

## CHAPTER I

### INTRODUCTION

This chapter will discuss about the background of the study, problem identification, research questions, purpose of the study, scope of the study and the significance of the study.

#### 1.1 Background of Study

Assessment holds an important role in language learning, including English for Foreign Language (EFL). It plays a big role in measuring students' achievement and getting information about students' knowledge in the learning process. Anderson L.W (2003:4) stated that Assessment means getting information about students that can be used to aid teachers in the decision-making process. Besides, *“assessment helps improve students' learning and teachers' teaching as both student and teacher respond to the information that it provides”* (Ministry of Education, 2007 in Earl, K & Giles, D, 2011, p. 12). It means that assessment is useful for teachers in measuring students' achievement, gathering information about students' learning and predicts what will the teachers do in the learning process and assessment also motivates students to do much better in the learning process.

Besides, the assessment should be related to learning outcomes which are created based on the cognitive process of thinking level taxonomy. Bloom (1965) who is the founder of taxonomy of thinking levels believes that it is to determine the congruence of educational objectives, activities and assessments in a unit,

course, and curriculum. Krathwohl (2002) stated *“The taxonomy table can also be used to classify the instructional and learning activities used to achieve the objectives, as well as the assessments employed to determine how well the objectives were mastered by students.”* Nowadays, Anderson and Krathwohl’s revision of Bloom taxonomy is used as the standard of learning outcome. Still in the same concept, Anderson and Krathwohl revised the taxonomy into six steps: Remembering, Understanding, Apply, Analyze, Evaluate and Create. Those steps are categorized as higher order thinking, they are apply, analyze, evaluate and create. Those four highest of steps demanded students to work in critical thinking and problem solving (Brookhart, 2010). This is also strengthened by FitzPatrick (2015), which also stated that cognitive process (the level of thinking) required achieving an outcome or respond to an assessment task may depend upon classroom instruction.

In 21<sup>st</sup> century learning, people are demanded to be a critical thinker and problem solver. This process is started since in learning activity. Kereluik and Mirsha(2011) in journal *What 21st Century Learning? A review and a synthesis* stated that *“The schooling needs to be fundamentally reconfigured to emphasize higher order cognitive processes such as critical thinking, creative problem solving, curiosity, and adaptability”*. It means the students much reach higher order thinking level to be critical thinker and problem solver (Brookhart,2010). Absolutely, the appropriate assessment must be needed. In short, assessment practices must represent to higher-order thinking skills (HOTS) in order to teach students critical thinking and problem solving. In addition, higher-order thinking

skills (HOTS) are grounded in lower-order thinking skills (LOTS) such as discriminations, simple application, and cognitive strategies and are linked to prior knowledge of subject matter content. The LOTS portion of examination was made up of remembering and processing items; the HOTS scale contained items at the evaluating and creating levels of learning.

Absolutely, Indonesia as develop country also applies the 21<sup>st</sup> century learning system especially in university level. It is supported by *Permenristekdikti Nomor 44 Tahun 2015* about *Standar Nasional Pendidikan Tinggi (SNPT)* stated that university students are able to apply logical, critical, systematic, and innovative thinking and also demanded them to be problem solver. In this case, the learning process needs to reach HOT through appropriate assessment as tools of learning. Therefore, the writer needs to know whether assessments practices that were used in Universitas Negeri Jakarta (UNJ) can provide students to achieve HOT or only reach LOT.

## **1.2 Problem Identification**

The assessment practice is made must rely on the cognitive process. The assessment is created based on the taxonomy level in order to measure the level of students' achievement. Based on Permen no.44, 2015 about "*Standar Nasional Pendidikan Tinggi (SNPT)*" stated that the learners in university are able to solve the problem based on their field and applying logical, critical, systematic, and innovative thinking . This is proof that students are demanded to do problem solving which is a target of higher-order thinking skills. However, Teacher claims

they are assessing higher-order thinking. In the fact, they are not (Brookhart, 2010). In short, the problem of this study is there are some assessments do not align with the cognitive process in learning outcome. So that, the proportion of LOT and HOT need to be analyzed in order to whether the assessments achieve HOT level as noted in learning outcome.

### **1.3 Research Question**

As the problem explained above, the writer formulates research questions as follow:

- 1) How can course assessment tasks in ELE-SP course units be described by the level of cognitive processes involved in them?

The question is broken down further into four sub-research question::

- a) What types of assessment tasks are employed in a course unit?
- b) What types of cognitive processes are involved in each type of the assessment tasks?
- c) What proportion of the assessment tasks in a course unit requires students to perform Low Order Thinking (LOT)?
- d) What proportion of the assessment tasks in a course unit requires students to perform High Order Thinking (HOT)?

#### **1.4 Purpose of the Study**

The aim of the study is to obtain of the levels a profile of cognitive processes involved in assessment tasks of ELE-SP ELTM 2 course units. The proportion of cognitive process needs to be analyzed in order to know whether cognitive process in assessments was used in ELTM 2 course achieve HOTS or only reach LOTS.

#### **1.5 Scope of the Study**

In this study, the types, techniques, and level cognitive process in assessment practice is focused. The files of assessment are analyzed based contribution of two categories of cognitive level; Lower- Order Thinking skills (LOTS) that are consist remember, understand, apply, and Higher-Order Thinking Skills (HOTS) that are consists of categories; analyze, evaluate and create level. The focus on the study is the proportion of cognitive process of taxonomy in assessment practices in ELESP. English Language Teaching Methodology 2 (ELTM 2) will be analyzed on this study. In addition, the analysis of cognitive process will be focused on assessment task of ELTM 2.

#### **1.6 Significance of the Study**

The significance of study is conducted based on providing insight on the implementation of cognitive process in taxonomy level from lower- into higher-order thinking in assessment practice. Besides, the result of study is expected to give information for lecturers about how far they guide students through assessments that they designed.

## CHAPTER II

### LITERATURE REVIEW

This chapter discusses the definition of assessment, types of assessments, and the purpose of assessment. The theory about taxonomy bloom is also explained in the second part of this chapter.

#### 2.1 Definition of Assessment

Assessment is kind of activity of measuring students' learning achievement. According to H.D Brown (2004) Assessment is ongoing process that evaluate students' learning ability by seeing activities of students in classroom. The assessment could occur whenever students give comments or respond questions from teacher besides giving them written test. Airasian. P. W., & Russell, M.K. (2012:3) stated "Classroom assessment is the process of collecting, synthesizing, and interpreting information to aid in classroom decision making". Bahman (2004:7) also stated that assessment is "*a process of collecting information about something that we are interested in, according to procedures that are systematic and substantially grounded*". In the other words, assessment describes activity of teacher to assess for some purposes because they must take many decisions throughout the school day (Airasian & Russel, 2001; Anderson, 2003). In addition, Assessment is described as the formation of judgments on the quality achievement of students (Knight, 2006).

Assessment leads important role in learning process. This is most effective and leads to learning when broader consequences of a given are considered (Boud, 1995, p.1 cited in Mahboob, 2008). Hughes (2003) also stated that the proper relationship between teaching and assessment is partnership, it means that assessment is very useful both by the teachers and the students. Besides, assessment is useful to give feedback and motivation. Falchikov (2005:2) argued motivational assessment is more related to students' needs. Motivational assessment is more beneficial for teachers rather than students. Meanwhile, feedback is more useful for students than teachers.

In conclusion, Assessment is the activity to measure students' proficiency from the beginning until end of learning. Assessment has important role in learning in order to gather information for students' achievement, measure students' competence and performance, motivate teachers and get feedback for students.

