

**Implementation of Scientific Approach  
in English Teaching at SMPN 1 Gringsing Batang**

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**ABSTRACT**

This research aimed: 1) to identify the implementation of scientific approach in English teaching at SMP N 1 Gringsing, 2) to identify the problems faced by the teachers and students implementing scientific approach in English teaching, and 3) to know the teachers' solutions of the problems. The method used in this final project is descriptive qualitative. The writer used observation sheet and documentation gotten by recording the activities, and the lesson plan of the teachers in collecting data. The result of the analysis shows: 1) the implementation of scientific approach in teaching learning process at SMP N 1 Gringsing Batang is running well, although the five steps are not working well because the time was not enough to finish all of steps of scientific approach in one meeting. 2) the problems in teaching learning process were divided into two parts. The first was problems of the teachers. Here, the first teacher often forgot to give apperception in the opening step as stated in the lesson plan. The teachers found the students were less active in learning process of questioning step. Moreover, the teachers gave same instruction in exploring and associating step by giving same questions but different pattern (written and orally). Then, the teachers were lack in the media of teaching learning process, so it made students bored. The second was problems faced by the students that they were being nervous, afraid, or ashamed if they made a mistake in arranging the question or sentence, and show their work. Sometimes they felt difficult when they found new vocabularies. 3) there were some solutions made by the teachers to solve the problems. They corrected the students' pronunciation and wrong sentence. The teachers let students to open their dictionary to find the meaning of difficult words. Furthermore, they gave motivation to the students that they should be more active in the teaching and learning process. In addition, the teachers gave punishment by giving questions to students who did not focus in learning process and the students were asked to write what they had learnt on that day in "My Journal". It was to know the students' development. Finally, the teachers should improve the techniques in learning process, so the students can receive the material easily.

**Keywords:** *Implementation, Scientific Approach, English Teaching*

## INTRODUCTION

One of the demands and challenges faced by the education today and in the future is that an education should be able to produce human resources that have intact competencies, namely the competence of attitude, competence of knowledge, competence of skills. Those competencies are integrated. The success of education is not only determined by a good curriculum, but also the professional teacher. Castetter in Mulyasa (2015:13) mentions that ‘the quality of learning is very influenced by the ability of the professional teacher’.

The government change the curriculum actually made based on social condition occurring in environment related with moral value that has to be changed to repair the quality of the education. The change of curriculum 2006 is regulated in National Constitution of Indonesia Number 20 of 2003 and Indonesian Government Regulation Number 19 of 2005. In addition, the newest change of curriculum in Indonesia is Curriculum 2013. It is a revision of previous curriculum that was School-based curriculum (KTSP).

Curriculum 2013 is a competency-characterbased curriculum. Mulyasa (2013: 99) argues that curriculum 2013 is

aimed to produce human resources that are productive, creative, innovative, and affective through the strengthening of attitude, skill and knowledge. Furthermore, according to Permendikbud Number 68 of 2013 mentions that curriculum 2013 has another quality which is developed and has to be applied in learning process such as, creativity, independence, solidarity, empathy, cooperation, tolerance, and capability from the students needed by the nation.

Some of the teachers give opinion about the implementation of curriculum 2013. They said that curriculum 2013 is very complicated in the process of learning and teaching, and it has many rules in assessing of learning activity of students. Although the curriculum was changed, but the way they teach the students based on the school based-curriculum in which the teacher is as a center in the learning activity.

There are some reasons related with the topics:

1. Education is the key advancement of the nation. It depends on the quality of the person who has good knowledge, good attitude, and good skill. In this case, the curriculum 2013 has an influence in the learning process that is to create productive, creative,

innovative and has a character of human resources.

2. After applying school based-curriculum in previous time, the education minister changed it into curriculum 2013 because it is to face the problems in the future.
3. Afterwards, there are some teachers who use scientific approach in teaching and learning activity. However, they did not apply some of the steps in the scientific approach. For example, the teacher was missing one step, like questioning in the teaching and learning process.

There are three main objectives of this research as follows:

1. To identify the implementation of scientific approach in English teaching at SMP N 1 Gringsing.
2. To identify the problems faced by the teachers and students implementing scientific approach in English teaching.
3. To know the teachers' solutions of the problems.

