CHAPTER I

INTRODUCTION

This chapter is the beginning of the research. It presents an overview of the research explaining the importance of this research and supported by theories relating to this research. This chapter consists of the background of research, the research questions, the aims of the research, the significances of research, the rationale, the research methodology and the data analysis.

A. Background of Research

One of teachers’ duties is gradually evaluating their students’ skill of what they have taught, for instance, giving students some tests. That is one of many ways to examine their ability. Teachers’ ability in constructing questions for an examination is needed. Thus, it is important to know the real teachers’ ability of in constructing questions for evaluating students’ skill.

Teachers’ understanding of how to construct good test items is important because this related with one of teacher's competence, that is pedagogical competence. According to the National Standard of Education in chapter 28 verse 3:

“Teacher pedagogical competence is an ability in the management of learning activity at least the following: an or understanding of the educational foundation; b) understanding of learners; c) developing curriculum or syllabus; d) designing learning; e) implementation of educational learning and dialogue; f) the use of technologies in learning; g) evaluation of learning outcomes, and h) development of a variety of learners to actualize its potential.”

Based on the explanation above, one of the teacher’s abilities in pedagogical competence is an evaluation of learning outcome. To evaluate
student’s competence, a teacher can give them some tests. Moreover, to construct good questions of the test, the teacher can use the Revised Bloom’s Taxonomy. The use of Revised Bloom’s Taxonomy can help teachers in designing the good test. Moreover, Revised Bloom Taxonomy is believed to give theories for teachers to do their activity in the classroom including administrating a test.

Therefore, every teacher needs to understand Bloom’s Taxonomy for the activities in the classroom and the guidance to evaluate the students’ ability in the form of test. In addition, testing is one of the powerful tools to measure students' abilities as well as to enhance their attitudes towards learning. Brown and Wickrama support that statement (as cited in Tran, 2012) said that “tests as a way of measuring a person’s skill, understanding, or performance in a specific domain.” In short, testing is one of ways or instruments to know how far the students have understood the teaching materials that have been given.

Moreover, according to Davis (2002), there are nine kinds of test: Multiple choice tests, True-false tests, Matching tests, Essay tests, Short answer tests, Problem sets, Oral exams, Performance tests, "Create-a-game" exams. However, this research is more focus on the multiple choice and essay test; those are packed into daily-test.

The purposes of this research are to analyze the written test in categorizing the questions of daily test. According to Nitko (1996), the process of collecting, summarizing, and using information about individual
test items especially information about pupils’ response to items is referred to item analysis. Moreover, according to Brown and Frederick (in Singh, n.d., 2014) said that “Item analysis has two purposes: Firstly, to identify the defective of test items and secondly, to indicate the content the learners have or have not mastered. Item analysis measures individual test item of regarding the difficulty level and to differences between high and low scorers in the test.”

Generally, the teachers’ guidance for their activities in the learning and teaching process is revised Bloom’s Taxonomy. That statement supported by Bloom, Anderson, Krathwhol (2001), the use of Revised Bloom’s Taxonomy is to inform or guide the development of assessments (test and other evaluations of students learning), curriculum (units, lesson, project, and other learning activities), etc. Furthermore, According to Anderson (2001), Bloom provides the six cognition levels. The original levels of Bloom’s Taxonomy in the cognitive domain ordered from simple to complex: Knowledge, Comprehension, Application, Analysis, Synthesis, and Evaluation. Additionally, in the revised Bloom’s Taxonomy, the levels of cognition become remembering, understanding, applying, analyzing, evaluating and creating.

In the cognitive domain of Revised Bloom’s Taxonomy, there are two classifications of thinking levels: Higher-order thinking skills (HOTS) and Lower-order thinking skills (LOTS). Levels at the top of the list are often considered as higher order thinking skills (HOTS) such as analyzing,
evaluating and creating, while those near the end of the list are considered Lower order thinking skills (LOTS) such as remembering, understanding, applying.

Several researchers have conducted research on HOTS and LOTS. First, the research was conducted by Mansory (2013) which explains about the analysis of test items in grade seven of math about Bloom’s Taxonomy. Second, the research was conducted by Gezer, Sunkur, & Sahin (2014) which explains about the evaluation of exam questions of social studies at the elementary schools. Third, the research was conducted by Zareian, Davoudi, Heshmatifar, Rahimi (2015), which explores the types and levels of questions inherent in two English for Specific Purposes (ESP) textbooks.

Different from the previous researchers, this research takes a different case. Knowing the problem, this research concerns in explaining about analyzing of English test items (daily test) in grade seven of MTsN in Bandung. Then, this is interesting to know which categories of cognition level that appropriate with each question in test items. Based on the explanation, the research is taken titled “Investigating EFL Teacher’s Ability Implementing HOTS & LOTS in their English Test Items.”

B. The Research Questions

This research is provided two questions as follow to make it complete:

1. To which categories do the formative tests developed by the EFL teachers meet the HOTS and LOTS?
2. What is the understanding of the EFL teachers in MTsN 1 Bandung and MTsN 2 Bandung regarding HOTS and LOTS?

