CHAPTER II

REVIEW OF RELATED LITERATURE

This chapter the review of related literature about the 2013 curriculum, scientific approach, and teaching English.

2.1 The 2013 Curriculum

The 2013 curriculum is the newest curriculum in Indonesia. This curriculum is the result of the development of the previous curriculum. “The 2013 curriculum is a curriculum developed to balance and enhance the hard skill and soft skill in form of skills, attitude, and knowledge” (Fadillah, 2014). In short, 2013 curriculum has a goal to enhance the education product which is concern in attitude, moral, and character building of human quality.

In line with the statement above, Hidayat (2013) claims that the 2013 curriculum orientation is the improvement and balance between attitude, skills, and knowledge competencies. Thus, curriculum is expected can make the students be more able to gain and apply their comprehension in learning process independently. Moreover, it enhances the value for Indonesia as a country that implements curriculum 2013 to compete with another country.

2.1.1 Structure of 2013 Curriculum

According to Fadillah (2014), “Curriculum structure is an organization of core competencies, basic competencies, learning content, learning subjects, and learning load in every education unit and programs”. The structure of the
curriculum can be identified as a basic and structure of learning subject that must be achieved by the students in learning activities.

The structure of curriculum is a description of the curriculum application that has some principles about the position of student in completing learning in a unit or level of education (Majid and Rochman, 2014). It means that the structure of curriculum consists of core competencies, basic competencies, learning load, subjects that must be taken by each student in the educational unit. Thus, there are changes in the subjects and time allocation in curriculum 2013.

Moreover, the structure of curriculum is clarified into some subjects, especially in Senior High School. Majid and Rochman (2013) state that the structure of curriculum in senior high school is clarified into some aspects, such as learning subject, learning load, and academic calendar. In this education level, the structure of curriculum consists of two subjects. They are compulsory and specialization subject. First, the compulsory subject consist of 10 subjects, such as Religious subject, Civics subject, Indonesian subject, Mathematics subject, Integrative Science subject, Integrative Social Studies subject, English, Art and Culture subject, Physical subject, and Craft subject. Second, the specialization subjects consist of 3 subjects, which are Mathematics and Sains, Social, and Language. In addition, the learning load in senior high school for all of class has experienced increasing time allocation per week. The previously X class amounted to 38 hours each week, on the 2013 curriculum is to be 42 hours each week. The previously XI and XII class amounted to 38 hours each week, on the 2013 curriculum is to be 44 hours each week. For 1 hour studying in senior high school is 45 minutes.
2.2 Scientific Approach

Scientific approach is learning that adopts science steps in developing the knowledge through scientific method (Majid and Rochman, 2014). In short, scientific approach is learning that using scientific steps to gain new knowledge. The students are requested to find out by themselves many kinds of facts, concepts, and new knowledge which are needed in daily life.

In line with statement above, Majid and Rochman (2014), claims that scientific approach is not only looking at the end result of learning, but the learning process is also considered very important. It means that, both learning process and the result of learning is an important thing in teaching learning. Additionally, scientific approach is implemented in 2013 curriculum. The implementation of this approach becomes the new challenges.

2.2.1 The Learning Characteristics of the Scientific Method

According to Hosnan (2014), there are some characteristics of scientific method in teaching and learning. Those are as follows:

a. Involving the cognitive process of potential in simulating the development
b. Can develop students’ character.

c. Student centered.
d. Involving the science process skill in constructing concepts, laws or principles.
2.2.2 The Learning Steps in Scientific Approach

As stated by the Ministry of National Education and Culture (2013), scientific approach has five steps in the learning activity; they are (1) observing, (2) questioning, (3) associating, (4) experimenting, (5) networking or communicating.

2.2.2.1 Observing

Observing technique is one learning scheme that uses contextual approach and real media in the context of learning that highlights the meaningfulness of the learning process (Hosnan, 2014). In this step the students observe the facts, look for the information, listen or read an object of the observation.

According to Majid and Rochman (2014), learning activities objective to observe closely related to the environment of real situation tackled in daily life. Thus, the purpose of observing is that the students get more understanding about anything observed, the students get more information and establish understanding by themselves on the result of observations obtain from source that are not clear. Then observing can contribute to developing the students’ seriousness, carefulness, and competence of seeking information.

According to Majid and Rochman (2014), there are several principles that should be paid attention by the teachers and the students in observing activity. It consist of:

a. Before observation is done, it will be better if the teachers and the students determine and agree in the observation procedure.
b. The number and the homogeneity of the students, the more the subjects are observed, the more difficult the observation that do.

c. Accurate, objective, honest, and focused on the object that is observed for the learning purposes.

d. The teachers and the students need to understand what they will write, record, and how to make note for the observation results.

Then, Hosnan (2014) mentions the stages of observation as follows:

a. Making the observation guidelines in accordance with the scope of object to be observed.

b. Determining the object which will be observed

c. Determining clearly how the observations will be conducted so that it runs easily and smoothly.

d. Formative the way and write the results of the observation, such as using a notebook, a camera, a tape recorder, and other stationary.

2.2.2.2 Questioning

Questioning is one of the method which students will improvement a new knowledge. From the question the students will construct the theory, ideas and law. In this second step of scientific approach, the students ask question about the information that is not understood from what is observed or question to obtain additional information about what is observed (starting from a factual question to the question is hypothetical) (Hosnan, 2014). It means that the students are asked
to have critical thinking by asking anything to get the additional information about what is observed.

In addition, questioning can give to developing ingenuity, curiosity, the ability to formulate questions to establish critical thinking necessary for intelligent life and lifetime learning.