## **2.2 Types of Assessment**

The writer distinguishes the type of assessment into three categories; by its method, by its time, and by its purposes. The types of assessment as follows;

### **2.2.1 Methods of Assessment**

Brown (2004:5) differentiated assessment based on the procedure and time of its implementation. There are formal assessment and informal assessment. Formal assessment is kind of assessment which assess students systematically,

and well-planned. Formal assessment also support the product of assessment by using tests such as quizzes, long test, periodical exams, etc.

Besides, Informal assessment evaluates students without use test or non-test. Informal assessment is used in classroom to assess students' performance without demanding results and judgments. Brown (2004) stated that Informal as an incidental, an unplanned comments and responses, along with coaching and feedback to the student. Teacher can give positive words like "good job", "nice work", or correcting students' work if they do some mistakes.

### **2.2.2 Times of Assessment**

The assessment is also differentiated based on the implementation of the time. Brown (2004:5) stated that the assessment is categories into summative and formative assessment. Summative assessment is usually used at the end of term, semester, or year in order to measure what has been achieved both by groups and by individuals (Hughes, 1989:5). Summative assessment is applied in the end of semester such as mid-term test, end-term test, etc. Summative assessment is aimed to measure and summarize what students have achieved in learning.

Meanwhile, formative assessment is when teachers use it to check on the progress of their students, to see how far they have mastered what they should have learned, and then use this information to modify their future teaching plans (Hughes, 1989:5). Formative assessment is conducted during the learning process such as portfolio, journal, etc. Therefore, formative assessment is used when teacher wants to monitor students' progress while they learn in the classroom.



### **2.2.3 Purposes of Assessment**

Earl, L.M., and Katz, M.S. (2006: 13) described three types concerning on the purposes for classroom assessment: assessment *for* learning, assessment *as* learning, and assessment *of* learning.

#### **Assessment for Learning**

The aim of “assessment *for* learning” or *formative assessment* is to give teacher information to improve, modify and differentiate teaching and learning activities. It accepts that there are many ways or technique that students can follow. It needs careful design on the part of teachers for using the result of information to determine what students know, and gain insight into how, when, and whether students apply what they know (Earl, 2006: 29).

#### **Assessment as Learning**

Assessment *as* learning is a process of developing and supporting metacognition for students. This focuses on the role of students as critical connector between assessment and learning. When students can responses the assessment critically, they make sense of assessment, relate it to prior knowledge, and use it for new learning (Earl, 2006: 29).. It is also similar with self and peer assessment that give students’ chance to identify their strength or need. This process can be through themselves or another student

## **Assessment of Learning**

This is also known as *summative assessment*. Assessment of learning refers to confirm what students know and can do, to practice whether they have achieved the curriculum outcomes, and to show how they make relation to others. The aim focuses on the result of assessment in order to ensure students achievement in learning process (Earl, 2006: 29).

### **2.3 Techniques of Assessment**

Stiggins (2004) describes four techniques of assessments that can be conducted in learning activity. There are selected responses, written response, performance assessment and personal communication.

#### **2.3.1 Selected Responses**

This technique is also known as objective assessment. This assessment includes options such as multiple choice questions, matching and T/F (True of False) statement. The technique of assessments is used for measuring students' knowledge and reasoning. For using this technique, the students (respondents) are only demanded to choose the best answer/right options.

#### **2.3.2 Written Response**

Written response demands students to construct answer in response to questions or task rather than select the answer from a list. They include short answer item and extended written response. Short answer item calls for brief

responses. Besides, extended written response items require response that is at least several sentences in length.

### **2.3.3 Performance Assessment**

Performance assessment is assessment based on observation and judgment. It has two parts: the task and the criteria for judging quality. Students complete a task-give a demonstration or create for judging quality or students complete a task- give a demonstration or create a product. The example of performance assessment is presentation in foreign language, working productively in group, term paper and also report.

### **2.3.4 Personal Communication**

This technique is used to gather information through personal communication with students. This activity is following: asking question during instruction, interviewing, and giving oral examination. It can be conclude that personal communication assessment is conducted by doing interaction or communication with students.

## **2.4 Theory of Cognitive Processes**

Cognitive processes are the classification of thinking level of students. It is related to the Bloom's taxonomy. Krathwohl (2002) stated "One of the most frequent uses of the original taxonomy has been to classify curricular objectives and tests items in order to show the breadth, or lack of breadth, of the objectives and test items". The original taxonomy included the following steps: knowledge, comprehension, application, analysis, synthesis and evaluation (Bloom, 1956).

The taxonomy had revised and also implemented by teachers nowadays into six categories: remember, understand, apply, analyze, evaluate and creating (Krathwohl D. R., 2002). The levels of bloom's taxonomy builds in increasing order of difficulty from basic and rote memorization (lower order thinking) to higher order level of critical thinking. Higher-order thinking is approached as the "top-end" of Bloom's taxonomy. Anderson and Krathwohl (2001) categorized the cognitive process into two levels; remember, understand, and apply which belong to lower order thinking and analyze, evaluate and creating which involved in higher order thinking.

#### **2.4.1 Lower Order Thinking**

Lower order thinking is the base of skills in order to move higher order thinking. To achieve higher order thinking, students are supposed to remember and understand the subject.

##### **Remember**

Remember is the process of retrieving a relevant knowledge from long-term memory (Krathwohl, 2001: 215). The cognitive processes of remember are *recognizing* and *recalling* (Meyer, 2002: 228). Recognizing or identifying involves putting knowledge in long-term memory. Besides, recalling or retrieving involves retrieving relevant knowledge from long-term memory.

##### **Understand**

Krathwohl (2001) stated that understand focuses on determining the meaning of instructional messages, including oral, written and graphic

communication. Meyer (2002) said that students *understand* when they build connection between the knowledge to be gained and their prior-knowledge. He also described that the cognitive process includes in understand level are *interpreting, exemplifying, classifying, summarizing, inferring, comparing and explaining*.

### **Apply**

This is the process of carrying out or using a procedure in given situation (Krathwohl, 2002: 215). Applying related to the situations where learned material is used through products like models, presentation, interviews and simulations (Churches, 2009: 39). Apply categories consist of two cognitive process; *executing and implementing*.

#### **2.4.2 Higher-Order Thinking**

Brookhart (2005) defined higher-order thinking in terms of transfer, critical thinking, and problem solving. In terms of transfer, Anderson and Krathwohl (2001) in Brookhart (2001) defined transfer in how it differs from retention:

*Two of the most important educational goals are to promote retention and to promote transfer (which, when it occurs, indicates meaningful learning) ... retention requires that students remember what they have learned, whereas transfer requires students not only to remember but also to make sense of and be able to use what they have learned.* (Brookhart,p. 3). It means that transfer is process the students are be able to apply what have they learnt in new situation.

The critical thinking or “artful thinking” includes reasoning, questioning and investigating, observing and describing, comparing and connecting, finding complexity, and exploring viewpoints (Barahal, 2008 in Brookhart, 2010: 4). In critical thinking, being able ‘to think’ means students can apply wise judgment or produce a reasoned critique.

In term of problem solving, the broad definition of *problem solving* as the non-automatic strategizing required for reaching a goal (Nitko & Brookhart, 2007). Bransford and Stein (1984) in Brookhart (2010) point out that problem solving is the general mechanism behind all thinking, including recall, critical thinking, creative thinking, and effective communication. It means problem is the process of solve the problem in new situation, and creating new solution creatively.

In cognitive process, Analyze, Evaluate, and Create are included in higher-order thinking (Anderson & Krathwohl, 2001 in Brookhart,2001: 5).

### **Analyze**

According to Krathwohl (2002: 215), analyze means breaking material into its constituent parts and detecting how the parts relate to one another and overall structure and purpose. This category includes the cognitive process of *differentiating*, organizing, and *attributing*.

