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ENGLISH TEACHER'S ACTIVITIES IN IMPLEMENTING THE SCIENTIFIC APPROACH OF THE 2013 CURRICULUM IN TEACHING AND LEARNING PROCESS AT SMPN 3 KAMPAR

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ABSTRACT

This research was aimed to investigate the English teacher's activities and determining factors in implementing the scientific approach of the 2013 curriculum in teaching and learning process. This research used qualitative research design. The subject of this research was English teacher of SMPN 3 Kampar. The data were collected by using observation sheet, interview, and documentation. The data were analyzed by using data analysis process developed by Creswell (1998): reading, describing, classifying, and interpreting. This research revealed that observing, experimenting, and communicating stages had been implemented very well in each meeting. However, questioning stage was only able to be implemented well. The teacher had provided opportunities for the students to ask some questions by walking over and pointing at the student to ask about the lesson. But, it was only conducted in the first and second meetings. Meanwhile, the implementation of associating stage was still bad. The teacher was only able to do this stage in the third meeting by giving the students task individually. This research also revealed that teacher's motivation, perception, and experience were internal factors while media and environment were external factors influenced English teacher's activities in implementing the scientific approach of the 2013 curriculum.

Keywords: *Curriculum 2013; English teacher's activities, implementing scientific approach*

INTRODUCTION

Education plays a very important role in various aspects of life in this global era. It is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, noble character, and skills needed by themselves, society, nation and country (The Decree of Number 20, 2003 of National Education System).

This important role is identified and characterized by increasingly competitive and stiff competition in society. Furthermore, the opportunities available are not comparable to the available fields. Educated people seem to succeed in taking the advantage of this opportunity. These communities are those who have quality human resources to face the competitive competition. They have some abilities and skills to use in various activities of life.

Quality human resources can be created through schools, educational institutions as providers of formal education. Schools have gained public trust in preparing and ushering in a generation of young people to be able to compete in global competition.

To create quality schools, various policies are continuously developed by the government through the researchers or the teachers themselves. One of the policies developed by the government in this case is the implementation of the 2013 curriculum. The 2013 curriculum is a curriculum that can educate future competency, communication skills, ability to think clearly and critically, ability to consider the moral aspects of a problem (Kemdikbud, 2013). Its application is regulated in Permendikbud Number 81 A of 2013 as follows: *"To achieve quality that has been designed in the curriculum document, learning activities need to use student-centered principles, develop students' creativity, create pleasant and challenging conditions, contain values, ethics, aesthetics, logic, and kinesthetic and provide diverse learning experiences through the applications of fun, contextual, effective, efficient, and meaningful learning strategies and methods."*

In principle, learning activities are educational processes that provide opportunities for students to develop their potential into abilities that are increasingly developing in attitudes, knowledge, and skills. In learning, students are encouraged to find themselves and transform complex information, check new information with what is already in their memories, and develop into information or abilities that are appropriate to the environment, time and place where they live.

The 2013 curriculum adheres to the basic view that knowledge cannot be transferred from teacher to student. Students are subjects who have the ability to actively search, process, construct, and use knowledge. Therefore, learning must be related to the opportunities given to students to construct knowledge in their cognitive processes. In order to truly understand and be able to apply knowledge, students need to be encouraged to work to solve problems, find everything for themselves, and strive to realize their ideas. (Permendikbud, 2013: 3)

In the 2013 curriculum, scientific approach should be implemented in teaching and learning process. It contains five learning experiences such as observing, questioning, experimenting, associating, and communicating. This approach is also supported by some other innovative approaches such as problem-based learning, discovery learning, explorative learning, project-based learning, and so on. They refer to natural meaning and suitable with human nature: learner centered, authentic, contextual, and meaningful for students' lives.

In observing activity, a teacher is expected to be able to create opportunities for students to carry out reading, listening, listening, watching (without or with tools) activities. Then, in questioning activity, a teacher is expected to create opportunities for students to ask questions about information that is not understood from what is observed or questions to get additional information about what is observed (starting from factual questions to hypothetical questions). Furthermore, in collecting information/experiment, a teacher is expected to be able to provide opportunities for students to conduct experiments, read sources other than textbooks, observe objects/events/activities and interview with resource persons. After that, in associating activity, a teacher is expected to provide opportunities for students to process information that has been collected. Finally, in communicating activity, a teacher is expected to provide opportunities for students to convey the results of observations, conclusions based on the results of the analysis verbally, in writing, or other media. (Permendikbud, 2013)

