#### **CHAPTER II**

### LITERATURE REVIEW

#### A. Test

After a learning process ends, students get learning outcomes. The learning outcome has an important role in the learning process. The learig outcomes is used to know the how far the students understand the material. The learning outcome becomes a measurement of the assessment of learning activities or learning processes expressed in symbols, letters and sentences that tell the results that have been achieved by each child or student in a certain period. The learning outcome can also be seen through evaluation activities aimed at obtaining proof data that will show the level of students' ability to achieve learning goals. Student learning outcomes are influenced by student ability and quality of teaching. Barbosa H & Garcia F (2005) state that online assessment is an important step inside the e-learning process because gives convenient feedback to all participants in the process, helping to improve the learning and teaching process. According, to sudjana there are two tools to assess student learning outcomes, namely: tests and non-tests. in this thesis, the researcher only explains about the test as a learning outcome assessment tool. Tests as an assessment tool are questions given to students to get answers from students in oral form (oral test), in written form (written test) or in the form of deed (action test). According to Yuliyanto et all. (2016) Test is one method to evaluate whether process learning has reached its goal or not yet. The test is a tool or procedure used to find out or measure

something, or rules that have been determined. To do this test depends on the instructions given for example: Circle one of the letters in front of the answer choices, explain, cross off the wrong answers, and etc.

Tests are generally used to assess and measure student learning outcomes, especially cognitive learning outcomes regarding the mastery of teaching materials in related with the objectives of education and teaching. According to Sudjana (1995), there are two types of tests namely; 1. Essay Test

Essay test is a test that contains questions-questions that require students to answer in the form of describing, explaining, discussing, comparing, giving reasons, and other similar forms in accordance with the demands of the question using their own words and language. There are various types of test description;

- a. Free Essay is essay which students' answers are not limited, depending on the views of students themselves.
- b. Limited Essay is essay in the form of a question that has been directed to certain things or restrictions. Restrictions can be in terms of environmental scope, the point of view to answer it, and its indicators.
- c. Structured Essay is the questions of essay are seen as a form between objective questions and essays. Structured questions are a series of short answer questions even though they are open and free to answer.

## 2. Objective Test

An objective test is a test which carried out objectively in a test (Suharmi in Sulistyorini's book 2009). Objective forms of questions are widely used in assessing learning outcomes. This is due in part to the vast amount of learning material that can be included in the test and the ease of assessing the answers given. Arikunto (2003) state that objective test has several types;

#### a. True-False

The questions contained in this test are statements. The statement is true and false. Students only need to mark each statement by circling "B" if the statement is correct and circling "S" if the question is wrong.

### b. Multiple choice

Multiple choice test consists of a statement or information about an incomplete statement or information and to complete it must choose one of several possible answers that have been provided. From several answer choices there is one correct answer.

### c. Matching test

Matching test consists of one series of questions and one series of answers. Each question has an answer listed in the answer series. The students are asked to find and put the answers, so that it is in match with the questions.

# d. Completion test

Completion test consists of sentences that have blank space. The students have to fill the blank space with the correct answer.

Arikunto (2003) argues that the function of the test can be reviewed from 3 things:

## 1. Function for class

- a. Make a diagnosis of student learning difficulties
- b. Evaluate the gap between talent and achievement
- c. Raise the level of achievement
- d. Classifying students in class when group methods
- e. Planning teaching and learning activities for students individually
- f. Determine which students need special guidance
- g. Determine the level of achievement for each student

## 2. Function for guidance

- a. Determine the direction of conversation with parents about their children
- b. Help students in making choices
- c. Help students achieve their educational and departmental goals
- d. Provide opportunities for mentors, teachers and parents to understand the difficulties of children.

### 3. Function for administration

- a. Give instructions in classifying students
- b. Placement of new students

- c. Help students choose groups
- d. Assess curriculum
- e. Expand community relations
- f. Provide information for other agencies outside the school.

