

CHAPTER II

LITERATURE REVIEW

A. Theoretical Review

a. Analysis of Teaching

Wina (2006) explains that the word "teaching" comes from Old English, namely *teacem*. This word comes from Old German (Old Teutonic), *taikjan*, which comes from the root *teik*, which means show. The word is also found in Sanskrit, *dic*, which in Old German known as *deik*. The term *teaching* (teaching) too related to token which means a sign or symbol. The word token also comes from Old German, *taiknom*, i.e. knowledge from *taikjan*. English ancient means that *teacem* is to teach, so the token dan teach is historically related. The definition of to teach (teaching) is seen from the origin of the word means to show something to someone through a sign or symbols, the use of the sign or symbol is intended to evoke or develop responses about events, people,

observations, discoveries, and so forth. Since the 1500s, the definition of teaching (teaching) has changed continuously through development.

According to Maswan and Khoirul Muslimin (2011:) teaching is to teach someone (student) by training and guide them to gain some experience. Hamza (2006) explains that teaching must follow psychological principles about learning. Psychologists formulate the principle that learning must be gradual and gradual increase. Therefore, in teaching, one must prepare materials that gradual, namely (1) from simple to complex, (2) from concrete to abstract, (3) from general or complex general, (4) from general (general) to the complex, and (5) from what is already known (facts) to unknown (abstract concept).

Some general principles about teaching according to Hamzah (2006) are (1) teaching must be based on the experience that students already have. What has been learned is the basis for learning the material to be

taught. Therefore, the level of student ability before the teaching and learning process taking place must be known to the teacher. This kind of ability level is called entry behavior. Entry behavior can be known, among others, by doing a pre test. This is very important so that the learning process can take place effectively and efficiently efficient, and (2) teaching must pay attention to the individual differences of each student. There are individual differences in learning abilities. Every individual has potential abilities such as talent and intelligence that differ from one to another other. What a person learns quickly, may not be able to done by others in the same way. Therefore, teaching must pay attention to the differences in the level of ability of each student. Whereas Nasution in Maswan and Khoirul Muslimin (2011: 220) argues that Teaching is "an activity of organizing or managing the environment as well as possible and connecting it with children, so that the learning process occurs.

The conclusions of the notion of teaching according to some of these experts are: give the best lessons to someone so that they get an experience according to the abilities of each individual. Therefore, teaching must also pay attention to the differences in the level of ability possessed by each individual because they have the ability potentials such as different talents and intelligences.

B. Analysis of Thinking Ability

Analysis comes from the English word, namely analysis. In absorption into Indonesian, the suffix *-ysis* changes to *-isis*. So analysis is absorbed into *analisis*. According to the Big Indonesian Dictionary, is the elaboration of a discussion in each part and the study of that part to get a proper understanding and understanding of the overall meaning (Tama, 2017).

Untara (2013) analysis is investigation of an event or problem to find out the state or actual situation. On the other hand, according to Sudijono (2012) the analysis

(analysis) is a person's competence to describe a situation or problem so that able to understand relationships which include the ability to describe a unity into parts, so that the whole is arranged so that it can be well understood, which is expressed by analyzing the components of the basic components with the relationship of their parts.

Thoughts are thoughts or ideas and mental processes. Think allows someone to tell an event as a form of and treat the model effectively in accordance with goals, plans, and wills (Rahayuningsih, 2019). Plato in Maulidya (2018) argues that thinking is like speaking from the heart. In another sense, thinking is an ideational activity.

Santrock defines thinking as manipulating or transform in memory, this is often done to educate and solve problems, while Suryabrata argues that thinking is a dynamic process that can be described according to the process or path (Rahayuningsih, 2019).

C. Critical Thinking Skills

According to Halpern (2014) in (Sani, 2019), critical thinking related to the use of cognitive skills or strategies that increase the likelihood of obtaining the desired effect. Following statement from Halpern: Critical thinking is the use of those cognitive skills or strategies that increase the probability of a desired outcome. It is used to describe thinking that is purposeful, reasoned, and goal directed—the kind of thinking involved in solving problems, formulating inferences, calculating likelihoods, and making decisions, when the thinker is using skills that are thoughtful and effective for the particular context and type of thinking task.

