CHAPTER II

LITERATURE REVIEW

This chapter discusses the theoretical review underlying this study. This theoretical review will be synthesized to outline the theoretical framework that is used by the writer to conduct the whole study.

2.1. Theoretical Review

2.1.1 Theories of Learning

There can be many interpretations of the word 'learning'. According to Cambridge Dictionary, learning is "the activity of obtaining knowledge". It is clearly related to activities which students undertake in order to develop their understanding – a process. Brown (2000, p.79) states that before designing a program of learning, it is important to know what the learners already know, then formulating the goals of the learning, and selecting method to achieve the goals, after implementing certain method, the evaluation is needed to know whether the goal is achieved or not. Those arguments can be seen in the context of daily classroom learning activities. Furthermore, Brown (2000, p.79) writes about the maintenance of what has been achieved. It points out that learning is not stopped after the goal is achieved. It needs maintenance so that what has been achieved would not lose. So, from the definitions above, it can be considered that learning is a continuous process of developing knowledge and maintaining what has been attained.

In conducting research, it is necessary to refer some theories as stated by Gredler (1992, p.5) that "…theories are composed of testable principles serving as framework for conducting research". Learning has been defined in numerous ways by many different theorists.Understanding how people process and store information was very *important* in the process of learning. Learning theories are grouped into three basic categories: behaviorism, cognitivism, and constructivism.

Behaviorism view point is developed first by Pavlov who argues that learning process begins with stimulus and followed by the response. In line with this, Watson defined learning as a sequence of stimulus and response actions in observable cause and effect relationships. Furthermore, according to Skinner's operant conditioning theory l*earning* is a change in *behavior*due to punishment and reinforcement(Brown, 2000, p.80-81). In other word, learning is seen as a transfer of knowledge. This view point emphasizes learning as something which is influenced by the environment (Gredler, 1992, p.10).

Cognitive theories emphasize making knowledge meaningful and helping learners organize and relate new information to existing knowledge in memory (Ertmer & Newby, 1993, p.54).Ausubel inBrown (2000, p.83) emphasizes learning as something that has to be done meaningfully. According to Ausubel's theory, to learn meaningfully, individuals must relate new knowledge to relevant concepts they already know. Gredler (1992, p.10) writes that learning is the involvement of mental processes, influenced by

learner's ability in processing information. Meaningful learning can be contrasted with rote learning. Learning by rote is weak or not meaningful since it is only drilling without involving learners mentally to process the information (Brown, 2000, p.83). Through relating new information from current experiences with their prior knowledge, interpreting the information, and using the information to establish meaning and understanding of concepts and ideas, meaningful learning of the new materials can be achieved (Marlowe & Page, 1998, p. 10). Meaningful learning can cause the obtained information to be better retained in students' long-term memory and available to be retrieved in other situations (Ormrod, 2012, p. 192). In addition, the cognitive perspective to learning believes the way that the learner learns involves receives, processes, and recalls information (Gredler, 2009, p. 95).

Constructivists believe thatlearning happens by creating a meaning from experience(Bednar as cited in Ertmer & Newby, 1993, p. 55). What the learner knows is based on his/her own experience. (Glaser, 1991, p. 453) argues thatconstructivism theory holds that understanding comes through experiences and interaction with the environment and that the learner uses a foundation of previous knowledge to construct new understanding. Roger in Brown (2000, p. 89) argues that learning is the process to be a fully functioning person. In order to be a fully functioning person, a person needs to know how to learn first.He also emphasizes that community of the learner will empower learning. In conclusion, the basic idea of constructivism is that knowledge must be constructed by the learner (Holzer,1994, p. 2).

2.1.2 Learning Outcomes

In a curriculum development, the developers plan the intended learning outcomes in the aims, goals and objective (Sowell, 1996, p. 197, Richards, 2001, p. 120-127). One approach to curriculum development suggests the developers create aims first, then translate them into goals and finally into objectives. Objectives are then transformed into learning experiences. In other words, aims are broad learning outcomes that are systematically made more specific.

The aims are general, philosophical, and long term. They often serve as statements of purposes. They are not measurable and presented to provide shape and direction for a curriculum. In the Indonesian education aims are commonly stated in the introduction part of the National Standard (the term for *Standar Isi Mata Pelajaran Bahasa Inggris* issued by the Board of National Standard for Education).An aim can be made operational as a set of goals that lead to the destination for the learners as far as a certain curriculum is concerned. In the English for Primary School curriculum, goals are stated in the standard competences and basic competences of the National Standard. They provides indicators scope for a curriculum,goals are of different types, depending on content generality and planning requirements at various levels of curriculum decision making,for example,a syllabus at a school level.Although goals may be considered long term, they are less long term than aims.Depending on their generality, goals may be achievable within a semester.

From goals come objectives, which are narrower statements of learning outcomes. Degrees of specificity in objectives vary depending largely on how planners conceive of content and their preferences. In whichever form objectives are cast, however, they provide curriculum developers with opportunities to state operationally what the goal statements mean and provide direction to instructional planners.