## **REVIEW OF RELATED THEORIES**

### **Learning Achievement**

There are some factors that influence in students' learning process such as motivation, the learning

environment, the learning style, and facilities. Reid (2009: 19) argues that motivation is the key factor of the learning success.

### **Curriculum**

Curriculum is an education program that is provided as a students' learning. Westbrook, et al (2013:18) mention that curriculum is the key reference point for the teachers, particularly in developing countries, where it is encoded in the official textbook and teacher guides, often the sole resource used by teachers.

### **Component of Curriculum**

According to Hamalik (2010:23) there are some components of curriculum that is to be main point in developing the learning system as follows:

1. The objective of curriculum

Law No 8 of 1989 of the national education system, the curriculum is an educational tool for developing the quality of human resources.

2. The material of curriculum

The material of curriculum is the content of curriculum. Law of National Education System, "... the content of curriculum is a matter and the learning to achieve the educational goals".

3. Method

Method is the way which is used to convey the material of learning to achieve the objective of curriculum.

4. The organization of curriculum

There are six shapes of the organization of curriculum, they are isolated subjects, correlated, broadfield, child-centered program, core program, electric program.

5. Evaluation

Evaluation is a component of curriculum. Because the curriculum is a guidance of the teaching learning activity.

### **Implementation of Curriculum**

Miller and Seller in Hamalik (2010:237) said that in some case, implementation has been identified with instruction.

### **Teaching Approach**

Every changes of curriculum brings the individual characteristics. Learning on the curriculum 2013 uses a scientific approach or process-based approach of science such as discovery learning, project-based learning, problem-based learning, and inquiry learning.

### **Scientific Approach**

Hosnan (2015:34) suggests that in the application of scientific approach in learning is involving skill, process, for

example; observing, clarifying, measuring, predicting, explaining, and concluding.

### **Implementation of Scientific Approach**

There are 3 main points that will be discussed in this part.

1. Scientific Learning Approach

Daryanto (2014:59) argues that the steps of scientific approach in learning process of curriculum 2013 is to all level which is implemented by using scientific approach, includes; finding the information through observing, questioning, collecting the data, then associating, and communicating.

2. Learning Principle of Scientific Approach

There are some principles of scientific approach in learning activity as follows (Hosnan 2015: 37); the center in learning process is students. Learning encourages the raising ability of students' thought. The teacher Give an opportunity to the students to train the capability in communication.

3. Scientific Learning Steps

a. Observing

In accordance with Permendikbud Number 81a, the teacher should open widely also gives various opportunities to the learners in

doing the observation through; observe, scrutinize, listen to, and read.

b. Questioning

Questioning in learning activity is an activity of the teacher to encourage, conduct, and appreciate the capability of students' thought.

c. Exploring

Permendikbud Number 81a of 2013 argues that the activity that is to collect the information which is collected by read another resource with another text book, observing the object/event or the interview activities with informant and another way.

d. Associating

Reasoning is a process of logical thinking and systematic based on the fact of empirical which is observed in getting a conclusion of knowledge.

e. Communicating

In communicating step gives the students benefits to provoke the confidence and study seriously (Daryanto 2014:80).

### **English Teaching in SMP N 1 Gringsing**

English becomes a compulsory subject in that school. The students of

grade VII-IX are already using curriculum 2013 with scientific approach.

### **Previous Studies**

The researcher needs some previous studies to support the study. There are four previous studies that the writer found:

The first one is written by Djuwairiah Ahmad (July-August 2014, in the Faculty of Education and teaching science. Alaudin Islamic University, Makassar, South Sulawesi, Indonesia) in his research paper entitled "Understanding the 2013 Curriculum of English Teaching through the Teachers' and Policymakers' Perspective".

Another research was conducted by Eko Ris hendrianto (2015) with his research paper entitled "The Implementation of Project Based Learning in Teaching English in Curriculum 2013; a case of the seventh grade students of SMP N 2 Semarang in the academic year 2014/2015.

In addition, Sahiruddin (Universitas Brawijaya, Indonesia 2013) with his research paper entitled "The implementation of the 2013 curriculum and the issues of English language Teaching and learning in Indonesia.

The next research was conducted by Retnawati et al (Yogyakarta State

University, January 2016). The research paper entitled “Vocational High School Teachers’ Difficulties in Implementing the Assessment in Curriculum 2013 in Yogyakarta Province of Indonesia.