According to Halpern, critical thinking processes are needed in solving problems a problem (problem solving) and make decisions. Ability solve complex problems and make decisions that are also part of higher order thinking skills. Halpern's theory of thought critical areas include: memory, reasoning and language, deductive

understanding, analysis argument, hypothesis testing, similarity and uncertainty, decision making decisions, problem solving, and creative thinking.

Critical thinking is a skillful and confident thinking process when one studies a problem from all points of view, and investigation to obtain the best opinion, judgment, or judgment uses his intelligence to draw conclusions Sies (1998) in (Sani, 2019). Critical thinking is the process of determining what to believe and done by Facione (2011) in (Sani, 2019).

Critical thinking is a systematic and organizational process that allows students to design and evaluate their opinions based on evidence, assumptions, logic, and language that underlies the opinions of others so that they can express their opinion with confidence. Critical thinking helps students gain a deep understanding and can conclude well on an information, so that they able to solve problems using systematic thinking and logically according to Elaine B Johnson (2009) in (Junaidi, 2017).

Based on the description above, it can be concluded that critical thinking is a competent to make decisions in order to solve problems by analyzing and reading and evaluating information obtained to find the right solution for solve the problem.

a) **Components of Critical Thinking Ability**

- 1) To seek clarity of statements/questions
- 2) Looking for excuses
- 3) Trying to get the right information
- 4) Using reliable sources
- 5) Meets consider the whole situation
- 6) Looking for alternatives
- 7) Amazing
- 8) Change of view when there is reliable evidence
- 9) Finding the accuracy of a problem, and
- 10) knowing the feelings, knowledge, and level of sophistication of others.

Seifert and Hoffnug in (Sari, 2019) mention that there are several important components in critical thinking, namely:

1) Basic operation of reasoning. To think critically, a person has the competence to explain, generalize, draw deductive conclusions, and formulate logical mental steps.

2) Domain-specific knowledge (Domain-specific knowledge). In facing a problem, one must have knowledge of content topic. To resolve a personal conflict, one must have knowledge of the person and by whom the conflict is involved.

3) Metacognitive knowledge (cognitive knowledge).

Critical thinking that effectively requires someone to monitor when he really understands an idea, we need to know when he needs new information, and find out how it collects and learns the information available.

4) Values, beliefs, and dispositions (values, benefits, and positions). Thinking.

Critical means to make a fair and objective assessment. This signifies that there is a kind of self-confidence thinking really leads to solution. This means having reflective perseverance just as you think. Based on the above theory, some of the abilities possessed in critical thinking is a Basic reasoning operation (basic reasoning), Domain-specific knowledge (Domain-specific knowledge), Metacognitive knowledge (Knowledge cognitive), and Values, beliefs, and dispositions (Values, benefits, and positions).

b) Critical Thinking Indicator

According to Norris (1989) in Sani (2019) a critical thinker will try to find reasons for thinking, sufficient information, using sources reliable sources and certify these sources, seek alternatives, take the views of others and oneself seriously, withhold consideration if

the evidence and reasons are not strong enough, look for as much as possible accurate information.

According to Ennis (1996) in Cahyono (2017). The basic criteria of elements that critical thinkers must possess in solving problems are Focus, Reason, Inference, Situation, Clarity, and Overview which can be abbreviated as FRISCO. Focus is the identification of focus or attention main, Reason, namely identifying and assessing the acceptability of the reason, Inference assessing the quality of the conclusions, assuming reasons to be accepted, Situation is the situation carefully, Clarity is clarity, check for make sure the language is clear, and Overview is checking back or steps step back and see everything in its entirety.

D. Speaking Ability

a. Definition

According to Richards & Rodgers (2001), speaking is one of the central elements of communication. In EFL teaching, it is an aspect that

needs special attention and instruction. Whereas, Gee (2008: 212) stated that speaking is so much part of our daily life that we tend to take it for granted. We speak in order to carry out various social activities. Although we may not always be consciously aware of doing so, we attune our language and the meanings we wish to exchange to our specific purposes for speaking in that context. In other word, that speaking is an activity requiring the integration of many systems. All these factors combine to make speaking a second or foreign language a formidable task for language learners yet for many people, speaking is seen as the central skill.