C. The Aims of Research

To respect the research questions, this research is aimed to:

1. To identify the categories to which the formative tests developed by the teachers meet the HOTS and LOTS.

2. To describe the EFL teachers’ understanding regard HOTS and LOTS in MTsN 1 Bandung and MTsN 2 Bandung

D. Significances of Research

This research is expected to give some significance based on two points along these lines:

1. Theoretical Significances

The result of this research is expected to give a useful contribution to English learning teaching. Moreover, to make the teachers aware of the importance of Bloom’s Taxonomy revised by Anderson, especially in constructing questions of daily test.

2. Practical Significances

This research is aimed for teachers and educational policy maker. Teachers can use this research as an additional reference to construct good questions and to help them reach the curricula goal by considering the level of HOTS questions based the thinking level in Revised Bloom’s Taxonomy. Moreover, this is aimed too for the educational policymaker to consider the policy that they make for the developing education in
Indonesia. The consideration is expected in the area of constructing questions. Therefore, the teachers can develop their ability in constructing good questions.

E. Rationale

Assessment, evaluation, and measurement are often used in education term, especially in the teaching process. However, assessment, evaluation, and measurement’s process are different. According to Miringa, n.d. (2016) “Assessment refers to the process products which are used to describe the nature and extent of pupils' learning. Meanwhile, according to Seif (in Jahanian, 2012), states that “evaluation is a rule-governed process for gathering and analysis of data.”

Moreover, according to Brown & Abeywickrama (in tran's journal, 2012), said that In educational term, measurement is “the process of quantifying the observed performance of classroom learners.” This research is included to assessment process because the researcher is gathering some information or some data from the teachers and she processed the data.

In learning and teaching process, evaluating the students is important because it is to know their ability. The teacher can give them some questions in the test to know how far the students’ understanding of the material. This notion is supported by Brown and Wickrama (2010) tests as a method of measuring a person’s capability, acquaintance, or performance in a specific domain.
Analyzing of test items is important to see the categories of questions and to know the quality of every question. It is strengthened by Ahiri (in Badara, 2016) “the aim of test item analysis is also to help the enhancing of test quality through revision or disposing of the ineffective item, and to recognize diagnostic information on every student whether they realize in comprehending the material being taught.” To analyze the English item test, we need to consider the keyword that stated in basic competence (KD). Then, it shows the level of cognition in revised Bloom’s Taxonomy.

In the 1990's, a former student of Bloom, Lorin Anderson, and David Krathwohl revised Bloom’s Taxonomy and published this Bloom's Revised Taxonomy in 2001. In the revision, The level of Revised Bloom’s Taxonomy is changed to verbs from nouns to for each of the categories. The levels of Revised Bloom’s Taxonomy are organized from Lower Order Thinking Skills (LOTS) to Higher Order Thinking Skills (HOTS).

These below are six levels of thinking skills from the lowest to the highest:

1. Remembering
2. Understanding
3. Applying
4. Analyzing
5. Evaluating
6. Creating

LOTS and HOTS are categorized of thinking skills in the cognitive domain that can develop from elementary, secondary schools, into higher
education. The classification of these thinking skills based on the research of educational psychologist and international activist Bloom (1913-1999).

“Revised Bloom’s Taxonomy is a part of the education system of implementation that delivers educational objectives to improve the effectiveness of education by dividing the objectives into domains” (Krathwohl, 1956). There are three learning domains of Revised Bloom’s Taxonomy: cognitive domain (it is related to knowledge or the thinking domain), affective domain (it is related to attitude or the feeling domain), and psychomotor (skills or the physical domain). This research focuses on the cognitive domain because it is to know how far the students’ understanding of teaching the material and the teachers’ competence in constructing the good questions.

Figure 1.1 Scheme of Research
This research is conducted as indicated in the scheme. Firstly, the researcher is deciding two places for being the target. Then, in every school, the teachers who teach in grade seven are asked to be the participant. After that, the formative test (daily tests) made by the teachers are analyzed. Then, each question of the tests are classified into keyword of the level of Bloom’s Taxonomy. Finally, the result is classified of Bloom’s revised Taxonomy; HOTS and lots.

F. Research Methodology

This part conducts the design of the research in general. It contains Research Design, Research Site, Participants, Procedure of Research, and Analyzing the Data.

1. Research Design

This research is classified as a case study using the descriptive qualitative method. The purpose of this research is to find out the category of lots and HOTS of test items analyzed. Additionally, the scope of this research is daily tests. The investigation of the evaluating process and activities from the EFL teachers in depth through the test items are processed here. It is strengthened by Creswell (2003) saying that case study as “researcher explores in depth a study, activity an event, a process, or one or more individuals.”

This research is a case study which analyzes the various sources of data: interview, questionnaire, and document analysis. According to Creswell (1998), the structure of a case study should be the problem, the
context, the issues, and the lessons learned. Moreover, the data collection
for a case study is extensive and draws from multiple sources such as
director participant observations, interviews, archival records or
documents, physical artifacts and audiovisual materials

This research displays the explanation and description of the result of
test items analysis considering the use of revised Bloom’s Taxonomy, to
reveal the result of this research. According to Creswell (2013: 232)
“Qualitative methods rely on text and image data, have unique steps in
data analysis, and draw on different designs.”

