#### CHAPTER III

## **METHODOLOGY**

This chapter describes in details about the methodology employed in this research including subjects, instruments, data collection and data analysis.

# Briefly, the steps in this research study are as follows:

The researcher:

- primarily searched for information relevant to immersion programs worldwide including Thailand from internet, theses, text, newspaper, magazines, journals, various kinds of multimedia focusing on L1 or minority language immersion programs set in L2 or majority language context. All information obtained was collected and categorized for use in the study.
- held discussions with people involved in immersion programs: teachers teaching in immersion programs, parents having students studying in immersion programs, students studying in immersion programs, administrators of immersion programs, students and parents in the community who would like to study or have their children study in immersion programs in order to get any information relevant to immersion

programs. All information obtained was collected and categorized for use in the study.

- chose the subjects (see details below, 1. Subjects)
- worked on a thesis topic proposal closely with the advisors
- studied how to make instruments from various books and specialists
- met with the subjects to find out information to construct the instruments
- designed and tried out the instruments in the way that would meet the thesis objectives following the specialists' advice. (see details below, 2. Instruments)
- collected the data (see details below, 3. Data collection)
- analyzed the data (see details below, 4. Data analysis)
- summarized the data for discussion, implication, and recommendation (see details in chapter V)
- prepared for the thesis presentation and defense

Description of subjects, instruments, data collection and data analysis are as follows:

# 1. Subjects

There were two groups of the subjects chosen for this study. The first group were all the population of 63 non-native English speaking students studying in 4<sup>th</sup> grade to 12<sup>th</sup> grade in one English immersion program in Chiangmai, Thailand. Twenty-three of them were Thai. Eighteen were mix-

Thai and twenty-two were other non-native English speakers. The second group were all the 50 parents of the non-native English speaking students studying in 4<sup>th</sup> grade to 12<sup>th</sup> grade in the English immersion program. Some parents had more than one child and some parents acted as a guidance of more than 3 children. However, each parent had to fill out the questionnaire according to the numbers of their children.

#### 2. Instruments

The instruments used in this research were questionnaires, observations and interviews.

### 2.1 Questionnaires

Two sets of questionnaire were developed by the researcher in relation to the significant information obtained from literature review, etc. and developed in the way that would meet the thesis objectives. They were revised and tried out a number of times according to the specialists' advice in terms of TEFL terminology and concepts as well as questionnaire construction until they were proved reliable using the alpha-coefficient method from the SPSS program for Windows, and the reliability was at 0.95 for both students' and parents' questionnaire which means 95 % of the responses would be consistent and that the instruments were reliable. They were mostly in closed-ended questionnaire formats with some open-ended so that students' and parents' opinion and suggestions could also be taken into

consideration. Each closed-ended question provided either multiple choice or rating scale using the five point-Likert scale:

61-	Mean range	Descriptive value			
Scale		Opinion	Preference	Ability	Comparison
5	4.21-5.00	Strongly agree	The most	Very good	Much better
4	3.41-4.20	Agree	A lot	Good	Better
3	2.61-3.40	Neutral	Moderate	Average	Comparable
2	1.81-2.60	Disagree	A little	Bad	Worse
1	1.00-1.80	Strongly disagree	The least	Very bad	Much worse

## 2.1.1 Questionnaire for students (see Appendix p. 110)

There were 7 parts in the students' questionnaire. Parts I, II and III were constructed to obtain personal information, school information and language background of the respondents respectively. Parts IV, V and VI were used to determine their self-rating English language skills: listening, speaking, reading and writing; their self-rating native language skills: listening, speaking, reading and writing; and their self-rating overall knowledge respectively. Part VII was to elicit their opinion on studying in the English immersion program and its effects on their attitudes and behavior as well as to provide them the opportunity to express their opinion and suggestions with their own words.

## 2.1.2 Questionnaire for parents (see Appendix p. 122)

For the parents' questionnaire, there were 7 parts altogether. Parts I and II were constructed to obtain information about their children. Parts III, IV and V were used to determine parental rating on their children's English language skills: listening, speaking, reading and writing; their children's native language skills: listening, speaking, reading and writing; and their children's overall knowledge respectively. Part VI was to elicit their opinion on their children's studying in the English immersion program and its effects on their children's attitudes and behavior. Finally, Part VII was intended to be placed at the end of the questionnaire for the parents to relaxedly present their personal information.

#### 2.2 Observation

Two observation forms were developed by the researcher in relation to the questionnaire to find out more information in order to support the result derived from the questionnaire. They were revised and tried out a number of times according to the specialists' advice.

# 2.2.1 Observation Form I (see Appendix p. 134)

Observation Form I was constructed to investigate students' choice of language spoken outside class. This form was in closed-ended observation format. Each closed-ended observation provided a rating scale using the five point-Likert scale:

Scale	Mean range	Descriptive value
5	4.21-5.00	The most
4	3.41-4.20	A lot
3	2.61-3.40	Moderate
2	1.81-2.60	A little
1	1.00-1.80	The least

#### 2.2.2 Observation Form II (see Appendix p. 135)

Observation Form II was constructed to investigate students' choice of cultural grouping and the language spoken in the group. This form was in open-ended observation format.

#### 2.3 Interview

Two interview forms were developed by the researcher in relation to the questionnaire to find out more information in order to support the result derived from the questionnaire. They were revised a number of times according to the specialists' advice.

#### 2.3.1 Interview Form I (see Appendix p. 136)

Interview Form I was constructed to investigate non-native English speaking students' attitudes towards the English immersion program and its effects on their attitudes and behaviors.

