

CHAPTER I

INTRODUCTION

1.1 Background of Study

Development of information technology and communication in the 21st century is taking place quickly. Technology development information and communication as well accompanied by various roles aspects of human life, including aspects education. The existence of information technology and this communication provides an opportunity to improve the quality of teaching and learning namely by opening access to search a vast learning resource for students. This is what became one of the factors in the popularity of new learning orientation called student centered learning (Kurniawati,2019). The rapid development of science and technology has an impact on teachers to be more creative and innovative in utilizing technology in the learning process. This can be done by making changes in the teaching and learning process.

In the curriculum 2013 changes in the learning process can be seen from conventional teaching patterns with students who tend to be passive to be active and meaningful because teachers involve students in the learning process.

Through the curriculum 2013 designed with developing characteristics a balance between spiritual and social attitudes. Education in Indonesia does not only focus on the side sknowledge but rather a learning activity on schools organized to developattitudes, knowledge, and skills of students. Wrongone attitude that is expected to developthrough the implementation of education is independent (Rahmadani,2020).

Self regulated learning as a construction psychologically describing how learners metacognitive, motivational, and behavior enhances learning and performance they. Independent students continuously prepare to learn by organizing their thoughts and beliefs as well managing resources and the learning environment them effectively. Self regulated learning emphasizes on student activities in full of responsibility responsible for success in learning. Students who are having strong independence will not be easy give up. With in other words, independent learning is a process how a learner organizes his learning by activating cognitive, affective, and behavior so that it is achieved learning goals.

Indicators of self regulated learning, namely: (a) learning initiatives; (b) has the ability self-determination; (c) diagnose learning needs; (d) creative and deep initiative make use of learning resources and choose strategies learn; (e) monitor, regulate and control learn; (f) able to hold back; (g) make own decisions; (h) able

to cope the problem. Independent learning has many benefits. These benefits are cultivating responsibility, improve skills, solve problems, make decisions, think creatively, think critical, strong self-confidence, and become a teacher for himself.

The reality that goes inside mathematics learning is lack independence of student learning or low independence of student learning as a result of the process learning. The low independence of student learning in aspects use a math book other than that book given by the teacher when learning, making separate notes about the learning material math and do individual tasks yourself that must be done (Astuti, 2017).

Mathematics learning for students is a pattern formation think in the understanding of a sense as well as in the reasoning of a relationship between those meanings. In mathematics learning, students are accustomed to gaining understanding through experience of attributes owned and not owned by a set of objects (abstraction). Students are given experience using mathematics as a tool to understand or convey information for example through equations or tables in mathematical models which are simplifications of problems stories or other math description problems (Nurfadilah, 2019).

The opinion of Surya & Syahputra (2017), that "Almost all of the learning process of mathematics in school beginning with shares of definition, formulas, examples, and ends with exercises", which means that almost all mathematics learning process in schools begins with understanding definitions, formulas, examples, and ends with exercises.

Many students do not like the subject of mathematics. They think that mathematics is an important subject boring and scary because math is synonymous with numbers and formulas. Negative attitudes towards mathematics arise because of wrong views about mathematics. One of them is the assumption that learning mathematics is necessary special talents that are not owned by everyone, as a result, the person who feels low intelligence is not motivated to learn independently in learning mathematics. students who do not perform well are not determined by their abilities less, but students lack independence in learning so that these students not trying to learn independently (Nurfadilah, 2019).

The problem that exists to date is learning at classes that are less than optimal in supporting student learning independence. Existing learning still focuses on the teacher as the only source learning so that it does not raise high learning motivation for students. Students rely too much on explaining the material from the teacher and very few students try to find other learning resources to support the task academic. Learning like this causes students to tend to be passive in

learning, accept whatever the teacher teaches so that students do not learn to construct their knowledge. Learning model nowadays, generally, the activities of students only listen to and watch the teacher's explanation, then the teacher resolves himself one-way completion and provide practice questions for the students to solve themselves (Nurhafsari,2018).

According to Hakim (2017) states that efforts are in the form of independence student learning is a process, and this process can only be carried out through learning activities. In this case, the teacher needs to make efforts by doing process variations learning either an innovative approach, method, or learning model so objectives that are expected to be successful. Application of learning strategies and methods that fit and this accurately can lead students to become individuals who are superior, independent, passionate, and highly oriented. Therefore, teachers as actors of education are required to do so to create and develop student independence. The teacher's role in this can be manifested by inviting students to learn to act and experience first hand as well active and independent involvement in the learning environment through learning mathematics.