### **Evaluate**

Evaluate is the process of making judgment based on criteria and standard (Krathwohl, 2002: 215). The criteria most often used are quality, effectiveness,

efficiency, and consistency. The cognitive process that includes in this category are *checking* (which refer to judgment about internal consistency) and *critiquing* (judgment based on external criteria) (Meyer, 2002: 230).

### **Create**

Create involves combining or reorganizing elements to form a coherent or functional whole or into a new pattern, structure and idea (Krathwohl, 2002: 215). The cognitive process of create includes *generating*, *planning*, and *producing*.

## **2.5 Previous Study**

FitzPatrick et.al (2015) on their research *Alignment of Learning Objectives and Assessments in Therapeutics Courses to Foster Higher-Order Thinking Skills* conducted this study in pharmacy field. They studied the proportion of HOTS. They found that only 33.8% of the assessment tasks in pharmacy school required higher-order thinking. It can be concluded the assessments were used is not developed well and do not provide students to achieve HOTS.

In addition, Igarria (2013) also conducted the study about cognitive process in the EFL textbook of *Horizons*. He found that Horizons textbook places emphases mainly on the lower thinking processes of knowledge, comprehension and application. Igarria recommends the questions in textbooks for English instruction that are intended for heterogeneous classes must be assessed carefully, and questions that encourage higher-thinking process among students.

## 2.6 Theoretical Framework

Assessment is the activity to measure students' proficiency from the beginning until end of learning. Assessment is as a tool for teacher for getting information about students' achievement and deciding the next learning activity and students for motivating them in learning process. The assessment could be formal and informal. Formal assessment is kind of assessment that assess students systematically, planned-well and support the product of assessment by using tests such as quizzes, long test, periodical exams, etc. Informal assessment evaluates students without use test or non-test. Informal assessment is used in classroom to assess students' performance without demanding results and judgments. Informal assessment also supports the process of assessment by using presentation, discussion, etc. On the other hand, the assessment practice also can be distinguished into two types; summative and formative. Summative assessment focuses on the result of teaching and learning process through mid-term and end-term test. Formative assessment aims at adapting the teaching and learning process to enhance students' achievement of targeted results. In addition, based on the technique, assessment is categorized into four types; selected response, written response, performance assessment and personal communication.

The assessment practice is really related to the cognitive process level. Assessment is created based on the cognitive level process in order to assess the achievement of cognitive process. The cognitive process is related to the taxonomy level that was created by Bloom (1965) that consists of six levels; knowledge, comprehension, application, analysis, synthesis, and evaluation. In



2001, Anderson and Krathwohl revised the taxonomy level. They modified some levels; remember, understanding, apply, analyze, evaluate, and creating. The cognitive level process by Anderson and Krathwohl is commonly used as standard of curriculum, including in making assessment.

The cognitive process in taxonomy level is distinguished into two level; lower-order thinking and higher-order thinking. Lower order thinking is only demand students to know and understand the material. Lower-order thinking as based to achieve higher-order thinking. Higher-order thinking has three function according to Brookhart; as *transfer*, *critical thinking*, and *problem solving*. This is describes on table 2.1

Table 2.1 Theoretical Framework of the Study

Types of Assessment (Brown, 2004)			Techniques of Assessment (Stiggins, 2004)	Cognitive Process (Anderson and Krathwohl, 2002)	
Method	Time	Purpose		LOT	HOT
<ul style="list-style-type: none"> <li>• Formal</li> <li>• Informal</li> </ul>	<ul style="list-style-type: none"> <li>• Summative</li> <li>• Formative</li> </ul>	<ul style="list-style-type: none"> <li>• Assessment of Learning</li> <li>• Assessment for Learning</li> <li>• Assessment as Learning</li> </ul>	<ul style="list-style-type: none"> <li>• Selected Response</li> <li>• Written Response</li> <li>• Performance Assessment</li> <li>• Personal Communication</li> </ul>	<ul style="list-style-type: none"> <li>• Remember</li> <li>• Understand</li> <li>• Apply</li> </ul>	<ul style="list-style-type: none"> <li>• Analyze</li> <li>• Evaluate</li> <li>• Create</li> </ul>

## **CHAPTER III**

### **METHODOLOGY**

This chapter discusses the methodology that will be used in this study. It includes the description of research method, research design, data and data sources, place and time, instrument, data collection and also analysis procedure.

#### **3.1 Research Method**

The aim of study is to obtain of the levels a profile of cognitive processes involved in assessment tasks of ELE-SP in ELTM 2 course. The type and cognitive process were contributed in assessments task of ELTM 2 UNJ need to be analyzed.

The study was conducted by using qualitative research design to answer research question “How can course assessment tasks in ELE-SP course units be described by the level of cognitive processes involved in them?” Qualitative research is an approach for exploring and understanding the meaning individuals or groups ascribe to social or human problem (Cresswell, 2012). Qualitative research method is used in this study in order to describe the cognitive process of assessment practices in ELTM 2 course.

#### **3.2 Research Design**

In order to analyze the cognitive process contributed in assessment task of ELTM 2 course, the writer uses descriptive qualitative research design. This study

uses document analysis to gather valid evidence of students' level of thinking in assessment practices. Bowen (2009) stated that document analysis is systematic procedure for reviewing or evaluating document-both printed and electronic material. This is appropriate design for this study because the writer will analyze the artifacts of assessment task in ELTM 2 course. In this study, the writer will choose interview as supporting data that will conduct in semi-structure interviews with reviews of documents that may permit researchers to verify, clarify, or alter what they thought happened, to achieve a full understanding of an incident, and to take into account the 'lived' experience of participants. (Bowen, 2009, p. 2).

### **3.3 Data and Data Sources**

The data used in the study were the cognitive process of assessments based on Anderson and Krathwohl taxonomy. Meanwhile, the data source used to conduct this study were RPKPS, assessment instruction sheet, and sample of assessment's portfolio in ELTM 2 course. In addition, the writer also conducted interview as supporting information in order to triangulate data.

In order to collect the data sources, *purposive sampling* was used to select the sample of students' assessment task and students' interview. According to Parahoo (1997, p. 232), purposive sampling is "a method of sampling where a researcher purposefully chooses who to include in the study based on their ability to provide the necessary data". The necessary data in this case are fifteen students' assessment tasks and fifteen student's interview that were analyze to get the evidence of students' cognitive process.

### **3.4 Place and Time of the Study**

The study was conducted from May until June 2016 in English Department, State University of Jakarta.

### **3.5 Instrument of the Study**

In collecting the data, the writer used document analysis as main instrument and semi-structured interview as supporting instrument. The interview used Bahasa Indonesia in order to avoid misunderstanding and misinterpretation.

#### **3.5.1 Document Analysis**

RPKPS, assessment instruction sheet and some samples of portfolio were analyzed in order to get the information about cognitive processes and the proportion of LOT and HOT that contributed in ELTM 2 learning activity.

#### **3.5.2 Interview**

The writer conducted interview in this study to support the data about the cognitive process involved in ELTM 2 course assessment tasks. The interview is flexible tool for data collection, enabling multi-sensory channels to be used: verbal, non-verbal, spoken and heard (Mannion & Marrison, 2007). The interview was used in this study in order to gather data about how the assessments related to the cognitive process. The interview is administered to 15 students which is grouped into three groups by using semi-structured interviewed.

### **3.6 Data Collection Procedures**

#### **3.6.1 Data Collection Procedures for Data Analysis**

There are two steps in collecting data from data analysis:

1. Collecting course RPKPS, assessment instruction sheet, and sample of portfolio.
2. Sorting the students' assessment tasks
3. Creating the tables to categorize data

#### **3.6.2 Data Collection Procedures for Interview**

There are two steps in collecting data from interviews:

1. Constructing questions for the interview.
2. Conducting group interview for three groups consisting five students.
3. Recording students' statements in interview

### **3.7 Data Analysis Procedure**

The data were obtained through document analysis and semi-structured interview. The data such as RPKPS, assessment instruction sheet, and sample of portfolio were analyzed, and the semi-structured interview was also used in answering the questions of study above.