Intended learning outcomes indicate the developers' emphases on content-process or declarative – procedural knowledge. These knowledge classifications are subdivided as verbal information, intellectual skills, cognitive strategies, attitudes, and motor skills(Sowell, 1996, p. 195 – 196). Factual knowledge and conceptual knowledge represent the "what" of knowledge, procedural knowledge concerns the "how". In other words, procedural knowledge reflects knowledge of different "processes", whereas factual knowledge and conceptual knowledge deal with what might be termed "products".

Factual knowledge contains the basic elements students must know if they are to be acquainted with the discipline or to solve any of the problems in it. The elements are usually symbols associated with some concrete referents, or "strings of symbols" that convey important information. For the most part, factual knowledge exists at a relatively low level of abstraction. Conceptual knowledge includes schemas, mental models, or implicit and explicit theories in different cognitive psychological models. These schemas, models, and theories represent the knowledge an individual has about how a

particular subject matter is organized and structured, how the different parts or bits of information are interconnected and interrelated in a more systematic manner, and how these parts function together. Procedural knowledge is the "knowledge of how" to do something. Procedural knowledge often takes the form of a series or sequence of steps to be followed. Procedural knowledge also includes knowledge of the criteria used to determine when to use various procedures.

2.1.3 Learning Activities

There are some scholars who talk about the learning activities. Brown (2001, p. 129) proposes learning activity as a number of things that students perform in the classroom, covering students' active performance, not one of the teachers'. Furthermore, learning activity refers to a reasonably unified set of students' characteristics, which is limited in time and preceded by some direction from the teacher with a particular objective. On the other hands, Beetham (2004, p. 7) states that learning activities are designed to achieve a series of intended learning outcomes through the completion of a series of tasks. Learning activities are also defined as "any activities of an individual organised with the intention to improve his/her knowledge, skills and competence" (Litwinska, 2006, p. 9). So, from the definitions, it can be concluded that learning activities are activities designed by the teacher which cover the students' active performancein order to achieve the intended learning outcomes.

In learning activities, students are no longer passive receivers ofknowledge; instead, they are active participants in learning and co-constructors of knowledge (Meece, 2003, p. 111). As the implication, there was a need to engage the students in their learning. Furthermore, Bowden and Marton (1998, p. 4) argue that higher education is not a place where learners mainly rely on the teacher to deliver expert knowledge; it is rather a place where learners participate actively in knowledge development. Moreover, Tilaar, Knight, and Yorke (2003, p. 14) suggest higher education programs to promote a complex learning, where students get opportunities to develop their autonomy in making decision, giving opinion, and attempting creation through researches. From the explanation above, it indicates the assumption that higher education students should have a high level of thinking to fulfill the needs of society. Referring to the revised bloom's taxonomy, the writer wants to analyze the learning activities designed towards developing students' level of thinking.

2.1.4 Students' Level of Thinking

Thinking is easier to describe than to define. According to Smith (2001, p.43) thinking isprocessing information mentally or cognitively by rearranging the information from the environment and the symbols are stored in the memory of his past.The human brain collects information about the world and organizes it to form a representation of that world. This

representation, or mental model, describes *thinking*, a process that an inividual human uses to function in at world (Sousa, 2001, p.243)

Cognitive psychologist have been designing models for decades in an effort to describe the dimension of thinking and the levels of complexity of human thought. One of the more enduring and useful models for enhancing thinking was developed by Benjamin Bloom in 1950s. Bloom's taxonomy identifies six levels of complexity of human thought, with the three lower levels (knowledge, comprehension, and application) being more basic than the higher levels (analysis, synthesis, and evaluation). Those levels are arranged as a stairway in which learners are encouraged to achieve a higher level of thinking. If a student has mastered a higher level, than he or she is considered to have mastered the levels below.

Anderson and Krathwohl (2001) then revised Bloom's taxonomy to fit the more outcome-focused education objectives, including switching the names of the levels from nouns to active verbs, and reversing the order of the highesttwo levels. The lowest-order level *Knowledge* became *Remembering*, in which the studentsare asked to recall or remember information. *Comprehension*, became *Understanding*, in which the student would explain or describe concepts. *Application* became *Applying*, or using the information in some new way, such as choosing, writing, or interpreting. *Analysis* was revised to become *Analyzing*, requiring the student to differentiate between different components or relationships, demonstrating the ability to compare and contrast.The two highest, most complex levels of *Synthesis* and *Evaluation*

were reversed in the revised model, and were renamed *Evaluating* and *Creating* (Anderson & Krathwohl, 2001). The implication of the changed forms from noun into verb was to emphasize the process than the result of the objectives (Krathwohl, 2002, p. 213).

