CHAPTER II
TEACHERS' PROBLEM IN TEACHING ENGLISH AND
IMPLEMENTATION OF SCIENTIFIC APPROACH IN CURRICULUM
2013

A. Definition of Teachers' Problem in Implementing Curriculum 2013

Teachers as the front guard in the implementation of the curriculum should become an important concern. The teacher is the one who is confronted directly with the learners in the learning so as to provide a direct influence on the success of learners to complete the learning task. Curriculum 2013 brings change to the fundamental role of teachers in learning. Administratively, the government has prepared a learning implementation tool that does not need to be prepared by the teacher. However, teachers are required to play a role as a motivator and facilitator of learning so that students will become a learning center. It becomes an obstacle for teachers because not all teachers have these competencies. In addition, teachers demanded their readiness to implement the curriculum in a short time while it has not been properly prepared.

It is not an easy matter to prepare an ideal teacher for curriculum 2013 in a short time, especially to change the teacher mindset from the previous one, school-based curriculum, meanwhile, in the curriculum, 2013 teachers should be able to direct the student to be active, productive, creative, and critical thinking.

One of the problems was found by Zaim (2016: 1-8) who conducted to investigate the extent to which the implementation of Scientific Approach by an English teacher who taught in tenth grade at SMAN 7 Padang. The researcher tries to see the implementation of the Scientific Approach in the teaching and learning process, assessment, and problems faced by the English teachers in the teaching and learning process using a scientific approach in the 2013 Curriculum. Kind of the research is descriptive method. Data of the research were taken from observation and interviews. Direct observations were

done to see the activities and assessments conducted by English teachers in the classroom. Then, the researchers interviewed the English teacher to know the extent to which the implementation of the Scientific approach in teaching and learning processes related to observing, questioning, experimenting, associating, and communicating. Then, the problems in the teaching and learning process were identified. The results showed that 69% of the steps in the scientific approach implemented by the English teacher. However, the English teachers only used 62% of assessments based on the 2013 curriculum. Afterward, there were problems faced by English teachers in the learning process in each step in the scientific approach in the aspect of the 2013 Curriculum.

Second of the problem was found by Ekawati (2017: 41-48) stated English Teachers' Problem in Applying the 2013 Curriculum. This problem is due to teachers' lack of understanding in giving an evaluation. To overcome teachers' problems in making the evaluation, thus, teachers should get adequate socialization and workshop which should be guided by a competent instructor. They also should be trained to prepare the appropriate instrument for evaluation. In addition, it is needed to be considered by the government and stakeholders to provide easy software of evaluation to help teachers in reporting the result of the evaluation. While in affective assessment, it is difficult for the teacher to analyze and evaluate the attitude of every student in his class. Moreover, teachers regarded that this curriculum is too complex in which teachers needed to evaluate students' attitude (through observation), students' knowledge (through the test), and students' skill (through practice).

Another previous research was held by Retnawati, et al. (2016). They investigated the vocational high school teachers' difficulties in applying the assessment within the 2013 curriculum. This research was descriptive explorative using qualitative data gathering. The data sources were 22 vocational high school teachers and the Vice Principals of the curriculum in the province of Yogyakarta Special Region of Indonesia. The result showed that the teachers' difficulties in implementing the 2013 curriculum were found in;

developing the instrument of attitude, implementing the authentic assessment, formulating the indicators, designing the assessment rubric for skills, and gathering the scores from multiple measurement techniques. In addition, this study stated that it was difficult to find a feasible application for describing students' achievement. Based on the previous studies, teachers (especially English teachers) should comprehend the characteristics of the 2013 curriculum. The curriculum of 2013 is designed with characteristics of developing a balance between spiritual and social attitudes, knowledge, and skills which should be applied in various situations in the school and community (Permendikbud No. 59 Tahun 2014). It becomes the basic understanding for teachers in their teaching so that the objectives of this curriculum are achieved. In addition, the syllabus and lesson plan must be prepared effectively before the teaching-learning process, as it will be a teacher's guide.

Based on the reason above, this discussion shows that teachers' problem in implementing curriculum 2013 is shown that the highest pedagogic competence of the certified teachers was in selecting and organizing the subject matter according to the subject of characteristics and the interpretation was good, during the learning process, many obstacles occur, there are many plans cannot be completed based on the lesson plan, and the instrument of attitude, implementing the authentic assessment, formulating the indicators, designing the assessment rubric for skills, and gathering the scores from multiple measurement techniques.