#### **3.7.1 Data Analysis Procedure for Document Analysis**

The data will be analyzed through the following steps:

1. Identifying ILO and indicators in RPKPS

2. Identifying types of assessment tasks employed in a course outline
3. Focusing the related verb in indicators column to obtain the cognitive processes involved in each type of the assessment tasks.
4. Identifying each related verb of indicator with Bloom's Taxonomy verbs list
5. Analyzing into document checklist
6. Calculating the percentage of each level of thinking (Remember, Understand, Apply, Analyze, Evaluate, and Create)
7. Identifying the percentage of proportion of LOT and HOT of all assessment tasks in a course outline.

Meeting	ILO	Learning Outcome	Instruction	Cognitive Process					
				LOT			HOT		
				Remember	Understand	Apply	Analyze	Evaluate	Create
2,3,4	<ul style="list-style-type: none"> <li>Students are able to present their review on knowledge about English language and how to teach it</li> </ul>	<ul style="list-style-type: none"> <li>Students are able to show their understanding position about what they have got from previous courses related with English teaching and learning.</li> </ul>	<ul style="list-style-type: none"> <li>Each student will be responsible to take 1 unit from Harmer, J. (2012). Essential Teacher Knowledge. Core Concepts in English Language Teaching. Essex; Pearson Education Ltd. (Section A; 1 – 34) and review it comprehensively.</li> <li>The students will prepare a review to be presented at class and to be compiled in his/her portfolio and give their own suggested way in teaching.</li> <li>The students are required to take a note on the other students' review.</li> </ul>	√					
				√	√	√			

### **3.7.2 Data Analysis Procedure for Interview**

Data analysis procedure for interview:

1. Transcribing the interview
2. Identifying the types of assessment that was used from transcription
3. Identifying the proportion of cognitive process based on the interview transcription.
4. Categorizing the result of identifying the proportion of cognitive process from the interview transcription into Lower-Order Thinking (LOT) and Higher-Order Thinking (HOT).
5. Using the data as supporting information of document analysis

## CHAPTER IV

### FINDINGS AND DISCUSSION

This chapter presents the findings and discussion for cognitive processes involved in English Language Teaching Methodology 2 (ELTM2) course from the document analysis and interview of students. The findings of the data were collected based on the research questions below:

Based on the data gathered, the writer analyzed it to answer the research questions. The research question of this study is :

- 1) How can course assessment tasks in in ELE-SP course units be described by the level of cognitive processes involved in them?

To answer research questions, the writer analyzed and linked the findings through 4 research sub questions. The sub questions are:

- a) What types of assessment tasks are employed in a course unit?
- b) What types of cognitive processes are involved in each type of the assessment tasks?
- c) What proportion of the assessment tasks in a course unit requires students to perform Low Order Thinking (LOT)?
- d) What proportion of the assessment tasks in a course unit requires students to perform High Order Thinking (HOT)?



#### 4.1 Data Description

Research Questions	Source	Data Collection Method
1. <i>What types of assessment tasks are used/employed in a course unit?</i>	Course Outline (RPKPS)	Document analysis
2. <i>What types of cognitive processes are involved in each type of the assessment tasks?</i>	a. Course Outline (RPKPS)	a. Document analysis
3. <i>What proportion of the assessment tasks in a course unit requires students to perform Low Order Thinking (LOT)?</i>	b. Assessment instruction sheet	b. Document analysis
4. <i>What proportion of the assessment tasks in a course unit requires students to perform High Order Thinking (HOT)?</i>	c. Sample of students' portfolio (CBA course batch 2012)	c. Document analysis & Semi-structured Interviews

Table 4.1 Data Description

They are the data description of cognitive processes involved in ELTM 2 course. This study was aimed at describing the cognitive process that are involved in ELTM2 course assessment tasks referring to Anderson & Krathwohl (2001, p. 67). The data of this study were gained though document analysis and interview. The document that was used to analyze is ELTM 2 study guide (RPKPS). The writer analyzed the learning outcomes of the study and also the assessment tasks that are used in ELTM 2 course.

There were fifteen participants who were chosen to be interviewed related to topic. The participants are English department students batch 2012 who were

joined ELTM 2 class. The interview was conducted to support the data from the document.

## 4.2 Findings

Assessment Task	Task Types	n	LOT		HOT	
			n	%	n	%
Note-Taking	<ul style="list-style-type: none"> <li>• Formal</li> <li>• Formative</li> <li>• Assessment for Learning</li> <li>• Written Response</li> </ul>	2	2	100%	0	0%
Performance	<ul style="list-style-type: none"> <li>• Formal</li> <li>• Summative</li> <li>• Assessment of Learning</li> <li>• Performance</li> </ul>	6	4	66%	2	34%
Observation	<ul style="list-style-type: none"> <li>• Formal</li> <li>• Formative</li> <li>• Assessment for Learning</li> <li>• Performance</li> </ul>	1	0	0%	1	100%
Portfolio	<ul style="list-style-type: none"> <li>• Formal</li> <li>• Formative</li> <li>• Assessment for Learning</li> <li>• Personal Communication</li> </ul>	7	2	28%	5	72%

Table 4.2 Summary of Findings

### 4.2.1 Types of Assessment Task in ELTM 2 Course

To answer the first sub-research question; *What types of assessment tasks are employed in ELTM 2 course unit?* The writer analyzed the assessment tasks stated in course outline (RPKPS) and also students' interview as the supporting

data. There are four assessment tasks that were given to the students in the ELTM 2 course.

#### **a. Note-Taking**

the assessment was conducted in on-going process (formative assessment) it means that the purpose of assessment is assessment for learning. Note-taking was also considered as formal assessment because it was planned in RPKPS. Besides, the technique of this assessment is written response that was demanded students to response the instruction in paragraph. This result is supported by the statements of students' interview as follows:

*“Iya ada, jadi pas awal itu kita dikasih topic masing-masing yang beda. Nah kita pelajari dulu topiknya di rumah, next meeting kita baru tampil di depan kelas menjelaskan tentang topic yang kita pelajari di rumah. Sementara 1 siswa presentasi, yang lain mencatat presentasi dari temannya tersebut...” (R5)*

*“...itu ada di pertengahan pembelajaran karena pada kegiatan awal kita cuma dijelasin tentang matkul dari ELTM 2 itu sendiri terus cuma dikasih handout dari harmer kalo gasalah, terus baru deh dipertemuan berikutnya kita review topiknya dan masing2 siswa taking note...” (R3)*

#### **b. Performance**

This assessment was conducted in the end process (summative assessment) and assessment of learning is considered as its purpose of assessment. Because of performance was planned in RPKPS, this assessment is considered as formal assessment. As well as its name, the technique of assessment is performance assessment. This assessment consists of, reviewing materials, practicing English management classroom technique, and observational report,

and teaching activity (in pairs or individual). These findings are supported by interview findings:

*“...ada kegiatan presentasi, sama presentasi hasil observasi yang dihitung sebagai UTS. Sedangkan di akhir ada UAS yaitu individual teaching sama bikin lesson plan baru.” (R11)*

### **c. Observation**

Observation was considered as formative assessment because the assessment task was employed in on-going process. Observation is formal assessment which assessed students systematically. Observation used performance assessment as the technique of assessment.

These findings are supported by interview findings as follows:

*“...Terus ditengah2 proses pembelajaran itu ada observasi, terus hasil observasinya di presentasiin deh...” (R5)*

*“Dipertengahan ada kegiatan observasi, sama presentasi hasil observasi yang dihitung sebagai UTS.” (R11)*

### **d. Portfolio**

This is types of formative assessment in order to record students' process in complete the task. It is also considered as assessment for learning as the purpose. This is formal assessment task which had officially planned in RPKPS and systematically assessed students' process. For the technique, it used personal communication assessment.