SMPN 3 Kampar is one of the state junior high schools (schools managed by the government, in this case the Ministry of National Education) in Kampar Sub-district that has been a pilot project and appointed to apply the 2013 curriculum in teaching and

learning process. This school has only one English teacher. She teaches English based on the 2013 curriculum. In teaching and learning process, she has applied the scientific approach of the 2013 curriculum in her teaching and learning process. Ideally, the teaching and learning process would be run well as the 2013 curriculum expected. Unfortunately, the teaching and learning process did not run ideally as the 2013 curriculum expected. The 2013 curriculum expects that the teaching and learning process will apply student-centered principles, develop students' creativity, create pleasant and challenging conditions, contain values, ethics, aesthetics, logic, and kinesthetic and provide diverse learning experiences through the applications of fun, contextual, effective, efficient, and meaningful learning strategies and methods.

The main purpose of this study is to find out English teacher's activities and factors influence her in implementing the scientific approach of the 2013 curriculum in teaching and learning process at SMPN 3 Kampar.

Kemdikbud (2013) states that "*The 2013 curriculum is a curriculum that can educate future competency, communication skills, ability to think clearly and critically, ability to consider the moral aspects of a problemand it can be implemented successfully by using scientific approach.*"

Nurdin (2016: 301) states that *"The scientific approach to the implementation of learning is a subject of discussion that has attracted the attention of educators lately. The background is because primary and secondary education products have not yet produced graduates who are capable of critical thinking equal to the abilities of other peoples' children.*"

According to Longman (2014) in Zaim (2017: 34), *"Scientific approach is defined as the process of finding out information in science, which involves testing the ideas by performing experiments and making decisions based on the result of analysis*." It means that scientific approach is a body of techniques for investigating phenomena, acquiring new knowledge, and correcting and integrating previous knowledge. Tang et al. (2009) in Zaim (2017: 34) say that *"Scientific approach has the characteristics of "doing science". This approach allows teachers to improve the process of learning by breaking the process down into steps or stages which contains detailed instructions for conducting students learning."*

The scientific approach of the 2013 curriculum has some concepts to understand. Nurdin (2016: 305) states that "*There are some concepts we should know related to the scientific approach of the 2013 curriculum. First, learning material is based on facts or phenomena that can be explained by certain logic or reasoning; not limited to mere imagination, legend, or fairy tales. Second, Teacher explanation, student response, and teacher-student educative interaction are free from prejudice, subjective thought, or reasoning that deviates from the logical path of thinking. Third, Encourage and inspire students to think critically, analytically, and precisely in identifying, understanding, solving problems, and applying learning material. Fourth, encourage and inspire students to be able to think hypothetically in seeing differences, similarities, and other similar links from learning material. Fifth, encourage and inspire students to be able to understand, apply and develop rational and objective thinking patterns in responding to learning material. Sixth, based on accountable concepts, theories, and empirical facts. The last, learning objective is formulated in a simple, clear, and interesting way."*

In principle, learning activities are educational processes that provide opportunities for students to develop their potential into abilities that are increasingly developing in attitudes, knowledge, and skills needed for life and for community,

nationhood, and contribute to the well-being of human life. Therefore, learning activities are directed at empowering all potential students to become the expected competencies. In learning, students are encouraged to find themselves and transform complex information, check new information with what is already in their memories, and develop into information or abilities that are in accordance with the environment and times in which they live. The 2013 curriculum adheres to the basic view that knowledge cannot be transferred from teacher to student. Students are subjects who have the ability to actively search, process, construct, and use knowledge. (Permendikbud, 2013)

Harmin & Toth (2012: 37) states that *"One of the teacher's tasks is to plan learning activities that inspire all students to remain actively and involved productively. Therefore, learning must be related to the opportunities given to students to construct knowledge in their cognitive processes.*"

In order to truly understand and be able to apply knowledge, students need to be encouraged to work to solve problems, find everything for themselves, and strive to realize their ideas. The teacher makes it easy for this process, by developing a learning atmosphere that allows students to discover, apply their own ideas, become aware and consciously use their own strategies for learning. The teacher develops learning opportunities for students to pursue the steps that bring students to the higher understanding, which were originally done with teacher's help to independent way. For students, learning must shift from "being told" to "actively finding out". (Permendikbud, 2013)

In learning, students construct knowledge for themselves. For students, the knowledge they have is dynamic, developing from simple to complex, from the scope of themselves and around them to a wider scope, and from the concrete to the abstract. As a developing human being, students will experience four stages of intellectual development, namely motorical sensory, pre-operational, concrete operations, and formal operations. In general, the first level occurs before a person enters school age, the second and third stages begin when a person becomes a student in the basic education level, while the fourth level starts from the fifth and sixth year of elementary school.

