

## TEACHER'S BELIEF TOWARD THE IMPLEMENTATION OF SCIENTIFIC APPROACH IN 2013 CURRICULUM AND ITS PRACTICES ON ENGLISH CLASSROOM

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**Keyword :**

Teacher's belief,  
scientific approach,  
2013 curriculum,  
English classroom.

**Abstract.** This research aims to investigate the teacher's belief toward the implementation of scientific approach in 2013 curriculum and its practices in English classroom, how those beliefs are reflected in their classroom practices, and the factors influencing those beliefs and practices. The researcher applied descriptive qualitative design by using opened questionnaire as the instrument. The results of this study showed that: (1) most of teacher had already understood the concept of scientific approach; (2) there are several problems arose in the implementation of scientific approach of 2013 curriculum in English classroom or its practices; and (3) factors which influence teachers thought related to the implementation of scientific approach in English classroom are time allotment, teacher's understanding toward their role in teaching learning process, learning media, facilities, and motivation for both teacher and student.

DOI :

10.30595/jssh.v3i2.2954

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### I. INTRODUCTION

#### a. Background

Nowadays, the implementation of 2013 curriculum which concerns on applying scientific approach is being a topic discussion by teachers in Indonesia. Some of teachers agree in implementing 2013 curriculum in the class, but some of them disagree. It happens due to problems faced by teachers while implementing 2013 curriculum in the class. On the other hand, in 2014, the Ministry of Education and Culture number 103 claims that all schools should implement 2013 curriculum and conduct the scientific approach in teaching learning process. However, the implementation of this 2013 curriculum in English classroom is not as easy as it seems.

In 2016, there are several schools which

are consistent in using 2013 curriculum with several standard proposed by government. Meanwhile, the other schools that cannot meet the standard should implement the previous curriculum which is called the school-based curriculum or 2016 curriculum. That is why, this policy becomes one of the consideration itself for teacher, especially in teaching English classroom.

The researcher found two related studies which are relevant to the objectives of the present study. The first related study comes from Sahiruddin (2013), He wrote an article entitled "The Implementation of the 2013 Curriculum and the Issues of English Language Teaching and Learning in Indonesia". Sahiruddin stated that the implementation of 2013 curriculum seems

to be promising if Indonesian government put maximum efforts through policy and budgeting to really resolve many constraint in Indonesia ELT practices. He also said that some common ELT problems in Indonesia are students' lack of motivation, poor attitude toward language learning, big class size, unqualified teachers, and cultural barriers for teachers to adopt new role of facilitator.

The next related study proposed by Kartikawati (2015), who conducted a study on "The Implementation of Scientific Approach in Teaching English of SMP Muhammadiyah 10 Surakarta". She found that the implementation of scientific approach in SMP Muhammadiyah 10 Surakarta is not completely in line with the process standard. Moreover, the teachers in SMP Muhammadiyah 10 Surakarta still confused to teach English using scientific approach therefore they are not always use all steps of scientific approach in teaching learning activities.

Based on the explanation above, the researcher analyzes that the implementation of scientific approach in 2013 curriculum arose pro and contra. Therefore, the teacher's belief about the implementation of scientific approach in 2013 curriculum is a pivotal aspect that need to be examined by the researcher. According to Borg (2001: 186), belief is a proposition which may be consciously or unconsciously held, evaluative in that it is accepted as true by the individual, and therefore imbued with emotive commitment; further it serves as a guide to thought and behavior. Then, comprehending this problem in a very deep understanding is also needed for teacher, educators, and academician. Therefore, this research would like to investigate the teacher's belief toward the implementation of scientific approach in 2013 curriculum and its practices in English classroom, how those beliefs are reflected in their classroom

practices, and the factors influencing those beliefs and practices.

Teachers participating in this study will benefit from the experience of reflecting their teaching beliefs and practices, particularly in the area of implementing scientific approach in 2013 curriculum in English classroom. The findings of the study will hopefully contribute to them (and to other teachers) with useful insights for their future teaching practices. This study is also expected to provide additional information to the existing studies about teacher's belief of the implementation of scientific approach in 2013 curriculum in English classroom, contribute to an understanding of how teachers' beliefs influenced the interpretation of their teaching practice and how they use this interpretation to teach.

## **b. Review Of Related Literature**

### **1. Belief in Teaching Context**

Richardson (in Hofer & Pintrich, 1997: 112) states that beliefs are thought of as psychologically-held understandings, premises or propositions about the world that are thought to be true. Moreover, Canh and Barnand (2009: 247) states that the relationship between teachers' beliefs and instructional practices has increasingly attracted educational researchers' attention. In general, research on teachers' thought processes is based on the three major assumptions: (1) teaching is largely influenced by teacher cognition, (2) teaching is guided by teachers' thoughts and judgements, and (3) teaching constitutes a high-level decision-making process (Sabiq, 2013:13).

Borg (2001: 186) states that the concept of belief becomes clearer if some common features of its definition are considered:

1. The truth element – drawing on research in the philosophy of knowledge, a belief is a mental state

which has as its content a proposition that is accepted as true by the individual holding it, although the individual may recognize that alternative beliefs may be held by others.

