

CHAPTER IV

FINDING AND DISCUSSION

This chapter consists of two parts, they are findings and discussion. Findings and discussion are presented based on the research question that is related to the Anderson Taxonomy that include in the assessment of an lesson plan that made by English Education Department of 2017

The data gained are presented in the form of table in the finding section that is Table 1, while the complete data are presented in the appendices. Furthermore, to clarify the results of the study, the data described in the form of analysis in the next sub-section, that is discussion section. The results of the analysis are expected to be a description of the assessment specifically cognitive domain in lesson plan by English Education Department students of 2017 have met with Anderson Taxonomy.

A. Finding

1. Lesson Plans Made by English Education Department Students of 2017

From the analysis of 6 bundles of lesson plan, there are describe assessment specifically cognitive domain in 6 bundle of lesson plan that made by English Education Department students of 2017. In 6 bundles of lesson plans, there are different levels ranging from junior high school grade 7 to 9 junior high school and senior high school grade 10 to 12 senior high school. Based on Anderson Taxonomy there are 6 level of taxonomy, there are *remembering*, *understanding*, *applying*, *analyzing*, *evaluating*, and *creating*. There are some table that describe the assessment specifically cognitive domain in lesson plans

made by English Education Department students of 2017 have met with Anderson Taxonomy.

| Table 4.1. Lesson Plan of The 7th Grade of Junior High School | | | |
|--|-------------|--------------------------------------|--------------------------------------|
| No | Name | Keyword of Cognitive's Action | Category of Anderson Taxonomy |
| 1 | A | Identify | Remembering (C1) |
| 2 | B | Identify | Remembering (C1) |
| 3 | C | Explain | Understanding (C2) |
| 4 | D | Determine | Evaluating (C5) |
| 5 | E | Remember Distinguish | Remembering (C1) Analyzing (C4) |
| 6 | F | Determine | Evaluating (C5) |
| 7 | G | Determine | Evaluating (C5) |
| 8 | H | - | - |
| 9 | I | - | - |
| 10 | J | - | - |
| 11 | K | Explain | Understanding (C2) |
| 12 | L | Explain | Understanding (C2) |
| 13 | M | Explain | Understanding (C2) |
| 14 | N | Answer | Understanding (C2) |
| 15 | O | Answer | Understanding (C2) |

Based on the data, The researcher found that in lesson plan for 7th grade of Junior High School the students mostly used *understanding* as category of Anderson Taxonomy with keyword of Cognitive's action *explain*. 3 lesson plan used *identify*, 3 lesson plan used *determine*, 1 lesson plan used *distinguish*, and 3 other lesson plan with no action verb.

| Table 4.2. Lesson Plan of The 8th Grade of Junior High School | | | |
|--|-------------|--------------------------------------|--------------------------------------|
| No | Name | Keyword of Cognitive's Action | Category of Anderson Taxonomy |
| 1 | P | Explain | Understanding (C2) |
| 2 | Q | Explain | Understanding (C2) |
| 3 | R | Explain | Understanding (C2) |
| 4 | S | Explain | Understanding (C2) |
| 5 | T | Explain | Understanding (C2) |
| 6 | U | Explain | Understanding (C2) |
| 7 | V | Explain | Understanding (C2) |
| 8 | W | Explain | Understanding (C2) |
| 9 | X | - | - |
| 10 | Y | Explain | Understanding (C2) |
| 11 | Z | - | - |
| 12 | A.A | Explain | Understanding (C2) |
| 13 | A.B | - | - |
| 14 | A.C | Determine | Evaluating (C5) |
| 15 | A.D | - | - |
| 16 | A.E | Describe | Remembering (C1) |
| 17 | A.F | - | - |
| 18 | A.G | - | - |
| 19 | A.H | - | - |
| 20 | A.I | Determine | Evaluating (C5) |
| 21 | A.J | - | - |
| 22 | A.K | - | - |
| 23 | A.L | Explain | Understanding (C2) |
| 24 | A.M | Determine | Evaluating (C5) |
| 25 | A.N | Explain | Understanding (C2) |
| 26 | A.O | Remember Mention | Remembering (C1) Remembering (C1) |
| 27 | A.P | Explain | Understanding (C2) |
| 28 | A.Q | Explain | Understanding (C2) |
| 29 | A.R | Explain | Understanding (C2) |
| 30 | A.S | Explain | Understanding (C2) |
| 31 | A.T | Explain | Understanding (C2) |
| 32 | A.U | Explain | Understanding (C2) |
| 33 | A.V | - | - |
| 34 | A.W | - | - |

