CHAPTER III

RESEARCH DESIGN

3.1. Research Design

This research is designed to identify students' perceptions on the use of cooperative learning approach for jigsaw technique implementation. This research specifically use survey research is a survey to obtain information about the characteristics, actions, and opinions that represent the population through questionnaires or interviews.

This present study is using quantitative research. According to Sudjana and Ibrahim (2001), "Quantitative research is a research based on assumptions, then determined variables, and then analysed by using valid research methods, especially in quantitative research ". This type of research is systematic, structured, composed from the beginning to the end of the study, and tends to this study using statistical figures analysis.

3.1.2. Population

The participants of this study were conducted in the Department of English Language Education of the Islamic University of Indonesian. Population is all data that is the canter of attention of researchers within the specified scope & time. The population is related to data. If every human being provides data, then the size or number of populations will be the same as the number of people (Margono, 2004). The population of the study is 80 students in English Language Education Students batch 2017.

3.1.3. Sampling

This study takes 70 as samples, because this research uses purposive sampling method. That purposive sampling was chosen because it ensured that the students who filled out the questionnaire were students who had passed all ICT courses without remedies or study over again.

3.2. Data Collecting Techniques

The study used questionnaire as the research instrument. The questionnaire was adopted from Wichadee (2005), namely Cooperative Learning Approach. The researcher adopted the questionnaire and found the reliability of this questionnaire is 0.85. There are 10 questionnaire and

it used five-point Likert scale from level 5 (strongly agree) and level 1 (strongly disagree). It contained the effectiveness of cooperative learning and attitudes students towards cooperative learning.

3.2.1. Instrument

Research instruments are tools that will be used to collect data, this research instrument can be in the form of questionnaires, observation forms, other forms related to data recording and so on (Notoadmodjo, 2010). The instrument that used by the researcher is:

Table 3: Cooperative Learning Approach Questionnaire

Statements	SA 5	A 4	N 3	DA 2	SD 1
Positive Interdependence 1. This approach helps me to learn new thing easily.					
Positive Interdependence 2. This approach helps me to acquire knowledge through working in a team.					
Processes in a Group 3. This approach makes me understand the working process.					
Interpersonal and Small Group Skills 4. This approach enables me to participate in sharing Information, making decisions, and solving problems.					
Positive Interdependence 5. This approach helps everyone reach the goal Equally.					
Individual and Group Accountability 6. This approach trains me how to be a good leader and a good follower.					
Positive Interdependence					

7. This approach creates a good relationship among Group members.					
Positive Interdependence 8. The lessons become more interesting with this Approach.					
Interpersonal and Small Group Skills 9. I feel actively involved in all activities through this Approach.					
Processes in a Group 10. I feel intellectually challenged through this Approach.					

3.2.2. Validity and Reliability of the Instrument

Before gaining the data through questionnaires, researcher checked the validity and reliability of the questionnaire through other peoples' journals in chapter 3 through a pilot study based on that person's research.

3.2.3. Validity

Validity is a standard measure that shows accuracy in a quantitative study. According to Widoyoko (2012), there are four kinds of validity; logical validity, content validity, constructs validity and predictive validity. He stated that a valid test will produce a valid learning achievement, content validity and construct validity were used in this research. This study uses content validity to check the instrument match with the research question.

Validity

Correlations

		VAR00001	VAR00002	VAR00003	VAR00004	VAR00005	VAR00006	VAR00007	VAR00008	VAR00009	VAR00010	VAR00011
VAR00001	Pearson Correlation	1	,426**	,593**	,186	,360**	,317**	,566**	,700**	,711**	,380**	,764**
	Sig. (2-tailed)		,000	,000	,124	,002	,007	,000	,000	,000	,001	,000
	N	70	70	70	70	70	70	70	70	70	70	70

