CHAPTER II

LITERATURE REVIEW

2.1 Competency

2.1.1 The Nature of Competency

Based on Piet Sahertian (1994) states that competence is an ability that is a blend of knowledge and capabilities that can be observed and measured. Meanwhile, Dimyati and Mudjiono (2006) argue that the term of competency refers to the behavior that can be observed, which is required to complete daily activities. Competence is defined as a case that illustrates the qualifications or ability, both qualitatively and quantitatively (Sahara, H. 1992). Competence as the authority to decide anything (Bakharuddin. 2012).

According to Purwanto (2004) competence is combination from knowledge, skills, values and attitude as reflect in the basic habit of thinking and acting that is dynamic, evolving, and can be achieved at any time. The habit of thinking and acting consistently and continuously enable become competent.

Based on the explanations above, it can be concluded that competence is the knowledge, skills, and the ability or capability that is owned by someone who has been a part of her that coloring cognitive behavioral, affective, and psychomotor.

2.1.2 The Aspects of Competency

Based on Dimyati and Mudjiono (2006) there are some aspect of competency as follows:

1. Knowledge

   Knowledge is someone to do something. For example, one can make the process of scientific thinking to solve a problem based on the knowledge that he had with the stage to think scientifically and critically.

2. Understanding

   Understanding is the depth cognitive and affective owned by individuals. For example, students are able to solve it based on their understanding to seek additional material for resolving the issue.

3. Skills

   Skill is something that is owned by an individual to perform required tasks. For example, students may only be able to make observations about the microorganisms that she has the skills how to use a microscope as a tool.

4. Value

   That is a standard of behavior that has been believed and psychologically has become part of him, so it will color in all his actions. For example, the standard of student behavior in carrying out the process of thinking such as openness, honesty, democracy, compassion, and so forth.

5. Attitude

   That feeling or reaction to stimuli coming from the outside. For example feeling happy or unhappy about the emergence of new regulations, feeling happy or unhappy about the lessons learned and so forth.

6. Interests

   Interest is the tendency of a person to commit an act or acts. For example, an interest in learning and deepen the subject matter.

Based on the explanations above, it can be concluded there are six aspects of competency such as knowledge, understanding, skills, value, attitude and interest.

2.1.3 Domains of Competency

Based on Piet Sahertian (1994) there are some domain of competency as follows:

1. Cognitive Domain

   That is about the behaviors which is emphasize intellectual aspects. Such as knowledge, understanding, and thinking.

2. Affective Domain

   That is about the behaviors which is emphasize aspects of feelings and emotions. Such as interests, attitudes, appreciation and how were someone adjustments.

3. Psychomotor Domain

   That is about the behaviors which is emphasize aspects of motoric skills. Such as writing, typing, swimming, and operating machinery.

   Based on the explanations above, it can be concluded there are three domains of the competency includes cognitive, affective and psychomotor.

2.2 Critical Thinking

2.2.1 The Nature of Thinking

Based on Ralingson (1997) argue that thinking is a cognitive process to get the new knowledge. Allinson in Mohsen Zare (2013) states that thinking is a mental activity that involves the brain. The activity of thinking also involves

the whole person and the feelings and will of man. Think of something means direct themselves to a particular object, realizing active and present in mind and then have insight into the object (Shor 1987).

Thinking is a process and translate the brain about information through the senses of happiness conscious or subconscious brain that produce meaning and a number of concepts (Johnson Alvonco 2001). Thayer (2000) thinking is combination from observations with the five senses or empirical observation that produces a number of concepts and understanding. Using the mind to consider and decide on something, to weigh in memory (Peih 2007). Thinking is a behavior that uses the idea of helping one's thinking. Think the ultimate goal of the learning process. Thinking is a process of cognitive and mental processes to acquire knowledge. The activities of think the merger between the perception and the elements you have in mind (Halpern 1998).

Related to Ross in Wowo Sunaryo Kuswana (2011) states that thinking is a mental activity in the aspect of basic theory of psychological aspects. Think very important role in student achievement, formal reasoning, success in learning and creativity for thought regulatory action is at the core of students (Tindangen in Eka Ariyati, 2010).

Based on the definition above, it can be concluded thinking is an activity of using mind to consider something.

