

## **Chapter Two**

### **Literature Review**

In this chapter, the researcher gives review of some theories about cooperative learning. A theory is very important for this research to lead the researcher to conduct the research. After the theory is completed, the researcher continued to conceptual framework which consists of summary of the theories.

#### **Definition of Cooperative Learning**

Cooperative learning is a method under constructivist theory which learner create their own understanding. According to Mustafa (2012) constructivist theory is established because there were principles which learners create their own knowledge. In this case, student did not only receive the knowledge, but they also create it. Students use material delivered by lecturer as a media to create their own understanding. Constructivist theory cannot be implemented in the classroom without a method. Cooperative learning is one of the method that can be used as a method to implement constructivist theory.

Panlumlars and Wannapiroon (2015) said that, cooperative learning is a technique of teaching which is employed to teach small groups and each member of the groups has their own abilities with different level. Azizinezhad, Hasemi, and Darvihi (2013) cooperative learning was a teaching and learning method where the students should active in the process of learning. From the definitions above, the researcher concludes that cooperative learning is a teaching technique

that is used by teacher to teach small groups in order to make students become active to learn.

### **The Implementation of Cooperative Learning**

It is known that creating classroom activities should consider many things such as how much time will spend, how students work, or how is the classroom arrangement not exception for cooperative learning. In cooperative learning activities, students will work with their team. Therefore, teachers need to make sure that they can control students' activities in order to keep them work on the plan.

Before implementing cooperative learning in the teaching and learning process, we should know the key elements of cooperative learning. According to Olsen and Kagan (1992) there are five key elements that should exist in the cooperative learning. Those are positive interdependence, team formation, accountability, social skills, and structures and structuring.

**Positive interdependence.** It means that all of group members should get benefits from the learning. If there are students who did not get benefit from the learning, it can be said that the implementation of cooperative learning has not been conducted maximally yet. It is in line with Olsen and Kagan (1992), who stated that positive interdependence happens when the improvements for one student are connected with improvements for other student, also when one student achieves other student too.

Furthermore, they also stated that positive interdependences can be created by four ways, those were goal structured, reward structures, role structured, material structured, and rule structured.

***Goal structured.*** Goal structured is giving the aim of the learning, what is the result from the discussion. For example, the teacher tells the student that after the discussion is finished, they will present the product of discussion.

***Reward structured.*** It is giving appreciation for students' work such as give score. Giving score can be taken by average from each member, sum of individual score. Scoring can increase students' motivation to gain their abilities in order to get better rewards.

***Role structured.*** It involves assigning different roles to each student within a group such as explainer or checker. In the higher education it can be more specific roles such as gatekeeper (monitor), cheerleader (encourager), taskmaster (supervisor), secretary (recorder/reporter), checker (explainer), and quiet captain. They have specific role and responsibilities in their own job.

***Material structured.*** It includes limiting sources and material used by students. Such as each student only allows to use one pencil and one paper. From the limited sources and materials, students are expected to use it responsibly. Material structured also involves designing information and the activities.

***Rule structured.*** It means that students cannot continue to the new learning before all of them finish the assignment. Therefore, students will focus on the current assignment until it has completed.

**Team formation.** Since cooperative learning emphasizes on sharing information and help each other, therefore the teams should have various students. According to Olsen and Kagan (1992) there are four types of formal team formation, such as heterogeneous grouping, random grouping, interest grouping, and heterogeneous/homogeneous language grouping.

***Heterogeneous grouping.*** It includes, to the extent possible, achievement level, gender, ethnic, and linguistic dimensions. Heterogeneous teams can be created by three steps: first, rank students from the highest to lowest achiever using test. Second, assign the top, bottom, and middle two achievers to the first team and remove from the list. Third, repeat second step to create next teams.

Differences on the achievement level will maximize peer tutoring and give a help to classroom management. With a high achiever on each team, the process of giving new materials becomes easier and low achiever will contribute to clarify and ask for more explanations. Then, various ethnicity can improve students' awareness toward different ethnic such as liking classmates. Differences of language ability have two benefits for students. First, it increases student awareness and understanding between students' cultural also give appreciation between them. Second, it improves opportunities to acquire language among students.

***Random grouping.*** It can be created by giving symbols, colored papers, counting, or playing cards. Then, students who get similar symbols, color, number, or card become a team. Random grouping is made when the teacher

wants their students to know teammates better for example when the beginning of new academic year.

***Interest grouping.*** It is based on students' characteristic. Students choose with whom they will be a team. Creating groups based on students' interests purpose to make students easier and quickly works with their group members.