Table.2.1.4 Revised Bloom's Taxonomy by Anderson & Krathwohl, 2001

Level	Cognitive Process	Key verbs
Remember	Recall previous learned information	recognize; recall; identify; retrieve.
Understand	Comprehending the meaning of information by interpreting and translating what has been learned.	interpret; exemplify; classify; summarize; conclude; compare; explain
Apply	Makes use of information in a context different from the one in which it was learned.	execute (carry out); implement (use)
Analyze	Separates material or concepts into component parts to best understand that information.	differentiate (distinguish, select); organize; attribute (deconstruct)
Evaluate	Makes decisions based on in-depth reflection, criticism, and assessment.	check (coordinate, detect, monitor, test); critique (judge)
Create	Creates new ideas and information using what has been previously learned.	generate (hypothesize); plan (design); produce (construct)

According to Sousa (2001, p. 254), the lower three levels (*Remember, Understand,* and *Apply*) describe a *convergent* thinking process whereby the learner recalls and focuses what is known and comprehended to solve a

problem through application. The upper three levels (*Analyze, Evaluate,* and *Create*) describe a *divergent* thinking process, because the learner processing results in new insights and discoveries that were not part of the original information. When the learner is thinking at these upper levels, thought flows naturally from one to the other and the boundaries disappear.

2.1.5 Students' Presentation Activities

Nunan (1999, p. 241) emphasizes that in EFL classrooms, learners should be given the maximum number of opportunities to practice the target language in meaningful contexts and situation. One of the way to develop the students' ability to practice is by doing oral presentation (Chivers and Shoolbred, 2007, p. 5). According to Chivers and Shoolbred (2007, p.5), "doing presentation is very good learning experience".

Students' presentation is one type of performance assessment as Feuer and Fulton (as cited in O'Malley and Pierce, 1996, p. 4) argue that performance assessment consists of any form of assessment in which the students constructs a response orally or in writing. According to Herman, Aschbacher, and Winters (1992, p.2), performance requires students to "accomplish complex and significant tasks, while bringing to bear prior knowledge, recent learning, and relevant skills to solve realistic or authentic problem". Furthermore, Mueller (2005, p.1-2) noted that performance does not only allow student to acquire body of knowledge and skill, but performance also emphasizes students' need to learn and demonstrate the

ability to apply the knowledge and skill on real world or authentic contexts.In line with this study, students' presentations discussed were the activities in which students perform their understanding about the materials through presentation as noted in the SPTLA that in ELTM 2 course, students are expected to perform their understanding in two ways which are presentations and portfolios.

2.1.6 English Language Teaching Methodology 2 (ELTM 2) Course

English Language Teaching Methodology 2 (ELTM 2) course is a 4 credits subject which has 32 meetings. ELTM 2 is the study of applications of different English teaching and learning. In this course, knowledge about English language and how to teach it will be reviewed, skills needed to perform competently as an English teacher will be practiced, techniques and activities for English language learning will be performed. After completing the course, students are supposed to gain the knowledge on teaching English and get the experience as a reflective teacher, be competent in running an English lesson. Students who aretaking this course should have passed some prerequisite subjects such as Language Learning Theories, ELTM 1, Introduction to Language, Curriculum Material Development, and Classroom Based Assessment and Evaluation. In other words, ELTM 2 is the application between teaching and learning theories and skills that students have studied in the previous semester.

2.2   Previous Related Studies

A number of studies have been conducted in exploring students' level ofthinking in learning. A content analysis study conducted by (Igbaria: 2013) analyzed the study units in the textbook Horizons for 9th-grade students studying English inheterogeneous classes. This study was aimed at examining the variety in the cognitive level represented by the WH-questions in the textbook according to Bloom's taxonomy, the extent to which the WH-questions in the textbook emphasize high-levelthinking,and whether the textbook aided students in developing cognitive skills. The results showed that 244 questions emphasized lower level thinking skills, while only 137 questions emphasized high order thinking skills. The questions in the Horizons textbook place a great deal of emphasis upon comprehension, which is one of the lower order thinking skills.

Moreover, a case study conducted by Dumteeb (2009) focused on the teacher's questioning techniquesand students' critical thinking skills in Thai context. This research used questionnaires and interview as the instruments to collect the data. The findings revealed that the questions and questioning techniques that had been used in the class were mainly at the low level of cognition. From this research, Dumteeb(2009)concluded that students'responses required low level of cognitive thinking and that such questions cannot develop inlearnersa critical mind. This is because mostof thequestions thatthe teachers asked were simple and required the student to retrieve information from their memory.

Evidences about level of thinkingmostly focused on the questions since Bloom's taxonomy helpteachers compose questions on different levels of thinking.Meanwhile, the research focuses on students' level of cognitive processes inpresentations activitieshave not been touched. Whereas, learning activities are also important in guiding students' thinking; it is an essential tool for examining students' understanding of the learning materials and assessing what levels of thinking students are using in the learning process(Wells, 1999:333). For that reasons,this study is important and worth to be conducted.

2.3 Conceptual Framework

In this study, learning activities are activities designed by the teacher which cover the students' active performancein order to achieve the intended learning outcomes. Learning activities are extremely important in guiding students' thinking. They are also an essential tool for examining students' understanding of the learning materials and assessing what levels of thinking students are using in the learning process. Furthermore, higher education students should have a high level of thinking to fulfill the needs of society. Therefore, referring to the revised bloom's taxonomy, the writer wants to analyze the presentation activities designed towards developing students' level of thinking which includes remembering, understanding, applying, analyzing, evaluating, and creating.