

**THE IMPLEMENTATION OF SCIENTIFIC APPROACH IN TEACHING  
ENGLISH AT THE 8<sup>TH</sup> GRADE OF SMP NEGERI 1 COLOMADU  
IN 2014/2015 ACADEMIC YEAR**



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**THE IMPLEMENTATION OF SCIENTIFIC APPROACH IN TEACHING  
ENGLISH OF 8<sup>TH</sup> GRADE AT SMP NEGERI 1 COLOMADU  
IN 2014/2015 ACADEMIC YEAR**

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**ABSTRACT**

Tatag Pamilih Guntoro/A320110018. **THE IMPLEMENTATION OF SCIENTIFIC APPROACH IN TEACHING ENGLISH OF 8<sup>TH</sup> GRADE AT SMP NEGERI 1 COLOMADU IN 2014/2015 ACADEMIC YEAR.** Research Paper. Teacher Training and Education Faculty, Muhammadiyah University of Surakarta. July, 2015.

Scientific is a modern term in learning world to motivate and develop the learners. Using scientific approach, it is expected that the students think scientifically, logically, critically and objectively in accordance with the facts. This research aims at finding out the implementation of scientific approach in teaching English at SMP Negeri 1 Colomadu, specifically it is to describe i.e. the learning objective, instructional material, method implemented by the English teacher, the procedure of the method applied, and the evaluation and problems faced by the teacher in implementing scientific approach in teaching English at SMP Negeri 1 Colomadu, in 2014/2015 academic year. The data of this research are collected in the form of field notes, lesson plan, syllabus, assessment form, and interview notes. The writer takes English teacher and eighth grade students of SMP Negeri 1 Colomadu as the subject of this research. The writer uses descriptive qualitative research especially spiral research in analyzing the data. The result of the study shows that the teacher used inquiry-based learning as the method in the implementation of scientific approach. The English teacher of the eighth grade students at SMP Negeri 1 Colomadu uses authentic assessment in the evaluation.

*Keywords: implementation, scientific approach, teaching English*

## **A. INTRODUCTION**

Language is an important means of communication to communicate with other people. There are many kinds of language used by people in the world, such as, French, Dutch, Spanish, English, Japanese, Mandarin, and other. In this global era, people who want to be successful should be able to master English. Because English is used in most fields and needs, such as economic trades, politics, science, technology, education, and many more.

The global era that is full of uncertainty and competition make people must be ready to face the uncertain change. There are many challenges in the future, especially for developing country like Indonesia. To anticipate that situation, especially in the free market ASEAN country, AFTA (Asia Free Trade Area), APEC (Asia Pacific Economic Cooperation), etc. human skills, intellectual are needed. English as an international language can be used to make an international relationship, getting social education purpose, and completing competence.

In Indonesia, the National Department of Education states that English is the first foreign language. Because of the position of the language in Indonesia, English, therefore is only functioned as (1) the medium of international communication, (2) the medium of Indonesia language development, and (3) as an instrument to develop and to improve many fields particularly in science and technology for the sake of the Indonesian development. From that policy, English is taught from elementary school until university level.

English, as an international language is very important to learn by the students. In Indonesia, it is taught from elementary schools to higher education level (SMP, SMA, and University). It is aimed at developing the student's abilities to absorb and disseminate the important information through listening, reading, speaking, and writing of which the implementation is integrated (Sardiman, 2001:1).

The Ministry of education and culture of Indonesia has recently published the new curriculum, it is called the 2013 curriculum. This reform is based on the Ministry of Education Regulation no.32 year 2013 about the

change of Ministry Regulation no.19 year 2005 about the National Education Standards. The 2013 curriculum replaced the previous one, KBK (*Competency Based Curriculum*). With this new curriculum, it is expected that Indonesia can promote its national education. The new curriculum, among other things, is intended to authorize teachers to develop down to earth learning activities relevant to the learners' need, based on actual condition of the school, and the necessity to link it to the environment. This approach is called a scientific approach.

Curriculum 2013 emphasizes the modern pedagogical dimension in learning to use a scientific approach as the main catalyst or devices. Scientific approach is believed to be the golden bridge growth and development of attitudes, skills, and knowledge of learners in approach or work processes that meet the scientific criteria. Kemendikbud (2013) gives the conception that scientific approach in learning includes components: 1). *observing*, 2). *questioning*, 3). *gathering information or experimenting*, 4). *associating or information processing*, 5). *communicating*. The application of the scientific approach can be done in accordance with the creativity of teachers, although there has been a teacher book. Teachers can develop their own according to the circumstances of learners and their schools.