Nunan (2011) stated that speaking is a skill which deserve attention every bit as much as literary skill, in both first and second language. To most people, mastering the speaking skill is the single most important aspect of learning a second or foreign language and success is measured in terms of the

ability to carry out a conversation in the language. Its can defined that speaking is fundamentally an interactive task and it happens under real time processing constraints. This means that they will able to use words and phrases fluently without very much conscious thought.

From some explanation above, researcher can concluded that speaking is important things for human. It is daily activity that always repeated. From speaking we recognize each other and share some information. Speaking makes people able to communicate and maintain the relationship in society.

b. Teaching Speaking

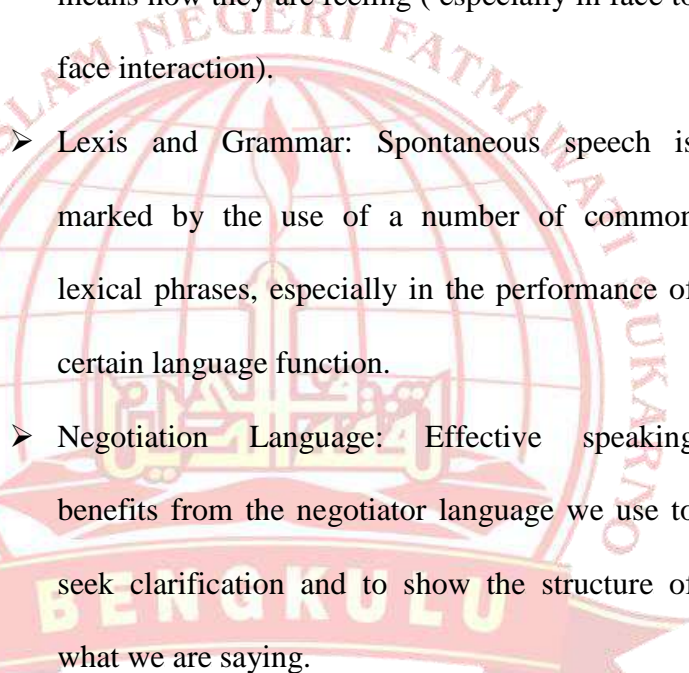
Teaching speaking skill to students should be oriented to enabling students to speak in English in different situations and genres. There were four recommendations for teachers who are going to teach speaking skill. First, whatever the activity chosen, it should allow students to talk a lot. Teachers should

select speaking activities that demand students to talk a lot. The activity should also be able to involve all the students in the activity. It does not only better students who dominate the class.

Speaking is one of four skills beside writing, reading, and listening. It is also as one of productive skills besides writing that use to express meaning, so the other people can make sense of them. A skill that enables us to produce utterances, when genuinely communicative, speaking is desire (and purpose driven), in other words we genuinely want to communicate something to achieve particular end.

Harmer (2008: 269-270) defined there were some elements that necessary for speaking as follows:

- Connected Speech: Effective speakers of English need to be able not only to produce the individual phonemes of English (as saying / would have gone) but also the use fluent „connected speech“ (as in I’ve gone).

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- Expressive Devices: Native speakers of English change the pitch and stress of particular parts of utterances, very volume and speech and show by other physical and non-verbal (paralinguistic) means how they are feeling (especially in face to face interaction).
 - Lexis and Grammar: Spontaneous speech is marked by the use of a number of common lexical phrases, especially in the performance of certain language function.
 - Negotiation Language: Effective speaking benefits from the negotiator language we use to seek clarification and to show the structure of what we are saying.

Based on the explanation above, the researcher can concluded that there were many elements that necessary for speaking. Because of some elements can make speaking clearly and easily to understanding each other. Students often think that the ability to speak a language is

the product of language learning. But speaking is also a crucial part of the language learning process.

According to Harmer (2008), many of the classroom speaking activities as follows:

1. Acting from a Script

Students to act out scene from plays and/or their course book. Sometimes filming the result, Students will often act dialogues they have written themselves. This frequently involves them in coming out to the front of the class.

2. Communication Games

Games which are designed to provoke communication between students frequently depend on information gap. So that one student has to talk to a partner in order to solve a puzzle, draw a picture, put the things in the right order, or find similarities and differences between pictures.