This result is supported by findings from interview as follows:

*“Kalo menurut aku sih kegiatan pembelajaran cuma ada di pertengahan sama diakhir. yang dikatakan Yasmin itu yang dikasih topic, itu ada di pertengahan pembelajaran karena pada kegiatan awal kita cuma dijelasin tentang matkul dari ELTM 2 itu sendiri terus cuma dikasih handout dari harmer kalo gasalah, terus baru deh dipertemuan berikutnya kita review topiknya dan masing2 siswa taking note. Kalo selebihnya aku sama kaya Fitra. Terus ada UAS Individual teaching sama kumpulin portfolio yang isinya tugas-tugas kita selama di ELTM 2.” (R3)*

#### 4.2.2 Cognitive Process Involved in Each Types of Assessment Task in

##### ELTM2 Course

To answer the second sub-research question; *What types of cognitive processes are involved in each type of the assessment tasks?* The writer analyzed the assessment tasks stated in course outline (RPKPS) and also students' interview as the supporting data. There are four assessment tasks that were given to the students in the ELTM 2 course.

##### a. Note-Taking

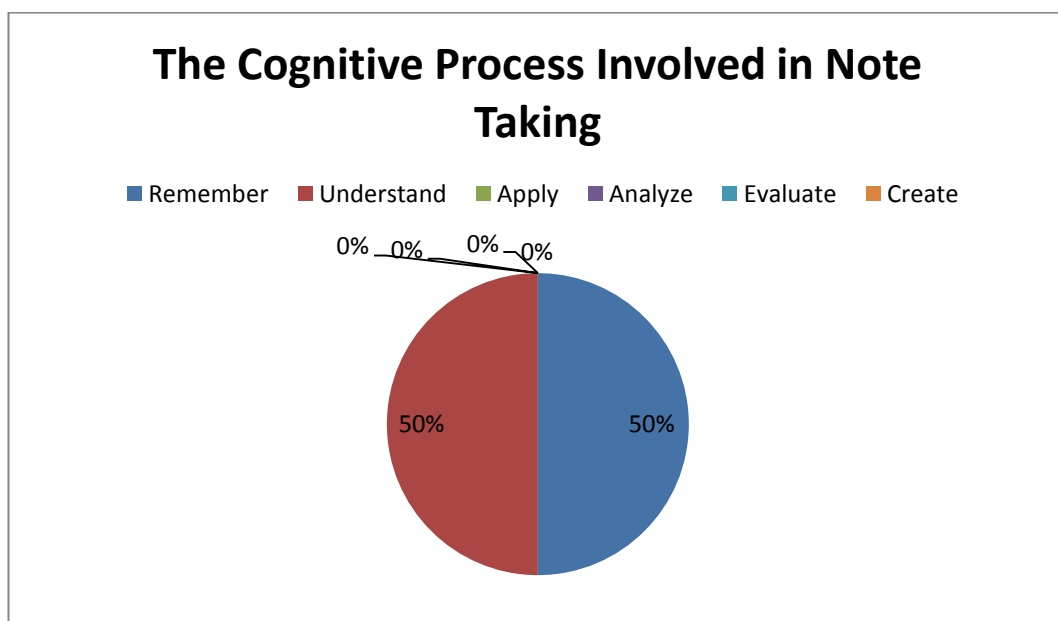


Chart 4.2 The Cognitive Process in Note Taking

Based on the results above, the cognitive processes involved in this assessment task are only remember (50%) and understand (50%). This assessment only provided lower- order thinking level without including apply level. Meanwhile, higher- order thinking level was not provided in note-taking.

The result above is also supported by the students' statements from interview as follows:

*“Ada, waktu itu disuruh baca handout dari Harmer tentang materi pengajaran bahasa Inggris. Sama baca materi yang buat isi kwlw to. Sama note-taking juga.” (R15)*

*“Sama note taking juga to, itu kan kita menulis ulang apa yang kita denger. Langkah-langkahnya sih biasa. Cuma dikasih handoutnya dan disuruh baca dulu di rumah. Note-takingnya pas ada temen yang lain review.” (R12)*

*“...pas nulis di table kwlw yang per-group. Langkah-langkahnya yaitu dibikin per-group 4 orang kalo gasalah. Terus kita dikasi beberapa materi ttg management classroom kalo gasalah. Terus dibaca semuanya. Setelah baca itu semua kita disuruh tulis pengetahuan kita ttg management classroom di table kwlw.” (R2)*

*“Waktu itu pertemuan pertama dikasi handout tentang materi bahasa Inggris gitu. Terus disuruh baca deh. Sama yang kelompok itu yang isi table kwlw. Kita kan suruh baca materi dulu tuh. Terus nulis deh di table kwlw.” (R6)*

## b. Performance

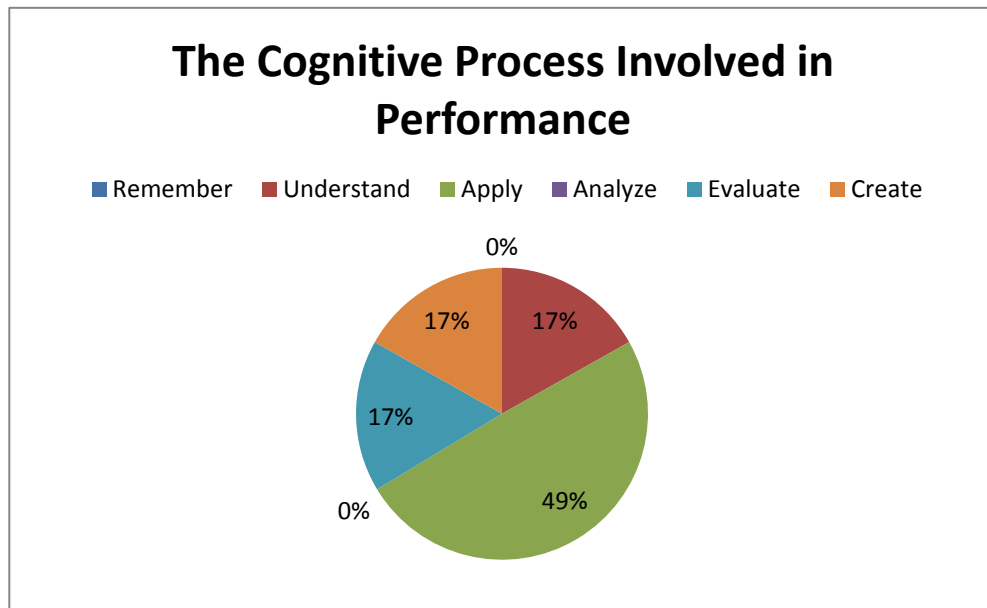


Chart 4.2 The Cognitive Process Involved in Performance

The cognitive processes involved in this assessment tasks are understand (17%), apply (49%), evaluate (17%), and create (17%). The assessment mostly used lower-order thinking rather without than higher-order thinking. Lower order thinking level were contributed without providing remember level. Meanwhile, higher-order thinking were contributed without involving analyze level. The result of the assessment is also supported by interviews' result as follows:

*“Iya ada, kaya disuruh review materi kita kan abis itu disuruh presentasi dengan bahasa kita sendiri. Jadi, kan kalo kita bisa presentasi kita udah mengerti materinya.” (R5)*

*“Memahami menurut gue ya itu pas kaya yang pas review materi yang sudah kita baca. Sama menulis pengertian kita ttg management classroom berdasarkan pengertian kita dari materi-materi yang telah kita baca.” (R7)*