Based on the data, the researcher found that in lesson plan for 8th grade of Junior High School the students mostly use *understanding* as category of

Anderson Taxonomy with keyword of Cognitive's action *explain*. There are 3 lesson plans used *determine*, 1 lesson plan used *remember*, 1 used *describe*, and 1 used *mention*. Last, there are 11 lesson plans with no action verb.

| No | Name | Keyword of Cognitive's Action | Category of Anderson Taxonomy |
|-----------|-------------|--------------------------------------|--|
| 1 | A.X | Explain | Understanding (C2) |
| 2 | A.Y | Explain | Understanding (C2) |
| 3 | A.Z | Determine | Evaluating (C5) |
| 4 | B.A | Explain | Understanding (C2) |
| 5 | B.B | Determine | Evaluating (C5) |
| 6 | B.C | State Find | Understanding(C2) Remembering (C1) |
| 7 | B.D | Determine | Evaluating (C5) |
| 8 | B.E | Determine | Evaluating (C5) |
| 9 | B.F | Explain | Understanding (C2) |
| 10 | B.G | Determine | Evaluating (C5) |
| 11 | B.H | Determine | Evaluating (C5) |
| 12 | B.I | Explain Answer | Understanding (C2) Understanding (C2) |
| 13 | B.J | Explain | Understanding (C2) |
| 14 | B.K | Explain | Understanding (C2) |
| 15 | B.L | Explain | Understanding (C2) |
| 16 | B.M | Explain | Understanding (C2) |
| 17 | B.N | Explain | Understanding (C2) |
| 18 | B.O | Explain | Understanding (C2) |
| 19 | B.P | Explain | Understanding (C2) |
| 20 | B.Q | Explain | Understanding (C2) |
| 21 | B.R | Explain | Understanding (C2) |
| 22 | B.S | Explain | Understanding (C2) |
| 23 | B.T | Explain | Understanding (C2) |
| 24 | B.U | Explain | Understanding (C2) |
| 25 | B.V | Explain | Understanding (C2) |
| 26 | B.W | Explain | Understanding (C2) |
| 27 | B.X | Explain | Understanding (C2) |
| 28 | B.Y | Explain | Understanding (C2) |
| 29 | B.Z | Explain | Understanding (C2) |

Based on the data, the researcher found that in lesson plan for 9th grade of Junior High School the students mostly use *understanding* as category of Anderson Taxonomy with keyword of Cognitive's action *explain*. There are 6 lesson plans used action verb *determine*, 1 lesson plan used *state*, 1 used *find*, and 1 used *answer*.

| Tabel 4.4. Lesson Plan of The 10th Grade of Senior High School | | | |
|---|-------------|--------------------------------------|--------------------------------------|
| No | Name | Keyword of Cognitive's Action | Category of Anderson Taxonomy |
| 1 | C.A | Answer | Understanding(C2) |
| 2 | C.B | Know | Remembering(C1) |
| 3 | C.C | Determine | Evaluating (C5) |
| 4 | C.D | Determine | Evaluating (C5) |
| 5 | C.E | Explain | Understanding (C2) |
| 6 | C.F | Determine | Evaluating (C5) |
| 7 | C.G | Explain | Understanding (C2) |
| 8 | C.H | Explain | Understanding (C2) |
| 9 | C.I | Explain | Understanding (C2) |
| 10 | C.J | Know Spell | Remembering(C1) Remembering(C1) |
| 11 | C.K | Explain | Understanding (C2) |
| 12 | C.L | Determine | Evaluating (C5) |
| 13 | C.M | Answer | Understanding (C2) |
| 14 | C.O | Explain | Understanding (C2) |
| 15 | C.P | Explain | Understanding (C2) |
| 16 | C.Q | Determine | Evaluating (C5) |
| 17 | C.R | Explain | Understanding (C2) |
| 18 | C.S | Explain | Understanding (C2) |
| 19 | C.T | Explain | Understanding (C2) |
| 20 | C.U | Explain | Understanding (C2) |
| 21 | C.V | Explain | Understanding (C2) |
| 22 | C.W | Explain | Understanding (C2) |
| 23 | C.X | Explain | Understanding (C2) |
| 24 | C.Y | Explain | Understanding (C2) |
| 25 | C.Z | Explain | Understanding (C2) |
| 26 | D.A | Explain | Understanding (C2) |
| 27 | D.B | Explain | Understanding (C2) |

| | | | |
|----|-----|---------|--------------------|
| 28 | D.C | Explain | Understanding (C2) |
| 29 | D.D | Explain | Understanding (C2) |
| 30 | D.E | Explain | Understanding (C2) |
| 31 | D.F | Explain | Understanding (C2) |
| 32 | D.G | Explain | Understanding (C2) |
| 33 | D.H | Explain | Understanding (C2) |
| 34 | D.I | Explain | Understanding (C2) |
| 35 | D.J | Explain | Understanding (C2) |