3. Discussion

One of the reason that discussion fail (when they do) is that students are reluctant to give an opinion in front of the whole class, particularly if they cannot think of anything to say and are not, anyway, confident of the language they might use to say it.

4. Prepare Talks

A popular kind of activity is the prepare talk where student makes a presentation on a topic of their own choice.

From the consideration above, we know that there were many speaking activities in a classroom. So, if we want to teach speaking for learners, we can choose the one of them. Because if we teach use the speaking with the activities in above, its" can make the students interesting and motivated them to speak English. So, its" can impact their speaking skill.

By mastering of English as a second of foreign language (ESL or EFL) comes down to how well

student speak. He may write well, for example; get high marks on tests, or even have an accent nearly identical to a native speaker, but if he cannot express ideas, opinions, or instructions clearly in a conversation. Language is for communication after all and that primarily means speaking.

Some of language learners regard speaking ability as the measure of knowing language. These learners define fluency as the ability to converse with others, much more than ability to read, write, or comprehend oral language. They regard speaking as the most important skill they can acquire, and they assess their progress in terms of their accomplishment in spoken communication.

E. Aspects of Speaking

Hughes (2011) defines speaking is a complex skill requiring the simultaneous use of a number of different abilities, which often develop at the different rates. Either

four or five components are generally recognized in analyzing the speech process, they are:

1. Pronunciation

If students want to be able to speak fluently in English, they need to be able pronounce phonemes correctly, use appropriate stress and intonation patterns and speak in connected speech. The speaker must be able to articulate the words, and create the physical sounds that carry meaning. At the level of word pronunciation, second language learners regularly have problems distinguishing between sounds in the law language that do not exist in language they already know.

2. Grammar

It is obvious that in order be able to speak foreign language, it is necessary to know a certain amount of grammar and vocabulary. Grammar is the sounds and the sound patterns, the basic units of meaning, such as words, and the rules to combine them to form new sentences. Therefore, grammar is very important in speaking

because if the speakers do not mastering grammar structure, they cannot speak English well.

3. Vocabulary

As we know, vocabulary is a basic element is language. Vocabulary is single words, set phrases, variable phrases, phrasal verbs, and idioms. It is clear that limited vocabulary mastery makes conversation virtually impossible.

4. Fluency

In simple terms, fluency is the ability to talk freely without too much stopping or hesitating. Fluency can be thought of as the ability to keep going when speaking spontaneously. When speaking fluently students should be able to get the message across with whatever resources and abilities they have got, regardless of grammatical and other mistakes.

5. Comprehension

The last speaking element is comprehension. Comprehension is discussed by both speakers because

comprehension can make people getting the information that they want. Comprehension is defined as the ability to understand something by a reasonable comprehension of the subject or as the knowledge of what a situation is really like.(Hughes, 2011).

Based on above explanation, it can be inferred that there were five elements needed for spoken production they are pronunciation, grammar, vocabulary, fluency and comprehension. We do not only need one or two vocabularies but also as many as we can memorize and understand it. We need many vocabularies to speak with other people. Sometimes some people say that grammar is not necessary but we can see if we do not understand grammar, how people can understand us. Good pronunciation is also necessary for our communication. So, all of elements are needed to produce spoken production well and make good communication for us.

F. Teaching English Speaking In Indonesia

The following are some of the themes of the English language problems faced by Indonesian students as follows:

- 1 Lack of knowledge of vocabulary
- 2 Grammar as a stumbling block
- 3 Fear of others' negative reactions
- 4 Low bravery when speaking publicly in English
- 5 Anxiety when speaking English

The following are some explanations of the themes of the English problems faced by Indonesian students as follows:

a. Lack of knowledge of vocabulary

Learning a new language cannot be separated from the vocabulary. Vocabulary can be defined in many ways. Knowing vocabulary in English is also very important in the process of learning English because if we comprehend the vocabulary, we can easily use the words we want to convey. Experts have proposed several

terms about vocabulary. According to Richards and Renandya (2002: 255), vocabulary is a core component of language proficiency and provides much of the basis for how learners speak, listen, read, and write. In distinction of several articles, it comes up that senior high school students in Indonesia had a low speaking ability. Even, the students admitted that vocabulary was a major problem.

