

CHAPTER III

RESEARCH METHODOLOGY

This chapter presents the methodological aspects of the present study to investigate teachers' perceptions about their experiences practicing Lesson Study. This study aimed to identify teachers' understanding of the aspects of Lesson Study such as the definition, the features, the steps and the benefits of the program. Besides that, this study also aimed to describe the implementation process of Lesson Study in the research site. The overview begins with discusses the research design, followed by the research site and the participant of the study. The present study obtains data from observation, questionnaire and interview. In this study, observation and interview serve as the main source of data. The data gained from those data collection techniques are further analyzed to get the findings of the study.

3.1 Research Design

This study is a mixed methods design which largely a qualitative research design taking on characteristics of a case study. The case study is considered as the appropriate research method for this study because it focuses on a particular phenomenon, situation or event (Cohen, Manion & Morrison, 2007). In addition, as a type of qualitative study, it has some advantages in investigating a phenomenon in detail so that it can bring enlightenment (Alwasilah, 2002) to the people involved in the study and the readers of the research paper. It is an inquiry process of understanding a social or human problem based on building a complex, holistic picture and forms with words reporting detailed views of informant, and conducted in natural setting (Cresswell, 1994). Furthermore, Cohen, Manion & Morrison (2007 p.254) suggest that case studies are set in temporal, geographical, organizational, institutional and other contexts that enable boundaries to be drawn around the case which will enable the study to capture the real situation of the research object.

Therefore, this study investigated the facts in real situation to cultivate more data and deeper understanding of the phenomenon in the field of the study. How the participant of Lesson Study (LS) perceived the program and how the program of LS implemented in the research site were the main objective of this study. Moreover, some quantitative calculations in terms of frequency and percentage were employed in this study.

Accordingly, case study was used as the method of the study as Wallace (2000; 47) defined it as the systematic investigation of an individual ‘case’, whether that referred to one teacher, one learner, one group, one class or whatever similar to that. In this research, a group of English teachers was investigated for their perception of LS and the process of the program implemented also become part of the investigation. In this study, as elaborated later, the data of the research were taken from multiple data collection techniques which were observation, questionnaires and interviews. Each data collection is discussed in the following session.

3.2 Research Site and the Participants

The research site of this study was MGMP (English Teachers’ Association) of Kota Sukabumi that served as a forum for professional development and exchange of experiences in teaching innovations. Recently, Education Office of West Java Province intends to implement Lesson Study through MGMP-based. This program was attended by English teachers in Kota Sukabumi from Junior high schools, both the government schools and private schools.

This association was chosen because as far as the teacher knows, there was no such study had been done in this research site. Indeed, there are so many studies of teachers’ perception of LS in other places, but specifically in Kota Sukabumi is still very limited observation done to investigate the topic. Another reason is the writer is the chairman of English MGMP in Kota Sukabumi, thus it could be another beneficial factor for the organization as the result can be used as feedbacks of the program. On the other hand, the writer has “authority” to do some treatment to his member in reaching the aims of the study, which is to investigate

the perception of teachers on Lesson Study. This is as suggested by Alwasilah (2002 p. 144) that in gaining entry or establishing rapport the researcher and the respondents should know each other to gain comfort situation and mutual respect.

The participants of this study were English teachers of Junior High School in Kota Sukabumi which referred to the 30 (thirty) teachers who were involved in implementing Lesson Study at least for one semester. Hence, they would find it easier to express their opinion or perception on the lesson study. They came from different schools which spread in Kota Sukabumi which might invite different perception on the lesson study. Thus, the result of this study would enlighten teachers toward the implementation of lesson study in that school. For further discussion each of these participants were called as R#1, R#2, R#3, R#4, R#5, R#6, R#7, R#8, R#9, R#10, R#11, R#12, R#13, R#14, R#15, R#16, R#17, R#18, R#19, R#20, R#21, R#22, R#23, R#24, R#25, R#26, R#27, R#28, R#29, and R#30. It is in line with research ethic to protect individual privilege (Alwasilah, 2002; Creswell, 1994; Arikunto, 2006).