The explanation above can be concluded that student learning independence is needed in the learning process. In the learning process, the teacher must apply an appropriate learning model because he realizes the importance of independent learning for students. One learning model that can improve learning independence is a flipped classroom.

Flipped learning model classroom is a way that can provided by educators by minimizing number of direct instructions in practice teach them while maximizing interaction with each other. It is making use of technology that provides additional ones support learning materials for students which can be accessed online. This matter free up the previous class time has been used for learning (Yulietri,2015).

The advantages of the Flipped model Classroom as the following: (1) Students have time to study the subject matter at home before the teacher delivers it in the classroom so that students are more independent, (2) Students can study the subject matter in conditions and a comfortable atmosphere with his ability to receive material, (3) Students get the teacher's undivided attention when having difficulty understanding assignments or exercises, (4) Students can learn of different types of good learning content through videos / books / websites (Yulietri,2015).

The flipped classroom learning model utilizes technology by providing learning materials that support students and can be accessed online. Thus students have the opportunity to study the material in-depth and access the learning

materials they want. These activities allow students to increase their learning independence.

Based on the description above, it is necessary to research “ **Implementation Of The Flipped Classroom Learning Model To Train Students Self Regulated Learning In Mathematics For Class VII SMP Negeri 2 Medan T.A 2020/2021** ”.

1.2 Problem Identification

Based on the background of the problems that have been stated, then several problems that arise can be identified as follows :

1. Students rely too much on explaining the material from the teacher.
2. Very few students try to find other learning resources to support the task academic.
3. The activities of students only listen to and watch the teacher's explanation.
4. Students tend to be passive in learning.
5. Teachers experience limited time in explaining the material.
6. Some students are embarrassed to ask questions after finishing teaching and learning activities.

1.3 Scope of Study

Judging from the background and problem identification, limitation of study that are :

1. So that students are not passive in learning and are not teacher-centered, The learning model used in this study is the flipped classroom learning model.
2. The respondents studied were grade VII students of SMP Negeri 2 Medan.
3. The material taught in this research is social arithmetic.

1.4 Research Questions

Based on the background described above, the researchers formulated the following problems:

1. How is the students response in mathematics using the flipped classroom learning model at SMP Negeri 2 Medan ?
2. How is the self regulated learning of SMP Negeri 2 Medan students after using the flipped classroom learning model?

3. How is the learning outcomes of SMP Negeri 2 Medan students after using the flipped classroom learning model?

1.5 Scope of Problems

The researcher limiting the scope of problems that are :

1. The learning model used in this study is the flipped classroom learning model and will only be carried out for class VII students of SMP Negeri 2 Medan in the academic year of 2020/2021.
2. Student learning self regulated in social arithmetic mathematics class VII SMP Negeri 2 Medan in the academic year of 2020/2021 is the limitation of the problem in this study.

1.6 Study Objectives

In line with the problem formulations mentioned in the previous section, this study objective :

1. Knowing the students response in mathematics using the flipped classroom learning model at SMP Negeri 2 Medan.
2. Knowing the self regulated learning of SMP Negeri 2 Medan students after using the flipped classroom learning model.
3. Knowing the learning outcomes of SMP Negeri 2 Medan students after using the flipped classroom learning model.

1.7 Research Purposes

The benefits of this research are:

1. Practical Benefits

a. For Educators

The teacher can make the flipped classroom learning model an option in training students to learn independence.

b. For students

With this flipped classroom learning model students can train their learning independence so they do not depend on others.

c. For Researchers

Can also be reference for further researched which will be develop research of this flipped classroom learning model or students self-regulated learning.

1.8 Operational Defenitions

- An implementation is an act of practicing theories, methods, and other things to achieve certain goals and for an interest desired by a group or group that has been planned and arranged in advance.
- The flipped classroom learning model is a model that utilizes technology by providing learning material through learning videos.
- Student responses are reactions given by students in response to the influence of stimulation of the learning process using the flipped classroom model.
- Self regulated learning is a condition of independent learning activities that do not depend on others, have a willingness and are responsible for solving their own learning problems.
- Learning outcomes are something that is obtained, mastered, or is the result of the learning process. Learning outcomes in this study were obtained by providing a test sheet at the end of the lesson.
- Social arithmetic is one of the important materials for students to learn because it relates to sales prices, purchase prices, profits, losses, interest, discounts, taxes, gross, tare, and net so it will be useful when solving these problems in the future.