## RESEARCH METHOD

This research used descriptive qualitative method since the main objective is to describe the implementation of scientific approach in teaching English in curriculum 2013. As stated in Moleong (2012:9), one of the characteristic from qualitative research is decriptive qualitative which the data is collected by the words, pictures, and not statistical.

The subject of the study is the English teachers of SMP N 1 Gringsing. There were two English teachers and as an additional subject was the students of SMP N 1 Gringsing it self.

In this phase, the role of writer is as the data collector, the data observer, the data analyzer, and the data reporter. The writer collected and observed the data of the English teachers of SMP N 1 Gringsing who have applied scientific approach in teaching learning process. Then, the writer analyzed and reported the data.

In this study, the writer used the observation sheets and documentation as the instrument.

Method of data collection is the way used in this study to get and collect the data. In this research the writer used the observation and documentation to collect the data. In organizing the observation to find out the required data, the writer did some steps bellow:

1. Making research instrument
2. Asking permission from the the institute to do the research. Then, asking permission to the head master of SMP N 1 Gringsing to do the research.
3. Observing directly, the writer visited to the observation class and did the observation in this case the English teacher and the students of SMP N 1 Gringsing. In addition, the observation was conducted in three days that was on 16<sup>th</sup>, 18<sup>th</sup>, and 19<sup>th</sup> May 2016.
4. Recording the observation of the implementation of scientific approach in teaching English in curriculum 2013 by English teacher of SMP N 1 Gringsing.
5. Making a note during the observation was on going.
6. Analyzing and making conclusion based on the observation.

This study used a method of descriptive of analysis data because this research aims in describing the implementation of scientific approach in the class.

In this case, the writer will be analyzed the data based on Miles and Huberman (1994:10-12) into some stages:

1. Data Reduction

- a. Analyzing each recording based on the date, time, grade, theme of the subject matter that was ongoing. Here, the writer identified the first teacher until finish and will be continued to analyze the second teacher.
- b. Clarifying for each problem, they were implementation of scientific approach in English teaching of SMP N 1 Gringsing, the problems faced by the teachers and students in English teaching, and the teachers' solution.
- c. Reducing the words that often appear in each problem above in form summarizing. For example, there were six meeting, in the first until six meeting of opening step will be found the words of the teachers greeted the students. Then, the words were reduced and will be

written one time in summarizing process.

2. Data Display

This phase presented the result of the analyzing and summarizing of each problem, they were the implementation of scientific approach in English teaching of SMP N 1 Gringsing, the problems faced by the teachers and students in English teaching, and the teachers' solutions.

3. Conclusion Drawing/ Verification

The phase was making a summary for each problem; they were the implementation of scientific approach in English teaching of SMP N 1 Gringsing, the problems faced by the teachers and students in English teaching, and the teachers' solutions.

## FINDINGS AND DISCUSSION

### 1. The Implementation of Scientific Approach in teaching and learning process applied by two English teachers

Based on the observation result, the writer did the observation with two English teachers and the result of the activities on that day as follows:

- a. Opening

In this opening activity, the writers identified the two English teachers of SMP N 1 Gringsing. The activities that was done by the two English teachers such as greeting the students, asking students' conditions, checking students' attendance, and starting the lesson. Furthermore, the second teacher, she gave an additional apperception to their students by giving some questions before going to the lesson. Meanwhile, Sugiyar et al. (2009) in Sumantri (2015:4) states that the beginning activity of teacher is asking the students' conditions, asking the student about the material that was learnt in the previous meeting, giving apperception, and giving motivation. It means that the way the teachers did in the opening activity was running well, although only the second teacher that was given apperception to their students.

b. Main activities

1) Observing

Based on the observation result, the writer identified that in this step, the

first teacher finished the observing activity by giving a video of "Narrative Text" entitled "The Ant and the Dove". Then, she also gave an example through some pictures in LCD projector. The students were asked to observe the text on the textbook by reading, and repeat the text after the teacher said. On the other hand, the second teacher did the observing activity by asking the students to read and observe the text of "My lovely house". It can be concluded that the activities had been done by the students and also the teachers worked well because the way they did appropriate with the procedures. Moreover, the teachers gave the students opportunity to observe, to read and listen in the observing step.

2) Questioning

After seeing the teaching and learning process did by two English teachers. This step found the two English teachers



gave their students opportunity to make a question related with the material that was learnt. As stated by Permendikbud Number 81 A of 2013 explains that the activity of the questioning step such as propose a question about the material that was not understand yet. Furthermore, the teachers tried to encourage or direct the students to be brave in questioning step.