In learning, students are facilitated to be actively involved in developing their potential to become competencies. The teacher provides learning experiences for students to carry out various activities that enable them to develop the potential they have into the competencies set out in curriculum documents. These learning experiences are increasingly developing into independent and steady learning habits as a basis for lifelong learning.

The development of attitudes, knowledge, and skills can occur in various combinations and emphases in a learning activity. Each learning activity has a combination and different emphasis on other learning activities depending on the nature of the content being studied. Nevertheless, knowledge has always been a driving force for the development of other abilities (Permendikbud, 2013).

The 2013 curriculum develops two modes of learning process namely direct learning process and indirect learning process. Direct learning process is an educational process in which students develop knowledge, thinking skills and psychomotor skills through direct interaction with learning resources designed in syllabus and lesson plans in the form of learning activities. In direct learning, students learn activities to observe, ask, gather information, associate or analyze, and communicate what they have found in

analysis activities. The direct learning process produces direct knowledge and skills or what is called instructional effects.

In accordance with the standard competence of the 2013 curriculum, learning objectives should include the development of the realm of attitudes, knowledge, and skills. Attitudes are acquired through activity: accept, execute, respect, appreciate, and practice. Knowledge was gained through the activity of remember, understand, apply, analyze, evaluate, and create. Skills were acquired through activities of observing, asking, experimenting, reasoning, serving, and creating (Kemdikbud, 2013a). So, the teaching learning process in scientific approach referred to the process of observing, asking, reasoning, experimenting, and establishing network for all subjects. Lubis (2016: 163) also states that the 2013 Curriculum uses the scientific approach stages namely observing, questioning, associating, experimenting, and networking/communicating. He adds that this approach aim is to make the students are able to explore some lesson as a unity.

Kemdikbud (2013) and Hosnan (2014) state that there are five steps of applying scientific approach in teaching and learning process. They are observing, questioning, experimenting, associating, and communicating.

In observing, a teacher is expected to be able to create opportunities for students to carry out reading, listening, and seeing (without or with tools) activities. There are two main activities that should be done to lead to the observing steps. First, the teachers give students a wide opportunity to do observation. The observation can be done through reading, listening, or seeing the object. Second, the teachers facilitate the students to do observation and train the students to observe the important things from the object. There are seven steps in observing process, (1) determining the object to be observed, (2) determining the purpose, (3) determining the way of observation, (4) limiting the object, (5) doing observation carefully, (6) reporting the result of observation, and (7) comprehending the result.

In questioning, a teacher is expected to create opportunities for students to ask questions about information that is not understood from what is observed or questions to get additional information about what is observed (starting from factual questions to hypothetical questions). Questioning functions to encourage and inspire learners to actively learn and develop questions of and for itself; to raise skills of students in talking, asking questions, and the other can answer logically, systematically using proper and correct grammar; to encourage students' participation in discussing, arguing, developing the ability to think and draw conclusions; and to build an attitude of openness to give and receive opinions or ideas, enrich vocabulary, as well as developing social tolerance in gregarious.

In experimenting, a teacher is expected to be able to provide opportunities for students to conduct experiments, read sources other than textbooks, observe objects/events, carry out activities and interview with resource persons. In experimenting, the steps are preparation, working, and follow up. There are five activities that can be done in experimenting, (1) Grouping students into several groups, (2) asking students to discuss, (3) recording the finding, (4) supervising the learning process to ensure that all learners are actively involved in the discussion, and (5) directing the group that need help.

In associating, a teacher is expected to provide opportunities for students to process information that has been collected. In communicating, a teacher is expected to provide opportunities for students to convey the results of observations, conclusions

based on the results of the analysis verbally, in writing, or other media. There are four activities that can be conducted in communicating steps, (1) asking the students to read their work to the class, (2) asking each group to listen well and provide additional input with regard to the work of each group, (3) giving explanation after the group discussion ended, and (5) structuring tasks and providing opportunities to the students to demonstrate attitude, skills, and understanding of the substance of learning given.