## **B. RESEARCH METHOD**

In this research, the writer use descriptive qualitative method. Qualitative method often involves no statistical analysis; it is associated with hypotheses generating and developing an understanding. Qualitative method collects the data through the observation and then come up with a theory account for the data. It looks for hypotheses or theories that can explain the data collected or the facts, which are observed. Thus, qualitative method is focused in the process (Moleong, 1991:4-5).

Moleong (1990:3) states that Qualitative research is a certain tradition in the social knowledge fundamentally depends on the observation concerning to human in their region and the phenomenon. Besides it tries to

describe and present the data got from the teacher what are the procedure for implementing scientific approach and what are the problems faced in implementing scientific approach in teaching English at SMP Negeri 1 Colomadu.

This study is conducted to the teacher and the eighth grade students of SMP Negeri 1 Colomadu. There are 7 classes of the eighth grade students of SMP Negeri 1 Colomadu. The total students are almost 285 students. The object of this study is the implementation of scientific method which seeks for the proper procedures, in teaching learning of English at eight grades of SMP Negeri 1 Colomadu.

The sources of the data are taken from an event, interview and observation. Sources of data are all elements of teaching learning process committed by teacher and students. The sources are:

### **1. Event**

The event includes the teaching learning process, to know the implementation of scientific approach in teaching English at SMP Negeri 1 Colomadu.

### **2. Interview**

Interview is done to get further information or data. Hadi (1984:226) states that interview is a method for collecting data by questioning and answering to get the purpose.

### **3. Observation**

According to Richards and Lockhart (1994:12) observation involves visiting a class to observe different aspect of teaching. Here, the observation is a way of gathering information about the teaching-learning processes.

In analyzing the data, the writer uses the concept of analyzing data proposed by Sutopo (2000: 91), who states the three steps of data analysis. The three steps are data reduction, data description, and conclusion also verification. The steps are explained as follows:

- a. Data reduction is aimed at selecting, simplifying, and abstracting the data from the field if conducted to get the simple and valid information in order to make conclusion.
- b. After reducing the data, the writer makes a description of the information in the form of sentences. The sentences are arranged logically and systematically. So, the description of the real condition is explained to answer the problems.
- c. The last step is concluding and verifying the information by drawing conclusion, possible configuration, cause, and effect, and other proportion. The verification is done by rechecking the data, information, and the conclusion to draw valid final conclusions.

### **C. RESEARCH FINDING AND DISCUSSION**

#### **a. Research Finding**

##### **1) The implementation of scientific approach in SMP Negeri 1 Colomadu**

###### **a) Learning objective**

Based on observation and documentation, the writer finds that the learning objectives of teaching learning process in SMP Negeri 1 Colomadu refers to the Curriculum. And also from the document such as syllabus and lesson plan. In the teaching learning process, the learning objective in SMP Negeri 1 Colomadu is divided into two, namely; general objective and specific objective.

###### **b) Instructional material**

Based on the observation in the class during the English teacher teaching, the writer knows that the English teacher in SMP Negeri 1 Colomadu using text book to teach the students and it is as the student's handbook. The textbook that used in the first semester is *When English Rings a Bell* Published by *Kementerian Pendidikan dan Kebudayaan, 2014* for the eighth grades. And then in the second semester, the teacher used worksheet book "*Lembar Kerja Siswa*"

Published by Tim MGMP Bahasa Inggris Karanganyar. This book is completed by many exercises. The second kind of instructional material is unprinted material. Some example of unprinted material there are cassette or audio material, videos, computer-based material and LCD (Liquid Crystal Display).

**c) Method Implemented by the English Teacher**

Based on the observation in teaching-learning activities from the observations in VIII class of SMP Negeri 1 Colomadu in 2014/2015 academic year, the writer found that the English teacher (Mrs. KSM.) usually uses inquiry-based learning to teaching English.

Inquiry-based learning is a form active, discovery or exploratory learning, the student are suggested to look for the problem, make hypothesis and the solve the problem themselves. They have a big role in the learning process than he teacher, because the teacher has a role as a translator to them. So, the student work and practice actively in teaching learning process.

**d) Procedure Inquiry Based Learning**

Based on observation and documentation (18<sup>th</sup> May – 3<sup>rd</sup> June, 2015), the writer found the techniques which were applied by English teachers at SMP Negeri 1 Colomadu such as Lecturing technique, reading aloud, questioning technique, translation and discussion. There are three steps in the classroom activities. First is pre-teaching, second is whilst-teaching, and the last is post- teaching.