***Heterogeneous/homogeneous language grouping.*** Students with different level of language proficiency may need different context and materials to interact. It gives advantages when the students learn challenging materials and need a good language proficiency. Students will get easier to learn. Although homogeneous in the language, but the teams are still heterogeneous on other scopes.

***Accountability.*** Students may be made individually accountable by assigning each student a grade on his or her own portion of the team project or by the rule that the group may not go on to the next activity until all team members finish the task (Olsen and Kagan, 1992). All of group members have their own responsible. Each student has their job to be finished in order to make group work keep running.

***Social skills.*** Social skills include ways students interact with each other to achieve activities or task objectives (e.g., asking and explaining) and ways student interact as teammates (e.g., praising and recognizing) (Olsen and Kagan, 1992). Olsen and Kagan also stated that there are some activities that can arise students' social skills, such as asking for clarifications, asking for explanations, checking understanding of others. Social skill also can be emphasized by asking student to

practice those activities. The purpose of practicing those activities is to make sure that students are understand the functions when required.

**Structures and structuring.** A structure is a way to organize distinct orders of classroom activities, including what kinds of communications between students at every stage (Olsen and Kagan, 1992). It is different with activities. They also mention meaning of activities. Activities are content-bound and specific and usually have specific objective.

**Variation Elements.** Olsen and Kagan (1992) also give some of variation elements in the cooperative learning. It purposes to make cooperative learning become easier to be implemented. Those variation elements are including group size, teambuilding, product/process, awareness/mastery, grading, and role of teacher.

**Group size.** Cooperative learning is different with traditional classroom that usually teacher as informer who gives or explains materials to the receiver or students in a whole of class. Cooperative learning divides students into small groups to make effective learning. It includes of work in pairs up to six members per team. Since it is small groups, it will give more chances to the informer to give more explanation and the students also get more information. Olsen and Kagan also suggest to make groups of four.

**Teambuilding.** Teambuilding procedures contain of choosing team name, team symbol or logo, and cheer or asking teammates about the topic related to

subject materials. This process also can be called creating team identity. In the process of teambuilding, also occurs introduction of each member.

***Product/process.*** The product of cooperative learning is the process itself. The process of communication in cooperative learning help students to comprehend how to cooperate, encourage, and explain.

***Awareness/mastery.*** Some methods purpose to master information or language skill or it emphasizes on achieving final product of the lessons. Cooperative learning emphasizes on the process of making the product of the lessons. Focusing on the process can gain awareness of content material without feeling hurry up to reach mastery levels. This is important for students acquiring English.

***Grading.*** Giving score on cooperative learning should not erase other elements such as interdependences. Scoring on cooperative learning more emphasizes on students' improvements. For example, by giving pre and posttest, then from both result can be calculated the students' improvement score.

***Role of teacher.*** The role of the teacher in cooperative learning is generally facilitating what students' need, monitoring the learning process among students, clarifying information, rather than providing materials as in the traditional role. Harel (1992) mention that teacher talk in cooperative learning has four major characteristics: teacher speaks little, teacher give wide questions to challenge thinking, teacher assists student with learning task rather than gives error correction, and teacher gives few orders.

McDonell (1992) stated that there are five roles of teacher in cooperative learning classroom, they are teacher as inquirer, teacher as creator, teacher as observer, teacher as facilitator, and teacher as change agent.

*Teacher as inquirer.* In order to make teaching and learning in cooperative learning running effectively, teacher has to know their learner. Teacher has to know the age, the students' experiences, students' language ability, students' needs, student's interest. After the teacher knows all of them, teacher concludes how they can teach their students.

*Teacher as creator.* The roles of the teacher as creator are creating social environment, structuring and planning learning tasks, setting goals of the learning, arranging classroom, assigning roles and students into groups, and picking material and time.

*Teacher as observer.* Watching and listening to the students' activities is important. By watching and listening, the teacher know the problems faced by students, know the strength, needs, and interest. After the teacher know all of them, the teacher can assist to solve the problems or maximize their strength.

*Teacher as facilitator.* It means that teacher give the students meaningful role. Teacher assists students in problem solve process. Also, teacher supports and encourages students to have more desire to learn.

*Teacher as change agent.* Teachers are the most important aspect in the changing classroom. In order to change classroom, teacher need to always learn from the experience. In a school there are many teachers. They can share the



experience in teaching collaboratively. Therefore, demonstrating that collaborative work between teachers is a best encouragement for student to cooperate.