The problems occur when students who lack of vocabulary need to talk and does not know how to combine the words into a good sentence. Khan (2005) once again states that the numbers of students who learn English as a foreign language have difficulties using words and expressions to speak. Students clearly know what they are going to say in the source of language, but when they have to switch the language itself into the target language such as English, they often get confused how to combine and use the proper vocabularies.

b. Grammar as a stumbling block

Language learners and language teachers, the pedagogical central role of language teachers is to teach grammar and correct the mistakes of learners. While teaching using a communicative approach, grammar as the use of language represents the foundation for communication. However, what I have found from several articles is senior high school students in Indonesia is lack grammar knowledge, even some of them really don't know what grammar is. Before speaking, grammar seemed to make the students too cautious. In other terms, too much stress in speaking on the use of proper grammar makes students inactive in speaking English.

Assistant Director of Study for IALF Surabaya, Widiastuti, admitted that she often received complaints from teachers about the difficulty of students understanding English grammar. "We emphasize how to let students be able to use their knowledge of grammar in direct practice. For example, when learning the present

simple tense, don't just give them practice questions, but invite them to chat with friends or use them in their daily life during English lessons," she explained.

c. Fear of other's negative reactions

Watson & Friend (1969) defines fear of negative evaluation as 'concern about evaluating others', avoiding evaluative situations, and the expectation that others will evaluate themselves negatively '(as quoted in Horwitz, Horwitz & Cope, 1991: 31) . Because each other's evaluations are so common in second language classes, students feel uncomfortable when they think that they are being watched by teachers and other students (Price, 1991; Zhao Na, 2007). The feeling of being watched by others makes them feel more insecure and unable to perform well in class. Even in small groups, students feel more anxious because they are afraid of negative evaluations from their peers, which makes them more quiet and reserved (Ohata, 2005).

That's all in line with the results that comes up from several articles, which is senior high school students in Indonesia reported that when they make a mistake when speaking English in front of their friends, their friends would be teased and mocked them. However, that is the reason why many students in Indonesia are afraid to speaking English because if their mistake was noticed, the others would tease and mock them.

a. Low bravery when speaking publicly in English

The difficulty usually faced by senior high school students is the courage to speak in public in English. There are several factors that nfluence why most students have low courage when speaking English in public, that is lack of vocabulary or grammar, lack of information about English (language style, use of words, etc.), which is not used to practicing correct patterns. This happens because they have get used to speak mother tongue and English has not. Sometimes, they have to get used to the differences between English and Indonesian cultures.

That statement is aligned with data that I found which is students in Indonesia were in the form of being dazed, shy, and afraid of speaking in English because they thought that speaking English with those with better English skills was inferior. Those kinds of explanations prevented the students from speaking in English.

b. Anxiety when speaking English

Given the position of English as a foreign language in Indonesia, not many students use it in daily communication. This phenomenon can shape the development of students' speaking skills. Padmadewi (1998) explains that students who take speaking classes often feel anxious because of the pressure of a speaking assignment that requires them to be present individually and spontaneously in a limited time. This statements matched with the data from several studies which is Indonesian students convey that they are improperly pronouncing English words, feeling inferior to those who

are considered to have better English proficiency, and hesitating to speak English with teachers.

However, language anxiety is one of the problems in foreign language learning. According to Krashen's (1982) hypothesis about affective filters, studying language in an improper affective state will have a mental filter, or barrier, and this will prevent them from fully exploiting the input for further linguistic mastery. That is, anxiety causes affective filters, which will prevent students from receiving input, and then their language acquisition will fail to make progress.

G. Problem Based Learning

The term “problem-based learning” was coined in 1974 by Howard Barrows, a leading figure at McMaster University Medical School (Barrows & Neufeld, 1974).

a. Definition of Problem Based Learning model

According to Sudarman (2005) defines Problem Based Learning as a learning approach that uses real world problems as a context for students to learn about

critical thinking and skills problem solving, as well as to acquire knowledge and essential concepts of lecture material or subject matter.

The foundation of problem-based learning theory is collaborativism, a perspective which holds that students will construct knowledge by building reasoning from all the knowledge that has been owned and from all that is obtained as a result of activities interact with other individuals.

