CHAPTER IV

FINDINGS AND DISCUSSION

This chapter presents the findings of data and discussion based on the research question as outlined in the first chapter.

4.1 Data Description

This study aims to investigate level of thinking and Knowledge Dimension in 56 intended learning outcomes of lesson plans referring to Anderson and Krathwohl (2001) classification. The total amount of lesson plans are eleven. Six lesson plans are for 11th grade and five lesson plans are for 12th grade in 2nd semester 2017. The lesson plans are collected from four English Language Education Study Program's micro teaching student teachers.

4.2 Findings and Discussions

4.2.1 The Level of Thinking Represented in Intended Learning Outcomes

In order to answer the first research question, which is, *what level of thinking represented in intended learning outcomes*, the result will be provided in the following table:

Tabel 4.1 The Thinking Level Represented in Intended Learning

Outcomes

The Knowledge	The Cognitive Process Dimension							
Dimension	1. D 1	2.	3.	4.	5.	6.		
	Remember	Understand	Apply	Analyze	Evaluate	Create		
A. Factual	7%	5%	0%	0%	0%	2%		
Knowledge	5	3				1		
B. Conceptual Knowledge	32% 18	13% 7	4% 2	7% 4	9% 5	2% 1		
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	-	• • • •			<b>2</b> 0 (	40.4		
C. Procedural	0%	2%	5%	0%	2%	4%		
Knowledge		Ι	3		Ι	2		
D. Metacogntive	0%	0%	0%	2%	2%	4%		
Knowledge	- / 0	- / 0	- / 0	1	1	2		

This study cover 11 lesson plans. The data were 56 intended learning outcomes. Based on the data displayed above, it can be concluded that cognitive levels are spread out from remembering to creating. 23 (39%) of 56 intended learning outcomes are on remembering level. 5 (7%) are on A1 (Remembering, Factual Knowledge) and 10 (33%) 30 are on B1 (Remembering, Conceptual Knowledge). 11 (20%) of 56 intended learning outcomes are on understanding level. 3 (5%) are on A2 (Understanding, Factual Knowledge), 7 (13%) are on B2 (Understanding, Conceptual Knowledge) and 1 (2%) are on C2 (Understanding, Procedural Knowledge). 5 (9%) of 56 intended learning outcomes are on applying level. 2 (4%) are on B3 (Applying, Conceptual Knowledge) and 3 (5%) are on C3 (Applying, Procedural Knowledge). 5 (9%) of 56 intended learning outcomes are on analyzing level. 4 (7%) are on B4 (Analyzing, Conceptual Knowledge) and 1 (2%) is on D4 (Analyze, Metacognitive Knowledge). 7 (13%) of 56 intended learning outcomes are on evaluating level. 5 (9%) are on B5 (Evaluating, Conceptual Knowledge), 1 (2%) is on C5 (Evaluating, Procedural Knowledge) and 1 (2%) is on D5 (Evaluating, Metacognitive Knowledge). 6 (12%) of 56 intended learning outcomes are on creating level. 1 (2%) is on A6 (Creating, Factual Knowledge), 1 (2%) is on B6 (Creating Conceptual Nowledge), 2 (4%) are on C6 (Creating, Procedural Knowledge), and 2 (4%) are on D6 (Creating, Metacognitive Knowledge)

As presented in table 4.1, all level of thinking from remembering, understanding, applying, analyzing, evaluating, and creating spread over in intended learning outcomes. This can be supported by the following information:

Extract 1

Remembering activities emphasize on memorize information "Students are able to memorize the lyric of the song word by word."

*Extract 2* Understanding level emphasizes on explaining "Students are able to explain biography text"

Extract 3

Applying level emphasizes on designing models "Students are able to organize the disorder steps of procedure text." *Extract 4* Analyzing level emphasizes on contrasting "Students are able to differentiate the facts and opinions from text."

*Extract 5* Evaluating level emphasizes on judgement of knowledge "Students are able to judge the news item."

*Extract 6* Creating level emphasizes on writing essay "Students are able to write a report text which contains some passive voices." This result is in contrast with the study of Suciati & Astuti (2016) that the cognitive levels in student teachers lesson plan. In study of Suciati & Astuti (2016) remembering, understanding, applying, analyzing, and creating were in student teachers lesson plan except evaluating level.

The other result of the study comes from Syarif (2016) that shows student teachers lesson plan did not cover all categories because there was no analyzing and evaluating level. Other study by Nor Hashimah Isa (2011) also found that cognitive level did not spread over preservice teacher's lesson plan because critical thinking skills of higher order level of thinking did not exist in the lesson plan.

From the data displayed, it can be conluded that the lower order thinking levels dominates 63% with the most prevalent level is B1 (remembering, concpetual knowledge) level with the percentage 39%. It means that most of the intended learning outcomes require activities such as labelling, making list of words, naming words in given cateogry, reciting numbers, alphabet, completing worksheet and workbook that elicit recall, naming facts, matching and locating. This kind of result also found in Syarif (2015) that showed lower order thinking dominated student teachers lesson plan.

As mentioned before, if lesson plans are dominated by lower order thinking, students will not learn how to analyze information, make decision and think critically and creatively, which are being emphasized in 2013 national curriculum, since lower order thinking are focusing students on remembering, retelling and understanding activities that do not need to be applied in any real life example, it only needs to be recalled and understood. Plus, remembering and understanding activities are not sufficient to prepare students to be an educated person who should be able to solve problem, analyzing information, be creative, and innovative. Thus, planned learning outcomes should be dominate by activities that develop student level of thinking to higher levels.