*“Palingan micro-teaching. Itu kan mengaplikasikan langsung kegiatan pembelajaran yang kita pelajari.” (R10)*

*“Ketika pas observasi to. Kita kan di draftnya itu ada suggestion. Disitu kita kasi saran sama gimana nilai apa yang seharusnya dilakukan.” (R11)*

*“Sama ini juga, waktu observasi kan disuruh kasi suggestion juga, terus nilai gurunya cara mengajarnya efektif atau tidak.” (R2)*

*“Bikin lesson plan mah. Yang waktu mau uas itu. Kita kan bikin ulang rpp berdasarkan indicator yang dipake dari CMD.” (R1)*

However, from the result of interview shows creating process is not only modifying the lesson plan from CMD, but also creating new lesson plan from CLIL activities in peer teaching activity. The statements are:

*“Ada yang waktu kita disuruh bikin lesson plan baru berdasarkan topic pembelajaran dari CMD dulu sama bikin lesson plan yang peer teaching yang pki CLIL.” (R10)*

*“Tapi yg peer teaching itu sebenarnya bikin materi baru lagi. Gue inget tuh gue bikin ttg descriptive text sama pasangan saya. Cuma tetap pki metode dari CLIL yang dikasi dosennya.” (R3)*

Based on the data above, it shows the differences between findings in document analysis and interviews.



### c. Observation

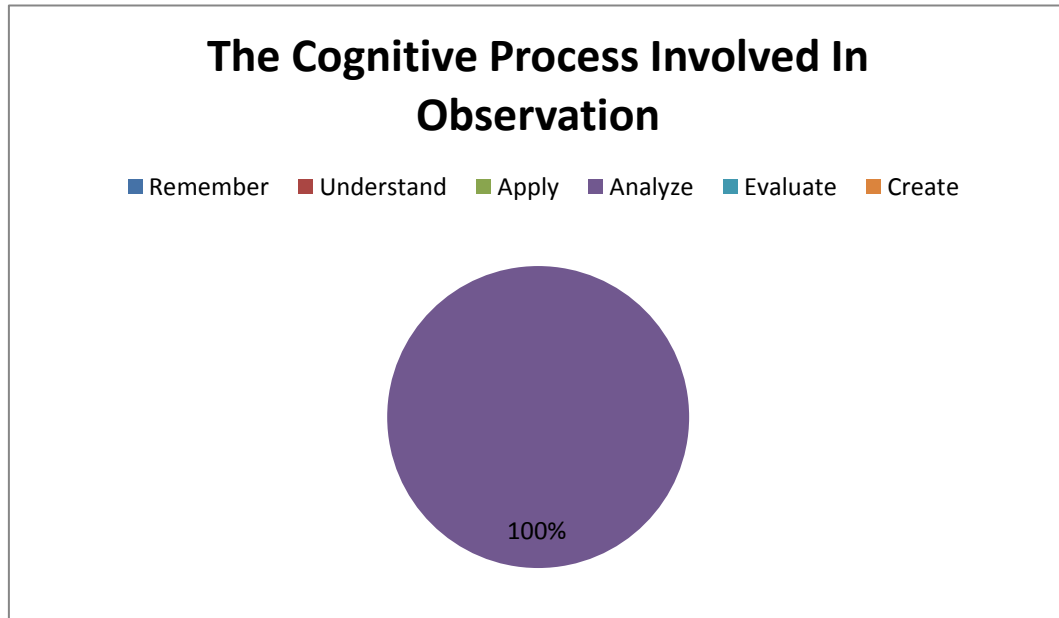


Chart 4.3 The Cognitive Process Involved in Observation

Based on the result above, it shows analyze level was the only cognitive process involved in observation. There was no lower-order thinking involved in this assessment task. Meanwhile, higher-order thinking level was contributed without providing apply and evaluate level. The result above is supported by the results of interview as follows:

*“Analisis ada, observasi tuh. Kita analysis proses belajar mengajar sama guru bahasa Inggrisnya. Yang dianalisis itu cara mengajar beliau. Terus juga dibandingin sama teori yang dipelajari di kwlw. Langkahnya paling ya izin ke sekolah, izin gurunya terus observe deh. Udah si itu aja.” (R2)*

*“...observasi. Pada saat observasi kita kan analisis proses pembelajaran di kelas bahasa Inggris di sekolah. Terus kita bandingin apa yang kita amati di sekolah sama apa yang telah kita pelajari.” (R7)*

#### d. Portfolio

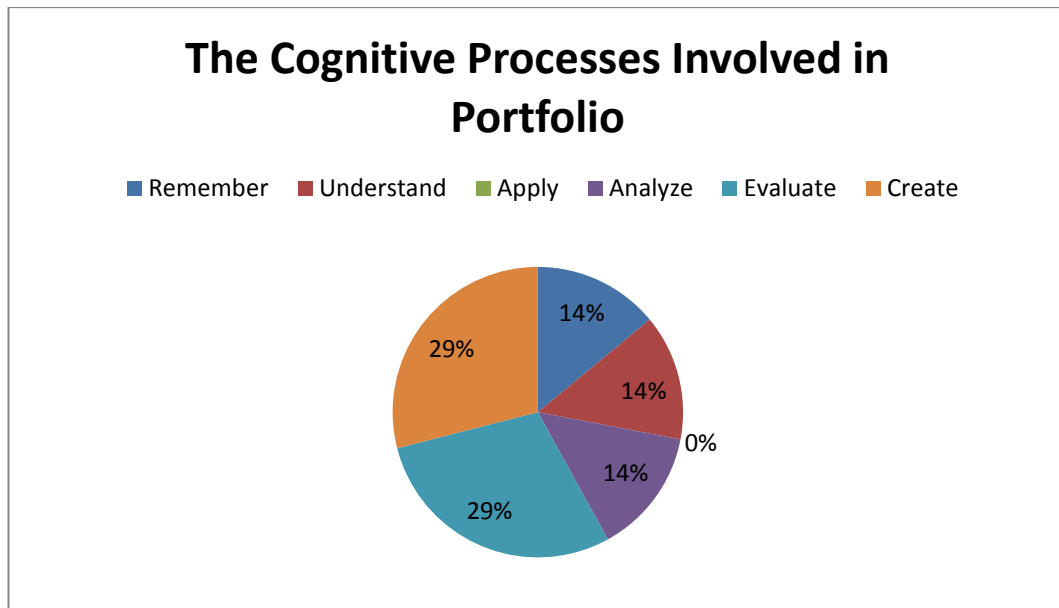


Chart 4.4 The Cognitive Processes Involved in Portfolio

The results shows that the cognitive processes involved in portfolio was remember (14%), understand (14%), analyze (14%), evaluate (29%), and create (29%) levels. It can be seen that higher-order thinking were more contributed (72%) than lower-order thinking (28%).

#### 4.2.3 The Proportion of Lower-Order Thinking (LOT)

In order to answer the third sub- questions of this study which is: *What proportion of the assessment tasks in ELTM 2 course unit requires students to perform Lower Order Thinking (LOT);* and course outline were analyzed then described and the transcription of students' interview were coded and categorized based on the revised Bloom's taxonomy (Anderson & Krathwohl, 2001) to find

out the proportion of assessment tasks in ELTM 2 require students to perform Low-order thinking which consist of remember, understand, and apply.