From the explanation about the steps of doing scientific approach in teaching learning process above, it can be seen that by doing scientific approach students are expected to be actively involved in class activities by integrating skills, attitude, and knowledge.

METHODOLOGY

The design used in this research was qualitative research. The type of data revealed by researcher in this research is narrative from the informant both verbally and in writing in the form of document data. The behavior of the subject observed is also the data in collecting the results of this research. This research was conducted in a state junior high school located in Kampar sub-district. The participant was an English teacher who taught and implemented the 2013 curriculum at SMPN 3 Kampar in Kampar Sub-district. The researcher used observational protocol for recording information while observing English teacher's activities in implementing the scientific approach of the 2013 curriculum in teaching and learning process at SMPN 3 Kampar. Besides, the researcher used interview protocol for asking questions and recording answers during a qualitative interview. The last, the researcher did the recording of documents and visual materials based on the researcher's structure for taking notes (as Cresswell, 2009:183 recommended).

The researcher did the observations to see and know the activities that the teacher did in implementing the five stages of the scientific approach in teaching and learning process at SMPN 3 Kampar. During the classroom observations, videotaping, fieldnotes with observation protocol were employed as the main techniques of collecting data in observation. The observations were conducted for three meetings started from 22nd July 2019 to 25th July 2019. The detail was presented in the following table.

Table 1. Classroom Observations

No.	Observations	Schedules	Rooms
1	Observation 1	Monday, 22nd July 2019	IX.2
2	Observation 2	Wednesday24th July 2019	VII.1
3	Observation 3	Thursday, 25th July 2019	IX.1

In analysing the data, the researcher used the data analysis process developed by Creswell (1998) as cited by Gay and Airasian (2000: 239) as follows: reading/memoing, describing, classifying, and interpreting.

In reading/memoing step, the researcher read the field notes, transcripts, memos, and observer comments to get a sense of data. The researcher also wrote notes in the margins or underline sections or issues that seem important to the researcher so that the researcher would have a record of initial thoughts and sense of the data. In describing, the researcher gave attention to the features of the research context. The researcher portrayed the views of the participant. How the participant defined situations and explained her actions are important to describe thoroughly. Finally, the researcher made

ongoing descriptions of the interactions and social relations with the participant since social processes can change over time. In classifying, the researcher categorized the data, did the coding process, and grouped the data into themes. In interpreting, the researcher interpreted the data based on the group of themes that have been classified. The researcher started to understand the data to conclude the study. For more details, the following table showed the process of analyzing the qualitative data of the research.

FINDINGS

The main finding of the research was that the teacher had done some activities in implementing the scientific approach of the 2013 curriculum at SMPN 3 Kampar. The observation and interview with the English teacher revealed that the English teacher had implemented the five stages suggested in the scientific approach well.

OBSERVING STAGE

"*At the beginning, the teacher came in the classroom and asked the class chairperson to ensure the class is ready to study. Then, she greeted and checked the attendance list. Afterthat, she began the lesson by informing the materials of Chapter 2 and explained what activities would be done in teaching and learning process. Next, she showed the picture to the students. Afterwards, she asked for help to one of the students to place the picture on the whiteboard. Then, the students observed the picture. She also said the yell to motivate the students. The students said the yell after her. Next, she provided the opportunities for the students to ask some questions related to the picture about healthy life. Then, she also asked the students to write their own answers on the whiteboard. Afterthat, she checked the students' writing on the whiteboard together with the students." (Classroom observation 1 with EF, 22/07/2019, at 10.*[25] *a.m to 10.*[39] *a.m)*

From the observational fieldnote above, it was clear that the teacher had done some activities concerning the observing stage. She had given the students wide opportunity to do observation through seeing the object (picture) placing on the whiteboard. She facilitated the students to do observation and trained the students to observe the important things from the picture. In observing the picture, she did some steps. First, she determined the object to be observed in the whiteboard. Second, she determined the purpose of observing the picture related to the lesson. Third, she determined the way of observation. Fourth, she limited the object to be observed. Fifth, she asked the students to do the observation carefully. Sixth, she asked the students to report the result of observation. The last, she asked the students to comprehend the result of the observation.

