

CHAPTER II

THEORETICAL BACKGROUND

2.1. Overview of Online Assessment

According to Harlen in 2005, the main purpose of any measurement of learning is to understand the purpose of collecting evidence through assessments. Assessment is the activity of collecting necessary information to determine if a program answers its goals. It aims to discover which methods work and which do not (Kaufman, Guerra & Platt, 2006). The teachers makes the assessment as a benchmark for monitoring the development of students' knowledge. The teachers needs to know the learning progress of the students to ensure that the learning process properly or vice versa. The result of assessment will direct the teacher to the students' needs to improve the learning process (Rocco, 2007). It should be noted that quick, instant and effective feedback is very important for the learners, as well as having access to multiple attempts, taking responsibility for their own learning and monitoring their own progress (Barbosa & Garcia, 2005).

Technology has developed significantly. This can be used in the academic area where teachers can implement online assessments. According to Khairil and Mokhsein in 2018, online assessment is assessment methods and practices which emphasize the role of information technology in measuring student learning. The term online assessment can assess students' knowledge. With the existence of this online assessment can make teachers or lecturers easy to do the quiz or other assessment.

Teachers can get many benefits by implementing online assessment in their teaching and learning activities. The online assessment enables enhancement of the assessment process, encourages flexibility saves time in the long term and allows for fast feedback to learners, it allows educators to monitor the progress and record the assessment activity (Barbosa & Garcia, 2005). In addition, the online assessment must maintain the features of traditional assessment such as validity, reliability, fairness, and accessibility (Baker, O'Neil, & Linn, 2003; Shute, 2009). Online assessment can be applied to both formative and summative assessment as a means of assessing student learning (Bull & McKenna, 2004).

2.1.1. Online Formative Assessment

Clarke in 2005 delineated formative assessment as an ongoing assessment based on how well students fulfill learning and engage students in improving their learning. For formative assessment, students must feel free to reveal their ignorance and if the results are to be used for grading, they will be highly motivated to conceal possible weaknesses. (Biggs, 1999). The main purpose of formative assessment is to provide feedback that can be used to improve knowledge, skills, and understanding of students (Shute, 2008). Thus students can improve their learning performance and can achieve the expected learning outcomes.

According to Popham (2008), formative assessments encourage teachers to constantly assess the effectiveness of instruction, attend to learning consequences, and make the necessary changes based on the evidence of the assessment. Formative assessment is an extremely valuable tool that can be used to determine

if there are gaps in student understanding which then allows the teacher to determine what students still need to learn (Heacox, 2012). Differentiating instructions requires teachers to evaluate the different styles of learning present in the classroom and make decisions for instructional activities based on those observations.

Email, feedback forms, and reflection discussions are techniques to obtain feedback useful for refining the instruction process. Several LMSs provide numerous features for the design and re-use of formative assessments (Sewell, Frith, & Colvin, 2010). For example, e-mail and discussion boards can be used for writing summary, and reflection postings.

2.1.2. Online Summative Assessment

Unlike formative assessments, which are generally used for providing feedback to students and teachers, summative assessments are generally “high stakes” assessments and used to get a final assessment of how much does a student know (Gardner, 2010). Summative assessment is a type of assessment that informs the teachers of the success or failure of the students in their learning process and the results usually in numerical scale (Herrera & Macias, 2015). Summative assessment is also used as a criterion for students to take further lessons. Therefore, if there are students who fail to reach the grades determined by the school, they must make remedial with the aim of improving the grades. In other words, summative assessment is a summary of what the student has accomplished at a specific point in time. It means looking back and notice of how well the student has reached goals. (Brown, 2004). Results of summative

assessments are often reported as scores or grades and it can provide person and cohort data that will help track progress and notify stakeholders.

Examples of summative assessments include papers, quizzes, and tests (Sewell, Frith, & Colvin, 2010). Quizzes or tests in LMSs can consist of multiple-choice, matching, and completion items. The instructor can customize the design of the test. The test can be timed and password protected. Grade availability can be determined by the instructor as either immediately after the test is finished or after the instructor has completed a review of items and an item analysis. Rationales can be provided for each answer option of an item or for the item as a whole.

2.2. Benefits and Drawbacks of Online Assessment

The benefits of online assessment as compared to the traditional paper format include time and cost savings and faster reporting of results (Kuhtman, 2004). Students prefer online assessment, because they can have more control, friendly interfaces and test as games and simulations, which resemble learning environment and recreational activities (Ridgway, Mccusker, & Pead, 2007). According to Baleni's study in 2015, online assessment makes students less stressed and more relaxed. Using online assessment enable the teacher to track the students' performance and make analysis across many assessments. It also can reduce the teachers' burden to assess large student numbers (Ellaway & Masters, 2008; Nicol, 2007).

Besides the benefits, the online assessment also have drawbacks. For example, inexperienced students and teachers with computer or with the online

assessment process (Osuji, 2012). Some teachers unfamiliar with technology, or most of them use online assessment for the first time (Alruwais, Wills, & Wald, 2018). Both of students and teachers need to be able to use computer well in order to create and take an assessment. Furthermore, Technology is not always reliable, sometimes there is an internet problem (Crews & Curtis, 2011).