B. Definition of Curriculum 2013

The need to direct or move the nation towards a common goal has necessitated that the educational systems of Indonesia should be centralized. It also happens to other countries such as Singapore and Japan. This greatly shaped and defined educational policies and programs as well as curriculum development. According to UNESCO Bangkok Staff (2014:34), Singapore's national curriculum aims to nurture each child to his full potential, to discover

his talents, and to develop a passion for life -long learning. Students go through
a broad range of experiences to develop the skills and values that they will need for life. Furthermore, In Japan, the standard nationwide curriculum is known as the "Course of Study", which aims to strengthen the teaching of basic and fundamental contents and to develop education considering individual student need and abilities. Meanwhile, in Indonesia, the theme of its curriculum is generating Indonesia people who are: productive, creative, innovative, and effective: through the strengthening of attitudes, skills, and knowledge which are integrated. It is expected to procduce, a productive, creative, and innovative human. The newest curriculum is named Curriculum 2013.

Curriculum 2013 is a competency and character-based curriculum. Curriculum 2013 was born as a response to the various criticisms of the previous curriculum, School-Based Curriculum. The changes are necessary for the curriculum because there is some weakness found in School-Based Curriculum as follows:

1. The content and message of the curriculum are still overcrowded. It is indicated by the number of subjects and a lot of materials that the scope and the difficulty are beyond the level of the children's age development.

2. The curriculum has not yet developed the competence completely in accordance with the vision, mission, and goals of national education.

3. The development of competence is more dominated by aspects of knowledge and it has not yet to describe completely by learners‟ personality (knowledge, skills, and attitudes).

4. The competencies which are required in accordance with development of society such as character education, environmental awareness, approaches and teaching methods, the balance of soft skills and hard skills, as well as the entrepreneurial spirit, have no been accommodated in the curriculum.

5. The curriculum is not sensitive and responsive yet to the social changes that occur at the local national, or global.

6. Standards of the learning process have not yet to describe the detailed learning sequence. Therefore, it opens a probability of various interpretations and it culminates in teacher-centered learning.

7. The assessment does not use a standard of competency-based assessment yet, and it does definitely provide remediation and enrichment services regularly yet (Mulysa, 2014: 60).

Based on the Regulation of Education and Culture Minister of Indonesia No. 59 the Year 2014, Curriculum 2013 is designed with the following characteristics:

1. Developing a balance between spiritual and social attitudes, knowledge, and skills, and applying them in various situations in the school and community

2. Putting school as part of the community that provides a learning experience. Therefore, the learners will be able to apply what is learned in the school to the community and utilize the community as a learning resource.

3. Giving freely enough time to develop a variety of attitudes, knowledge, and skills.

4. Developing the competencies expressed in term of class core competencies which is specified more in basic competence of subjects.

5. Developing class core competencies into organizing elements of basic competence. All the basic competencies and learning processes are developed to achieve the competence stated in core competencies.

6. Developing a basic competence based on the accumulative principle, mutually reinforced and enriched between- subjects and education level (horizontal and vertical organizations.

The theoretical basis of Curriculum 2013 will be developed based on the theory of "standard-based curriculum and competency-based curriculum". standard of education establishes national standard as a minimum quality of citizens divided into standard contents, process standards, graduate compentency standards, educator standards and education personnel, management standards, financing standards, and educational assessment standards. The compentency- based curriculum is designed to provide the

widest possible learning experience for learners in developing the ability to be knowledgeable, skillful, and actionable.

The curriculum 2013 embraces: (1) taught curriculum, the learning process developed in some activities, such as in schools, classes, and communities; and (2) learned-curriculum according to the background, characteristics, and early ability of the learners. Meanwhile, the direct experience of the learners becomes the result of the curriculum.

In learning activities, it is not only carried out in class, but the teacher also takes advantage of the environment around the school so that students do not feel tired with learning in the classroom which may take longer so that students feel bored. Students also find learning fun and this can stimulate student activity in the learning process.

Furthermore, the juridical foundation is the legal basis for curriculum development. Therefore, the legal basis is the law which is the main reference in curriculum development. According to Sarin (2014: 286), the juridical foundation of the 2013 curriculum is as follows

1. Constitution of Republic of Indonesia Year 1945.
2. Law No. 20 Year 2003 about National Education System.
3. Law No. 17 the Year 2005 about the National Long-Term Development Plan, as well as the provisions as outlined in National Medium Term Development Plan and
4. Government Regulation Number 19 Number 19 Year 2005 about National Education Standards which is changed with Government Regulation Number 32 the Year 2013 Amendment to Government Regulation Number 19 Year 2005 about National Education Standards.