The next observational fieldnote supported the information that the researcher got from the observation fieldnote above. To make clear, the researcher presented the second observational fieldnote as follows:

"Initially, the teacher came in the classroom and greeted the students. Then, she told the students about the material that would be discussed. Afterthat, she asked the students to open the English textbook. Then, she asked and explained about the last material. That was greeting. Next, she told and explained about the new material that would be studied. It was about taking a leave. Afterwards, she asked the students some questions to introduce the topic. She showed the picture related to the topic to the students. She placed the picture on the whiteboard without student's help. Actually, she should involve the students in doing anything in classroom in order to achieve good learning process. Then, she asked the students about the picture. Afterthat, she read the

expressions and words written on the paper and asked the students to repeat after her. The students repeated the expressions and words together." (Classroom observation 2 with EF, 24/07/2019, at 09 .[30]*a.m to 09.*[50] *a.m)*

"At the beginning, the teacher came in the classroom. She sat on the chair and put some books and a paper on the table. After praying, she greeted the students and asked them to open the English textbook. Then, she asked the students about the last topic. Afterthat, she, with the student's help, placed the picture on the whiteboard. Afterthat, she asked the students to observe anything in the picture well. Then, she asked some questions to the students related to the picture. She also asked the students to guess the topic that would be discussed." (Classroom observation 3, 25/07/2019, at 10. [25] *a.m. – 10.* [35] *a.m)*

The above observational fieldnotes strengthened the information or data had got from the first observation. It proved what the English teacher did during teaching and learning process especially in observing stage.

Then, the researcher conducted some interviews to get an additional information or data in connection with what the researcher found during classroom observations. In the interview, the teacher argued that in observing stage, the teacher could do reading, listening, and watching (seeing the picture). She (the English teacher) showed the picture and asked the students to observe it to connect with the learning material. The teacher also argued that the observing stage of the scientific approach should not be only in in the form of picture. But it was also in the form of reading or watching video, etc. It revealed that the English teacher was familiar with the general concept of the scientific approach, the functions and the significances to implement the approach in her classroom. For instance, the teacher saw the importance of the teacher's role in scientific approach activities as shown in the transcripts above.

QUESTIONING STAGE

"*Next, the teacher gave chance for the students to ask some questions. However, they tended to be silent and ashamed. Then, she walked over the students and pointed to one of the students to ask a question. Then, one of the students asked about the names of fruits showed. Some of the students heard the question and some of them talked each other out of the lesson. They didn't care about the lesson. She answered and gave reward to the students who asked the questions. Then, she explained the things in the picture to the students. She also asked the students to guess about the learning topic. She gave a plus to the student who asked the question. Then, she asked the students to repeat after her and explained the topic. The students repeated the expressions and listened to the teacher. She also stated the goal of the lesson on the whiteboard."(Classroom observation 1 with EF, 22/07/2019, at 10.*[40] *a.m – 10.*[58] *a.m)*

From the observational fieldnote above, the researcher found that the English teacher had given opportunities for students to ask questions about information that was not understood from what was observed or questions to get additional information about what was observed. She or the English teacher accepted one question from the student. Then, she gave the reward to the student to give the motivation. Eventhough there was one question from the student, it meant that the teacher had done the important point in questioning stage of the scientific approach of the 2013 curriculum. However, this was not drowned in the third observational fieldnotes. In the fieldnotes, the English teacher agreed that the teacher should be able to let the students to ask some questions about the

picture placed on the whiteboard in order to they could guess the topic that would be discussed in teaching and learning process.

"Next, the teacher gave the students opportunities to ask some questions about the picture placing on the whiteboard. Afterthat, one of the student asked the question about taking a leave in the picture. Then, she gave reward to the student for the question. Classroom observation 2 with EF, 24/07/2019, at 09.^{50} a.m-10.^{00} a.m)

"There was no questioning stage." (Classroom observation 3 with EF, 25/07/2019, at 10.^{35} a.m to 10 ^{35} a.m)

From the interview, the researcher could understand that the English teacher had known and understood the important thing in questioning stage. So, she tried to create opportunities for the students to ask for some questions.