It implies that the learning process moves from transfer of student facilitator information to the knowledge construction process social and individual.

According to constructivism, human can only understand through everything it constructs alone.

Problem based learning has the idea that learning can be achieved if educational activities are centered on tasks or authentic, relevant, and presented problems in a context.

According to Rusma (2010) said Problem Based Learning is the use of various the kind of intelligence needed to do confrontation with real-world challenges, the ability to face everything new and complex there is.

In this problem based learning model, understanding, transfer knowledge, higher order thinking skills, solving ability problems, and scientific communication skills are a direct impact learning. While the opportunities for students to gain the essence of knowledge, scientific process skills, student autonomy and freedom, tolerance for uncertainty and non-routine problems is impact of learning accompaniment.

Based on some of the opinions above, the researcher concludes that problem based learning is a learning-oriented model on problem solving that is integrated with real life. In PBL, it is expected that students can form knowledge or concepts new

information from the information they get, so that students' thinking skills really trained.

b. Characteristics of Problem Based Learning Models

Characteristics of Problem Based Learning Model

Characteristics of Problem Based Learning model, namely asking questions or problems, focusing on interrelationships interdisciplinary, authentic inquiry, produce products or work and presenting it, and cooperation.

The characteristics of the PBL model according to Rusman (2010) are as following:

- a. Problems become a starting point in learning.
- b. The problem raised is the problem that exists in the unstructured real world.
- c. Problems require multiple perspectives perspective.
- d. Problems challenge the knowledge possessed by students, attitudes, and competencies that

then require identification of learning needs and new areas of learning.

e. Learning self-direction becomes the main thing.

f. Utilizing diverse sources of knowledge, use, and evaluation of information sources is an essential process in problem based learning.

g. Learning is collaborative, communication, and cooperative.

h. Development of inquiry and solving skills problem is as important as content mastery knowledge to find a solution to a problem.

i. synthesis and integration of a learning process.

j. Problem based learning involves evaluation and review student experience and learning process.

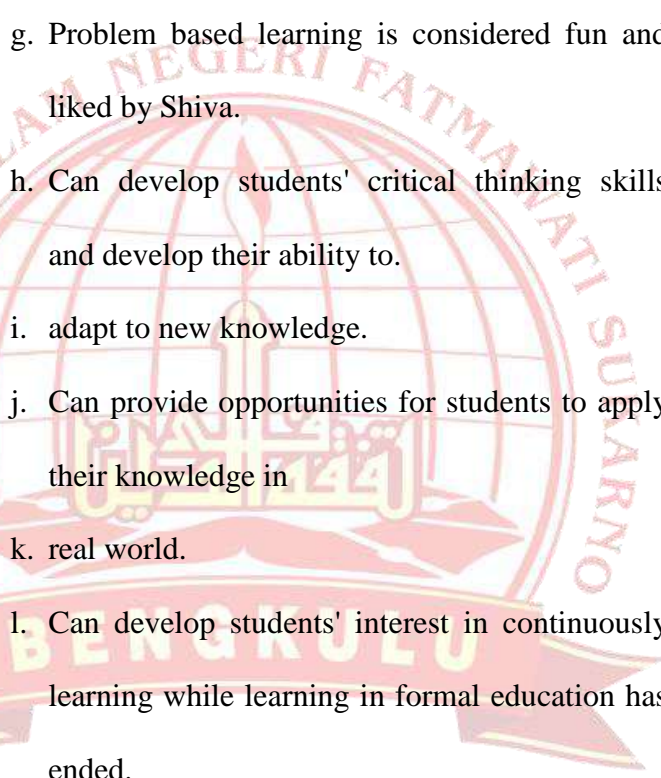
Based on the description of the characteristics according to the experts above, it appears that it is clear that learning with the Problem Based Learning model begins by the existence of problems which in this case can be

raised by students or teacher, then students deepen their knowledge about what what they already know and what they need to know to solve the problem. Students can choose the problem that is considered interesting to solve so that they are encouraged to play an active role in study.

c. The Steps of the Problem Based Learning Model

According to Sanjaya (2007) the advantages of the problem-based model are learning (PBL) are as follows:

- a. Is a pretty good technique for understanding the content lesson.
- b. Can challenge students' abilities and provide satisfaction to discover new knowledge for students.
- c. Can improve student learning activities.
- d. Can help students to how to transfer their knowledge to understand problems in real life.