### 3) Exploring

Exploring step is the third step of scientific approach after observing and questioning. Here, the two English teachers have different way in exploring step. The students were asked to collect the additional information from the teacher by giving them the tasks. Sometimes the teacher wrote it on the white board, showed in the LCD projector, in the students' handbook. In addition, the second teacher, she divided the students into some groups and the students should find the difficult word based on the text

of "My Lovely House". Meanwhile, Majid and Rochman (2014:91) argue that the activity in exploring step there are three phase, they are preparation, implementation, and follow up. In line with this, the first teacher and the second have success in this exploring step because both of them did the three steps above.

### 4) Associating

Associating is the fourth step in the scientific approach. In this stage, the students continued the activity from exploring step that they analyzed the assignment or task was given by the teachers. Here, the students were given opportunity to discuss with their group or their colleague. Meanwhile, Daryanto (2014:71) clarifies that from the associating step the students are expected to agglomerate the various idea or event, then they can memorize it. That can be seen from the class observation result, that the teachers gave the students task in different

pattern. So the students can recognize the new words.

#### 5) Communicating

In this part, the teachers gave the students opportunity to present their works by reading a text or write their result on the whiteboard. But in the first meeting and fifth meeting on the first teacher that she could not finish this step in the learning process of “Narrative Text” because the time was not enough, so the teacher continued in the next meeting. Meanwhile, according to Hind Sha Putri with research paper entitled “English Teacher’s Perception toward Scientific Approach in Curriculum 2013 at SMK N 7 Semarang Academic Year 2013/2014. Her result of the research said that they have not applied the last step was communicating, because of the inability in the management. It can be concluded that the main activities is not always finish

in one meeting, because it depends on the material that will be learnt.

#### c. Closing

In this stage, the two English teachers close the class by concluding the material that they have learnt on that day with their students. Sometimes the teachers reviewed the lesson by asking some questions to the students. Then, the teachers gave home assignment related with the material, and students should submit it in the next meeting. Furthermore, before leaving the class the teachers said “thank you” and “*Walaikumsalam*” to the students to close the lesson on that day. Permendikbud Number 81 A of 2013 (page 14) state that in the closing activity the teacher and students make a conclusion based on the material that was learnt, give feedback toward the teaching learning process on that day, and convey the material that will learn on the next day. In short, in the closing activity was done by two English teachers and it worked well, although the

teachers forgot to convey the material for the next day.

## **2. Problems faced by the teachers and students in implementing scientific approach in English teaching**

### **a. Problems of the teachers**

The problems of the teachers in the beginning of the opening step, both of the first teacher and second teacher have different way in teaching. The second teacher gave scaffolding by giving some questions to students, and the first teacher did not do that. the teachers often give same instruction in the exploring and associating step such as giving same questions but different pattern (written and orally). Then, the teachers were lack in the media of teaching learning process, so it made students bored because of monotonic. In line with this, there was a research was conducted by Hind Sha Putri entitled "English Teachers' Perception towards Scientific Approach in Curriculum 2013

at SMK N 7 Semarang Academic Year 2013/2014. Her result of the research shows that there were some problems faced by the teachers. In the main activity they have not applied the last step was communicating because of inability in main time management.

### **b. Problems faced by the students**

There were many problems faced by the students such as they felt difficult in arranging the question, they felt nervous, afraid, ashamed when they were presented their work in front the class, they thought that if they made a mistake in arranging the English sentence. In addition, they still felt difficult in translating English especially new words into Indonesia.

## **3. Teachers' solutions**

The two English teachers helped the students by giving direction to open their dictionary, sometimes the teachers corrected their pronunciations if wrong; then the teachers always give an opportunity to their students to be

brave in questioning step no matter if it is wrong; the teachers always support the student to be active in teaching and learning process especially in each step of scientific approach.

## CONCLUSION

The Implementation of Scientific Approach in teaching and learning process applied by two English teachers of SMP N 1 Gringsing, Kendal worked well although there were some problems encountered by both teachers and students. The problem faced by the teachers was in the opening steps; that is lack of questions given to the students. Meanwhile, the problems faced by the students are that they felt difficult in arranging the question and they felt nervous, afraid, ashamed when they presented their work before the class.

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