2. The relationship between beliefs and behavior – most definitions of belief propose that beliefs dispose or guide people’s thinking and action.
3. Conscious versus unconscious belief – on this point there is disagreement, with some maintaining that consciousness is inherent in the definition of belief, and others allowing for an individual to be conscious of some belief and unconscious of others.
4. Beliefs as value commitment – many definitions of belief recognize an evaluative aspect to the concept.

Borg (2009: 2-3) also summarizes what is generally accepted today about the nature of teacher cognition and its relationship to what teachers do:

1. Teachers’ cognition can be powerfully influenced by their experiences as learners;
2. These cognitions influence what and how teachers learn during teacher education;
3. They act as a filter through which teachers interpret new information and experience;
4. They may outweigh the effects of teacher education in influencing what teachers do in the classroom;
5. They can be deep-rooted and resistant to change;
6. They can exert a persistent long term influence on teachers’ instructional practices;
7. They are, at the same time, not always reflected in what teachers do in the

classroom;

8. They interact bi-directionally with experience (i.e. beliefs influence practices but practices can also lead to changes in beliefs).

## 2. Scientific Approach

According to Handelsman, et al. (2004: 522), scientific teaching approach is a pedagogical approach used in classrooms whereby teaching is approached with the same rigor as science at its best and it involves active learning strategies to engage students in the process of science and teaching methods that have been systematically tested and shown to reach diverse students. Moreover, Fauziati (2014: 156) state that there are five main steps of scientific approach used in the classroom, they are: (1) Observing, this includes activities such as reading, listening, scrutinizing, and watching (with or without a device). These are intended to develop students’ attitude such as seriousness, thoroughness, and curiosity in looking for information; (2) Questioning, this step used to develop the students’ creativity, curiosity, and the ability to formulate questions to develop critical thought necessary for intelligent living and lifelong learning; (3) Gathering information or experimenting, the purpose is to develop the students’ attitudes such as meticulousness, honesty, politeness, tolerance and to develop the students’ ability to communicate, to implement information gathered through a variety ways to learn, develop study habits and lifelong learning; (4) Associating or information processing, the aim of this step is to develop students’ attitudes such as honesty, thoroughness, discipline, obedience, hard work, as well as to develop the students’ ability to apply the procedures; and (5) Communicating, the purpose of this activity is to develop the students’ attitudes such as honesty,

thoroughness, tolerance, as well as to develop their ability to think systematically and to express their idea briefly but succinctly, and to develop their language skills.

### 3. 2013 Curriculum

According to Mulyasa (2013), 2013 curriculum is a competency-based curriculum which emphasizes the development of ability to perform tasks with certain performance standard. This curriculum is based on character and competence that is expected to produce productive, creative, and innovative human.

Mulyasa (2013) claimed that there are several characteristics of 2013 curriculum as follows: (1) 2013 curriculum uses the overall of learning resources; (2) 2013 curriculum emphasizes a field experience to familiarize the relationship between teachers and students; (3) 2013 curriculum prioritizes a personal individualized learning strategies; (4) In 2013 curriculum, easiness is provided through a combination of personal individualized learning with field experience, and team learning; (5) In 2013 curriculum, the students will be able to learn the materials well and achieve the goal by using a learning strategy which is called as complete learning.

Mulyasa (2013) also claimed that there are three advantages of curriculum 2013, as follows: (1) The 2013 curriculum uses a natural approach (contextual) because it starts, focuses, and ends to the essence of the learners to develop skills and competences in accordance with their own potential; (2) The curriculum 2013 which has competency-based character may underlie the development of other capabilities; (3) There are fields of study or particular subjects in which the development is better to use competence approach.

### 4. Related Studies

The researcher found two related

studies which are relevant to the objectives of the present study. Those are discussed below:

Sahiruddin (2013) wrote an article entitled "The Implementation of the 2013 Curriculum and the Issues of English Language Teaching and Learning in Indonesia". He stated that the implementation of 2013 curriculum seems to be promising if Indonesian government put maximum efforts through policy and budgeting to really resolve many constraint in Indonesia ELT practices. He also said that some common ELT problems in Indonesia are students' lack of motivation, poor attitude toward language learning, big class size, unqualified teachers, and cultural barriers for teachers to adopt new role of facilitator.

The next related studies is Kartikawati (2015), who conducted a study on "The Implementation of Scientific Approach in Teaching English of SMP Muhammadiyah 10 Surakarta". She found that the implementation of scientific approach in SMP Muhammadiyah 10 Surakarta is not completely in line with the process standard. Moreover, the teachers in SMP Muhammadiyah 10 Surakarta still confused to teach English using scientific approach therefore they are not always use all steps of scientific approach in teaching learning activities.

Following the related studies above, the researcher analyzes that the implementation of scientific approach in curriculum 2013 still found pro and contra. And it is a need to know the teacher's thought related to its practice in English classroom today. Therefore, this study focus on teacher's belief toward the implementation of scientific approach in curriculum 2013 and its practices in English classroom.