#### 2.3.2 Interview Form II (see Appendix p. 137)

Interview Form II was constructed to investigate their parents' attitudes towards the English immersion program and its effects on their children's attitudes and behavior.

#### 3. Data collection

The data from questionnaire, observation and interview were collected by the following procedure:

#### 3.1 Questionnaires

# 3.1.1 Questionnaire for students

In order to get honest, reliable and applicable results, the questionnaire was distributed to the students using an administered method. The students filled out the questionnaire during the class time with the teacher there ready to help them with any problems that arose. The students were encouraged to honestly answer the questions for their own benefit and it was emphasized that their answers would in no way affect their grades or them in any negative ways. To make sure that the questionnaire was anonymous, a big brown envelope was placed on the teacher's desk for students to personally put in their questionnaire.

# 3.1.2 Questionnaire for parents

The questionnaire was distributed to parents via their children after they had finished their own questionnaire. Since the questions were more or less the same as the students' questionnaire, the students should be able to clarify to their parents if any problems arise. The parents' questionnaire was sent to the parents in the school envelope together with a letter from the school principal encouraging the parents to honestly answer the questions in order to provide information for the school to improve itself in the area of English language learning for their children's benefit and that their answers would in no way affect their children's grades or them in any negative ways. To make sure that their questionnaire was anonymous, they were informed in the letter that a big brown envelope would be placed on the teacher's desk for their children to personally put in their questionnaire together with other parents' questionnaire. The above procedures were made with anticipation of honest, reliable and applicable results.

#### 3.2 Observation

# 3.2.1 Observation Form I (Students' choice of language outside class)

The observation was conducted with 40 non-native English speaking students on their choice of language spoken

outside class. The subjects were randomly selected out of the subjects who answered the questionnaire, with 20 Thai / mixed Thai and 20 other non-native English speaking students. Each non-native English speaking student was observed average of 5.2 times, with the most frequent 13 times and the least frequent 2 times, for 3 months. The observation was done every day in the morning before school began, during break time, lunch time or in the afternoon after school ended depending on situations. The observer employed many methods in observation, e.g. listened to the students talking to each other while walking around the play ground, sitting among them in the hall way, having lunch with them in the canteen, To make sure that the information derived from this etc. observation is honest, reliable and applicable, the researcher had the observation start during the last three months of the academic year assuming that the students had fully adjusted themselves to all situations at school during this time so that the language they chose to speak outside class was their own choice after settling down at school not the choice forced by any kind of tension or situations, and the students did not know that they were being observed. The data was recorded right after each observation in Observation Form I.

# 3.2.2 Observation Form II (Students' choice of cultural grouping and the language spoken in the groups)

The observation was conducted with mainly the 63 nonnative English speaking students in their choice of cultural groups and the language spoken in the groups. The nationality of each student in the group and the languages spoken in the group were observed. Each group was observed on an average of 5.4 times, with the most frequent 7 times and the least frequent 2 times, for 3 months. The observation was done every day in the morning before school began, during break time, lunch time or in the afternoon after school ended depending on situations. The observer employed many methods in this observation, e.g. observed and listened to the students talking to each other while walking around the play ground, sitting among them in the hall way, having lunch with them in the canteen, etc. The data was recorded right after each observation in Observation Form II. The observation was started during the last three months of the academic year assuming that the students had fully adjusted themselves to all situations at school during this time so that the cultural group they chose to belong to and the language they chose to speak in the group was their own choice after settling down at school not the choice forced by any kind of tension or situations and the students did not know that they were being observed. All these precautions were taken to assure that the results derived from the observation would be honest, reliable, and applicable.

## 3.3 Interview

#### 3.3.1 - Interview Form I (for students)

The interview was conducted with 28 non-native English speaking students from grade 4 through grade 12 concerning their attitudes towards the English immersion program and its effects on their attitudes and behaviors. The subjects were randomly selected out of the students who answered the questionnaire. The interview was carried out after the students had done the questionnaire. They were interviewed both as a group and individually. To make sure that the information obtained is honest, reliable and applicable, the students were encouraged to feel free answering the questions for their own benefit and it was emphasized that their answers would in no way affect their grades or them in any negative ways. The data was recorded right after each interview in the Interview Form I.

#### 3.3.2 - Interview Form II (for parents)

The interview was conducted with 15 parents of nonnative English speaking students from grade 4 through grade 12 concerning their attitudes towards the English immersion

program and its effects on their children's attitudes and behavior. The subjects were randomly selected. This interview was intended to be informal, and the parents did not know that they were being interviewed. The reasons behind this are that most of the parents were Thai and usually Thai will talk more and be more straightforward in a casual situation than a formal one. Consequently, in order not to let the parents know that they were being interviewed, the interview had to be carried out before they answered the questionnaire because the questions were similar to the questionnaire. Therefore, during the second semester, the informal interview or, for the understanding of the parents, a routine teacher-parent talk was carried out both in small groups and individually; in the morning when they came to bring their children to school, during break time or lunch time if they happened to be there, after school when they came to pick up their children, including when they appeared at school on parents' meeting day as well as on different special occasions arranged by the school. above procedures were made with high expectations that the results obtained from the interview would be honest, reliable, and applicable.

# 4. Data Analysis

The data obtained in this research was processed and analyzed by using the Statistical Package for Social Science (SPSS) for Windows. The outcome of the analysis was shown as frequency, percentage (%), population mean  $(\mu)$ , population standard deviation  $(\sigma)$  and description as appropriate.