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- e. Can help students to develop new knowledge and take responsibility for the learning they do.
 - f. Can find out how students think in accepting lessons using a problem-based model learning.
 - g. Problem based learning is considered fun and liked by Shiva.
 - h. Can develop students' critical thinking skills and develop their ability to.
 - i. adapt to new knowledge.
 - j. Can provide opportunities for students to apply their knowledge in
 - k. real world.
 - l. Can develop students' interest in continuously learning while learning in formal education has ended.

According to Warsono and Hariyanto (2012), the advantages of PBL include:

1. Students will get used to dealing with problems (problem posing) and challenged

to solve problems not only related to learning in the classroom but also face problems that exist in everyday life (real world).

2. Cultivate social solidarity by getting used to discussing with friends.
3. The more familiar the teacher with the students.
4. Familiarize students to do experiments.

From the description above, it can be concluded that the learning strategy Problem-based learning must begin with an awareness of the problem to be solved. At this stage the teacher guides students to awareness the existence of gaps or gaps felt by humans or the environment social. The abilities that must be achieved by students, at this stage are: students can determine or capture gaps that occur from various phenomena.

d. Steps for the Implementation of the PBL Learning Model

Table 2.1

Syntax of Problem Based Learning Models Learning:

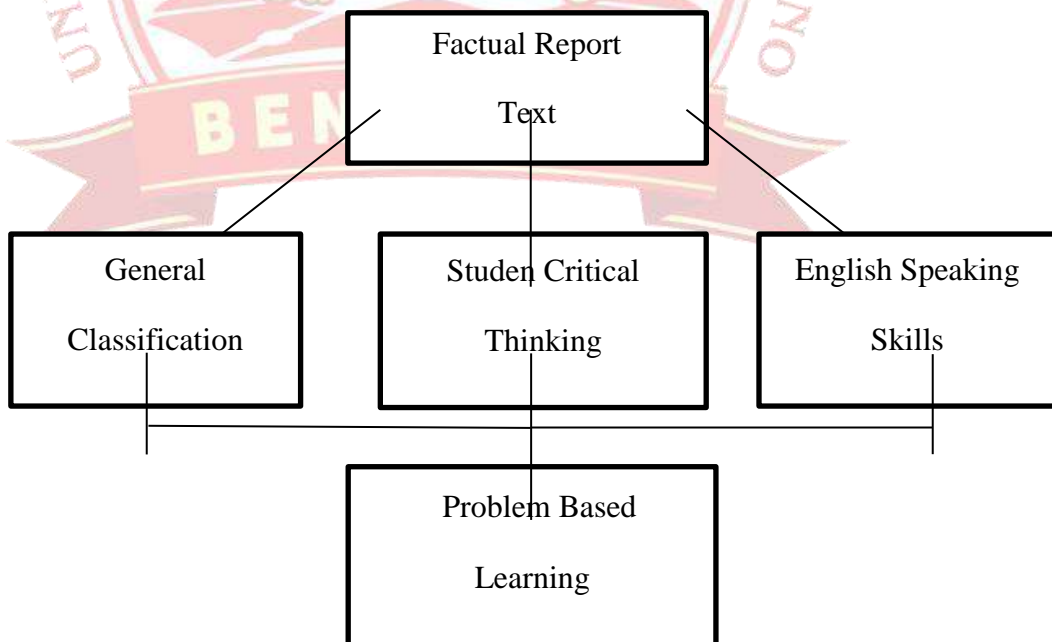
Stage	Explanation
Stage 1 Orient students to problems.	The teacher explains the purpose learning and the facilities or logistics needed.
Stage 2 Organizing students to learn.	Teachers help students define and organize learning tasks related to problems that have been oriented in the previous stage.
Stage 3 Guiding individual and group investigations.	Teacher encourages participants students to gather appropriate information and carry out experiments to gain the clarity needed to solve problems.
Stage 4 Develop and present the work.	Teachers help students to share tasks and plan appropriate work as a result of problem solving in the form of reports.
Stage 5 Analyze and evaluate the problem solving process.	Teachers help students to reflect or evaluate the problem solving process carried out.