2.2.2 The Nature of Critical Thinking

According to Ralingson (1997) critical thinking as directed thinking because focus that will be solved. In critical thinking involving logical thinking and reasoning. Critical thinking is the ability to think clearly and rationally

(Liv 2002)). Halvorsen (2005), critical thinking is the ability to analyze the facts, then make an idea and defend those ideas to make a comparisons. After that, it can make a conclusions and create a solution based on the problem. Claudette (2011) stated that critical thinking is a deliberate process for evaluating an information of experience, confidence and capability.

Additional from Robinson (2004), critical thinking is a process step analyses an issue in giving argumentation with a coherent and systematic. It begins to analyze, organize ideas, defending an opinion, make a comparison of various information, draw conclusions from information already they get and evaluate the problems that exist with a problem solving (Karen Worth 2009).

Based on Halpern (1998), argues that critical thinking is the development of cognitive abilities in learning to achieve learning objectives. Paul (2006), states that critical thinking like the models of thinking about everything or matter whatever, by improving the quality of the creative thinking based on the knowledge and experience which that they had (Mertes in Thayer 2000). Ennis (1985), critical thinking is arrangement by logical with emphasis on making the decisions about what to believe and be done. Evaluate activities into consideration the conclusions that will be drawn to determine the contributing factor in arguing (David 2006).

Based on the definitions above, it can be concluded that critical thinking is an individual to think logically in identifying the issue, giving argumentation, word choices and emphasizing decision-making about what to believe or do confidently.

2.2.3 The Position of Critical Thinking in Learning Process

The learning process related to the formation and use of the ability to think. Muslich (2009) states that students will be easier to recognize concepts and knowledge when they already have intellectual in their selves. So, when they faced with learning material, it is easy to arrange and compose a logical thinking. The learning objectives by Sugandi (2000: 25) is helping our students to gain experience, and with experience that behavior may include knowledge, skills, and values or critical thinking is considered necessary for inclusion in the learning process of students both inside and outside of the classroom. To develop students' critical thinking ability, teachers do not teach specifically in a subject. Good critical thinking skills, can form a rational attitude-behavior. So, improve critical thinking skills are very necessary and important to be developed especially in this time. David (2006) argue that during learning process, teachers often require students to have the ability to think critically, that the students are also able to deal with various problems or challenges of life. In a learning process, aspects think it's a very important aspect for students. From small things alone, as rational beings, humans would always be compelled to think of things around them. Then a problem as well but would require intelligent ideas that are useful to solve these problems. The idea of thinking is what can be called with the results of thinking critically.

Therefore, it is no wonder that lately in a learning process implanted critical thinking skills in students. Besides, because critical thinking skills are very important for the students' thinking, critical thinking is now also widely regarded as a basic competence, such as listening, speaking, reading and writing need to be mastered (Fisher, 2009). The purpose of the learning goals is to arrive

at the formation of the students who are able to think neutral, objective, reasoned or logical. With accustomed to critical thinking in the learning process, students will also be used to reflect on himself to use his thinking to the fullest potential. So that the power of thought and keeps honed his reason for accustomed used to think critically. But this will not be successful if teachers are not forming an active learning in the classroom. So in this case, the teacher must also have thought and broad view in order to create innovative learning fun for students and can form the character of students who can think critically.

Based on explanation above, it can be concluded that the position of critical thinking in learning process as the part of learning objective, that this ability should become the most important activity should be apply during learning process from pre-teaching until post-teaching and as the reflect of the students when they faced with anything problem can solve with easier.

2.2.4 The Purpose of Critical Thinking

Based on Elaine B. Johnson (2009: 185) stated that the purpose of critical thinking is to achieve a deep understanding. Meanwhile, Fahruddin Faiz (2012) argues that the purpose of critical thinking is simple: to ensure, as far as possible, that our thoughts are valid and correct.

According to Halpern (1998) argue that the goal of critical thinking is create new idea, knowledge and problem solving. Additional from Bianchini (2008), the purpose of critical thinking is to measure the knowledge of someone about the information related the problem.

Related to Zaini (2001), there are four stages the purpose of critical thinking in learning process. (1) develop in analysis, (2) develop in making

decision, (3) repair in memorization, (4) and develop norm as the leader of students' attitude.

Based on the above opinion, it can be said that the purpose of critical thinking is to achieve a deep understanding of a material or concept so as to ensure that the students' thoughts on a concept that is valid and correct.