C. Scientific Approach in Curriculum 2013

The approach is the level at which assumptions and beliefs about language and language learning are specified; the method is the level at which theory is put into practice and at which choices are made about the particular skills to be taught , the content be taught and the order in which the content

will be presented; technique is the level at which classroom procedures are described. According to Anthony in Richrads& Rodgers (1934: 16) stated that approach refers to theories about the nature of language and language learning that serve as the source of practices and principles in language teaching. He also added that within one approach, there can be many methods. A technique is implementational that which actually takes place in a classroom.

As stated in the National Educational Rule (Pemendikbud). (No. 65 Tahun 2013) about the Standard of Process in learning and teaching, that " the implementation of Curriculum 2013 in the teaching and learning should emphasize on the pedagogical dimension in the teaching and learning process that is use a suitable method of teaching which is based on scientific approach".

So, based on Pemendikbud Number 65 of 2013 about the standard process of education, the preferred model of learning in the implementation of curriculum 2013 is the scientific approach. The scientific approach is the characteristic and becomes its power from the existence of curriculum 2013. So, approach is a basic concept that gives power and has a background about how a teaching and learning method is implemented based on the theory.

The scientific approach is a concept of teaching and learning which has a background about the method of teaching and learning which has a scientific characteristic. According to Hudson and Rudolph as cited in Atsnan and Yuliana Gazali (2013: 2) the scientific method was introduced to educational America at the end of the 19th Century as the emphasis of the laboratory method wich was refers to the scientific facts. The scientific method has a characteristic that is "doing science".This method facilitates the teacher to improve the process of teaching and learning. Daryanto (2013: 51) states that teaching and learning using a scientific approach is a process of teaching and learning which formulated in order to the students can act in constructs the concepts and principles of the material through the steps of observing (to identify or to solve the problem), formulates the problem, pose or formulates a hypothesis, gathering the data with various techniques, analyze the data,

gives conclusion and communicate the concepts and principles which was found.

The scientific approach has the purpose to give the students an understanding to understand the material can found from anywhere and whenever which was not dependent on the information from the teacher. So, that the condition of teaching and learning are hoped to create and motivate the students to search the information about the material from various source through observing and did not just from the teachers explanation. The implementation of the scientific approach in teaching and learning involves the skills process like observing, classifying, measuring, predicting explaining,and concluding. In those processes, the students need the teacher's help. But, the help should be decreased because of the students' more improved skill. The scientific method is very relevant with three learning theories they are Brunner, Plaget, and Vygotsky theory, learning theory of Brunner also called discovery learning. According to Carin &Sund as cited in Daryanto (2013: 52) that there are four main things related to the theory of learning from Brunner. Firstly, an individual learns and improve their ideas if they use their idea. Secondly, by doing the cognitive process in the discovery process, the students get sensation and satisfactory which is an intrinsic appreciation. Thirdly, there is one way that someone can learn some techniques in doing the discovery learning that is have an opportunity in doing the discovery learning. Four, by doing the discovery learning can force memory retention.

Those four things are appropriate with the cognitive process needed in the teaching and learning process using scientific approach . The Plaget theory stated that learning is related to the formulation and development of schema. Schema is a mental structure and cognitive structure which enable the intellect to adaption. Vygotsky in his theory stated that teaching and learning work if the students learn to handle the tasks which did not learn but those tasks still in the scope of their skill.

1. **The Characteristics of Scientific Approach**

   The scientific approach refers to the technique of investigating phenomena, acquiring new knowledge, or correcting and integrating prior knowledge (Grauch, 2003:5). This method is students-centered, the students are required to find their own material related to a particular subject. Fathurrohman (2014:115) stated that there are six characteristics of a scientific approach. They are:

   a. Students-centered. The teacher involves the students in the teaching and learning process. They are the facilitator for the students.

   b. In constructing the concept, law, or principle in a classroom, teachers, and students use the scientific process. Teachers encourage the students to apply and develop rational thinking and objective in responding to the learning materials.

   c. Developing cognitive skills like critical thinking.

   d. The development of the students' characters is highly expected. The scientific approach emphasizes spiritual and moral attitudes.

   e. The learning materials are based on facts that can be explained logically. It cannot be based on a feeling of prediction

   f. The learning objective is stated clearly and simply but the way of presenting should be attractive.