H. Conceptual Framework

PBL is learning by using problems as the focus of learning to develop problem solving skills, mastery of materials and self-regulation. The role of educators as companions, motivators and facilitators for students in learning and solve problems (Prabawati & Hermawan, 2017). Student activities with PBL, namely: (1) learning in small groups (3-5) or studying individually, (2) accepting problems in accordance with the competence of learning objectives, (3) learning by digging / searching for information (inquiry), and use that information to solve factual problems being faced, (4) analyze problem solving strategies, (5) discuss in groups, and (6) presenting in class. The activities of educators with PBL are: (1) designing learning assignments with various alternative problem solving methods, (2) provide direction and guidance in the learning process, (3) as a facilitator, motivator and facilitator, and (4) evaluate the performance of students. The ability that The students obtained are: (1)

trained to solve problems (problem-solving), (2) ability to find new information (inquiry), (3) sensitivity to see problems, (4) sharpness analysis & identification of problem variables, (5) interpretation ability, (6) decision making, (7) critical thinking, (8) priority and selective, (9) responsibility, (10) creative, (11) using scientific method, (12) life long learning ability, and (13) independence in learning and solve the problem.

Table 2.2:
Conceptual Framework



I. Previous Study

With the traces of these researchers, they can support the author's opinion to make problem based learning a reference strategy that can help students understand critical thinking which refers to learning to speak. And by using this classroom action research strategy, almost all students become interested and feel happy learning English because they know that English is a foreign language. The results of this study are that there is a significant influence on the use of problem based learning as a learning medium. The purpose of this study is to provide a more in-depth explanation of the application of problem based learning in learning, as an effort to improve students' critical thinking skills and students' speaking skills. Problem based learning, creative tasks, and exercises". Based on this, this study will explain problem based learning in an effort to improve students' critical thinking and improvise their speaking skills through problem based learning strategies.

Rahmawati (2019) This study aimed to analyze critical thinking aspects reflected in students' discussion and giving some opinions. The critical thinking aspects examined in this study covered critical thinking elements mainly proposed by Emilia (2005) as well as critical thinking dispositions mainly proposed by Ennis (1996). In particular, the purpose of this study was to find out elements of critical thinking demonstrated by students in their speaking through discussion and speaking test. This study employed a qualitative research design, particularly a descriptive qualitative.

Yamin (2011) Although, Problem Based Learning (PBL) has a strong theoretical supports from the literature, to date there has been many PBL research resulted with unexpected findings, leading to a conflict on the effect of PBL on students' critical thinking ability. In this review, the authors investigated the theoretical relation, as well as reviewed the recent empirical evidence on the effect of PBL on students' critical thinking ability. The review included the

most recent experimental studies from multiple disciplines between the years 2000 to 2011. Within this, it is concluded that 1) the specific processes in PBL theoretically support students' critical thinking development according to the design applied, 2) empirical evidences in general are inconclusive in explaining the effect of PBL on students' critical thinking ability, particularly outside of medical field, 3) some evidences indicate that PBL requires long term exposure to foster students' critical thinking ability, 4) several predictors might also influence the relationship of PBL and critical thinking such as age, gender, academic achievement, and educational background.

Joseph alisson & Wei pan 2015 (Alisson & Pan, 2015) The theorising of critical thinking has long been attempted in education. Problem Based Learning (PBL) has also been reviewed and utilised in higher education building and construction related subjects. However, how certain 'key skills', such as critical thinking, can be integrated into PBL in order to promote deeper learning in these complex

multidisciplinary environments, warrants further exploration. This paper intends to address this knowledge gap by evaluating the integration of critical thinking into PBL, drawing on a recent Higher Education Academy funded research project. The research employed a multi-methodological research design, and was carried out on a large and innovative building 'design and build', multi-disciplinary group project, undertaken by 67 second-year undergraduate students in the environmental building discipline at a UK university. A process model developed in the previous research was adopted for integrating critical thinking into PBL and its integration and use indicated a number of impacts on student learning.

J. Hypothesis

H0 : Problem Based Learning (PBL) does not increase students' ability to think critically.

H1: Problem Based Learning (PBL) is able to increase students' ability to think critically.