These teachers' backgrounds were varied from male and female, younger and older with different length of teaching experience. Most of them are English education graduate, and only few teachers have other education background such as Islamic education, Sundanese teacher and literature. Actually, many of them have been the participants of LS last year in the same program of MGMP, and the rest are newcomers of the program which is intended to disseminate the LS program to every teacher in Kota Sukabumi (MGMP Bahasa Inggris, 2010). The complete information of the participants of this study can be seen in Table 3.1

Table 3.1
Demographic information of the participants

Description		Number (people) n=30
Gender	Male	9
	Female	21
Age	18-25	0
	26-35	11
	36-45	13
	46 and above	6
Highest Qualification	Certificate or Diploma	1
	Bachelor Degree (S1)	27
	Masters' Degree (S2)	2
Number of years as English teachers	0-5 years	3
	6-10 years	10
	11-15 years	10
	16 years and above	7
LS participation	One year	2
	Two years	18
	More than two years	10

3.3 Data Collection Techniques

As mention earlier, to collect the data of the study three techniques were employed in this study; these were observation in the process of Lesson Study, questionnaire, and interview. Furthermore, these multiple methods of data collection were taken into account to triangulate the data. Hopefully, with this triangulation can verify the validity of the information being collected (Blaxter et al., 2006) thus it could avoid subjectivity as each data collection technique could

be a cross check information of other types. Each technique of data collection was described below.

3.3.1 Observation

Observation was performed to understand what goes on in the classroom or the place (Van Lier, 1988). It also allows the researcher to draw inferences or conclusion about respondents' meaning and view point, event, or what happening there or process observed (Alwasilah, 2002).

To give valid information from observation, a set of observation instrument was used. This instrument was a modification of observation instrument proposed by Direktorat Ketenagaan Dirjen Dikti (2008) as can be seen in Appendix 2-4. The instrument consists of three level observations that are monitoring sheet for Plan, monitoring sheet for Do and monitoring sheet for See.

The observation was conducted in numerous activities. Since the program of MGMP had five meetings of Lesson Study, the observation was held five times too. This observation aimed at revealing some findings on the site from deciding goal of study, designing the lesson plan, observing and doing the plan in the classroom with one model teacher and the reflection session. Field note is used in this step; also recorder tools such as voice recorder, camera and video recorder might help the researcher to capture the situation of the program (Alwasilah, 2002; Merriam, 1991).

The first session of Lesson Study was held on Tuesday, 12th of November 2013 taking place in SMPN 4 Sukabumi. In this session, the participants discussed the lesson plan which would be used in presentation in the classroom later. The second session of LS was held on Tuesday, 19th of November 2013 and the venue was SMPN 10 Sukabumi. This session was the open lesson of Mr. A as the model teacher while observed by other participant-teachers. After finished it was continued with reflection session in the same location.

The third meeting was in SMPN 10 Sukabumi on November 26th, 2013. The session was intended to make revision on the lesson plan from the

last meeting. Then the lesson plan was to be tried out to another class with Mr. B as the model teacher. The fourth meeting was in SMPN 2 Sukabumi on December 3rd, 2013. It was the reflection session of the third open lesson in SMPN 10 because of the time limitation. Later it started another open lesson with Miss C as model teacher. The last meeting was the fifth meeting which was held in SMPN 10 Sukabumi on December 10th, 2013 as the final reflection and evaluation of the program.

This observation was conducted as it was suggested by Lewis (2002a), and Fernandez (2002, 2005) that in conducting Lesson Study observation should cover the whole processes of Lesson Study.

3.3.2 Questionnaire

A questionnaire is a complement instrument in this study, since it is a self-report data collection instrument that is filled out by research participants. It is extremely flexible and can be used to gather information on almost any topic involving large or small numbers of people (Nunan and Bailey 2008). It allows the participants to fill it out at their own convenience. The reason of using questionnaire, as suggested by Dornyei and Taguchi (2010), was because it was simple, versatile and reliable. The questionnaire was distributed to the teachers after the whole Lesson Study programs were finished.