2. **The Stage of Scientific Approach**

   All levels of school which use curriculum 2013 will use the scientific approach. Its stages in the learning process include collecting information through observing, questioning, experimenting, and then the process of collecting data or information is followed by analyzing, realizing, concluding, and creating. It is stated in the Regulation of Minister of Culture and Education Number 103 the Year 2013, the implementation of a scientific approach in English teaching and learning process is conducted through a number of steps as follows:

3. Observing

Observing activity is a process that needs all of the senses such as seeing, observing, reading, listening, and scrutinizing. In observing by reading, students are exposed to models text in order to list items they need to know in order to understand and or produce texts orcommunicate ideas. The texts can be authentic and or simplified. The items to list basically include the social function of the text, text structure, grammar, and vocabulary. Meanwhile, in observing activity by listening, students activities conducted in this stage are, for example, students listen to an audio recording, watch a video, watch the teacher (with our without other students) demonstrate a monologue or dialogue, watch other students act pit a monologue or dialogue, and read texts.

The observing material is in the form of facts, concepts, and procedures. Fact materials can be interpersonal or transactional texts, special texts, functional text , and linguistic elements in the form of reading, video, or sound recording. While observing material in the form a concept is about the social function of the texts and observing material in the form of a procedure is the text structure of each text which read or heard. Therefore, the learning alternatives to the process of observing can include listening, watching video conversations, watching simple movies, and reading stroybooks, newspaper, magazines, brochures, leaflets, banners, and English posters (Ministry of Education and Culture, 2013).

Faturrohman (2015: 121) also stated that observing activities in the learning process will be done by the stages below:

1) Decide the observation object.
2) Make the guided format in doing the observation.
3) Decide what data which are going to be observed.
4) Decide the object location which is going to be observed.
5) Decide how to collect the data.

4. Questioning

In the second stage, students ask or formulate questions based on the identified items. The questions at least cover all of the achievement indicators stated in the lesson plan. The hypotheses or temporary answers are formulated based on existing knowledge. Students need to be motivated to ask questions regarding the existing knowledge. The activities can be asking questions, asking and answering questions, and discussing what is not understood or additional information to find out a clarification. In English learning, examples of the activities in asking questions can include, students ask questions about the social function, generic structure, and linguistic features of the text being read or heard (watched) that they do not understand or want to know more, or with guiding questions.

To facilitate the process of questioning the teacher should help the students ask questions with reference to the items they want to know, provide them with a number of guiding questions the students can just tick some of them. The questions can be about facts and hypothetically (Faturrohman, 2015: 127). Another way to train students in asking questions is to use such an inquiry method. This method can be done by dislaying a phenomenon and asking students to ask questions about it, while the teacher just replied: yes or no (Sani, 2015: 88). For instance, to teach the narrative descriptive text, teachers can ask students to observe a descriptive text and then ask them questions:

Teacher : "Try to ask questions about the characteristic of this descriptive text. I will only answer it: yes or no."

Students A : "Does it use simple present tense?"

Teacher : "Yes"

Students B : "Does it use to describe something?"

Teacher : "Yes".

Students C : "Does it also use to entertain people?"

Teacher : "No".

This method will trigger students to do more observation and improve their critical thinking.Questioning her is not always in a question form, but it can be a statement which is needed to be responded to by others. In addition, the criteria of good questions are brief and clear questions, inspiring questions, probing or divergent questions, and validity questions, giving an opportunity to the students to rethinking, stimulating students' cognitive ability, and stimulating interaction process (General Directorateof Primary Education, 2013a).

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 the conclusion: and to build an attitude of openness to give and receive opinions or ideas, enrich vocabulary, as well as developing social tolerance to be gregarious.

As Suharyadi (2014: 1351) also stated, "Questioning can be used both teachers and students in the classroom". He mentioned some ofthe purposes of teacher classroom question as below:

"A variety of purposes emerge from the analysis of the literature, including (1) to develop interest and motivate students to become actively involved in lessons (2) to evaluate students" preparation and check on homework or seatwork completion. (3) to develop critical thinking skills inquiring attitudes. (4) To review and summarize previous lessons. (5) to nurture insight by exposing new relationship. (6) to assess achievement of instructional goals and objectives emulate students to pursue knowledge on their own" (Suharyadi, 2014: 1351).

5. Experimenting

The next step is experimenting, in this stage, the students will be asked to collect the data. the students can use many kinds of sources also re-observe deeper about the object or even some experiments. The experimenting is done to have an authentic result of learning. In this stage, the students are also expected to solve the problem to develop their skills in solving the problem.