Based on the data, the researcher found that in lesson plan for 10th grade of Senior High School the students mostly use *understanding* as category of Anderson Taxonomy with keyword of Cognitive's action *explain*. There are 5 lesson plans used *determine*, 2 lesson plans used *know*, 2 lesson plans used *answer*, and 1 lesson plan used *spell*.

| Table 4.5. Lesson Plan of The 11th Grade of Senior High School | | | |
|---|-------------|--------------------------------------|--------------------------------------|
| No | Name | Keyword of Cognitive's Action | Category of Anderson Taxonomy |
| 1 | D.K | Explain | Understanding (C2) |
| 2 | D.L | Apply | Applying (C3) |
| 3 | D.M | Explain | Understanding (C2) |
| 4 | D.N | Explain | Understanding (C2) |
| 5 | D.O | Explain | Understanding (C2) |
| 6 | D.P | Identify | Remembering (C1) |
| 7 | D.Q | Explain | Understanding (C2) |
| 8 | D.R | Determine | Evaluating (C5) |
| 9 | D.S | Determine | Evaluating (C5) |
| 10 | D.T | Explain | Understanding (C2) |
| 11 | D.U | Explain | Understanding (C2) |
| 12 | D.V | Answer | Understanding (C2) |
| 13 | D.W | Determine | Evaluating (C5) |
| 14 | D.X | Explain | Understanding (C2) |
| 15 | D.Y | Determine | Evaluating (C5) |
| 16. | D.Z | Create | Creating (C6) |
| 17 | E.A | Explain | Understanding (C2) |

Based on the data, the researcher found that in lesson plan for 11th grade of Senior High School the students mostly use *understanding* as category of Anderson Taxonomy with keyword of Cognitive's action *explain*. There are 4 lesson plan used *determine*, 1 used *apply*, 1 used *identify*, 1 used *answer*, and 1 used *create*.

Tabel 4.6. Lesson Plan of The 12th Grade of Senior High School

| No | Name | Keyword of Cognitive's Action | Category of Anderson Taxonomy |
|----|------|-------------------------------|-------------------------------|
| 1 | E.B | Determine | Evaluating (C5) |
| 2 | E.C | Analysis | Analyzing (C4) |
| 3 | E.D | Explain | Understanding (C2) |
| 4 | E.F | Determine | Evaluating (C5) |
| 5 | E.G | Answer | Understanding (C2) |
| 6 | E.H | Determine | Evaluating (C5) |
| 7 | E.I | Explain | Understanding (C2) |
| 8 | E.J | Explain | Understanding (C2) |
| 9 | E.K | Explain | Understanding (C2) |
| 10 | E.L | Explain | Understanding (C2) |
| 11 | E.M | Explain | Understanding (C2) |
| 12 | E.N | Determine | Evaluating (C5) |
| 13 | E.O | Explain | Understanding (C2) |
| 14 | E.P | Determine | Evaluating (C5) |
| 15 | E.Q | - | - |
| 16 | E.R | Explain | Understanding (C2) |
| 17 | E.S | Explain | Understanding (C2) |
| 18 | E.T | Explain | Understanding (C2) |
| 19 | E.U | Explain | Understanding (C2) |
| 20 | E.V | Explain | Understanding (C2) |
| 21 | E.W | Explain | Understanding (C2) |
| 22 | E.X | Explain | Understanding (C2) |
| 23 | E.Y | Explain | Understanding (C2) |
| 24 | E.Z | Explain | Understanding (C2) |
| 25 | F.A | Explain | Understanding (C2) |
| 26 | F.B | Explain | Understanding (C2) |
| 27 | F.C | Explain | Understanding (C2) |
| 28 | F.D | Explain | Understanding (C2) |

Based on the data, the researcher found that in lesson plan for 12th grade of Senior High School the students mostly use *understanding* as category of Anderson Taxonomy with keyword of Cognitive's action *explain*. There are 5 lesson plans that used *determine*, 1 lesson plans used *analysis*, 1 lesson plans used *answer*, and there is 1 lesson plans with no action verb.

