

## CHAPTER III

### RESEARCH METHODOLOGY

This chapter explains the research methods used in the study. It demonstrates the preliminary study (Section 3.1), the subjects (Section 3.2), the samplings (Section 3.3), research instruments (Section 3.4), research procedures (Section 3.5) and the analysis of the data (Section 3.6), including validity and reliability (Section 3.7).

#### 3.1 Preliminary Study

A preliminary study is conducted as a research device designed to obtain information relevant to the objective of the study. The worksheet (Appendix I) was used to study the process of making portfolios in each school. The teacher interview form (Appendix II) was used to gain of how the teachers use portfolios in the classroom. And the questionnaires (Appendix III) were used to gain background of the learners who used portfolios. And

#### 3.2 Aims and Objectives

The aim of this study is as follows:

1. To analyze the structure of portfolios in order to find out similarities and differences of each portfolio and to gain some ideas of creating appropriate portfolios;
2. To study relationships of portfolios objectives and results so that the improvement of students' skills will be effectively examined;
3. To examine the criteria of assessing portfolios in order to find suitable evaluation for students; and
4. To find out the advantages and disadvantages of portfolio from the survey attitudes of students and teachers.

### 3.3 The Population

The target population of the study was 50 secondary students and one teacher from Winitsuksa school, 50 secondary students and one teacher from Bansrapleng school, and 50 secondary students and one teacher Chalorad Rungsarit school, in the Office of Lopburi Education Service Area. The students were randomly chosen from those who used portfolios in the three schools. For the three teachers, they were the only ones who applied portfolios in the area.

In the study, the researchers define the subjects as follows:

- A: Bansrapleng School
- B: Winitsuksa School
- C: Charoradrangsarit School
- TA: the teacher who teaches English at Bansrapleng School
- TB: the teacher who teaches English at Winitsuksa School
- TC: the teacher who teaches English at Charoradrangsarit School

### 3.4 The Sampling

The sampling groups for a random sample were 50 learners from Bansrapleng school, Chalorad Rungsarit school and Winitsuksa school, studying in the first semester of the academic year 2004.

### 3.5 Research Instruments

In the study, the research instruments were:

1. The portfolio worksheets (Appendix I)

In the study, the portfolio worksheets of the three schools were requested, so that their structure and content would be analysis. These worksheets were designed by the three teachers and completed by the 150 students. The worksheets were coded as follows:

- Ap1: the worksheet number 1 of Bansapleng School
- Ap2: the worksheet number 2 of Bansapleng School
- Ap3: the worksheet number 3 of Bansapleng School
- Ap4: the worksheet number 4 of Bansapleng School
- Ap5: the worksheet number 5 of Bansapleng School

- Bp1: the worksheet number 1 of Winitsuksa School
- Bp2: the worksheet number 2 of Winitsuksa School
- Bp3: the worksheet number 3 of Winitsuksa School
- Bp4: the worksheet number 4 of Winitsuksa School
- Bp5: the worksheet number 5 of Winitsuksa School

- Cp1: the worksheet number 1 of Charoradrangsarit School
- Cp2: the worksheet number 2 of Charoradrangsarit School
- Cp3: the worksheet number 3 of Charoradrangsarit School
- Cp4: the worksheet number 4 of Charoradrangsarit School
- Cp5: the worksheet number 5 of Charoradrangsarit School

## 2. The teacher interview form (Appendix II)

This was constructed in order to seek for the teacher attitudes about using portfolios for assessment.

## 3. The student questionnaire (Appendix III)

The questionnaire of this study is based on the questionnaire designed by Boonchom Srisaart (1997 p.87). It is consisted of two sections: Part One, learners were asked about their general information and their English skills; Part Two, learners were asked to rate of their satisfied in terms of classroom interaction, the process of collecting learners' work for portfolios, their learning development and advantages from using portfolios. The scale of the questionnaire is as follow:

5 = most satisfied

4 = satisfied

3 = moderately satisfied

2 = less satisfied

1 = least satisfied

### 3.6 Data Collection Procedures

The research procedures for this study follow the main stages described below:

1. The researchers took a cover letter from the Dean of the Graduate School of Naresuan University, Phitsanuloke, to the Bansrapleng School, Winitsuksa School Lopburi, and Chaloradrangsarit School, requesting permission to collect the data.
2. The researchers asked for the portfolio worksheets, distributed the student questionnaires, and interviewed the teachers.
3. The data was collected and analysis.

### 3.7 Data Analysis

Statistics used for analyzing the data are:

1. Mean (Kanokthip Patanapuaphan, 1986. p. 43)

$$\bar{X} = \frac{\sum fX}{N}$$

$\bar{x}$  = mean

$\sum fx$  = sum of the number of the sampling times  
the scale of level

$N$  = the number of the sampling

## 2 Standard Deviation (Kanokthip Patanapuaphan, 1986. p. 192)

$$S^2 = \frac{N \sum x^2 - (\sum x)^2}{N(N-1)}$$

$s^2$  = Standard deviation

$X$  = the number of the sampling in each level

$N$  = the number of the sampling

$\sum$  = sum

### 3.8 Validity and Reliability

In the study, every question of the student questionnaire and teacher interview form was directed to the purpose of this study. To ensure the validity of the questionnaire, it was commended on by the advisor and experts as follows:

1. The advisor: Dr. Sudakarn Patamadilok, Naresuan University
2. The expert: Miss Sompit Wongyam, Educational supervisor, Lopburi
3. The expert: Mrs. Wanida Pudpong, Charoratrangsarit Winitsuksa instructor, Lopburi
4. The expert: Mrs. Wathinee Sripaebou, Winitsuksa instructor, Lopburi.

After the preliminary study, the final revision of all instruments was relied on the advice of the professionals above. To ensure internal reliability of portfolio worksheets, the Kuder Richardson-21 formula (Hatch 1982. pp. 248-249) was employed.