2. Research Site

To support this research, two places become the area to collect the
data. MTs Negeri 1 and MTs Negeri 2 Bandung become the places to
collect the data. The selection of those places is because the researcher
wants to know the system in constructing the test items in those two
schools which are managed by the ministry of religion. All in all, it is
expected that this research can help the teachers develop their ability in
making good quality of test item considering Revised Bloom’s
Taxonomy.

3. Participants

The participants of this research are the English teachers of Mts
Negeri 1 and MTs Negeri 2 Bandung at grade seven. It is considered
from taking the representative of the existing English teachers in
Indonesia, especially in Bandung. Therefore, one teacher of each school
is selected to become the representative of English teachers for supporting the research. The selection is considered by the existence of the English teachers of the school at that grade (the seventh grade).

According to Creswell (2009), the subject selection in qualitative research is purposeful: participants are selected who can best-inform the research questions and enhance understanding of the phenomenon under study. It means that the quality considers the selection of the schools and the participants.

Furthermore, this research uses purposeful sampling, because it is considering the quality of the participants which are suggested by the other teacher in both schools. According to Creswell (2012:206), “The researcher term used for qualitative sampling is purposeful sampling, researcher intentionally select individuals and sites to learn or understand the central phenomenon.”

4. Procedure of Research

a) Instrument

In collecting the data, analyzing the document of daily tests is the main point of this collecting data, this instrument is used to reveal the first answer the research questions. Moreover, questionnaire and interview become the important parts which are used to reveal the answer to the second research questions.

The questionnaire is one of the instruments for collecting the data consists of a series questions and other prompts for gathering
information from respondents. According to Bell (1999), a questionnaire is fundamentally a structured technique for gathering primary data. It is mostly a sequence of written questions for which the respondents have to provide the answers.

Moreover, this research uses semi-structured interviewing. Cresswell (2012), a semi-structured form of an interview conducted with several guiding questions, but it is possible to have spontaneous questions if the questions prepared do not meet the intended purpose.

Furthermore, according to David, & Sutton (2004, in Kajornboon, 2005) Semi-Structured interviews are often used in qualitative analysis. The interviewer does not asked a specific hypothesis in semi-structured interviews, the researcher has a list of questions to be covered, but In this type of interview, the order of the questions can be changed depending on the interviewer.

Based on that explanation above, in semi-structured interviews, the interviewer not only asked the specific questions but also, the questions can be changed depending on the direction of the interview, the researcher used the semi-structured form of interview technique to ask the teachers’ understanding about LOTS and HOTS.
b) Procedure of Collecting Data

In conducting this research, firstly, the test items made by the teachers for evaluating the students’ understanding are analyzed. The next step is giving them the questionnaire, afterward, making an interview section is conducted with the teachers’ understanding of Revised Bloom’s Taxonomy to construct item test for evaluating their students gradually. After collecting the data, the data is processed. Then, the results appear. Finally, the result of the collected data can be concluded. It is shown in the table of each level considering the revised Bloom’s Taxonomy. All in all, the result speaks whether the test items include to LOTS or HOTS categories.

G. Analyzing the Data

After all of the data are collected, processing it is the next step to know how the result is. Henceforward, the data will be analyzed. According to Miles and Huberman (1994), a qualitative data analysis consists of three procedures:

1. Data Reduction.

Data reduction refers to the process whereby the mass of qualitative data may obtain – interview transcripts, field notes, observations, etc. It is reduced and organized, for example, coding, writing summaries, discarding irrelevant data and so on. At this stage, the researcher tries and discards all irrelevant information, but to ensure that the researcher has
accessed to it later if required, as unexpected findings may need you to re-
examine some data previously considered unnecessary.

Based on the explanation, in this stage, the research is analyzed by
using the coding technique. According to Creswell (2012), codes are then
used in forming a description of the central phenomenon or the context (or
setting) of the study. Codes are also grouped to form broader themes that
are used in the study as key findings. Moreover, Goetz and Le Compte
(1984) described “coding is formed of a taxonomic analysis, a kind of
outline of what is related to what, and in what ways. Moreover, according
to Miles and Huberman (1994) recommend that data can be coded
descriptively. They suggest creating an initial "start list" of codes and
purifying these in the field.

Based on the explanation above the data analyzed by using the coding

2. Data Display.

To conclude the mass of data, Miles, and Huberman (1994) suggested
that a good display of data, can show by tables, charts, networks and other
graphical formats is essential. The data is shown by the percentage of each
level considering the Revised Bloom’s Taxonomy, HOTS, and LOTS in the form of a table.

3. Conclusion drawing/verification.

To finish the research, the conclusion from all that have already discussed considering the collected data are provided. In the end, it shows the category of the level of the test items analyzed.

All in all, this chapter has explained all of the points which are conducted to complete this research. Those are the background of the research, the research questions, the aims of the research, the significances of research, the rationale, the research methodology and the data analysis. Furthermore, after all, data are collected and processed the results are appeared to answer the research questions provided before.