It is not that lower order thinking is not important. Bloom (1956) emphasized the importance of offering lower level activities to student as basis to move to upper level of cognition. Gotchers supports that remembring process is one of the most important cognitive processes because they are assumed as the first levels of cognitive processes that students must improve and practice to go to higher level. However, It is that remembering things is not sufficient enough for being an educated person who can use what he or she has learned previously to learn new things and to solve a variety of academic and nonacademic problems (Raths, 2002, p. 235). When Students only be able to remember and recall information without any analyzing, judging and evaluating processes in it, they will live like a parrot. They only be able to remember, retell, repeat, calling back information exactly the way it was told without knowing what exactly is the meaning of it and how to use it. Thus, developing level of thinking to higher level will be beneficial for students both in academic and academic aspect.

It is important to know for educators that lower order thinking should be deemed as a bridge activity to move on to higher level of thinking and not to be the core nor centre in teaching and learning activities. Of course, writing higher order objectives are not easy to do. As stated by Cruickshank (2006) instructional objectives, because they are so precise, are difficult to write in lesson plan. Instructional objectives are easy to write when the learning outcome is at the lower level of cognitive domain of learning. It is fairly simple to write an objectives that calls for identification or recall of something while objectives that calls analysis the characteristic of verbs, it is difficult.

Even so, beginning teachers need to understand how thinking skill such as collaborative skills, think critically and problem solving should be developed in a lesson so the lesson is not focused totally on the lower levels (McGregor & Cartwright, 2011); (Moore, 2005); Cheng (2013) supports that pre-service teachers need to be able to demonstrate the competency in making a balance between the curriculum goal and students' individual needs, and broadening students' learning

## experience.

The Knowledge	The Cognitive Process Dimension							
Dimension	1.	2.	3.	4.	5.	6.		
	Remember	Understand	Apply	Analyze	Evaluate	Create		
А.						2%		
Factual	7%	5%	0%	0%	0%			
Knowledge	5	3				1		
B.			4%			2%		
Conceptual	32%	13%		7%	9%			
Knowledge	18	7	2	4	5	1		
C.		2%			2%	4%		
Procedural	0%		5%	0%				
Knowledge		1	3		1	2		
D.		<b>2 2 4</b>		2%	2%	4%		
Metacogntive	0%	0%	0%					
Knowledge				1	Ι	2		

Moreover, since the need to develop level of thinking to higher order level has

been stated in 2013 National Curriculum, candidate teachers need to realize how to

provide a supportive planning activities to meet the educational goals, that is, to produce higher order thinkers to keep up with the life of 21st century

### 4.2.2 The Knowledge Dimension Represented in Each Level of Thinking

In order to answer the second research question, which is, *How does each level represent in term of Knowledge Dimension?*, the result will be provided in the following table:

#### Tabel 4.2 The Knowledge Dimension Represented in Intended Learning

#### Outcomes

Based on the table displayed, it can also be concluded that Knowledge Dimension are spread out from Factual to Metacognitive Knowledge. This is supported by these following examples:

#### Extract 1

Factual Knowledge emphasizes on vocabularies
Students are able toidentify the new vocabularies found in the song. *Extract 2*Conceptual Knowledge emphasizes on parts of sentence
Students are able to categorize the language features (Figurative Language) used in the song. *Extract 3*Procedural Knowledge emphasizes on subjects-specific skills
Students are able to modify passive voice into active voice and active voice into passive voice. *Extract 4*Metacognitive Knowledge emphasizes on contextual and conditional knowledge
Students are able to create a story based on one of the songs lyric.

The tabel analysis shows that 9 (14%) of 56 intended learning outcomes are on Factual Knowledge. 5 (7%) are on A1 (Factual Knowledge, remembering), 3 (5%) are on A2 (Factual Knowledge, understanding) and 1 (2%) is on A6 (Factual Knowledge, Creating). 37 (62%) of 56 intended learning outcomes are on Conceptual Knowledge. 18 (32%) are on B1 (Conceptual Knowledge, remembering), 7 (13%) are on B2 (Conceptual Knowledge, Understanding), 2 (4%) are on B3 (Conceptual Knowledge, Applying), 4 (7%) are on B4 (Conceptual Knowledge, Analyzing), 5 (9%) are on B5 (Conceptual Knowledge, evaluating), and 1 (2%) is on B6 (Conceptual Knowledge, creating).

7 (13%) of 56 intended learning outcomes are on Procedural Knowledge. 1 (2%) is on C2 (Procedural Knowledge, Understanding), 3 (5%) are on C3 (Procedural Knowledge, Applying), 1 (2%) is on C5 (Procedural Knowledge, Evaluating) and 2 (4%) are on C6 (procedural Knowledge, creating). 4 (8%) of 56 intended learning outcomes are on metacognitive knowledge. 1 (2%) is on D4 (Metacognitive Knowledge, Analyzing), 1 (2%) is on D5 (Metacognitive Knowledge, Creating).

From the data displayed, it can be conluded that Conceptual Knowledge dominates most of the intended learning outcomes. It can be said that students should be trained their metacognitive to cope with the college life that requires students to be an autonomous and independent learner. Autonomous learner should be able to solve problems or develop new ideas with divergent or convergent thinking, should be able to a self-directed learner. It means that the skills that student needed to be autonomous learner should be more than just know the categorization of language features without any curiousity to know more whether it is right or not.