The teacher activities in collecting information and exploring are (1) sorting, matching, labeling activities; (2) activities focusing on the device (3) small group construction of text; (4) jigsaw and information gap activities; (5) presentation and practice activities relating to the grammatical features of text; (6) skeleton text. meanwhile, the students' activities in collecting information and exploring as follow: (1) reading various texts; (2) discussing the material; (3) studying in the group; (4) sorting, matching and labeling activities such underlining pronoun in texts, circling adjective in texts, giving mark triangle for the verb in the group; (5) having an interview with an informant (General Directorate of Primary Education, 2013b).

Experimenting has it aims to develop three fields; attitude, skill, and knowledge. In achieving those aims, Faturrohman (2014:136) suggested that there are several learning activities in the experimenting stage that need to be implemented as follows:

a. Set the theme which relevant to the core competence as stated in the curriculum.

b. Learn how to use learning media.

c. Learn about some relevant theories that had used in a similar experiment before

d. Do and observe some experiments.

e. Note the fact that happened surrounding, analyze it, and show thedata.

f. Make a conclusion about the experimenting result.

g. Make the response to the result and present it.

Through these activities, students will get the knowledge to assessing their high-level thinking. Attitude and skills are also gained by having critical, creative, and caring characters. In teaching descriptive text, for example, an experimenting activity can be done by asking students to do a discussion to find the generic structure, language feature, and social function. As the facilitator, the teacher can guide the discussion and help students to face difficulties. The teacher should also pay attention to the overall classroom situation.

6. Associating

Associating is the ability to analyze and associate the information that occurred within the group. Associating is the process of analyzing the information to find the relationship between one information to other information and to find the patterns of the interrelationship of the information, therefore one can make a conclusion from the patterns found. However, the associating stage in curriculum 2013 emphasizes the students to be more active than the teacher. This is in line with Suharyadi (2014:1351) who stated that in the associating stage the learning process will be managed effectively if there is a direct interaction between learners through stimulus and response.

The competence is developed to build attitudes such as honest, conscientious, discipline, la- abiding, hardworking, also the ability to implement procedures and inductive and deductive thinking skills. (Ministry of Education and Culture, 2013d).this phase aims to build the capacity to think and act scientifically. The teachers activities in associating are; (1) demanding students to analyze the result of exploring;(2) self-assessment and peer assessment activities; (3) demanding students to sequence the pictures; (4) comparing the model text with other text (General Directorate of Primary School, 2013b; Directorate of Junior High School Coaching, 2013).

7. Networking

The last stage is networking or also known as communicating. The learning activities of this phase are delivering the observation result and summary based on the oral and written analysis as well as other media used. Furthermore, the activities are delivering results in the form of conceptualization as demonstrated oral and written, write, explain, edit the work of a friend; the magazine published the results of the work on the walls, bulletin school, learning journals, and school and blogs. In addition, it is the writing activity or telling what has been found in the activity of collecting information, associating, and finding a new pattern. The collected data are delivered in front of the class (Ministry of Education and Culture, 2013d).

The competence that develop is developed attitudes of honesty, through, tolerance, the ability to think systematically, to express their opinions briefly and clearly, and develop good language skill and correct. Confident and polite characters are formed when students communicate their findings or work. It is in line with Brown's (2007) statement on communicative competence which facilitates students to develop spoken and written communicative competence.

To resume the example of learning activities in teaching English descriptive, narrative, explanation, functional text using a scientific approach will be explained in Table 1 as follow:

Table 2.1 : The Example of Learning Activities In Teaching English Descriptive, Narrative, Explanation, And Functional Text Using The Scientific Approach

No	Steps of teaching English using Scientific Approach	Learning activites in each type of genre
		Congratulation
1	Observing	Observing examples of congratulatory expression material (Congratulations) and its use to be developed by students from the media.

2	Questioning	Asking questions related to the congratulation given. The teacher connected students" questions to the learning materials given.
3	Experimenting	Discussing the detail information from the materials give in a group
4	Associating	Finding the relationship between one information to other information.
5	Networking	Reporting the result of group discussion in front of the class.

D. Previous Study

In this part, the researcher will review some previous studies related to this research.The first research has come from Like Harmer (2010) with his research entitled "Teaching and Learning English As Foreign Language" . The study is organized within English language accusations teaching sequences, there are four things that students need to do with a new language: be exposed to it, understand its meaning, understand its form (how it is constructed), and practice the language itself.

Another research has come from Intan Siti & Didi (2017) with his research entitled "Scientific Approach: An English Learning Teaching (ELT) Approach in the 2013 Curriculum". The objective of the study is to investigate the practice of a teacher implementing a scientific approach in English learning-teaching in one junior high school in Bandung and reveal the difficulties encountered by the teacher in the process.