#### **B.** Online Test

Many researchers in the world are currently developing web-based assessment applications in the field of education, according to Akdemir and Oðuz (2008) in HüseyinÖz (2014), they research the impact of computer-based assessments by comparing participants' online test scores and participant scores using paper based tests. Their research did not reveal that there were significant differences in scores from participants who used online tests and paper-based tests. Based on the result of Akdemir and oguz journal result, online tests do not too influential student test score and the result of the study show that online test can be alternative way to replace paperbased test. In Rohmatul Hidayah's thesis result state that some of respondents explained that online test is interesting. On the other hand, Gül, Emrah et al. (2015) in Azmina et al. (2017) state a lot of software that develops and is indeed provided for students and students can access it. Thus, the development of technology is also important in assessments in the field of education. According to Akdemir and Oðuz in HüseyinÖz journal (2014), computer experience and competency could affect the scores and confidence in undergoing computer-based testing Nowadays, online test or E assessment can access via smart phone not only via computer. It makes students are not required to have and master a computer,

almost of them have a smart phone so that it makes it easier for them to access the online test.

In Indonesia, e-learning is not a new thing in the field of education, but the implementation is still on going slow, including in some countries that are other developing. In the concept of e-learning, the whole process evaluation of learning outcomes can be done online, starting from the implementation process evaluation of learning to the acquisition of results evaluation (exam or test). Learners are able too do the test questions online and after finishing the test they can get the exam results right away.

## 1. The Advantages and Disadvantages of Online Test

From several studies examine the advantages and disadvantages of online tests. The following are the advantages and disadvantages of online test.

# a. The advantages

Online tests bring many advantages to the teachers, students and institutions:

- 1) Rastgoo et al., 2010 in alsadoon (2017), states that online tests can save costs because they do not need money to print the questions.
- 2) According to Ridgway, McCusker&Pead, 2004 in alsadoon (2017), online tests can avoid the disadvantages of paper-based tests or traditional system tests such as online tests which save time. Hoover (2007) in Alsadoon (2017) journal state e-assessment Hoover (2007)

- in Alsadoon (2017) journal state e-assessment is a flexible form of assessment in terms of time and place.
- 3) From RohmatulHidayah's thesis. The research result that online test is efficient. The participants also explained that online test does not need prepare many things. In paperbased test, the students have to prepare their stationery. They think that online test saves their time. The participants explained that online test can increase their independence and honestly. The participants explained when they do the online test they are focus on their phone, so there is not time to cheating.

### b. The disadvantages

Desipte of many advantages, online test also has disadvantages. Rastgoo et al., (2010) in Alsadoon (2017) state in preparing for online tests, teachers need much time, need technology and online tests also do not have test controls. Lack of control makes the students cheating easier.

According to Rowe (2004) in Alsadoon (2017), there are three serious problems regarding students' honesty on online tests.

- Students can get the answer key before the test starts. They get the
  answer key from the other students who have already taken the test
  because it is difficult to ensure that all students take the test at the
  same time.
- 2) Students can repeat the test again, students can review the answers so that they give an opportunity to answer correctly. Students may

break into the system network and then claim that they have lost their answers or they change the test schedule so that students who have taken the test are treated like students who have just taken the test.

- 3) Illegal help during the exam, such as exchanging emails or hiring someone else to take the exam. As Rowe stated, students know computers better than their teachers do so it is easy for them to use computers for cheating.
- 4) Studies done by Osuji (2012) and Craven (2009) in Apipah & Tonder (2018) journal show that other challenges include the cost of a computer or laptop; Internet cost (cost of buying data); power supply problems, and lack of sufficient technical infrastructure to support e-assessment.

In Rohmatul Hidayah's thesis result, the participants explained that online test need quota and high network to access the test. Karal et al. (2011) state that shen student during the test, the failures of the internet connection negatively affect connection. It means that student need good internet connection when take online test.