For instance the lesson plans made by students ER to FD. They used *explain* in their lesson plans to state how to assess the cognitive domain. The most widely used example sentences in their assessment in cognitive domain are "*the knowledge from the students that can explain what the teacher wants from her learners*". The researcher found that most of the students use action verb *explain* in the cognitive domain because many of them follow the example of the lesson plan given by Instructional Design lecturers.

Therefore, to see whether they really understand about Anderson's Taxonomy, the researcher have done the test. The test that was distributed was to see if they could make an assessment in the cognitive domain. The tests were distributed in the form of 18 questions. These 18 questions are divided into 3 parts.

Part A is a multiple choice, they will choose the correct answer according to the questions provided and questions in the form of understanding of the level of cognitive domain. Part B is a matter of matching sentences with the cognitive level. Last, part C which they were ordered to make a sentence cognitive domain. In part C this action verb has been provided which they will choose in making cognitive sentences.

Based on the test about students' understanding of Anderson Taxonomy that researcher conducted on 13th to 18th November of five classes of English Education Department students of 2017. There were 107 students out of 158 students who made lesson plan who participate on this test. The result showed that the highest score of the test was 96 point achieved by 9 students, approximately students got 80-70 point in the test, the last, 11 students got score under 50 point.

Table 2. 1 Scores of the test students' understanding about Anderson Taxonomy.

| 4.7. Scores of Test Anderson Taxonomy | |
|--|-------------------------------|
| Scores | The Number of students |
| 96 | 9 |
| 92 | 6 |
| 90 | 5 |
| 89 | 1 |
| 88 | 7 |
| 87 | 1 |
| 86 | 1 |
| 84 | 5 |
| 83 | 1 |
| 82 | 6 |
| 81 | 2 |
| 80 | 7 |
| 78 | 6 |
| 76 | 3 |
| 74 | 6 |
| 73 | 2 |
| 72 | 1 |
| 70 | 5 |
| 69 | 1 |
| 68 | 3 |
| 67 | 3 |
| 66 | 3 |
| 65 | 1 |
| 64 | 3 |
| 63 | 1 |

| | |
|----|---|
| 62 | 1 |
| 60 | 1 |
| 56 | 3 |
| 52 | 2 |
| 51 | 1 |
| 49 | 1 |
| 48 | 1 |
| 43 | 1 |
| 41 | 1 |
| 37 | 1 |
| 30 | 1 |
| 28 | 1 |
| 26 | 1 |
| 20 | 1 |
| 8 | 1 |

By looking the scores that they got in the test, the reseacher made an interview with some students. The researcher took 5 students with high scores and 5 other students that got under the standard scores. The researcher asked the students some questions with different answer from them.

From 2 students who got high score they can understand well the level of coginive domain and also can pair that level with the action verbs that is usually found in the cognitive assessment appropriately. They can also reproduce the action verb from the assessment perfectly using the action verb provided. For example Student A, she said she feel no difficulty in making cognitive sentences.

Furthermore, most students have a fairly good understanding even though there is an error in determining the understanding of the cognitive domain, not quite fitting in pairing sentences with the level of cognitive domain, as well as students having mistakes in making the sentence of the goal in the assessment, both in the choice of words or topics / teaching materials or references.

The other 2 students that got high score they stated that they still remember about taxonomy and cognitive domain. They also said that they have studied taxonomy before studying Instructional Design and also 1 student that have very unique answer, she said that before they met with Instructional Design class she have read about taxonomy in Journal, but at the time she didn't understand what is taxonomy. Then, after they studied about taxonomy in Instruction Design she have understand about that and she did not feel hard to learning Instructional Design

However, there are some students that they less understand about English education. Thus the reason some students got less score for the test before. Based on the interview, the reseacher found that the students' who got scores under 50 they feel difficult to make a lesson plan. To make a topic is really hard for them and some students said that they still have difficulties in using English properly.