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VAR00											
VAR00 002	Pearson Correlation	,426**	1	,418**	,434**	,401**	,523**	,340**	,491**	,401**	,326**	,682**
	Sig. (2-tailed)	,000		,000	,000	,001	,000	,004	,000	,001	,006	,000
	N	70	70	70	70	70	70	70	70	70	70	70
VAR00 003	Pearson Correlation	,593**	,418**	1	,318**	,240*	,342**	,649**	,469**	,532**	,247*	,698**
	Sig. (2-tailed)	,000	,000		,007	,045	,004	,000	,000	,000	,039	,000
	N	70	70	70	70	70	70	70	70	70	70	70
VAR00 004	Pearson Correlation	,186	,434**	,318**	1	,242*	,356**	,239*	,244*	,346**	,451**	,541**
	Sig. (2-tailed)	,124	,000	,007		,044	,003	,047	,042	,003	,000	,000
	N	70	70	70	70	70	70	70	70	70	70	70
VAR00 005	Pearson Correlation	,360**	,401**	,240*	,242*	1	,483**	,425**	,425**	,465**	,377**	,638**
	Sig. (2-tailed)	,002	,001	,045	,044		,000	,000	,000	,000	,001	,000
	N	70	70	70	70	70	70	70	70	70	70	70
VAR00 006	Pearson Correlation	,317**	,523**	,342**	,356**	,483**	1	,346**	,363**	,426**	,366**	,655**
	Sig. (2-tailed)	,007	,000	,004	,003	,000		,003	,002	,000	,002	,000
	N	70	70	70	70	70	70	70	70	70	70	70
VAR00 007	Pearson Correlation	,566**	,340**	,649**	,239*	,425**	,346**	1	,580**	,529**	,307**	,723**
	Sig. (2-tailed)	,000	,004	,000	,047	,000	,003		,000	,000	,010	,000
	N	70	70	70	70	70	70	70	70	70	70	70
VAR00 008	Pearson Correlation	,700**	,491**	,469**	,244*	,425**	,363**	,580**	1	,578**	,382**	,761**
	Sig. (2-tailed)	,000	,000	,000	,042	,000	,002	,000		,000	,001	,000
	N	70	70	70	70	70	70	70	70	70	70	70
VAR00 009	Pearson Correlation	,711**	,401**	,532**	,346**	,465**	,426**	,529**	,578**	1	,604**	,810**
	Sig. (2-tailed)	,000	,001	,000	,003	,000	,000	,000	,000		,000	,000
	N	70	70	70	70	70	70	70	70	70	70	70
VAR00 010	Pearson Correlation	,380**	,326**	,247*	,451**	,377**	,366**	,307**	,382**	,604**	1	,641**
	Sig. (2-tailed)	,001	,006	,039	,000	,001	,002	,010	,001	,000		,000
	N	70	70	70	70	70	70	70	70	70	70	70
VAR00 011	Pearson Correlation	,764**	,682**	,698**	,541**	,638**	,655**	,723**	,761**	,810**	,641**	1

Sig. (2-tailed)	,000	,000	,000	,000	,000	,000	,000	,000	,000	,000	
N	70	70	70	70	70	70	70	70	70	70	70

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

3.2.4. Reliability

Reliability the quality of being trustworthy or of performing consistently well. According to Widoyoko (2012) in his book mentioned that reliability means something that can be trusted. A test is reliable if it is consistent when being used repeatedly. The reliability coefficient of the instrument is 0.879. It can be concluded that the reliability of the test instrument is very high.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,879	,879	10

3.3. Data Analysis Technique

1. Questionnaire

Students' perceptions on the use of cooperative learning approach for jigsaw technique implementation can be administered individually. The administrator's total time is estimated to be approximately 30 minutes for students to complete the questionnaire, plus about 10 minutes for students to fill in worksheets and profiles. After explaining the purpose of the inventory, a researcher should direct the students to read the instructions silently and then raise their hands if they have any questions about the direction. Then, a researcher should direct the students to read each statement and show how often they use the jigsaw, using 5-point Likert scale given after each statement.

3.3.1. Steps of Data Analysis Technique

The data was analysed quantitatively by using Microsoft Excel. In this research, the researcher looks some steps to analyse the data by doing these steps:

1. Adopted the instrument to collect the data, in this research the researcher applied Cooperative Learning Approach (CLA) questionnaire.
2. Provided an offline form for the questionnaires. In this research, researchers used paper and copies of the number of students.
3. Distributed 70 questionnaires to 70 students of English Language Education and 70 questionnaires were returned.
4. Used Microsoft Excel to analyse the data from the questionnaires into statistical package.