

CHAPTER III

RESEARCH METHOD

A. Research Design

The method in research is selected by considering its appropriateness with the research object. In this case the object determines the method. This research is arranged base on the problem analyzed and the main purpose of the research. In this research, the researcher uses descriptive qualitative method. It is qualitative because it deals with the natural phenomenon. Generally, qualitative method is the method used to analyze the problems which are not designed or arranged using procedure (Subroto, 2007).

According to Creswell (1994) qualitative research is descriptive in what the researcher is interested in process, meaning, and understanding gained through word or pictures. And the research is conducted by qualitative approach because the result of the data analyzed is in descriptive phenomenon such as word, sentences and utterance.

B. Research Setting

This research would conducted in the English Department of *Tarbiyah* and Teacher Training Faculty of UIN *Antasari*. Located at Jl. A.Yani KM. 4.5 Banjarmasin, South Kalimantan. The study conducted in the classroom to doing survey with questionnaire to students to get in-depth information. Research is also conducted by analyzing discussion board using community of inquiry framework theory in Introduction to Linguistics subject.

C. Population

According to Sugiyono (2015), Population is an area of generalization which consists of objects or subjects that have certain qualities and characteristics set by researchers to be studied and then drawn conclusions.

The population of this research were the students of English Department of 2017. In the English Department of 2017 there are 5 classes, they are A, B, C, D, and E with total of 165 population.

Table 3.1. Numbers of Students

No	Class	Total
1	PBI A 2017	35
2	PBI B 2017	29
3	PBI C 2017	32
4	PBI D 2017	34
5	PBI E 2017	35

D. Sample

According to Sugiyono, (2015), the Sample is part of the number and characteristics possessed by that population. If the population is large, and researchers are unlikely to learn everything in the population, for example because of limited funds, energy and time, researchers can use samples taken from the population.

For sampling the researcher used a type of probability sampling with simple random sampling technique. It is said to be simple because taking sample members

from the population is done randomly without regard to the level in the population. This method can be done if members of the population are considered homogeneous.

Sample of this research were students perceive to learning and satisfaction in online discussion class of Introduction to Linguistics subject. The researcher determined the sample of 50 students by randomly from class A, B, and C of population. Because, they are still in the same level, the same lecturer, and the same learning method.

E. Source of Data

The aim of the research is to get data. The data is the important tools in the research which are in the form of phenomenon in the field and number. From the data, the researcher will know the result of the research. Collecting the data must be relevant with the problem of research.

Thus, data source is the substance where the researcher will get information that is required. Ary et al, (1985) argued that in qualitative research, there are two sources that can be used to get the data. Those are:

1. Primary Source

Sugiyono (2015) stated that primary source is source which can give valuable information directly. In other word, the primary source is to give prominent data relate to problems of the research. For the primary source, the researcher uses document analysis and the questionnaire.

2. Secondary Source

Secondary source is additional source to get the data. Given (2008) argued “Secondary data source is preexisting source that have been collected for a different purpose or by someone other than the researcher”. In other word, secondary source has function to collecting data for different purpose when conducting research. The secondary source which is used is document. The document is the screenshots of online discussion board/forum from Canvas website.

F. Techniques of Collecting Data

Data is information that has been collected by conducting research. To get the reliable data, the researcher has to do some techniques for collecting those data. Data collecting technique is an important step in research, because the aim of the research is to get the data. Collecting data can be done in any settings, any sources, and any ways.

In qualitative research, Sugiyono, (2015) stated that the fundamental method relied on by qualitative researchers for gathering information is participation in the setting, direct observation, in-depth interviewing, and documentation review. In this research, the researcher uses document analysis, questionnaire, and documentation.

1. Document Analysis

Document analysis is a form of qualitative research in which documents are interpreted by the researcher to give voice and meaning around an assessment topic. Analyzing documents incorporates coding content into themes similar to how focus group or interview transcripts are analyzed (Bowen, 2009). A rubric can also be

used to grade or score document. There are three primary types of documents (O'Leary, 2014):

- a. **Public Records:** The official, ongoing records of an organization's activities. Examples include student transcripts, mission statements, annual reports, policy manuals, student handbooks, strategic plans, and syllabi.
- b. **Personal Documents:** First-person accounts of an individual's actions, experiences, and beliefs. Examples include calendars, e-mails, scrapbooks, blogs, Facebook posts, duty logs, incident reports, reflections/journals, and newspapers.
- c. **Physical Evidence:** Physical objects found within the study setting (often called artifacts). Examples include flyers, posters, agendas, handbooks, and training materials.