*Teacher as feedback giver.* Wafa (2012) stated giving feedback is one of the teacher roles to correct the mistakes during students' activities through giving guidance, recommendation, explanation, the general rule, or criticism. Moreover, Petchprasert (2012) stated that feedback supports both the lecturers and learners reach the objectives of teaching and learning. Furthermore, he mentioned that feedback is considered as a technique to encourage learners' learning especially in second language learning.

Implementing cooperative learning needs serious preparation in order to make it effective. Cooperative learning is not only work in a team, but there are some activities to make cooperative learning more attractive. Johnson and Johnson (1999) as cited in Burden and Byrd (2003) argued that there are ways in the implementing cooperative learning in the classroom which are informal groups, formal groups, and base groups.

**Informal group.** It is usually conducted after teacher gives instruction or giving material. According to Burden and Byrd (2003), focus on the informal groups is to make student active on giving opinion or giving explanation to others. The researcher argued that main goals of informal groups is to train student social skill because they are try to giving their opinion to others and there is no doubt

that they will get others arguments too. Therefore, they will learn how to understand and respect each other.

Informal group consists of Think-Pair-Share, Round Robin, and Group Interview. All of those types activities are started by teacher giving questions or giving problems to the students.

***Think-Pair-Share.*** Teacher usually uses low consensus question (known or knowable), then students start to think individually, then they move to their pairs to discuss the answer. The last, teacher ask student to report the result of their discussion.

***Round robin.*** Students are divided into group of three or four and then share the answer with the member in turns. For example, who are the oldest or the youngest student share the answer first, and continued to others.

***Group interview.*** One member of the group becomes an interviewer. The interviewer asks other members about the answer, and then the interviewer conclude or choose the best answer from the other members.

**Formal group.** It is more structured activities than informal groups. It consists of various characteristics of group members. There are five types of techniques in formal groups. The first four is stated by Slavin (1995) as cited by Burden and Byrd (2003), which are Student Teams-Achievement Division (STAD), Teams-Games-Tournament (TGT), Team Accelerated Instruction (TAI), and Jigsaw. The fifth type is stated by Johnson and Johnson (1999) as cited by

Burden and Byrd (2003). They argued that Learning Together also include in types of formal groups.

***Student Teams-Achievement Division (STAD).*** It has five key components such as: class presentation, teams, quizzes, individual improvement scoring, and team recognition. The activities start by making groups of four then teacher explain the materials for the day. Then students in the groups discuss to master the material. After the discussion is finish, then the teacher make quiz. In the quiz, students work individually. However, team score depends on individual performance.

***Teams-Games-Tournament (TGT).*** It uses same teacher role and teamwork as in STAD. However, students compete with other team members in weekly tournament based on the grade. In the tournament table contains three students. For example, low score students compete with two other low score students or high score students compete with high score students. Olsen and Kagan (1992) not recommended TGT because it rewards high achiever students and gives extra challenges for other students which may decreased self-confidence and decreased feeling of academic capability.

***Team Accelerated Instruction (TAI).*** It is a combination of individual instruction and team learning. In this technic, students learn material individually then teach each other without material explanation from the teacher. Team score are based on the average of score got by each students.

***Jigsaw.*** It involves six members team that each student has their own section. Each student read his or her section. Then they meet with other team's member who have same section to discuss their section. After the discussion is done, each student back to their teams to teach their section.

***Learning together.*** In the learning together students are divided into team that contain different students' ability. Then, teacher gives assignment to the teams. Each student in the team should be responsible to search any information to complete the assignment. After the assignment is finish, students in one team will get same grade.

**Base groups.** Base groups are long-term, heterogeneous groups that stay together across task throughout the year (Burden and Byrd, 2003). Base groups give students opportunity to assist each other and usually this types conduct as a routine activity. For example, in the morning student divide into groups to discuss the homework and in the end of the day they are divided into a groups again to discuss what have been learned that day.

### **Advantages of Cooperative Learning**

All of method in teaching have positive side and negative side, not exception cooperative learning. Cooperative learning can be very beneficial to create good classroom activities but also it will not be effective if the teacher did not prepare it well. In the classroom, teacher should make sure that the students understand how to conduct the activities. Besides, teacher also should consider to

develop student's social skills, such the ability to negotiate, to respect each other, and understand the others say.