2.2.5 Activity Critical Thinking

Activity critical thinking skills by Ennis in Nur Siti (2013) consists of 12 components, namely: (1) formulate the problem, (2) analyze the argument, (3) ask and answer questions, (4) assess the credibility of sources of information, (5) make observations and assess the report on the observation, (6) make deductions and rate deduction, (7) make induction and assess induction, (8) evaluate, (9) identify and assess identification, (10) identify assumptions, (11) conclude and execute, (12) interacts with others.

Based on Karen Worth (2009) there are five stages on critical thinking. Begins to analyze, organize ideas, defending an opinion, make a comparison of various information, and draw conclusion.

Additional from David (2006) argued that there are seven activities on critical thinking, those are: (1) Define a problem, (2) Limit the problem, (3) Evaluate the data, (4) Analyse arguments, (5) Discuss the problem, (6) Share different perspective, (7) and deduce the information.

Based on explanation above, it can be concluded that there are six stage in activity critical thinking. Those are formulate the problem, analyze the problem, ask and answer questions related the problem, find additional information from other sources, share their arguments, and make conclusion.

2.2.6 Skills Learner Need

2.2.6.1 Cognitive Skill

According to Bill Mayer (2008), state that learners are able to construct their potential intellectual such as knowledge, how to think and find the problem solving through hypothesis and explain the result using logically reason and fact. This skill is important to create and build the readiness of the learner to learn.

The part of knowledge in this skill is the ability to define about something, principle, etc. in other hand for their intellectual skill are about knowledge, comprehension, application, analysis, syntheses and evaluation Zeidner (2005).

These domain continuous without interruption from recognizing the material, comprehend, able to use and apply the material that they have learned. After that the learners are able to scatter the structure of the material into component and the factor why it can happen. The next is gather the information from a piece of component become good structure the material and detail to make easier the learner to learn. The knowledge had already they get, so the learners are able to evaluate their knowledge and activity during the lesson.

Based on the explanations above, it can be concluded that cognitive skill is the all activities related to the brain and the aim of this skill in the ability to think.

2.2.6.2 Metacognitive Skill

Learners are able to describe what happened during the lesson and able to identify what activities in the learning, like comprehending, remembering, applying their experience about knowledge and using a strategy that they used (Bill Mayer 2008).

Based on Zeidner (2005) metacognition is awareness of the learners about their learning, Schraw (2006) what, how, when and why the learning strategy depends on the learners itself to apply in their learning process. The final purpose in this skill is reflection their own learning.

Based on the explanations above, it can be concluded metacognitive skill is an ability that emphasize the thinking process of students.

2.2.7 The Characteristic of Critical Thinker

According to Halpern (1998) there are six characteristics of critical thinker those are curiosity, humility, researcher, listener, objectivity and creativity. Great thinkers always want to know the knowledge that they think are less valid, then they will be continuing their own study to find out the information from different sources. Research is one of the great thinker way to find the information they learned to find a satisfactory answer based on the information obtained. Not just listen to what others have to say, but great thinker also participated to deliver their opinions. The Objective is the nature of a great thinker because they have a purpose and consistent what they want to achieve and not easily influenced by others. Great thinker, always full of creativity. Because creativity is the ability to find something new and different to the others.

Based on David Graddol (2006), there are some indication that indicated characteristic of critical thinker. They are analyze, perspective, creativity, conclusion and communication. Analyze the information of data, idea, or concept with accurately. Perspective, they are able to have much knowledge about anything. So, they can give their opinion logically based on the evidence,

and rebut the unreal information or knowledge. Creativity is the character of the critical thinker because they should be creative to make differentiation with the other by their self. Conclusion, they are able to giving conclusion from the case based on accurate information and logical perspective by their own words. Communication is the last point in this characteristic. They should be able to share their opinion or knowledge to another. They can share each other to change the information or knowledge.

In addition, from Ralingson (1997) critical thinking if the students deliver of relevant ideas in giving argumentation that the speaker must still discuss the background of the problem, the nature of the problem, cause and effect of the problem, including the consequences of problem solving and implementation steps. Not only give their argumentation, but also they should give respond to an idea from other people may be positive (support, approve, justify), can also be negative (reject, rebut, criticize).

Based on the explanations above, it can be concluded the characteristic of critical thinkers are should be able to dare giving responses a problem with full consideration begin by identify the issue or problem, analyze the problem that exists is to seek information from a variety of information as one of problem solving. After the information has been in getting, it is time to communicate or share the information to other people. When give the reason and deduce the students should provide a logical reason and consistent with their answers not influenced by others.