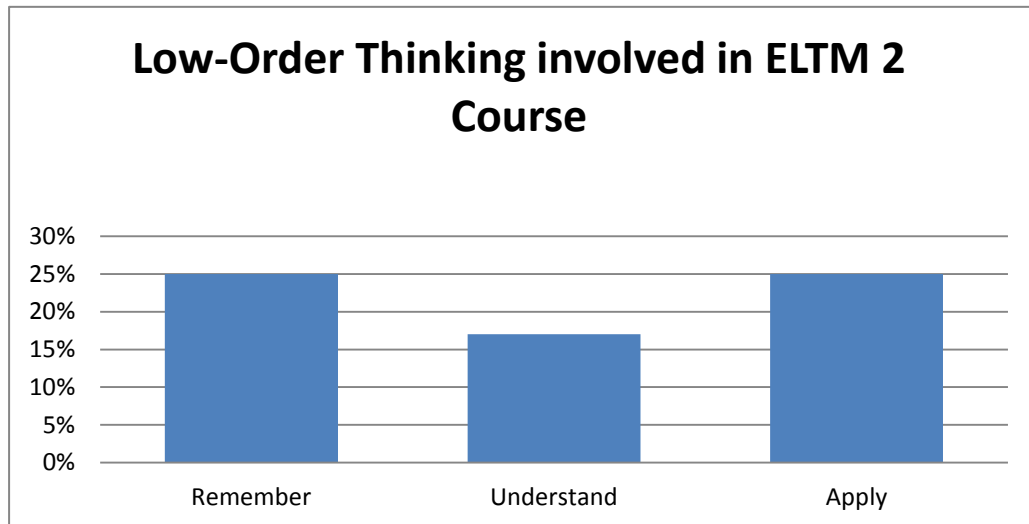


Chart 4.5 Lower-Order Thinking involved in ELTM 2 Course

Based on the chart above, it can be seen that remember (25%) and apply (25%) are the most involved processes in LOT process. Meanwhile, understand level was only 17% involved. The assessment tasks that categorized in the area of remember, understand, and apply mostly contributed in note-taking, and performance.

#### 4.2.4 The Proportion of Higher-Order Thinking (HOT)

In order to answer the last sub- questions of this study which is: *What proportion of the assessment tasks in ELTM 2 course unit requires students to perform Higher Order Thinking HOT?;* and course outline were analyzed then described and the transcription of students' interview were coded and categorized based on the revised Bloom's taxonomy (Anderson & Krathwohl, 2001) to find

out the proportion of assessment tasks in ELTM 2 require students to perform Low-order thinking which consist of analyze, evaluate, and create.

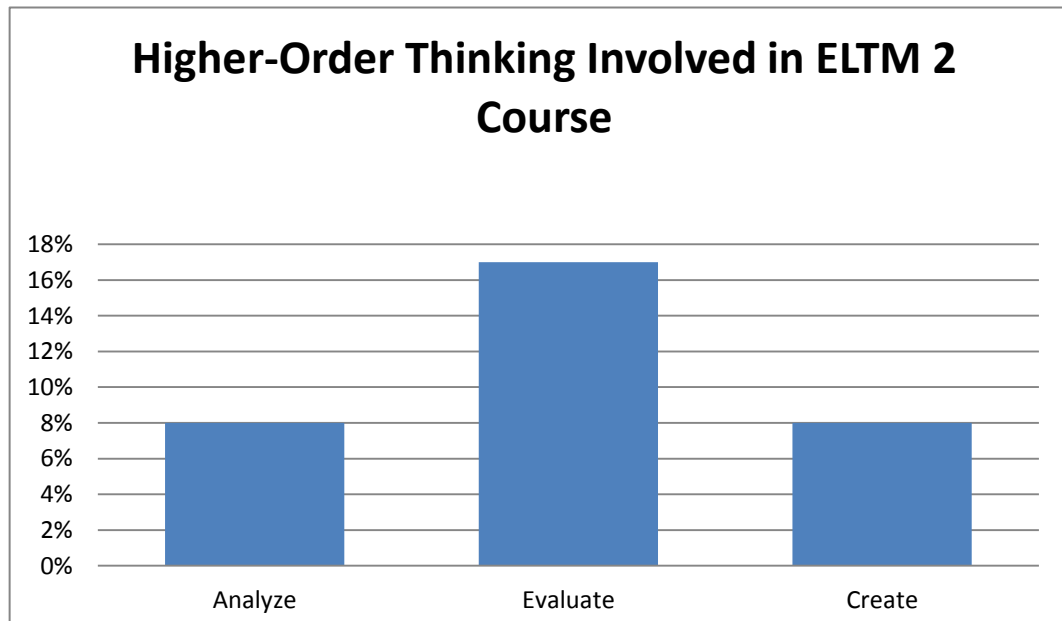


Chart 4.6 Higher-Order Thinking involved in ELTM 2 Course

Based on the chart above, it shows that evaluate level (17%) and create level (17%) were mostly contributed in higher order thinking level. Meanwhile, analyze level only 8% contributed. The assessment tasks provided higher-order thinking are observation and performance.

Based on diagram and explanation above, the proportion of lower order thinking and higher order thinking can be seen at the table below:

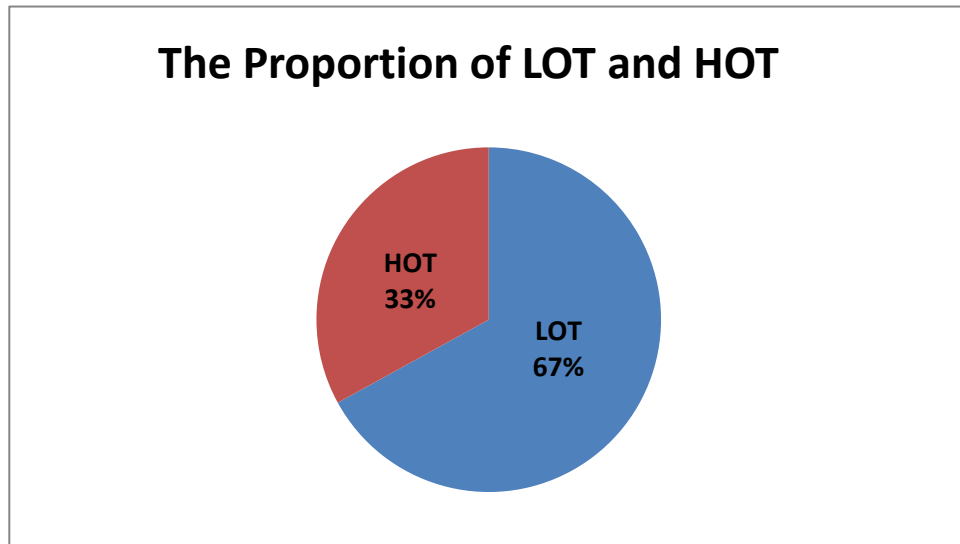


Chart 4.7 The Cognitive Process Involved in ELTM 2 Course

It can be concluded that the cognitive processes involved in ELTM 2 course were dominantly contributed by lower order thinking (67%) than higher order thinking (33%).

### 4.3 Analysis Discussion

In addressing the research question, the discussion focused on four research sub questions as the assessment tasks in ELTM 2 course can be described by level of cognitive processes. The sub questions are the types of assessment tasks employed in ELTM 2 course, the types of cognitive processes involved in each type of assessment tasks, the proportion of assessment tasks require students to perform Low-Order Thinking, and also the proportion of assessment tasks required students to perform High-Order Thinking.

#### 4.3.1 Types of Assessment Task

**Note-taking**, each students note every review from students about knowledge of English and the practices of English Language teaching and learning. Students

were also demanded to write their understanding about English classroom management in table KWLW. This assessment is considered as *formative assessment* or *assessment for learning* because this was employed in on-going process of learning activity. Besides, this is also considered as *formal assessment* because this assessment was planned in RPKPS. The technique of note-taking assessment task is *written response*. It demands students to construct answer in length of sentences.