Cooperative learning can be very beneficial for students. Cooperative learning will be more effective if learners study the meaning and utility of the language at the same time. Actions and communications between group members increase communication ability, encouraging students to train language usage in different conditions (Wichadee and Orawiwatnakul, 2012). On this point of view, cooperative learning can be said as suitable method to develop student academic ability and social ability. Students learn the language and practice it to communicate with their friends at the same time. In the group, students will interact naturally to discuss the material or the assignment given by teacher. In the process of discussion, they will face some problems and they practice to solve them, even that is problem relate to the material or problem between members.

Furthermore, they mention four advantages of cooperative learning, they are:

**Increase students' motivation.** Compared with teacher centered learning, cooperative learning is more emphasized on the works among students. Therefore, students will feel that they have a responsibility with the groups. Students will understand that without him or her, the groups will not work. Because of that, students will try to always participate in the group work. Besides, sometimes in the group there are different students' ability such as clever and medium. The medium students are motivated to have ability such clever students.

**Develop students' creative thinking.** In the team students have same chances to give their opinion to solve or to answer issues that teacher give. In the process of giving opinion, they will face other students' opinion. Hence, they will give more explanation to support their opinion. This process forces students to develop their critical thinking. In the process of giving more explanation students need to be creative to create good reason supporting their opinion.

**Increase students' social skill.** When working together, students can see how much effort that other students do. They can know the condition of the group. Therefore, they can identify the problems faced by other member and try to assist each other. In the process of assisting each other, there will appear more intimate feeling among students. In that process the students also think how to assist their teammates carefully without hurting their friends' emotion. After the discussion is finished, that feeling will stay within them.

**Reduce students' anxiety.** Sometimes, there are some students who did not comfortable or did not confident to share their opinion in a large group. Therefore, cooperative learning can be the solution of the issue. Cooperative learning provides small group discussion which makes students more relax and confident to explain their ideas. The more they conduct group discussion, the more they train their self-confidence.

The other positive things that can be taken from cooperative learning were reported by Gillies and Boyle (2009), they said that students learn to know and

communicate each other, understand other members' role, learn to manage their time effectively, and being willing to take some risks with their learning.

Moreover, Alansari (2006) adding more advantages which is found in her research, such as allowing students to regulate discipline and self-control, increasing critical thinking and creativity, stimulating group discussions, stimulating students' responsibility, advancing social comportment, emphasizing self-evaluation. Motaei (2014) also said that students who work in small group will share ideas with the other member that raise creative thinking and problem solving skill.

### **Disadvantages of Cooperative Learning**

Cooperative learning also has disadvantages. According to Wichadee and Orawiwatnakul (2012), there are three disadvantages of cooperative learning: first, it is time-consuming for students to learn materials in a cooperative way and to work together in groups. Second, the room with fixed chairs might not be suitable for doing cooperative learning activities. Third, cooperative learning will never successful if student don't get clear instructions, so students have to be informed of what they are doing.

Furthermore, Celik, Aytin, and Bayram (2013) in their research found that there are some disadvantages of cooperative learning, such as: sometimes, teacher cannot control the activities about what students are talking about all the time. It is proved by when the students are alone or the teacher did not near of them, they will not speak English. Then, not all of students work with same effort. For

example, some students do the assignment seriously but some of students may only talk with friends which is not related with the material.

Then, Alansari (2006) found that there are some disadvantages of cooperative learning, such as: it requires changes in the classroom atmosphere, it needs particular technical skills and knowledge, students may have lost attention on the learning, often teachers only pay attention on the most active students.

### **Conceptual Framework**

This research aims to find out students' perception on the use of cooperative learning method in teaching and learning process at EED of UMY 2014. The definitions of cooperative learning presented by many experts. Most of them said that cooperative learning is an active learning method where the students cooperate with other member in the group to achieve the goals of the lesson. Azizinezhad et al (2013), argued that cooperative learning is a teaching and learning technique where the student active in the learning activities to get the knowledge.

The implementation of cooperative learning is using some types Burden and Byrd (2003) argued that there are some ways in the implementing cooperative learning in the classroom which are informal groups, formal groups, and base groups. In the implementation, appeared some problems that generally comes from the student and lecturer.

Cooperative learning can provide some advantages for students. Wichadee and Orawiwatnakul (2012) said that cooperative learning can increase students'



motivation, develop students' thinking, feel the group situations, reduce students' anxiety. Besides, they also said that cooperative learning also has some disadvantages there are some disadvantages: "First, it is time-consuming for students to learn materials in a cooperative way and to work together in groups. Second, the room with fixed chairs might not be suitable for doing cooperative learning activities. The last, cooperative learning will never successful if student don't get clear instructions, so students have to be informed of what they are doing." (p. 94).