2.3 Student Centered Learning

2.3.1 The Nature of Student Centered Learning

Based on Leo Jones 2007 argue that a student centered approach is an approach to develop the learners can do anything, especially their attitude during the learning process, because at this stage the learners decides to express their feeling what they want to learn and do. Bakharuddin (2012) student centered learning is the learner as a creator in the classroom do an activity based on the topic from the teacher had given. The topic in this learning should be relevant topic, includes appropriate with the learner to be active and life in the classroom.

According to Machemer, P.L. and Crawford, P. (2007) argue that in the students centered learning, the learners are dominate during teaching learning and student-centered learning typically involves more formative assessment and less summative assessment (Bucharest 2010).

Based on the explanations above it can be concluded, student centered learning is a learning based on the learners because during the learning process the all activity is handled by learners and the teacher just became a guide in the lesson.

2.3.2 The Elements of Student Centered Learning

2.3.2.1 Framework of Instructional Events for Student Centered Learning

Based on Rodolfo (2001) there are eight events for student centered. They are set learning challenge in this stage the teacher should decide the challenge of learning to the students what should students do. Define learning goals and objectives, in learning there must be objectives to be achieved, and therefore the bud before teaching the teacher must determine what learning goals and

what you want is developed by students. Determine learning strategy is to achieve the learning goals, the teacher should choose a strategy that will be used in the classroom. In choosing a strategy of teachers also needs to know how the implementation of the strategy and in accordance with the state of the class.

Cooperative and collaborative learning are the same strategies that emphasize students' center during learning process through group discussion. Set performance requirements, in this learning based on students' center, teacher should have an assessment rubric to determine the ability of the students. The assessment rubric should detail and in accordance with the performance to be held. Construct knowledge, in lessons students can work individually or in groups. In building a knowledge sometimes require a partner to discuss and exchange ideas or information. In the center-based learning students are sharing responsibility for learning. Monitor and assess learning, in this stage is assessment of learning outcomes is not always done by teachers themselves, but they themselves are sometimes required to assess the results of their own learning his or assess learning outcomes during the learning that takes place. Provide feedback is used to determine or evaluate the learning outcomes of the goals, objectives or strategies used with the results achieved by the students there might be changes that must be made when further learning, so as to give additional advice for teachers. Communicate result, in this phase is the final assessment carried out by the teacher to know the learning outcomes that have been done. In this test may be oral or written.

Based on the explanations above, it can be concluded there are eight steps before teacher apply student centered learning in their teaching.

2.3.2.2 Classroom Management

As professionals in addition to teaching activities, teachers also need to conduct classroom management that will create and sustain conditions that classroom teaching activities that can take place effectively and efficiently. Classroom management is seen as a process to control the behavior of students where the teacher's task to create and maintain order classroom atmosphere. Classroom management is an effort made by those responsible for learning activities with the intent to achieve optimal conditions so that it can be done and learning activities, as expected. Leo Jones (2007) state that in many kinds of teaching EFL classroom management that will be faced by teachers such as, large classes, very small classes, mixed ability classes, different ages, monolingual classes, pairs or groups or whole class, different personalities, best friend and relative strangers and noisy classes.

Timing is how long the activities that will be use during the teaching learning process. Limited time it is better for the students when they do the task, so the teacher should be consistent when give the time to the students use timer to warning it. If the time to do the task only ten minutes, so after ten minutes later teacher should terminate the task. Teachers need to be flexible because if the learners are enjoying the learning it is can give the long time, but if the learner are not enjoying the learning it is can change the style of learning but if it is impossible the learner to learn so the teacher can stop the learning.

Based on the explanations above, it can be concluded that in classroom management is an important thing for the teacher to make a sure if the learning, teaching will be run well and can achieve the learning goal based on the condition of the class and use the appropriate time during learning process.