EXPERIMENTING STAGE

"Next, the teacher asked the students to write the bold words on the whiteboard. The students wrote the words one by one. Then, she checked the students' works and wrote the correct answers. Afterthat, she asked the students to read the written words. It seemed that the students read the words with enthusiasm. She also asked all the students to repeat after her about the expressions and words of the material. the students said the expressions together. Then, she let the students to open the dictionary to check some difficult words. Next, she wrote some examples of the expressions on the whiteboard. Then, she asked the students to observe another examples of the expressions in the textbook or LKS. The students took and open LKS to get another expressions. Then, she wrote the examples on the whiteboard. Afterwards, she asked the students to read and repeat after her again." (Classroom observation 1 with EF, 22/07/2019, (At 10. ^{59} a.m to 11.^{35} a.m)

From the observational fieldnote above, it was clear that the teacher had provided opportunities for students to conduct experiments, read sources other than textbooks, observe objects/events/ activities and interview with resource persons. However, the English teacher didn't divide the students into several groups to do the discussions. This condition was also drowned in the second and third observational fieldnotes. Then from the interview, it was clear that the teacher had given the students opportunities to read other sources of text (dialogue). She had done what the teacher should do in experimenting stage of the scientific approach of the 2013 curriculum.

ASSOCIATING STAGE

"There was no associating stage." (Classroom observation 1 with EF, 22/07/2019, at 11.^{36} a.m to 11. ^{36} a.m)

From the observational fieldnote above, the researcher found that the teacher was not able to provide opportunities for the students to process information that had been collected. She did not give the students drill or activity to do. This condition also happened in the second observational fieldnote. The teacher was not able to provide opportunities for the students to process information that had been collected. She did not give the students task or drill that the students should do. The following fieldnote drew the situation.

"There was no associating stage." (Classroom observation 2 with EF, 24/07/2019, at 10.^{50} a.m to 10.^{50}a.m)

However, in the third observational fieldnote, the teacher was able to provide opportunities for the students to process information that had been collected. She asked the students to write and create the expression of asking for and giving information

related to the objective of doing something based on the used context. The following observational fieldnote proved the English teacher's activity in this associating stage.

"Next, the teacher provided opportunities for the students to process information that has been collected. She gave the students task or drill to do individually related to the expression of asking for and giving information related to the purpose of doing something based on the used context. Then, the students did the task or drill individually." (Classroom observation 3 with EF, 25/07/2019, at 11.[16] a.m to 11. [40] a.m)

The interview transripts strengthened the information that the researcher got from the observational fieldnotes. From the interviews, the English teacher argued that giving drill or exercise would be better in order to the students were able to analyze and associate the information occurred within the group. It was also to find the relationship between one information to other information and to find the patterns of interrelationship of the information so that one can make conclusion from the patterns found.

COMMUNICATING STAGE

"At the end of the lesson, the teacher asked the students to conclude the lesson. However, the students were not able to conclude the lesson by themselves. So, she helped the students to conclude the lesson. Finally, the students concluded the lesson well. She gave the task to the students to do at home about the lesson. Then, the students wrote the instruction of the task. The class was over." (Classroom observation 1 with EF, 2/07/2019, at 11.[37]a.m to11.[45]a.m)

From the observational fieldnote above, it was clear that the teacher did the conclusion about the lesson with the students. However, it was better for the teacher to follow some steps in communicating stage such as asking the students to read their work to the class, asking each group to listen well and provide additional input, giving explanation after the group discussion ended, and structuring tasks and providing opportunities to the students to demonstrate attitude, skills, and understanding of the substance of learning given. What the English teacher did during teaching and learning process was also drown from the second and the third observational fieldnotes. Besides, the English teacher's activities were also known from the interview transcripts that had been conducted.

Extracted data from the interview revealed that there were two main factors which influence English teacher's activities in implementing the scientific approach of the 2013 curriculum in teaching and learning process, namely internal and external factors. Internal factors included teacher's motivation, perception, and experience while external factors included media and school environment.

From the interviews, it was clear that the teacher was interested in implementing the scientific approach in teaching and learning process since it was easy to implement. It meant that she had high motivation in implementing it. She was also supported by the other teachers. They also used and implemented the scientific approach in their teaching and learning processes. Besides, the researcher found that teacher's perception about the 2013 curriculum implementation was another factor in implementing the scientific approach of the 2013 curriculum. She had positive perception about it. She thought that eventhought the 2013 curriculum was new in our educational system, it was not difficult to implement. It gave the easy way for teachers to teach. She added that the teachers should be creative, innovative, and ready to teach anytime. The most important one was our preparation before coming to the classroom.

Furthermore, the researcher also found that teacher's experiences or trainings in implementing the scientific approach of the 2013 curriculum was also a determining factor. The English teacher was encouraged by her experiences and trainings she had followed. So, she thought that the implementation of the scientific approach of the 2013 curriculum in teaching and learning process was easy.