**a) Pre-teaching**

Pre-teaching is one of activities which is done to open teaching-learning process. Pre-teaching consists of some activities; there are praying together, greeting, and preparing the lesson. First, the teacher walks to the classroom and conditioning the class, and prays together. After listening the pray, the teacher greets the students. After that, the teacher starts speaking by adding some vocabularies for daily conversation.

b) Whilst-teaching

There are five phases in whilst-teaching as follows:

- (1) Observing: students observed example the text which were presented by the teacher with Liquid Crystal Displays (LCD). In this phase, the teacher used lecturing technique to explain the text. Sometime, here the teacher also uses reading aloud technique.
- (2) Questioning: In this stage, the teacher tries to help the students to make a question. Students asked the teacher what they did not know about materials such as generic structure or social function of recount text. This phase, the teacher used questioning technique. In this technique, the teacher always helps students if they have difficulties.
- (3) Gathering information or experimenting: Students were given same materials with different example of text. In this stage, the teacher gives explanation about the text. The students learn about some examples of recount text, and then the teacher asked to the students to answer the question about the text and also translate the text into bahasa Indonesia. In this phase, the teacher used lecturing technique.
- (4) Associating: Students discussed and asked the questions to each other about the materials. In this phase, the teacher commands to the students to read a recount text. Then, the students must answer the question based on the text.
- (5) Communicating: The students present the result of their work. The teacher asked to the students to come forward the class to present their result. The teacher used lecturing technique to evaluate the materials.

c) Post-teaching

Post-teaching is the last activity to end the teaching-learning process in the classroom. Teacher gives homework to

students before end the teaching-learning process. The next, the teacher close the lesson by saying; “*wassalamu’alaikum warahmatullahi wabarakatuh*, good bye and see you next lesson.”

**e) Evaluation**

The evaluation used in teaching English in SMP Negeri 1 Colomadu is to know the student’s progress. Based on the observation and interview, the English teacher used authentic assessment. By using authentic assessment, the data can give description on students’ development based on fact.

**2) Problems which are Faced by the Teacher in Implementing Scientific Approach at SMP Negeri 1 Colomadu**

There are some problems which are faced by the English teacher in the implementation of scientific approach in teaching English. From the observation and interview, the writer found some problems as follows:

a. The teacher’s limited knowledge of scientific approach

She gets understanding of scientific approach through seminar and training from the Ministry of Education in their region, however it is still new for junior high school to understand about the concept of scientific approach and hard to implementing all the steps in teaching learning process. In teaching learning process the teacher must be able to manage the classroom activities, because she/he has responsibilities for all activities in English lesson. She must control the classroom every time. The English teacher of SMP Negeri 1 Colomadu also have problem with the limited time to give all the materials with all steps of scientific approach. And the teacher can’t maximum in the scoring assessment.

b. The student’s capability

Although the teacher uses many tricks to teach, the students still feel difficult to remember and to read them well. The students are still

confused to understanding the meaning of the word it is because of their language background and they have not English background before. The students of SMP Negeri 1 Colomadu does not have the same background in English, this is make a problem to the teacher to teach them. In this case the teacher should be lead the students slowly and give more attention to the students to make their easier to understanding on the teacher explanation.

#### **b. Discussion Finding**

There are some components which writer discusses in the research finding.

First, based on the research finding, the writer concludes that the learning objectives of teaching learning process in SMP Negeri 1 Colomadu are refers to the Curriculum. And also from the document such as syllabus and lesson plan. In the teaching learning process, the learning objective in SMP Negeri 1 Colomadu is divided into two, namely; general objective and specific objective.

Second, The materials that used by the English teaches is printed material which taken from book. The textbook that used in the first semester is *When English Rings a Bell* Published by *Kementarian Pendidikan dan Kebudayaan, 2014* for the eighth grades. And then in the second semester, the teacher used worksheet book "*Lembar Kerja Siswa*" Published by Tim MGMP Bahasa Inggris Karanganyar. The teacher also takes another material from download on the internet. Based on the research finding, the writer concludes that the material is used by the teachers in SMP Negeri 1 Colomadu is suitable with Richard's Theory, which is using printed material such as textbook as source of study, and unprinted material from the internet.

Third, based on the research finding, the English teacher uses inquiry based learning as the method and the teacher also used some technique such as lecturing, reading aloud, translation, discussion,

answering question in teaching English to the eight grade student at SMP Negeri 1 Colomadu.