2.3.2.2 Classroom Setting

Arrangement of tables and chairs should allow the students can interact with each other and give space for learning activities. Tables and chairs also should be moved, transferred, and arranged flexibly. Give flexibility to the students set up their own or choose a table-chair respectively. Lord (1999), states that there are six forms of arrangement of tables and chairs that can be selected by teachers to increase engagement and interaction with other students in the learning process. Model U is a model arrangement of tables and chairs U model can be selected for various purposes. In this model, the students have a board to write and read, can see the teacher or visual media with ease and allows them to be directly opposite each other. Model team, in this model, the tables are grouped semicircle or oblong in the living room, classroom to allow teachers to interact with each team (group of students). Teachers can put chairs around tables to create an intimate atmosphere. Students can also rotate the circular seat facing the front of the classroom to see the teacher or the blackboard. Model table conference, this model is suitable if relatively rectangular table. This arrangement reduces the dominance of teaching and increase student engagement. Circles model, in this model, the seating of students arranged in a circle so that they can interact face to face directly. Model circle like this is suitable for the full group discussion. Model fishbowl,

this arrangement allows the teacher conducting discussions to prepare the role play, debate, or observe the activity of the group. The most special arrangement consisting of two concentrations chairs circle. Teachers can also put a conference table in the middle, surrounded by chairs on the outside. Breakout Model groupings, if the class is large enough or if the space allows, put tables and chairs where small groups of students can perform learning activities that are based on team tasks. Place the arrangement of the fragment groups far from each other so that the teams that do not interfere with each other.

Based on the explanation above, it can be concluded that classroom setting in preparation for teaching learning process can influence the motivation and student interest lo learn English more enjoy. Their interaction between students to teacher and students to students is should be provided.

2.4 Inquiry Based Learning

2.4.1 The Nature of Inquiry Based Learning

Inquiry based learning is the one of the learner centered approach that emphasizes active learner, can use their knowledge to find and solve the problem (Rachel 2001). Inquiry based learning is a pedagogical approach that emphasize learner to posing, investigating and answering the question during study in the class (Lord 1999). Caitriona Rooney (2009) argue that inquiry based teaching is like learning center, teaching learning process is dominated by the learner. Teacher only becomes guide and facilitator. Based on En Linea (2013) inquiry

based learning is the approach, focus on how learners can solve the case by their selves using thought.

In addition, from Lord (1999) inquiry based learning is an inductive learning how the learner use their analytical skills than their knowledge. Learner was required memorize the memories about the fact and try to do experiments to make a clear a problem with independently. Inquiry based learning is the appropriate learning become task in the learning (Njoroge 2014), because can increase learner motivation during learn a subject. Not only can apply in group task, but also this learning possible individually. Marianne Juntunen (2013) state that inquiry based learning can be run well if the teacher and learner can complete each other. The knowledge of teacher and learner' critical thinking is the key in this approach. Anna (2009) believed that inquiry-based approach can improve education. Learner finds the questions become the problem and analyses it becomes find problem solving through their knowledge and mind. En Linea (2013) the final product in inquiry based learning is the solution of the problem. Eick and Reed (2002) stated that inquiry based learning is the series of stages learning to achieve the teaching learning process. There are ask, investigate, create, discuss and reflect.

Based on the definitions above, it can be concluded that inquiry based learning is learning to focus on learning center that has five stages includes: ask, investigate, create, discuss and reflect during the learning process.

2.4.2 The Principle of Inquiry Based Learning

Based on Karen Worth and Maurido Duque (2009) there are some principles on Inquiry Based Learning as follow:

2.4.2.1 Principle of Intellectual Development

The main objective of this strategy is the development of thinking skills of think. Thus, inquiry based learning is oriented towards learning outcomes and oriented learning process. Therefore, the criteria for the success of the learning process by using strategies inquiry not determined the extent to which students can master the subject matter, but the extent to which students search and find information based on the subject matter they are studying.

2.4.2.2 Principle of Interactions

The learning process is basically the process of interaction, the better interaction is between students and interaction between students and teachers and even students with their environment. Learning as a process of interaction means teachers not as a source of learning, but as a guide during the learning process.

2.4.2.3 Principle to Ask

The role of the teacher in using the inquiry model is the teacher as a interrogator. Because the students' ability to answer every question basically is already a part of the thought process. Therefore, the ability of teachers to ask at every step of inquiry is needed. Various types and questioning techniques should be mastered by every teacher, asked merely to call attention to the students, asked to track, ask to develop the ability, or ask for the test.

2.4.2.4 Principle of Learning to Think

Learning is not just remembering some facts or knowledge, but learning is the process of thinking (learning how to think) that the process of developing the potential of the whole brain, both left brain and right brain. Learning to think is the utilization and use of the brain to the fullest.