**Performance,** Performance is one of assessment task was mostly conducted in ELTM 2 course. The activities were included in performance are presentation and micro-teaching. In presentation, students presented the students understanding on knowledge of English and the practices of English language teaching and learning, English lesson and practice on classroom management. Students also present students' result of analysis on the observed English lesson was considered as mid-term test. Besides, in micro-teaching activity students did group teaching activity and individual teaching activities as end-term test.

The performance is formal assessment that was planned well in RPKPS and used for grading students' ability. This assessment task was considered as *summative assessment* because the time of assessment was conducted in the end process. It means that performance is considered as assessment of learning. As its name, the technique of assessment is *performance* in order to evaluate the ability so that rubric or scoring guide might be used for judging quality.

**Observation,** This assessment required students to observed real English class activity at school and compare the activity with the principle of English teaching and learning proposed by proposed by various scholars and the English Teaching and Learning practiced in real class.

The process of observation was considered as *formative assessment* or *assessment for learning* because this task was conducted in on-going process of learning. However, the process of comparing teaching activity is *summative* or *assessment of learning* because this task was held in the end after observation process. Moreover, observation is categorized as formal assessment because this assessment was planned systematically in RPKPS to assess students. Besides, students complete a task-give a demonstration or create for judging quality and create report. It means observation used performance technique assessment.

**Portfolio,** This is assessment task which record students' progress in accomplishing the course. The content of this portfolio is all students' assignment during learning process such as notes of students understanding and reflecting some practices of English teaching language and learning, and the organizer on students' understanding of English management classroom (kwlw table), and some lesson plans.

Because the purpose of portfolio is to record students' progress, this is kind of *formative assessment* or *assessment for learning*. The method of this assessment is formal assessment which was planned in RPKPS to see students' progress during complete their assessments. Portfolio used communication personal as the

technique of assessment in order to see students' achievements, efforts, and their contribution individually.

#### **4.3.2 Cognitive Processes Involved in Each Types of Assessment Task in ELTM2 Course**

**Note-Taking**, It shows that there are only remember (50%) and understand level (50%) were involved in note-taking assessment. In order to reach remember level, students were required to take a note on the other students' review. Besides, in gaining understand level students were able to read the given materials by lecturer about classroom management skills and summarize them by writing their understanding about the given materials in the kwlw table.

**Performance**, The result shows only three cognitive processes involved in performance, there are understand (17%), apply (49%), evaluate (17%), and create (17%). This assessment demanded students to review the concept of English teaching and learning form Harmer J and give the suggestion about the way of teaching. Besides, students were also required to practice the various teaching and classroom management skills, conducted peer teaching and individual teaching activity. On the other hand, students were demanded to report the result of observation and evaluated teacher's work. In creating process, students were able to modify lesson plan developed in CMD class to be guidance to carry out individual teaching activity.

**Observation**, the cognitive process involved in observation was only analyze level (100%). The assessment task require the students to compare the principles



of English teaching and learning proposed by various scholars and the English Teaching and Learning practiced real class.

**Portfolio**, The results above shows that only apply level did not involve in portfolio. Remember and understand levels were occurred in 14%. Meanwhile, higher-order thinking level were more contributed in portfolio, they are analyze (14%), evaluate (29%) and create (29%). To gain remember level, students were able to know the concept of English Teaching and Learning and classroom management skills. Besides, students were able to summarize their understanding the concept of English teaching and learning and also classroom management skills by filling kwlw table in order to reach understand level. In reaching analyze level, the results of comparing real teaching activity and the principle of teaching and learning proposed by various scholars. The results of observation were summarized. The students also were able to give teaching suggestion for English teacher were observed. In order to reach create level, students were able to modify the lesson plan of CMD course and create the lesson plan from CLIL activity. All tasks were administered were compiled in portfolio.

#### **4.3.3 The Proportion of LOT and HOT in ELTM 2 Course Assessment Task**

**Remember** – is 25% involved in assessment task of ELTM 2. Students were demanded to read to the materials from students to get their knowledge about the concept of English teaching and learning and management classroom skills. Students also were supposed to notes the review from other students' reviews in order to get the other knowledge. To reach this level, students are able to know the

concept of English teaching and learning and also the management classroom skills.

**Understand** – is 17% contributed in the assessment tasks. In order to reach this level students were able to review the material that had they read. Students were required to review the material about the concept English teaching and learning orally. Students also were able to summarize their understanding about classroom management skills by filling the kwlw table.

**Apply** – is 25% involved in this assessment tasks. Students were able to carry out practical activities for English learning. Students were required students to do teaching practice in peer and individually. Besides, students were able to use various teaching and classroom management skills. Students will practice some major English class management technique.

**Analyze** – is only 8% contributed in this process. Students were demanded to conduct observation at school in group to observe the real class activity. Students analyze teaching activity in English class and students by comparing the principles of English Teaching and Learning proposed by various scholars and the English Teaching and Learning practiced real class.

**Evaluate** – is 17% contributed in assessment tasks. To gain this process, students were supposed to give their recommendation about the way of teaching, after reviewing the material from Harmer J about concept of English Teaching and Learning. Besides, students were able to report the observation result. After

conducting observation, students presented the results of observation and gave their evaluation about the English teaching activity observed at school.

**Create** – is only 8% contributed in assessment task of ELTM 2. Based on the findings, students were able to re-create the lesson plan in peer teaching and modify the lesson plan in CMD course to do teaching practice.

In order to response the main question, the findings of the proportion of lower-order thinking skills (LOTS) and higher-order thinking skills (HOTS) had been calculated. Based on the findings, the proportion of LOTS is 67%. Besides, the proportion of HOTS is 33%. It means that the contribution of LOTS is higher than HOTS. It means teachers more focused on the foundation of skills to reach critical thinking and problem solving skills.

#### **4.4 Limitation**

In this study, the writer only focuses on the cognitive process involved in students' assessment tasks in ELTM 2 course. However, this study has some limitations associated with the sample of students, the data collection methods, and the study design approach. There were formative and summative assessment which involved in ELTM 2 course assessment, and yet the writer only focus on the summative assessment. Moreover, the writer only focused on analyzing the document (course outline) to categorize the assessment tasks into the cognitive processes that are involved. All the limitations occur because of the writer's knowledge and resource

## CHAPTER V

### CONCLUSION AND RECOMMENDATION

#### 5.1 Conclusion

Regarding assessment practice in ELTM 2 course which is focused on the cognitive process involved in ELTM 2 course assessment task, the study found that there are four assessment tasks which were employed in ELTM 2 course note-taking, performance, observation, and portfolio. The result shows that note taking, observation and portfolio used formative as time of assessment because they were conducted in on-going process. On the other hand, performance was conducted in the end process (summative assessment) or also known assessment for learning. Since all the assessment was conducted systematically and planned well in RPKPS, it means all assessment tasks used formal assessment as the method. The result also shows that performance and observation use performance assessment as the technique of assessment. Meanwhile, note-taking used written response as the technique of assessment. Besides, personal communication assessment was employed as the technique for portfolio assessment.

The result of analysis of cognitive process involved in each types of assessment task shows that note-taking required students to reach 'remember' and 'understand' process. Meanwhile, performance demanded students to reach 'understand', 'apply' and 'evaluate' levels. Observation activity required students to reach analyze level. The result also shows the cognitive processes involved in ELTM 2 course assessment task consists of remember (25%), understand (17%),

apply (25%), analyze (8%), evaluate (17%) and create (8%). From this result, it can be seen that the proportion of LOTS (67%) is more contributed than HOTS (37%).

## **5.2 Recommendation**

Nowadays, students need to be a critical thinker and problem solver. It means students have higher-order thinking. Assessment can be a suitable tool to help students reach higher-order thinking. Therefore, teachers have to pay attention and determine appropriate assessment that will be employed in classroom. The recommendation for the next English Department students, the students could not only focus on the cognitive process of assessment task, but also can be the real activities in classroom.

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