

Chapter I

Introduction

This chapter discusses about the background of the study, problems, the purpose of observation, the benefit of observation, and the definition of terminologies.

1.1 Background of study

God at the beginning created the formless and empty earth in the universe. He filled the earth, full of His creatures (Genesis 1:1-2). His creatures who are so special in His eyes is the human. Van Brummelen (2009) stated God created human beings to follow the Creation Mandate (Genesis, 1:28, 2:15), the Great Commandment (Matthew 22:37 – 39), and the Great Commission (Matthew 28:18 – 20). He created human beings as in His own image (Genesis 1:27) with their uniqueness. In the uniqueness, they color life by their differences. They have their own characteristics, thoughts, feelings, senses, opinions, and even knowledge. Knowledge itself was created by God, and absolutely from God. He is the master of everything; He knows everything, from the beginning until the end, and no wonder that He is Omniscience.

Eve who was created by God, fell into temptation when the serpent offered the fruit from forbidden tree and Adam with her ate that fruit (Genesis 3:2-6) as known, the Fall of human. The background of their action was they tried to be superior because they thought they can do anything like God and differentiate good and evil. This human thought was wrong, because their thinking has been polluted by sin, and sin brought humans to death. “Fallen humanity is in active rebellion against its Creator. Humanity’s

natural tendency is to put itself in the place of God and to rebel against the laws of universe (Rom 8:7).” (Knight, G, 2006, p. 206)

Much knowledge is recorded in the Bible, when we look back into the description of Noah ark, we find a exact detail of the dimensions of Noah’s Ark, such as how was the capacity of this ark consider with the height, the length, and width. This knowledge that came from God and it describes how great the ark was which enabled the creature to come in and can be saved. From the example above, we may observe that God created number which can be used to calculate. As time goes by, people investigate number and develop number into the branch of science, such as Mathematics, Physics, etc.

Mathematics is labeled as a difficult subject for many students, and they really struggle with that. During observation, the writer found that almost of her students had difficulties to understand Mathematics, whether in Indonesian or English version. The writer needed so much effort and prayers to enable her to pursue students’ progress. Then the writer decided to use assessment to observe and measure how far the students absorb the lesson and grew in understanding. We can not let our students to learn by themselves without our guidance, because we play a significant role for them – agent of change.

Van Brummelen (2009) stated that assessment can be included in some of areas, such as attitude, achievement, interest, etc. Meaning, assessment can be used to measure other aspects beside cognitive. It is an important point where the teacher can learn each one of students. At the same time, we as the Christian teacher can put right value and right principles.

2 Timothy 4:2 reminds us as the teacher that we should have the right principles in our teaching. Right principles are only can be found in Jesus, and we can find in the story of Jesus in the Bible. In that verse, stated some of the principles, such as telling the Gospel for every people, always be prepared with the uncertain time, and correct others from their mistakes with patience and love. The principles which Paul brought in this verse actually describe the tough task which we have to do. But by the fruit of Spirit (Galatians 5:22-23) which dwells in our heart, with the help of Holy Spirit will enable us to do God's will. Moreover, we as the Christian teacher have to guide the students into the right way, and Jesus Himself is the way of our life (John 14:6).

Correcting and rebuking are two things which come from our judgment, and sometimes our judgment is subjective. Jesus, we known as our example never judged anyone based on the subjectivity, because He is just and fair. Jesus judgment to His people makes the people realize the Greatness of Him and brings the goodness for the better life. Correcting does not mean a negative thing, but it brings a positive affect for our progression and development.

Van Brummelen (2009) stated that people can learn from their mistakes to overcome the same mistakes and to teach themselves as the responsive and responsible disciples of God. Responsible here means that as the teacher we have to bring our students to know God, teach how the students build relationship with Him, and discover His world and His word. Therefore, first of all, the teachers must be equipped with a good relationship with God Himself.

1.2. Problems

The following questions for the observation:

- a) How can an assessment process be made to help students to feel successful?
- b) How the assessments can be an effective way for the students' improvement in marks?

1.3. The purpose of observation

The purposes from this observation:

1. To know the implication and advantages of the various assessments, for example: the students can be helped by various assessments to gain deeper understanding about mathematics.
2. To measure the students' progress from the assessments, for example: initially the students didn't really understand and through the practices, the teacher helped them by informal assessment. As the result, the students developed from their prior knowledge to the new understanding.
3. To develop the various assessments by modification of problems, for example: the teacher gave an easy level of problem for the first meeting, and for the next meetings, the teacher adapted to the advanced problems.

1.4. The benefit of observation

1. For the writer

The writer can use an assessment as a process to approach students and grow students' progress in the future teaching and learning process. Besides, the writer can implement what she got from this observation for the future teaching.

2. For teachers

The teachers can understand how to shape and design the assessments for the students' improvement, and be aware of the students' progress. The benefit of assessment provided the information about how the assessment worked. The teachers have the awareness of how students develop in aspects of learning.

3. For students

The students have the motivation to learn more and more about Mathematics and set their goals to be active learners. The students will know by the assessment that they are able to solve the Mathematics problems from the easy until the hard ones. They also being prepared by the teacher in order they can be shaped as good learners.

4. For school

The school will be more aware how to organize Mathematics assessment. From the observation, the school is able to see the valid information which provided by the writer to investigate how far the students can be expected to achieve.

1.5. Definitions

a. Assessment

Brady & Kennedy (2005) defined assessment as the process of collecting students' data to examine how well the students understand the lesson, and how good the students' attitude in the school, in order to know the students' development from over time. Moreover, assessment is “the term typically used to describe the activities undertaken by a teacher to obtain information about the knowledge, skills and attitudes of students.” (Marsh, 2004, p.275).

b. Self Assessment

Self assessment defined as “Process by which students develop insight into their own learning, and has become increasingly emphasized with the development of outcome based education.” (Brady & Kennedy, 2005, p.66).

c. Learning

Lambert and McCombs (as cited in Earl, 2003) defined learning as “a constructive process that occurs best when what is being learned is relevant and meaningful to the learner and when the learner is actively engaged in creating his or her knowledge and understanding by connecting what is being learned with prior knowledge and experience”.

d. Mathematics

“Mathematics defined as the study which needs the skills to analyze, of generating the data / information then processes into the terms and symbols, involving the solving problems in daily life.” (Reys, et al., 2007, p.3)