2.4.2.5 Principle of Transparency

The meaningful of learning is learning that provides a wide range of possibilities as a hypothesis must be verified. The task of the teacher is to provide space to provide opportunities for students to develop hypotheses and validate the hypothesis openly.

2.4.3 Advantages of Inquiry Based Learning

A research journal of English teaching made by Sandra (2014) in titled "The Use of Inquiry Based learning to Foster Students' Centered Learning ", in this study, she stated that there are some advantages of using inquiry based learning as strategy in teaching learning process. Learning becomes more alive and more active student. Encourage students to think and work on his own initiative, to be honest, objective, and open. Avoid the traditional way of learning, the teacher as the master class. Students learn to take advantage of a variety of learning resources. Train students learn on their own with the positive so that it can develop democracy education. In the discussion of such an inquiry, the teacher can know the depth of students' knowledge and understanding of the concepts being discussed.

In addition, from Patricia (2013) in her study about "Inquiry Based Learning in Science Class" stated that there are three advantages of inquiry based learning.

First, this strategy is a learning strategy that emphasizes the development of cognitive, affective, and psychomotor a balanced way, so that learning through this strategy is considered more meaningful. Second, inquiry based learning gives space for the students to learn according to their learning styles. Third, the learning strategy can serve the needs of students who have the ability above average. That is, students who have good study skills will not be hampered by weak students in learning.

Based on explanations it can be concluded the advantages of inquiry based learning very effective for the students to improve their learning, especially in critical thinking to face about the problem with their own solution.

2.4.4 The Technique of Using Inquiry Based Learning

According to Lorine Sweeny 2007 teacher should prepare the necessary what are they need during the teaching learning process. For this strategy needed some information or news from newspaper, article, picture and video. It can attract attention and will help learner to easier understand about the lesson. Before implement this strategy, teacher should give warming up and brainstorming to the learner for building their knowledge.

Based on Eick and Reed (2002) argue that there are five stages of inquiry based learning. In the first stage is the learners should have questions related the material on that picture or video. If there is no one question from the learners, teacher should guide them to ask about anything relating to the topic. The second is teacher ask for the students for collecting the information from many sources like books, internet or newspaper with a period of time. The third is students generate new thoughts, ideas and theories that are not directly inspired by their

own experience. They write them down in notes. The fourth is the students share their opinion and discuss in a group or a whole class. In the last stage, they are should be able to answer all of the questions and deduce the information.

2.4.5 The Implementation

The teacher will give some instruction to the learner during the lesson. Because the teacher are the creator of this activity so they as a facilitator and controller the class. Anna and Brian (2009), state that teacher will give explanation the material only the basic.

a. Pre-teaching activities

   Teacher builds students' knowledge by brainstorming with giving general question to the learners about that topic, introduce the topic using clue like picture, realia, phenomena, etc the all clue it can be included in the topic. So the learners can guess the topic.

b. Whilst- activities

   In the main activities, teacher begins to apply the inquiry based learning in teaching learning process. Teacher shows the picture or video, the learners should observe that and try to understand what the information on these. In the first stage is the learners should have questions related the material on that picture or video. If there is no one question from the learners, teacher should guide them to ask about anything relating to the topic. Teacher writes all of the student's questions on the whiteboard. The second is teacher ask for the students for collecting the information from many sources like books, internet or newspaper with a period of time. After getting the information from many sources, they can synthesize the all of the information. They should be

combine the separate parts into a complete whole and meaningful information. The third is students generate new thoughts, ideas and theories that are not directly inspired by their own experience. They write them down in notes. The fourth is the students share their opinion and discuss the problem in a group or a whole class. In this stage they can share anything what they get from their sources and share each other. In the last stage is they are should be able to answer all of the questions and conclude. Teacher can invite some students to conclude from their friends' opinion about that problem.

c. Post-activities

In the last activities, teacher invites 2 or 3 students become a volunteer to giving conclude what they have learnt in the lesson today. After they all give their opinion teacher will compare the all opinion of the volunteer and giving addition, if there is important information still not yet they know. Teacher make individual notes to students about the mistakes of the students during the lesson. Teacher can drill some students pronounce unwell. The important stage in the last activities, teacher should check the understanding of students before the class will be finished and give suggestion.

2.5 Review of the Previous Study

There are some previous studies about implementation of inquiry based learning in different subject.