## II. METHOD

This research was conducted in May,

2016. The participants of this study were 13 teachers. They are from all level of teaching, 30.8% from elementary school; 15.4% from junior high school; 23.1% from senior high school; 23.1% from vocational high school; and 7.7% from other. They were selected through purposive sampling. According to Lewis and Ritchie (2003: 79), purposive participants are members of a sample which are chosen with a purpose to represent a type in relation to a key criterion. It were used to ensure that all the key constituencies of relevance to the subject matter are covered.

In order to investigate teachers' beliefs in implementing scientific approach in 2013 curriculum in English classroom in a very deep understanding, this research will use descriptive qualitative as its research methodology. And open questionnaire is used as the instrument of collecting the data. Moreover, in analyzing qualitative data, the researcher used 3 steps, those are: organizing and familiarizing, coding and reducing, and interpreting and representing (Ary et al, 2010:481).

### III. RESULTS AND DISCUSSION

In understanding the concept of scientific approach in 2013 curriculum, the data showed that only 5 teachers understood well, 7 teachers were less understand, and 1 teacher did not understand about it at all although 8 from 13 teachers had already implemented 2013 curriculum in their school. Moreover, in describing a brief concept of scientific approach, most of them showed variety answer of it. Those answers were (1) scientific approach is learning English which used scientific steps did by students; (2) this approach is applied in order to make the students become active in teaching learning process into several activities like observing, formulating questions and hypotheses, collecting

information, analyzing the data, communicating the finding, and creating some creation; (3) scientific approach is inquiry learning; (4) this approach emphasizes on authentic assessment; (5) scientific approach makes students become productive, active, and creative through attitude, skill and knowledge which are being integrated; (6) This approach also expected to make students to be a scientific, logic, critical, and objective thinker according to the fact beyond them.

The finding of study showed that most of teacher had already understood the concept of scientific approach. Handelsman, et al. (2004: 522) stated that scientific teaching approach is a pedagogical approach used in classrooms whereby teaching is approached with the same rigor as science at its best and it involves active learning strategies to engage students in the process of science and teaching methods that have been systematically tested and shown to reach diverse students. Based on the explanation above, the researcher concluded that the teachers' understanding about the concept of scientific approach is suitable with Handelsman, et al Theory.

However, several problems arose in the implementation of the concept of scientific approach of 2013 curriculum in English classroom or its practices. As we know, there are 5 stages that need to be implemented in the class such as; observing, questioning, experimenting, associating, and communicating. One of the stages, questioning, becomes problem faced by teacher. Fauziati (2014:156) stated that questioning is used to develop the students' creativity, curiosity, and the ability to formulate questions to develop critical thought necessary for intelligent living and lifelong learning. Meanwhile, in the practices teachers believed that students were not ready yet because they

still shy and reluctant to participate or to be active in the English class especially in asking question. And it makes students difficult to be a critical thinker.

Moreover, based on the findings, teachers believed that some students also have difficulty in collecting information, doing experiment, and processing the information in English classroom which included in experimenting and associating stages. Fauziati (2014: 156) stated that gathering information or experimenting is used to develop the students' attitudes such as meticulousness, honesty, politeness, and tolerance; and to develop the students' ability of communication, to implement information gathered through the variety ways to learn, develop study habits and lifelong learning. Then, She also explained that associating or information processing has aim to develop students' attitudes such as honesty, thoroughness, discipline, obedience, hard work, as well as to develop the students' ability to apply the procedures. Here, the students still need a guidance from the teacher to participate in those stages, meanwhile it supposed to be done by themselves. As a result, some of teachers believed that the implementation of scientific approach is not appropriate in English classroom. They think five stages of scientific approach in 2013 curriculum are more appropriate to be implemented in science class rather than English class.

Furthermore, teachers believed that there are some factors influence their thought related to the implementation of scientific approach in English classroom. First, the limit of the time in presenting a big amount of material in the class become one of the factors that cause a problem for teacher to follow five aspects of scientific approach. As we know, in context of ELT in the 2013 curriculum, the time allotment for English subject at schools is reduced. Second, teachers still did not understand about their role in teaching learning process

using 2013 curriculum. Meanwhile, in 2013 curriculum, teachers' role in the class changes from being information center to be facilitator (Sahiruddin, 2013:571). Third, learning media and facilities which are limited also become one of the factors. And the last factor is motivation for both teacher and student to know the essence of 2013 curriculum.

#### IV. CONCLUSION

Despite several factors which hamper the implementation of scientific approach, out of 13 teachers, 10 of them agree in the implementation of scientific approach in English class with a new revision. Teachers believed that this scientific approach which emphasizes in critical and logical thinking should be implemented in English class because it is a need to renew the previous curriculum although there are some aspects that need to be consider, such as teaching strategy, teaching media, facilities, time allocation, and the teacher itself. Moreover, they believed that 2013 curriculum need a lot of time of preparation by the government before it is implemented in English classroom. And the last, in term of assessment and material development, it is a need for revitalization.

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