From the interviews, it was also clear that school environment and media supported the teacher in implementing the scientific approach of the 2013 curriculum in teaching and learning process. She thought that even though the electronic media were limited in the school, natural media around the school would be the optional things. It meant that school environment and media would be the needs and supported the teacher in implementing the scientific approach of the 2013 curriculum in teaching and learning process.

DISCUSSION

Being completed by such stages as observing, questioning, experimenting, associating, and communicating, a recommended teacher's activities in implementing the scientific approach of the 2013 curriculum has been reported in the literature. This study set out with the aim of investigating English teacher's activities in implementing the scientific approach of the 2013 curriculum in teaching and learning process at SMPN 3 Kampar.

Qualitative analysis of this study showed that the English teacher at SMPN 3 Kampar had implemented the scientific approach of the 2013 curriculum for each meeting well. This research also revealed that observing, experimenting and communicating stages had been implemented very well. It indicated that the English teacher had been successful in activating the students in teaching and learning process. She was able to change the learning process from teacher's centered to student's centered.

In observing stage, the English teacher had provided opportunities for the students to carry out reading, listening, and seeing activities as recommended by the 2013 curriculum. It was proven when the students were able to observe the picture (seeing), said the yell (speaking), read and checked the writing on the whiteboard (reading and writing), repeated the expressions and words (listening and speaking), and placed the picture on the whiteboard (acting) very well even though the 2013 curriculum only considered reading, listening, and seeing activities in this stage.

In experimenting stage, the English teacher had provided opportunities for the students to conduct experiment, reading sources other than textbook, and observing the activity. It was seen when the students were able to write the words or expressions, read the words, say the expressions, sing the song, take and open LKS for another examples, and perform the dialogue in the classroom.

Then, in communicating stage, the English teacher had provided opportunities for the students to convey and conclude the results of observations or the lesson. It was proven when the students had been able to conclude the lesson orally even though the teacher's role was still needed. It was a good achievement of the English teacher in teaching and learning process. Therefore, it can be said that what she had got from the previous trainings, gave her good skills in these three stages.

The findings revealed that the English teacher was only able to implement the questioning stage well. It was proven when the teacher was only able to provide opportunities for the students to ask the questions for two meetings. For the third

meeting, she failed and directly came to the experimenting stage. She had understood the important of questioning in teaching and learning process. However, she could not practice it very well. She did not have knowledge enough to support the students to ask the question. As a result, there was only one student asked the question. The other students tended to be silent and ashamed. On the top of that, there was a little group of the students talked each other out of the lesson. They did not care about it.

Next, the finding also revealed that the English teacher was bad in implementing the associating stage. In other words, she was poor in this stage. It was proven when the English teacher was only able to implement this stage for one meeting. The other two meetings, she failed. She was unable to provide opportunities for the students to process information that had been collected. She only gave the students the task individually. In order to be continued to the communicating stage, it was better for the teacher to divide the students in group. It would directly support the students to do communication to get the conclusion of the lesson or the result of observation. It would also increase students' understanding of the lesson. Besides, it would also give the students opportunities to find the solution to the learning problem from various sources of different or contradictory opinions (Permendikbud, 2013).

The important finding was that the English teacher's activites were influenced by some factors. The factors came from internal and external of the teacher. Internal factors included teacher's motivation, perception, and experience while external factors included media and school environment.

The first internal factor which influenced English teacher's activities in implementing the scientific approach of the 2013 curriculum was teacher's motivation. It was admitted by Erkaya (2013) which revealed that the teachers were more intrinsically than extrinsically motivated, and what they explained as enhancing their motivation was classified into six groups: working conditions, colleagues, classes, pay/benefits, administration, and students. Looking at the findings, the researcher understood that what would increase the teachers' motivation the most would be their colleagues; that is to say, what they needed was supportive colleagues, colleagues that would be there for them when they needed them, that would guide them if they needed guidance, that would work with them when and if necessary.

In addition, Bernaus, et. al (2009) also corroborated this finding. They revealed that teacher motivation was related to teacher use of motivating strategies, which in turn were related to student motivation and English Achievement. Thus, any change in the educational system that promotes higher levels of teacher motivation should result in improved levels of education of the students.