The type of document analysis this research was public records as the transcript analysis. Transcript analysis in this research was 12 weeks of discussions in Introduction to Linguistics subject was conducted in order to explore students' level of cognitive presence utilizing the practical inquiry (PI) model and coding indicators according to Garrison & Anderson, 2003 (Table 3.2). And also for supporting the transcript analysis the screenshots of online discussion board from Canvas website also attached.

Table 3.2. Cognitive Presence Phases and Indicators

Cognitive presence phase	Indicators	Socio-cognitive processes
Triggering event	Recognize problem	Presenting background information that culminates in a question
	Sense of puzzlement	Asking questions
Exploration	Divergence – within the online community	Unsubstantiated contradiction of previous ideas
	Divergence – within a single message	Many different ideas/themes presented in one message
	Information exchange	Personal narratives/descriptions/facts (not used as evidence to support a conclusion)
		Sharing of literature/resources
		Questions of clarification
	Suggestions for consideration	Author explicitly characterizes message as exploration, e.g. ‘Does that seem about right?’ ‘Am I way off the mark?’
	Brainstorming	Adds to established points but does not systematically defend/justify/develop situation
Leaps to conclusions	Offers unsupported opinions	

Integration	Convergence – among group members	Reference to previous message followed by substantiated agreement (e.g. ‘I agree because . . .’) Building on, adding to others’ ideas
	Convergence – within a single message	Justified, developed, defensible, yet tentative hypotheses
	Connecting ideas, synthesis	Integrating information from various sources – text book, articles, personal experience
	Creating solutions	Explicit characterization of message as a solution by participant
Resolution	Vicarious or real world	Providing examples of how problems were solved
	Application of solutions/ideas	Results of application
	Defending solutions	Defending why a problem was solved in a specific manner

Source: Practical Inquiry (PI model) by Garrison et.al (2003).

2. Questionnaire

According to Sugiyono, (2015), Questionnaire is a data collection technique that is done by giving a set of questions or written statement to the respondent to answer. The questionnaire is an efficient data collection technique if the researcher knows the exact variable to be measured and knows what can be expected from the respondent. In addition, the questionnaire is also suitable for use when the number of respondents is large enough and spread over a large area. Questionnaires can be closed or open questions or statements, can be given to respondents directly or sent by post, or internet.

There are two kinds of questionnaires: open questionnaire and closed questionnaire. This research used open questionnaire in which the answer options have been given in the multiple choices or checklist: the student respondents only needed to choose the answer best express what their opinion.

Questionnaire in this research use CoI survey instrument draft v15 with 12 items that has been develop by the researchers Arbaugh, et al (2015) to determine their perceive in online discussion. The CoI survey was developed and validated by Arbaugh *et al* (2008). The CoI Survey included teaching presence perception 13 items, social presence perception 9 items, cognitive presence perception 12 items, (See **Appendix A**).

A CoI survey instrument, was administered at the end of the semester to explore student-perceived learning and satisfaction as well as their perceptions.

This research only focus on cognitive presence. The items were measured on a 5-point Likert-type scale, with 1 = *strongly disagree* and 5 = *strongly agree*.

The scale to measure this research is Likert Scale. The Likert Scale is a tool used to develop instruments used to measure the attitudes, perceptions, and opinions of a person or group of people against the potentials and problems of an object, the design of a product, the process of creating products and products that have been developed or created. According to Sugiyono, (2015) Likert Scale is used to measure attitudes, opinions and the perception of a person or group of a social phenomenon.

Table 3.3. Likert Scale

Category	Scale
a. Strongly Disagree	1
b. Disagree	2
c. Neutral	3
d. Agree	4
e. Strongly Agree	5

The questionnaires that have been selected are:

Table 3.4. CoI Survey of Cognitive Presence

No	Questions
1	Problems posed increased my interest in course issues.
2	Course activities piqued my curiosity.
3	I felt motivated to explore content related questions.
4	I utilized a variety of information sources to explore problems posed in this course.
5	Brainstorming and finding relevant information helped me resolve content related questions.
6	Discussing course content with my classmates was valuable in helping me appreciate different perspectives.
7	Combining new information helped me answer questions raised in course activities.
8	Learning activities helped me construct explanations /solutions.
9	Reflection on course content and discussions helped me understand fundamental concepts in this class.
10	I can describe ways to test and apply the knowledge created in this course.
11	I have developed solutions to course problems that can be applied in practice.
12	I can apply the knowledge created in this course to my work or other non-class related activities.