In this study, to gather more information about teachers' perception on the Lesson Study closed or fixed choice questions were used. The participants were required to answer by choosing an option from a number of given answers. The questions for the study were generated based on a review of the relevant literatures, observation of Lesson Study teams, informal interviews with Lesson Study practitioners, and questions adapted from other survey instruments (Harnita, 2010; Halilah, 2011; Emilia, 2010; Hendayana et al., 2011; Lewis, 2002a, 2002b; Lewis, Perry and Hurd, 2004; Fernandez and Yoshida, 2004; Hustler, 2003). A review of literature helped to identify components of effective professional development, indicators of

teaching effectiveness, indicators of student learning and elements involved in the Lesson Study process.

Teachers' questionnaire consisted of several questions, asking about their understanding of lesson study, such as definition, benefits, characteristics, strengths, steps also the process of Lesson Study implementation in English MGMP of Kota Sukabumi. There were three main themes of the item namely affective, cognitive, and behavior. Each theme was spread through the questionnaire's question as can be seen in Table 3.2 to get more comprehensive understanding on teachers' perception toward the implementation of Lesson Study.

This questionnaire is basically derived from several instrument models of Hustler et.al (2003) and modification of Guskey (2000) ideas in evaluating Teachers' Professional Development program.

Table 3.2

Questionnaire arrangement

Items in questionnaire	Questions number
Teachers' reaction	
- Attitude	31, 34, 36
- Motivation	32, 33, 35
- Goal and achievement	37, 38, 39, 40
Teachers' learning	
- I understand the concept of lesson study	1, 2
- Principles of Lesson Study	3, 4, 7, 18
- Characteristics of Lesson Study	5, 8, 24
- Steps of Lesson Study	9, 25,
- Goal / benefits of LS	27,28, 29, 30
Teacher action on the Implementation of LS	
- Planning	10,11,12,13,14,15
- Do / observation	16,17,18,19,20
- See / reflection	21, 22, 23

The questionnaire used Likert response scale - from Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SDA) with the same order of interval so the scores are 4, 3, 2, and 1 (Sugiyono, 2008).

In order to reveal more detailed information from participants, this questionnaire was also added with open ended questions to see their opinion on the topic of questions (Alwasilah, 2002; Cohen, Manion and Morrison, 2007 p.321). These questions were based on previous research which has been modified to get the goal of this study. The responses to these questions sought to determine if the teacher was currently practicing Lesson Study; the content area of their Lesson Study; the degree of experience the individual had with Lesson Study, including which parts of the Lesson Study cycle they had done, and how many times they had done each part. Teachers were also asked about the reasons they decided to practice Lesson Study and the types of training they had with Lesson Study. The theme for open ended questions is displayed in the Appendix 1.

3.3.3 Interview

Interview was used as instrument of this study. Besides, it could provide in-depth information about participants' feeling, ways of thinking, or experience (Nunan and Bailey 2008).

The interview was conducted with all English teacher participants. The teachers were interviewed after they finished a cycle of the Lesson Study. It was not only to get more evidence regarding the aims of this study, but also to obtain their understanding and perception on Lesson Study. The teachers were interviewed individually, since Emilia (2005 p. 81) stated that individual interviews were intended to allow for greater depth, that was the case with other methods of data collection techniques, and it "provides access to what is inside an interviewee's head, ... what he/she thinks" about the teaching program (Cohen et al. 2007 p. 254).

Audio recording is employed in the interview. Audio recording is used to record the conversation, thus, the writer could keep the information safely. The recording also enables the writer to play back and it could be transcribed later as Cohen et al. (2007 p.360) argued that recorder can be used in capturing the detail information from interview.