Then, from the interview conducted, it can be revealed that teacher's perception was another internal factor which influenced English teacher's activities in implementing the scientific approach of the 2013 curriculum. This finding was corroborated by Madkur and Nur (2014) which stated that most English teachers in six pilot schools in Bogor and Lampung accepted the 2013 curriculum in teaching English. However, according to them, the curriculum should be evaluated and further developed. So, the researcher found that teachers' perception on the use of this curriculum in teaching English was positive.

This finding contradicted with the report given by Darsih (2014). She revealed that 2013 curriculum was still confusing so it was hard to be implemented at the moment. She had such a perception since the teachers rarely joined a kind of training or workshop dealing with the 2013 curriculum. In line with her, Ahmad (2014) revealed

that the implementation of 2013 curriculum in English language teaching practices at the schools was considered to be partial, biased and tends to be traditional in all levels. Although the teachers' administrative task to design the lesson plan was relatively simple as some parts had also been described in the syllabi, the teachers chose to design it mainly for the purpose of fulfilling one of the formal requirements in administrative tasks.

Another internal factor influenced the English teacher's activities in implementing the scientific approach in teaching and learning procses was teacher's experience. It was corroborated by the report revealed by Rice (2010) which revealed that experience, gained over time, enhanced the knowledge, skills, and productivity of workers. In education, teacher experience was probably the key factor in personnel policies that affected current employees: it was a cornerstone of traditional single-salary schedules; it drove teacher transfer policies that prioritized seniority; and it was commonly considered a major source of inequity across schools and, therefore, a target for redistribution. The underlying assumption was that experience promoted effectiveness.

Furthermore, the research also revealed some external factors which influenced English teacher's activities in implementing the scientific approach of the 2013 curriculum in teaching and learning process. The first external factor was media. It was very important to ensure the success of teaching and learning process. It was admitted by the finding of previous research like Chirimbu and Tafzoli (2013) which revealed that using media in pedagogy was important for both teachers and students. They argued that it could handle a range of activities and carried out programmed functions in different situations.

It was also corroborated by Amine, et. al (2012) which found that the availability of multimedia was a dynamic and challenging motivating factor in EFL classrooms, leading to certain suggestions focusing on the achievement of learning objectives. They argued that foreign-language learning was encouraged by different technological equipment, such as computers, projectors, video, films, and multimedia. They also revealed that students' responses showed that there was a strong relationship between language learning motivational factors and using technology. So, the use of technology in EFL classrooms provided a meaningful and interesting process for language learning, and students were more motivated by this technological development in EFL classrooms.

In addition, Gilakjani (2012) corroborated that teachers needed to make full use of multimedia to create an authentic language teaching and learning environment where students could easily acquire a language naturally and effectively. He also revealed that the purpose of using multimedia tools was to find the best ways for both students to learn effectively and teachers to teach efficiently.

The second external factor was environment. It was admitted by Ali (2017) which revealed that he found significantly positive influence of all person-environment fit dimensions including; person-organization fit, person-job fit, person-vocation fit, person-group fit and person-person fit on teaching satisfaction and life satisfaction perceptions among faculty members in Pakistan. Another finding was reported by Agarwal and Thakur (2014) which revealed that school environment had maximum influence on the quality and quantity of students-teachers actions and had also facilitating effects on the achievement of students

CONCLUSIONS

Considering the results of data analysis, some points can be concluded. First, the implementation of the scientific approach of the 2013 curriculum in teaching and learning process at SMPN 3 Kampar had been implemented well. The research revealed that observing, experimenting and communicating stages of the scientific approach of the 2013 curriculum had been implemented in each meeting. However, questioning and associating stages had not been implemented in each meeting.

Second, dealing with the English teacher's activities in observing, the English teacher had provided opportunities for the students to carry out reading, listening and seeing activities. In experimenting stage, the English teacher had provided opportunities for the students to do experiment. Then, in communicating stage, she had provided opportunities for the students to conclude the lesson. It can be seen when the students had been able to conclude the lesson orally even though the teacher's role was still needed. In other words, the English teacher had good knowledge and practice for these three stages.

However, related to English teacher's activities in questioning stage, she was only able to provide opportunities for the students to ask the questions for two meetings. For the third meeting, she failed and directly came to the experimenting stage. In associating stage, she was only able to implement this stage for one meeting. For the other two meetings, she failed. Third, it can not be denied that the English teacher activities were influenced by some factors. The factors came from inside and outside the teacher herself. The researcher found that teacher's motivation, perception, and experience were internal factors or the factors that came from inside the teacher while media and environment were external factors or the factors that came from outside the teacher herself.

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