Source: CoI Survey by Arbaugh et.al (2015).

3. Documentation

A valuable source of information in qualitative research can be documentation. Sugiyono, (2015) stated that documentation can be written and picture by someone that can be used to obtain information. In conducting documentation method, the researcher can provide magazines, books, documents, etc. The function of documentation method is to make credible the result.

According Sugiyono, (2015) documentation is a record of past events. Documents can be in the form of writing, pictures, or monumental works from someone. This technique used to collect the data documents by screenshots of online discussion board from Canvas website.

G. Data Analysis

After collecting the data, the researcher analyzes the data. Wiersma, (1991) stated “Data analysis in qualitative research is a process of categorization, description, and synthesis. Data reduction is necessary for the description and interpretation of the phenomenon under study”. In short, data analysis is systematically process to analyze data which have been collected.

To analyze the data, the researcher uses descriptive qualitative to analyze data. According to Sugiyono, (2015) there are four activities to analyze data in descriptive qualitative research adapted from theory of (Miles, Huberman, and Saldana, 2014). Those activities are data collection, data reduction, data display, and drawing conclusion. Based on those statements, the researcher divides the

activity in analyzing data into four activities, they are data collection, data reduction, data display, and drawing conclusion.

1. Data collection

In conducting research, researcher collected the data from transcript analysis of weekly discussion and questionnaire about students perceive. A CoI survey instrument, was administered at the end of the semester to explore student-perceived learning and satisfaction as well as their perceptions of cognitive presence. Apart from one student in online course, all the students completed the survey. And also the data from documentation screenshots of online discussion board in Canvas website.

2. Data reduction

Data reduction means the process of selecting, identifying, classifying and coding the data that are considered important. In data reduction phase, the researcher focuses on the result of transcript analysis and the result of questionnaire of student perceptions which is conducted in English department of 2017. Data reduction is the process of selecting, focusing, simplifying, abstracting, looking the themes and patterns and discarding unnecessary. The data is in the form of questionnaire result notes, then the data is reduced to the narrative text.

3. Data display

Data display means the process to simply the data in the form of sentence, narrative, or table. Data display refers to show data that have been reduced in the form of patterns. It benefits to help the researcher in understanding the data.

The data display phase is done in the form of a brief description by using narrative text, it can also be in the form of graphics, matrix, and chart. In this case, the researcher displays the data on form table based on the result of transcript analysis and the result of questionnaire of student perceptions cognitive presence.

4. Drawing conclusion

After all the data have been found, the data is concluded and verified by recheck every step of analyzing from data collection, data reduction and data display. In this step, from the data display it is analyzed further to derive the conclusions. Also the researcher concludes the data to answer the research questions.

In qualitative research, the characteristic of conclusion is temporary. It can change if the researcher does not discover strong evidence to support the next collecting data. However, if the conclusion in the previous data can be evidenced by validity and consistency when the researcher is going back to the field, so the conclusion is credible. In this research, the researcher makes conclusion from the data display.

H. Research Procedure

In conducting the research, there are three procedure steps in qualitative descriptive research, as follow;

1. Collecting data in the field: Researcher must collected and stored many sources of facts that occur comprehensively and systematically. First, the document analysis in this research uses transcript analysis 12 weekly of

online discussion in order to explore students' level of cognitive presence. Second, the purpose of questionnaire data result is to get the perceptions of students that doing in online discussion was administered at the end of the semester to explore student-perceived learning and satisfaction as well as their perceptions, and this was suit according to theory of CoI for analyzing online discussion, and to prove and support the result of student perception, the researcher needed a document as well as screenshots of online discussion board in Canvas website.

2. Analyzed data: the findings are presented under two main headings: learning processes and learning outcomes. Under learning processes, the results of the transcript analysis of weekly online discussions, were reported to reflect students' cognitive presence throughout the course. For learning outcomes, students' perceived learning and perceived satisfaction obtained through CoI survey, were reported.
3. Preparing a report: techniques for reporting may include handling each case as a separate chapter. During the process of preparing the report, the researcher critically examines the document to find out how the report is incomplete. The researcher uses a representative audience group to review and comment on the draft document. Based on these comments, researchers rewrite and make revisions.