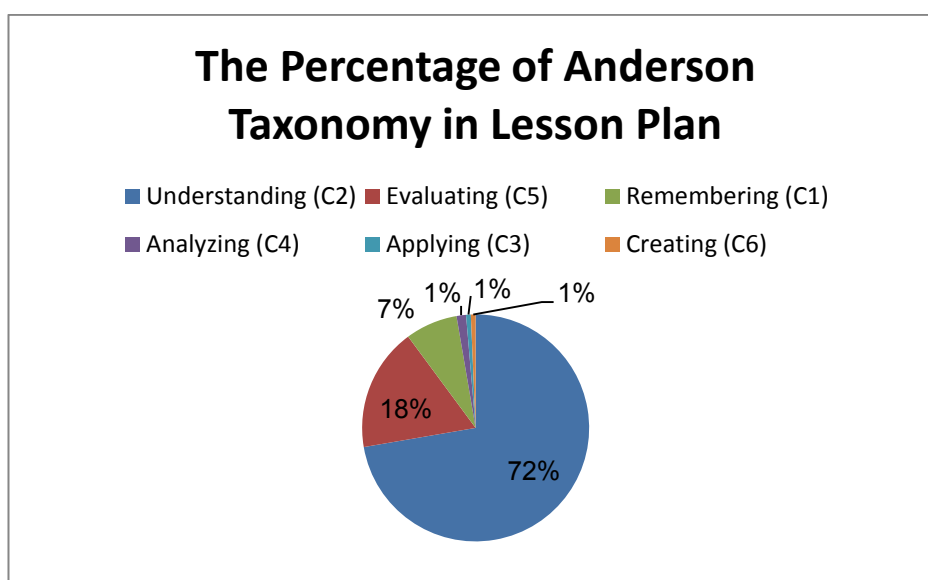
B. Discussion

1. The implementation of Anderson Taxonomy in assessment ,especially, cognitive domain in lesson plans made by English Education Department students of 2017

From the data that have been gathered of 6 bundles of lesson plan by English Education Department students of 2017, that found most of the students use *understanding (C2)* with *explain* as the keyword to describe the cognitive domain in assessment in the lesson plan, there are 107 lesson plans written by the students who use this word. Next, there are 26 lesson plans used *evaluating (C5)* with *determined* as the action verb, 11 lesson plans had

remembering (C1) with *identify, remember, describe, mention, find, know,* and *spell* as the action verb, 2 lesson plans used *analyzing(C4)* with *distinguish* and *analysis* as the action verb, 1 lesson plan used *applying (C3)* with *apply* as the action verb and the last 1 lesson plan used *creating(C6)* with *create* as the action verb. This is the percentage of the use action verb of Anderson Taxonomy in their lesson plans.

4.1. Percentage of Anderson Taxonomy in Lesson Plan



Futhermore, from 157 lesson plans there are 15 lesson plans that was not using action verbs and was not attaching the cognitive domain in their assessment. The last, there found 5 lesson plans that have 2 keywords of cognitive domain. It's conclude that the cognitive domain in their lesson plan include LOT (lower ordered thinking), based on the finding mostly there are the lesson plan used *explain* as their action verb in cognitive domain.

The cognitive domain contains learning skills predominantly related to mental (thinking) processes. Teachers and learners need to understand the hierarchy of processes and skills within the cognitive domain so they appreciate prerequisite skills for learning as well as the way these skills need to be transformed to master more complicated elements of discipline-specific concept inventories. Development of learning skills should never be taken for granted in teaching or learning new content. Skills associated with lower-level processes should be introduced in foundation courses and elevated in intermediate-level coursework. Skills associated with higher-level processes should be thoughtfully introduced and reinforced in upper-division courses. Methodically invoking key learning skills from different process areas and clusters across the cognitive domain also provides a method for infusing richness in course activities while strengthening lifelong learning skills. To improved cognitive domain performance is always possible, no matter what one's state of learning skill development (Hoque, 2017).

In making lesson plan, the assessment especially cognitive domain have to be balanced between the objective and indicator of learning. In lesson plan that made by English Education Department students of 2017, it found that they wrote different material with various objective and indicator of learning. But, in the assessment especially in cognitive domain, many of them wrote same sentence. Even though, in cognitive domain of Anderson Taxonomy have many action verb that they can used as their assessment.

In this discussion, cognitive domain based on Anderson Taxonomy have many action verb. But in the finding, in the lesson plan that made by English Education Department students of 2017 found that most of them used *Explain* as action verb in cognitive domain of their lesson plan.

Based on that category, their lesson plans have implemented with the Anderson Taxonomy theory because in their lesson plans their put some action verb that based on Anderson Taxonomy in their cognitive domain. But, they can more explore the action verb cognitive domain in Anderson Taxonomy.

Based on the test that gathered from 107 students, the researcher got 10 student that consist of 5 students from highest score and 5 students from lowest score. Some of the highest students were already understand Anderson taxonomy before they were taught in Instructional Design, that is why they could got the highest score in the test. However, some students who got the lowest score were having difficulties in using English correctly, that is why they were having trouble expressing their thought in making the lesson plan.

Making lesson plan is something that really new for English students' of 2017. Based on interview before, they said that the lecturer of Instructional Design is very clear to explain about Anderson taxonomy and the classification of cognitive domain. Thus, the students state that they did not feel difficult to make a lesson plan and about to make a sentences of cognitive domain.