According to Majid and Rochman (2014), questioning activity has three functions to the learning process in the class. Those functions are: first function of questioning provoking students’ curiosity, interest and concern about a theme or topic, second function of question, encouraging and inspiring the students to be active in teaching and learning, third function of questioning, analysing students’ learning difficulties and find out the solution; providing opportunities for learners to demonstrate attitudes, skills, and understandings of learning substance given.

2.2.2.3 Associating

Associating is the aptitude to classify the varied ideas and associate phenomenon then put it into a piece of memory (Hosnan, 2014). Furthermore, Majid and Rochman (2014) state associating is the process of systematic thinking on the empirical facts and logical that can be observed to obtain a conclusion in the form of knowledge. In other words, associating is the learning process to classify the result of observing and questioning from the general to the specific to gain a spaciousness and deepness information from various bases that have different opinions (Hosnan, 2014). For example, the students classify the information about the expressions that are used by people in the market.
Furthermore, the students can do analysing the conversation, making category of dialogue, comparing various expression, analysing the structure and discussing the content of dialogue or expression then getting the feedback from the teacher.

The competences that are developed are the attitude of honest, thoroughness, disciplined, law-abiding, hard work, the ability to apply the procedures, inductive, and deductive thinking skills.

2.2.2.4 Experimenting

According to Majid and Rochman (2014), to gain real or authentic learning, learners have to try or do experiment, especially for materials or substances that are compatible. Moreover, learning activities on the activity of experimenting is doing experiments, reading sources except textbooks, observing objects/ events/ activities, interviewing with informants (Hosnan, 2014). In addition, experimenting can contribute to developing a thorough attitude, honest, polite, respect the opinions of others, the ability of communication, implement the ability to gather information through a variety of ways which is learnt, and develop the habit of learning and lifelong learning.

Furthermore, Majid and Rochman (2014) say that to reach the objective of experimenting activity there are some activities that should be done. First, the teacher has to formulate the purpose of experiment that will the students do. Second, the teacher and students prepare the equipment. Third, the teacher and students need to calculate the place and time. Fourth, the teacher provides worksheet for guiding the students’ activity. Fifth, the teacher speaks about the
problems that will be used in experimental process. Sixth, the teacher distributes worksheet to the students. Seventh, the students do the experiment using teacher guide. Last, the teacher collects the students’ result and evaluates it. If it is necessary it will be discussed classically.

2.2.2.5 Networking or Communicating

According to the Ministry of National Education and Culture (2013), learning activities in networking or communicating is delivering the observations, conclusions based on the results of the analysis of oral, written, or other media. Further, networking or communicating can contribute to developing the attitude of honest, thoroughness, tolerance, the ability to think systematically, and expressing opinions clearly and briefly, and develop language skills correctly.

In other words, in the last activity, the students present their knowledge about what they have been learnt. Further, the students present their conclusion of result that has been done in a group or individual. This activity can be done by display, orally, or other media.

Furthermore, to reach the learning steps of scientific approach the teachers and students have to understand about criteria of scientific approach.

2.2.3 The Criteria of Scientific Approach

The teachers and students should have good understanding about the criteria of scientific approach in 2013 curriculum. Based on Majid and Rochman (2014), the criteria of scientific approach in 2013 curriculum are, as follows:
a. Teachers’ explanation, students’ response, and educative interaction between teachers and students are free from the wrong prejudice, subjective thought, or deviates reasoning from logic thinking.

b. Learning material is based on fact or phenomena that can be logically explained, not only guess, fantasy, legend, and fairy tale.

c. Encouraging and inspiring the students to think critically, analytically, and appropriate in identifying, comprehend, solve the problem, and apply the learning materials.

d. Based on the reliable concept, theory, and empiric fact.

e. Encouraging and inspiring the students to comprehend, apply, and evolve rational and objective thought in responding the learning materials.

f. Encouraging and inspiring the students to think hypothetic in facing difference, sameness, and link each other from the learning materials.

g. The learning objectives are formulated plainly and clearly, yet the presentation system is interesting.

2.3 Teaching English

English is one of important subject in the school, from the basic until the highest. There are four skill in English that have to be taught to the student. Those are reading, listening, writing, and speaking. By teaching four skill students can master English well.
1. “Patel and Jain argue that reading is a complex skill involving a number of simultaneous operation.” It means by reading activity, people may gain important information that is not presented by teacher. Besides, reading can improve students’ attention and comprehension. Reading will help to achieve some clear aim or information. Furthermore, reading is one of the ways to get information.

2. Writing is a process of discovering and organizing the ideas. “Patel and Jain (2008), claims that writing is essential features of learning a language because it provides a very good means of foxing the vocabulary, spelling, and sentence pattern.” Writing skill is the ability to discover and organize ideas into written form arranged in a particular order and linked together in certain ways by using appropriate convention including content, organization, vocabulary, language use (grammar), and mechanics.

3. Listening is one of the most importance communication skill that students can acquire. According to Solak (2016), listening comprehension is an extremely part of language learning phenomenon. Listening can be considering the fundamental skill to speaking, because without understanding the input at the right level, any learning cannot begin.

4. English speaking ability is very important for people interaction. In this global era, many people used English as a media of communication and it makes people who come from different countries to be easier in making interaction and communication. As one of international language, English is also being taught in Indonesia. Wulandari (2009) argue that Speaking is
an interactive process of constructing meaning, receiving, and processing information. Furthermore, speaking begin with proper attention to pronunciation (Patel and Jain, 2008).