Based on Njoroge, Changeiywo and Ndirangu (2014) about "*Effects of inquiry-based teaching approach on Senior High School Students' achievement and motivation in Physics in Nyeri County, Kenya*". The researcher used quasi

experimental design. This study was designed to investigate the effect of Inquiry-Based Teaching (IBT) approach on senior high school students' achievement and motivation in the learning of physics based on the topic magnetic effect of an electric current. In their study used two experimental groups and two control groups for the study. The result of this study showed that the experimental group had a higher mean gain than those in the control group. This meant that Inquiry-Based Teaching (IBT) approach resulted in higher students' achievement in the learning of the magnetic effect of an electric current than the regular teaching method.

Additional from Valery (2004) when did action research in mathematic subject. Her title about "*Increasing Students' Achievement on Logarithm at Twelfth Grade*". She gave a question of mathematic without giving the pattern for that question, she let the students find other pattern in different books or source and use their thought. During 2 cycles the researcher did the same when gave the task to the students. In her study show that the student's achievement is increasing and they always use deep thought to do the task by their self.

According to Dewi Fauziyah (2015) in her title "*Penerapan Strategi Pembelajaran Inquiry Pada Mata Pelajaran Ekonomi Pokok Bahasan Pasar*". The researcher uses qualitative descriptive design in her study, because she wants to describe the effect of inquiry based learning in tenth grade at SMA N 1 Kebomas in economics subject. The result shows that inquiry based effect gave a positive impact to the students because can increase the students' achievement. Not only giving impact to the students' achievement, but also during learning

process the researcher found has been increased affective ability and psychomotor ability of the students.

Like Agus Eddy Hartawan, Ida Bagus Putrayasa and I Wayan Artika (2015) about "*Model Inkuiri Dalam Pembelajaran Menulis Teks Eksposisi di Sma Negeri 1 Sukasada*". The researchers used descriptive qualitative, because they want to assess learning model exposition text that includes planning, implementation, and evaluation of instructional text exposition by the teacher at tenth grade in Bahasa Indonesia subject. The result shows that in making lesson plans, there are many components of a lesson plan in curriculum 2013. But, the components of a lesson plan in exposition writing text were not included in teachers' lesson plan. The implementation of the exposition writing text in the classroom was not with the same lesson plan because of the situation in the classroom. The teacher has done the evaluation of attitude component, knowledge and skill. The evaluation of exposition writing text is very difficult because there are so many aspects that had to estimate such as: judging of attitude, knowledge and skill.

Another study from Zaenudin (2009) in his title "*Penerapan Metode Pembelajaran Inquiry Untuk Meningkatkan Hasil Belajar Sejarah Kelas X SMA Negeri 1 Sulang Kecamatan Sulang Kabupaten Rembang*" the researcher used classroom action research in his study, and there are two cycles. In his study use test in the end of cycle. The researcher use 3 indicators for criteria of success those are, the increase of students' achievement, the increase activeness of students in learning and the performance of teacher during teach in the learning process. The result shows that after the implementation of inquiry based learning

in history subject during learning process, the students' achievement, activeness of the students in learning and performance of teacher during teach in the learning process from the cycle I until Cycle II was increased.

Related to with Komalasari (2013) in her study about "*Implementation of Inquiry Learning with Reading Infusion to Improve Cognitive Abilities and Logical Thinking Ability Profile of High School Students*". She wanted to determine the cognitive abilities of inquiry learning by reading infusion and logical thinking ability profile of students on physic subject, then it was conducted using quasi experiment with one group pre-test and post-test. Improvement of cognitive abilities measured by the average normalized gain. Logical thinking ability was measured using the group assessment of logical thinking. The result shows that cognitive ability is improved by an average of 0.68 and normalized gain medium category. For the category level of logical thinking ability of students 13,3% including formal level, 73,3% including transition level and 13,3% including concrete level.

Those studies, showed that inquiry based learning strategy mostly can improve students' motivation and achievement. Mostly previous studies applied inquiry based learning in a science subject, mathematic, economics, Bahasa and history. English subject has four skills, those are listening, reading, writing and speaking. But, there is no researcher did inquiry based learning in English subject and investigate the impact of that strategy on students' critical thinking ability in senior high school level. To make different from previous studies, the researcher applies inquiry based learning in EFL students, especially in speaking class to measure the effect of that strategy on students' critical thinking. So, the researcher

conduct, the use of inquiry based learning toward students' critical thinking in speaking skill in senior high school students.