in his speaking class. Non-participant observation was employed to know how the implementation of scientific approach in teaching speaking. Furthermore, the documents used for this study were lesson plan, syllabus and another data that have related with applying a scientific approach in teaching speaking.

### **Findings And Discussion**

Based on the data collection which was conducted on 14<sup>th</sup> November 2014 and 21<sup>th</sup> November 2014, there were three procedures in implementing scientific approach in teaching English, they are planning, implementing, and evaluating in writing skill.

#### **Planning**

Before conducting the learning process in classroom, the teacher prepared the lesson plan and syllabus. The teacher used syllabus which has been provided by the government. The teacher needed to make the lesson plans, which were arranged based on basic competencies made by the government. Some basic competencies were developed into one lesson plan and each lesson plan can be taught for one or two meetings. The English teacher in SMA Islam designed a lesson plan for two meetings. Because in applying five steps of scientific approach, it needs more time

especially if there are many materials that should be taught.

#### **Implementation**

After preparing a lesson plan and syllabus, the teacher needs two meetings to implement it. The detail steps of scientific approach are presented as follows:

##### **a. Observing**

To begin the materials, the teacher did not explain directly about the content materials, but the teacher showed a picture, which consists of a man and a woman in the boutique. While showing the picture, the teacher asked to the student to notice the picture. Then, the students observed, read and noticed about they were looking.

##### **b. Questioning**

In observing activity, the teacher divided the students into some groups; each group consists of 3 or 4 students. After that, the students were given five-minute discussion and made questions about social function, text structure and language feature of the expressions in the picture. Some of the students delivered their questions by raising the hands. They asked about what kinds of expression in the picture shown by the teacher. After answering the student's question, the teacher gave students some questions that they should write on paper. It aims to test the student's understanding.

##### **c. Exploring**

Exploring aims to internalize or explore the knowledge and skill that just learnt, and also it is to develop skill, attitude, and knowledge. In this activity,

after students got some information from the teacher, teacher gave more questions to explore students' deeper comprehension. Then, students must present their opinion in front of the class.

#### **d. Associating**

After students presented their works in front of the class, the teacher checked their work. He revised some students' errors. Since the time is limited, the activity continued on the next meeting. In the next meeting, associating activity is continued with the students who were asked by the teacher to make some examples of expression by using their own words.

#### **e. Communicating**

To attract students' attention, the teacher asked the students to play snake and ladder game in communicating step. This is the most interesting part for the students. Before playing snake and ladder, the teacher prepared 100 expressions of sufficiency and excess to do or not in Bahasa Indonesia, because there are 100 numbers in snake and ladder game. There were twenty students in the class and they became one group, so the students made a circle. The teacher also prepared the snake and ladder paper, some dices and prizes. For someone who could reach number 100 will get the prize. The role of the game is, the students should roll the dice. After they know what number that they got, the teacher will see the number of the expression. Next, the student should translate the expression in English.

#### **Discussion**

The researcher found that the teacher in SMA Islam Batu had applied 5 steps of scientific approach such as observing, questioning, exploring, associating and communicating. Moreover, the teacher in SMA Islam Batu has applied 2013 curriculum since new academic year 2014-2015, because the government has required to all schools to implement 2013 curriculum. Therefore, the class that the researcher observed was the class of elective subject (X MIA 1). The teaching activity consist of 3 procedures, they were planning, teaching process and evaluation.

*Planning* includes in making a lesson plan, and learn the syllabus that was prepared by the governments. The teacher used discovery learning as a teaching mode and discussion as a teaching method. The teacher prepared some media and learning resources. *Teaching process* has 3 activities such a pre-teaching, whilst-teaching, and post-teaching. The step of scientific approach is conducted in whilst teaching. Moreover, the teacher in SMA Islam Batu needs 2 meetings for implementing all of the steps of scientific approach.

Consequently, the first meeting implemented 4 steps (observing, questioning, experimenting, and associating) and the next meeting, associating step would be continued before doing communicating step. Finally, the teacher used authentic assessment as evaluation. They include 3 aspects such as attitude, knowledge, and skill. In addition, the teacher used authentic assessment as well. It because according to The Ministry of Education and Culture (2013), the authentic assessments should covers three aspects such as cognitive, psychomotor, and affective.

In addition, the researcher also found that the teacher has some problem in implementing scientific approach. The teacher is still confused how to analyze the activity, which refers to every step. Moreover, the teacher assumed that scientific approach is more suitable for science subject because applying scientific approach in English, it is constrained to use three teaching models such as discovery learning, inquiry based learning, and project based learning. However, scientific

approach is good for the students. It makes the students think Higher Order Thinking Skills (HOTS) by solving complicated problem.

### Conclusions

Based on the data analysis, it can be concluded that teacher used five steps of scientific approach, namely: observing, questioning, exploring, associating, and communicating. In the first meeting, he applied four steps of scientific approach including observing, questioning, exploring, associating. In the next meeting, associating step was continued after pre teaching, and then it continued with the last step of scientific approach, it is communicating. However, the teacher has difficulties in implementing scientific approach especially in analyzing learning activities.

### References

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the empowerment by the first meeting. The implementation strategy for solving the problem is to experiment in groups and (discussing) and the next meeting, assessing it would be continued before being communicated. Finally, the teacher need not be assessed as evaluation. The subject is such as (student) knowledge and skills. In addition, the teacher and student assessment as well. It refers according to The Ministry of Education and Culture (2013) the scientific aspects should cover three aspects such as cognitive, psychomotor, and affective in school learning.

and in addition, the research also referred that the teacher has some problem in determining activities. The process of the subject will continue down to analyze the activities which refers to every step. Moreover, the research assumed that the scientific approach is more suitable for science subjects because applying scientific approach in English is considered to use in developing models such as discovery learning and inquiry-based learning and project based learning. However, scientific

approach is good for the students. It makes the students think Higher Order Thinking Skills (HOTS) by solving complicated problem. In conclusion, it can be concluded that teacher used five steps of teaching approach, namely: observing, questioning, exploring, associating, and communicating. In the first meeting, the teacher used four steps of scientific approach, which are observing, questioning, factoring, associating, and communicating. The second meeting, the teacher used five steps of scientific approach, which are factoring, associating, communicating, and then it continues with the factoring and then it continues with the factoring. However, the teacher has a different approach in implementing scientific approach especially in applying learning activities. It is a significant finding that the teacher has a different approach in implementing learning activities. It is a significant finding that the teacher has a different approach in implementing learning activities. It is a significant finding that the teacher has a different approach in implementing learning activities.