3.4 Data Analysis

After the data were collected through observation, interview and questionnaire, the data then analyzed to draw the conclusion. The analysis of each method is explained below:

3.4.1 Data Analysis from Observation

To analyze the data from the observation, the activities were recorded by videotaping and then were transcribed. This transcription data were read accurately to get accurate data which described the situation of the onset setting in narrative-description. The data transcribed, then were categorized and referred back to the theories explained in Chapter 2 (Alwasilah, 2002; Miles and Huberman, 1984). It was commented and compared to the appropriate theories to see the rightfulness of the process flow.

The observation report was arranged into three major steps of Lesson Study which were PLAN session, DO session, and SEE session. Each of the session described the implementation of LS program in the research site (Hendayana et al., 2006).

In addition, the “interesting” or “strange” findings then were noted as feedback for further analysis on the next step of data collection. Merriam (1998, p. 69) adds that detailed descriptions of respondents’ activities, behaviors and actions were recorded in observation.

3.4.2 Data Analysis from Questionnaire

After collecting the data through questionnaire, the obtained data are analyzed and interpreted based on the following steps as in accordance to Williams (2003) and Cohen et al. (2007) proposed in analyzing questionnaire's data:

1. Scoring teachers' answers.
2. Calculating the frequency and the percentage of teachers' answers on the questionnaire by using Microsoft Excel.
3. Comparing and contrasting the data with theories and previous research then the results are merged into a condensed body of information.

In addition, to analyze the data from questionnaire, simple statistic operation was used to reveal the perception of the participants toward the implementation of Lesson Study in the research site. This process can be drawn up in the formula below (Cohen et al., 2007 p.502).

Individual score

Max score : $40 \times 4 = 160$ points

Min score : $40 \times 1 = 40$ points

Number of class : 4

Range : max score – min score/class

$$= 160 - 40 / 4$$

$$= 30$$

Classification interval for individual participant is displayed in Table 3.3

Table 3.3

Classification interval for individual participants

Class interval	Description
40 – 70	very negative
71 – 101	negative
102 – 132	positive
133 – 160	very positive

Group score

Max score : $40 \times 4 = 160 \times 30 = 4800$ points

Min score : $40 \times 1 = 40 \times 30 = 1200$ points

Number of class : 4

Range : max score – min score/class

$$= 4800 - 1200 / 4$$

$$= 3600/4$$

$$= 900$$

Meanwhile classification interval for group participant is displayed in Table 3.4

Table 3.4

Classification interval for group participant

Class interval	Description
1200 – 2100	very negative
2101 – 3002	negative
3003 – 3903	positive
3904 – 4800	very positive

3.4.2 Data Analysis from Interview

The data analysis from the interview is conducted through several steps which according to Miles and Huberman (1984), the data analysis consists of three flows namely data reduction, data display and conclusions. Therefore, the steps in analyzing the data obtained through the interview are as following description.

The interviews are recorded through audio recording that enables the researcher to keep the information safely; the data then transcribed based on the

audio recorded; selecting and reducing inappropriate data which is not relevant to this study; categorizing the data into several themes which is relevant to the research questions which are the teachers' perception on Lesson Study, e.g. the definition, the characteristics and components, the steps, the advantages and the impact of Lesson Study into their teaching activities in the classroom; and finally relating the data that supported to the relevant theories and previous research to address the research questions. The transcriptions in the first stage interview were confirmed to the participants to make sure that they were exactly what they said and meant. Kvale (1996: 161) mentions that this step aimed to give the participants an opportunity to reply whether they really meant what the researcher transcribed.

To ensure confidentiality the questionnaires and interviews were coded using numbers and pseudonyms prior to beginning the analysis of the data (Alwasilah 2002). The quantitative data and the qualitative data were first analyzed separately and then considered together.

3.5 Concluding Remark

To conclude this chapter, it will be safer to say that this study is combining both quantitative method in form of four-Likert scale questionnaire items to collect data on general perception of English teachers towards the implementation of lesson study and qualitative method in forms of observation, open-ended questions, and interviews to strengthen and enrich any significant findings from questionnaire survey.