Fourth, there are three steps in the teaching technique that used by the English teacher. First is pre-teaching, second is whilst-teaching, and the last is post- teaching. Whilst-teaching consists of five phases, namely 5M in Indonesia, there are: observing, questioning, gathering information or experimenting, associating, and communicating.

Fifth, based on the research finding, the English teacher at SMP Negeri 1 Colomadu used authentic assessment in the evaluation. By using authentic assessment, the data can give description on students' achievement, motivation, and attitude based on fact. The English teacher of SMP Negeri 1 Colomadu also uses several assessments such as, daily assignment, quizzes, Porto-folio assessment and Formal testing. The formal testing in SMP Negeri 1 Colomadu is divided into two, named as mid test and final test.

Sixth, there are some problems which are faced by the English teacher in the implementation of scientific approach in teaching English, the first problem is the teacher' limited knowledge of scientific approach. The teacher must be able to manage the classroom activities, because she/he has responsibilities for all activities in English lesson. She must control the classroom every time. The teacher also have problem with the limited time to give all the materials with all steps of scientific approach. And the teacher can't maximum in the scoring assessment. The second problem is the students' capability. The students does not have the same background in English, this is make a problem to the teacher to teach them. The students have less of motivation to learn more actively.

Finally, the researcher concludes that based on the discussion above, there is compatibility between research finding in SMP Negeri 1 Colomadu and the Fauziati theory of Inquiry based learning. Inquiry based learning in SMP Negeri 1 Colomadu changes from teacher-centered approach. The teacher has role as a facilitator for the students.

Inquiry is defined as a seeking for truth, information, or knowledge by questioning. It can make student to think logically, student more active. By experimenting, student can collect the information by themselves. The procedure in English teaching is suitable with the theory of learning cycle of scientific approach.

However the implementation of inquiry-based learning method in SMP Negeri 1 Colomadu has some weaknesses such as it is difficult to control the activities and the learners, it takes a long time to implementing and difficult to adapt with this approach.

#### **D. Conclusion**

The writer can draw the conclusion based on the result of research finding concerning the implementation of scientific approach in teaching English at SMP Negeri 1 Colomadu. It can be concluded as follows:

1. The learning objectives of teaching English in SMP Negeri 1 Colomadu are divided into two, namely; general objective and specific objective. General objective in SMP Negeri 1 Colomadu is based on the curriculum and syllabus. The specific objective in SMP Negeri 1 Colomadu is the learning objective, which is developed by the school itself but it is depending on the curriculum.
2. The instructional materials in teaching English, the English teachers in SMP Negeri 1 Colomadu used two kind of instructional material namely, printed material such as textbook, worksheet book as source of study, and unprinted material that downloaded from the internet or other resources to access the material that needed by the students.
3. The English teacher uses inquiry based learning as the method and the teacher also used some technique in teaching English to the eight grade student at SMP Negeri 1 Colomadu. There are three steps in the teaching technique that used by the English teacher. First is pre-teaching, second is whilst-teaching, and the last is post- teaching. Whilst-teaching

consists of five phases, namely observing, questioning, gathering information or experimenting, associating, and communicating.

4. In the procedure of inquiry based learning, the teaching learning process divided into three steps, there are; 1.) Exploration, 2.) Elaboration and, 3.) Confirmation. The English teachers in SMP Negeri 1 Colomadu are implementing scientific approach when they teach in the classroom. In teaching learning activity there are five phase in teaching learning of scientific approach, they are implementing 5M namely: Observing, Questioning, Experimenting, Associating, and Communicating. The procedure in English teaching is suitable with the theory of learning cycle of scientific approach.
5. The English teacher at SMP Negeri 1 Colomadu used authentic assessment in the evaluation. The English teacher of SMP Negeri 1 Colomadu also uses several assessments such as, daily assignment, quizzes, Porto-folio assessment and Formal testing. The formal testing in SMP Negeri 1 Colomadu is divided into two, named as mid test and final test.
6. There are some problems faced by the teacher in teaching English. The first problem is the teacher, the teacher must be able to manage the classroom activities, because she/he has responsibilities for all activities in English lesson. She must control the classroom every time. The English teacher of SMP Negeri 1 Colomadu have problem with the limited time to give all the materials with all steps of scientific approach. And the teacher can't maximum in the scoring assessment. The second is classroom activities, in the classroom activities, although the teacher uses many tricks to teach, the students still feel difficult in English. The students are still confused to understanding the meaning of the word. The student is usually walking around the class if they have problem, they asks each other to get the information. And the third is the student, the students of SMP Negeri 1 Colomadu do not have the same

background in English, that is make a problem to the teacher to teach them. The students have less of motivation to learn more actively.

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