CHAPTER 3 RESEARCH METHODOLOGY

The aims of this study are to study the amount of L1 used by novice teachers in an English class, their reasons for the use of L1, and perceptions on their use of L1. This chapter presents the design of the study. It consists of subjects of the study, instruments used, research procedures, and methods of analysis in order to answer these three research questions:

1. *How much L1 do novice teachers use in an English class?*
2. *What are the purposes of L1 used by novice teachers?*
3. *What are the perceptions of novice teachers on their use of L1 in an English class?*

3.1 Subjects

The subjects of this study were 4 trainee teachers who taught English at a Thai high school in Bangkok in their teaching practicum. This teaching practice is a part of the Teaching Techniques in Practice course in a Master of Arts (MA) program. In this MA program, English is used as a medium of teaching and all MA participants attempt to use English both for study and teaching. Therefore, these 4 subjects are encouraged to use English as much as possible when they teach. Although none of them had real teaching experience, they had 3 short teaching practice (Micro Teachings) sessions in the MA courses. In each micro teaching, they had to teach English to university students for half an hour. Also, they joined an English camp once to teach English to high school students for a few days.

In this study, the subjects taught an English course to high school students who were studying in Matayom 4 and 5. Two of them (S1 and S3) taught Matayom 4 students, and the other two (S2 and S4) taught Matayom 5 students. They taught only once a week for a period of 100 minutes for 1 semester. They helped each other in their teaching performance. While one subject was teaching, another who did not have class would help to manage the class, distribute documents, or monitor students.

Generally, their classes consisted of mixed-ability students. Also, the books used for these classes were in the same series which is Global Link. However, there might have been differences in the activities used in each class which depended on the lesson. Since the classes were observed in different periods and the pace of teaching of each subject was not the same, the chapter or lesson being taught was also different even in the same level.

3.2 Research Instruments

The research instruments used in this study were the video recording of lessons and the semi-structured retrospective interviews. Each of them is explained below.

3.2.1 Video recording of lessons

While the subjects were teaching, their behaviors and voices were recorded by video recording. The video was used to record an actual teaching situation of each subject. Each class was recorded only once for about 100 minutes long. Altogether four classes were recorded. The recording was used to see the amount of L1 and how it was used by each subject. Also, it was used as prompts in the semi-structured retrospective interviews to remind the subjects about their teaching and the use of L1 so that they can clarify and explain the situations.

Although the study focuses on the language used by the subjects in their classroom teaching, the visual information from the video recording can also be useful f to find out the reason why the subjects used English (L2) or Thai (L1) in their teaching. Therefore, the video recording is advantageous in gathering the data.

However, using video recording also has its limitations. Firstly, the researcher realized that the classroom environment and atmosphere may influence teachers' decision and their teaching. Secondly, there will be some scenes which cannot be clearly recordable and sometimes the subjects did not speak on the microphone. However, any unclear phenomenon will be clarified later in the interview with the subjects.

The data from this instrument were used to answer Research Question 1 (How much L1 do novice teachers use in an English class?), and Research Question 2 (What are the purposes of L1 used by novice teachers?), and it can also be used to support the analysis and the interpretation to answer Research Question 3 (What are the perceptions of the teachers on the use of L1 in an English class?).

3.2.2 Semi-Structured Retrospective Interviews

The semi-structured retrospective interview is also the instrument that aims to get the information about the subjects' reasons for using L1 in their teaching, and to know their perceptions on the use of L1.

The questions used in the interview were open-ended and covered six main aspects as follows: the objectives of the lessons, the students' behavior, the use of classroom language, their perceptions on L1 use, the factors that influence their L1 use and the clarification of some behaviors that the researcher observed from the video (See Appendix B).

The interviews were conducted within the day of their teachings so that the subjects could still remember the situation. They were interviewed individually while watching the video of their teachings. Each interview lasted around 40 minutes. The information gained from the interview was audio recorded and transcribed for further analysis.

The data from this instrument were used to answer Research Question 2 (What are the purposes of L1 used by novice teachers?) in conjunction with the data from the video recordings. Moreover, the data will be mainly used to answer Research Question 3 (What are the perceptions of the teachers on the use of L1 in an English class?).

3.3 Research Procedures

The research procedures are divided into two main stages according to the instruments used: lesson recording, and interviewing.

3.3.1 Lesson Recording

a) Preparation Stage

The researcher contacted the subjects, asked for their permissions and discussed with them to select the most convenient class to conduct the research. The researcher also informed the subjects about the objective of recording which is focused on teachers' classroom language. Then, the researcher asked for their permission to set up the video at the back of the classroom and record their teaching in a normal setting. The subjects were asked to act naturally following their normal plan.

b) Data Collection Stage

The video recording was conducted between the 16th-19th weeks of the semester in order to allow the students and the teachers to know each other quite well and behave more naturally. The video camera was set at the back of the classroom to record their normal teaching.

After the recording, the researcher watched the video of each subject to see the overall picture of the teaching and to focus on their language use, and then prepared the questions for interviewing each subject in the semi-structured retrospective interview.

3.3.2 Interviewing

The researcher prepared a list of questions used to interview each subject. The questions were about the overall situation of the class, the reasons why or why not for using L1 in each stage of teaching, their satisfaction with the amount of L1 use, the factors influencing L1 use, their perceptions toward the use of L1 in an English class, and the techniques used to minimize L1 use.

The semi-structured retrospective interviews were conducted in the same day of teaching. Each subject was asked to sit individually with the researcher and watch the video recording of their teaching while being interviewed. The subjects had to think back to the situation and recall the utterances used in their teaching. Also, they had to answer the researcher's questions to clarify a point in the video recording and to get

their perceptions on L1 used in an English class. The researcher was taking notes and audio recording the interviews as well.

The details of how each stage was carried out are presented in Table 3.1 below:

Table 3.1 Research procedures

Preparation and Data Collection Stage
1) Discussing with the subjects to select the classes 2) Asking for their permissions 3) Reserving the equipment and making an appointment 4) Video recording of classroom teaching 5) Subject interviewing

Subject	Topics of Lesson
S1	• Reviewing tenses • Introducing unit 6 -- 'Family'
S2	• Writing activities about comparing and contrasting places
S3	• Continuing unit 6 -- 'Family' • Reviewing units 4-6
S4	• Reviewing the whole course and preparing for the exam

3.4 Data Analysis

The following section concerns the method of analysis of the data derived from the two instruments, video recording of lessons and semi-structured retrospective interviews, in an attempt to answer the three research questions: 1) 'How much L1 do novice teachers use in an English class?', 2) 'What are the purposes of L1 used by novice teachers?', and 3) 'What are the perceptions of novice teachers on their use of L1 in an English class?'.

3.4.1 Data From Video Recording of Lessons

In order to know the amount, and the purposes of L1 use in an English class of the subjects, the researcher watched the subjects' teaching and their students' behaviors, and focused on their utterances and interactions in the video recording. It was also used as a reminder for the subjects during the interview. The data gain from this instrument was used in many steps of data analysis.

First, in watching the video-recorded data, the teacher talking time (TTT) in each class was tallied second by second. The teachers' utterances were taken into account even though they were repeated and separated by silent time or interrupted by students' talk. It was calculated into minutes and then converted into percentages to see the total amount of time that the subjects uttered in their classroom teaching.

Second, the TTT was separated into the durations for L1 use and L2 use. Then, it was again converted into percentages to answer how much L1 was used by novice teachers in an English class.

Third, the amount of L1 and L2 use was divided into 5 periods of the class time. The class durations were divided into 20 minutes each to observe what happened and how much L1 and L2 were used in each period so that it could be used for further analysis about the purposes of L1 used by the subjects. The reason of dividing into 20 minutes each was because this range of time was not too much or too little for showing the movement of L1 and L2 use in each stage of teaching, such as eliciting and monitoring, which mostly took about 20 minutes.

Then, the data of the amount of L1 use of each subject were categorized into different purposes. At this stage, the data from semi-structured retrospective interviews were also used for supporting the analysis and purposes classification. To categorize, the researcher used the 6 purposes of L1 which were summarized and elaborated on by many experts (Liu et al., 2004; Cole, 1998; Mattioli, 2004; Littlewood and Yu, 2009; Mee-ling, 1996 (b); Cameron, 2001, Cook, 2001; Cook, 2005; Willis, 1981; Rechards, 1990 cited in Watson Todd, 1997; Prodromou, 2002 cited in Al-Hinai, 2006) to capture the purposes of L1 use (i.e. to highlight important points, to enhance students'

understanding, to increase students' motivation, to maintain discipline, to overcome communication difficulties, and to save time).

3.4.2 Data From Semi-Structured Retrospective Interviews

The data from semi-structured retrospective interviews were used to supplement the lesson recordings in order to answer the research question 2. It was used to clarify any points concerning the reasons and decision of each subject to use L1 or L2 at that time. Moreover, the subjects' answers in the interviews were grouped and transcribed according to the topics set for answering the research question 3. The topics were about their perceptions on the use of L1, the purposes, and the factors influencing L1 use.

3.5 Conclusion

This chapter has provided an overview of how the research study was conducted, including the preparation stage, the data collection stage, and how the data were analyzed.

The subjects of the study were 4 trainee teachers who taught English at a Thai high school in Bangkok in their teaching practicum. Their classes were video recorded. Then, they were interviewed individually in the same day after teaching by the researcher. The data obtained from both research instruments were analyzed in order to know the amount and purposes of L1 and the subjects' perceptions on the L1 used in an English class.

Next, the data obtained from these two research instruments will be presented and interpreted in the next chapter (Chapter 4).