

CHAPTER 3

RESEARCH METHODOLOGY

This chapter gives an overview of the research procedure and research instrument used in the study. It includes the description and details of the subjects, the research instrument, and the methods of analysis of the data and statistical techniques.

3.1 Subjects of the Study

The subjects were 59 first year Business Administration students who took Foundation English II in the second semester of the academic year 2000 at Prince of Songkla University, Hat Yai Campus. They regularly spent two periods (50 minutes each) per week studying this course in the classroom, plus one period of self-study and one period in the language laboratory. All of them had taken Foundation English I in the first semester.

3.2 Research Instrument

In order to acquire the information for this study, a writing task was used as a research instrument (see **Appendix A**). It consisted of three sequential pictures selected from the book “Composition through Pictures” (Heaton, 1966). Some useful vocabulary with Thai equivalents and the beginning of the story were given. Fifty minutes were allocated to the students to complete their writing.

Before using the research instrument with the students in the main study, a pilot study was conducted in the first semester of the academic year 2000 with a group of twenty first year Business Administration students at Prince of Songkla

University, Hat Yai Campus on September 9, 2000. These students were not involved in the main study. The main purposes of the pilot study were to find out the suitability of the selected series of pictures regarding the content and time allocated for writing, and to try out the taxonomy used in analysing data in the study. The test time was 50 minutes. The students were not allowed to use dictionaries, grammar books, or speak with one another while writing. The result of the pilot study was that the students were able to write compositions ranging from 150 words to 172 words within the time allotted to them. Consequently, the writing task was used in the main study and the test time remained 50 minutes.

3.3 Data Collection

The data of the students' global and local errors were obtained by the use of the writing task described above, from the students in the main study in the second semester of the academic year 2000. The students were given a series of pictures, certain useful vocabulary with Thai equivalents and the beginning of the story as a writing prompt and told to write a composition, within 50 minutes, of about 150 words based on the pictures. In order to measure their actual competence, they were not permitted to use dictionaries, grammar books, or speak with one another while they were writing.

3.4 Data Analysis

The data in this study consisted of the information obtained from 59 compositions written by the students. Two types of data analysis were conducted: analysis of types and frequency of global and local errors, and analysis of comprehensibility of written works.

3.4.1 Analysis of Types and Frequency of Global and Local Errors

Hendrickson's (1981) Global/Local Error Taxonomy was adapted for this study because it provides detailed description of errors in students' compositions which cause much or little difficulty in understanding the intended meaning of a sentence. According to Hendrickson (1981), types of global and local errors found in students' compositions were classified into four categories, i.e. lexicon, syntax, morphology, and orthography. They were based on misuse, omission or misspelling of forms and structures of English lexicon, syntax, and morphology. The orthographic category included misspellings of lexical, syntactic, and morphological features.

However, it was found in the pilot study that the four categories overlapped. That is, misspelling of forms and structure of English lexicon, syntax, and morphology overlapped the orthographic category. Therefore, the taxonomy was adapted to avoid this overlap. In this study, errors found in the students' written works were first identified and evaluated as a global or local error. Then they were classified into four categories, namely lexicon, syntax, morphology and orthography. The lexical category includes the misuse, omission, or insertion of any free morpheme of nouns, verbs, adjectives, or adverbs. The syntactic category consists of misused, omitted, and inserted articles, demonstrative and possessive adjectives, pronouns, modals, qualifiers, prepositions, conjunctions, sentence connectors, subordinators, question words, and word order. The morphological category comprises the misuse, omission, or insertion of a bound morpheme. The orthographic category includes misspelling of bound and unbound morphemes and capitalisation.

The steps in analysing types and frequency of global and local errors in students' written works were as follows:

- 1) All errors were identified.

2) All errors found in students' written works were evaluated as a global or local error depending on the degree of the researcher's difficulty in understanding the students' intended meaning.

3) All errors were classified into four categories mentioned above: lexicon, syntax, morphology and orthography. They were further described for sub-types of errors and causes, e.g. noun and misuse.

4) The number of categorised global and local errors produced by students were tallied and calculated in percentages to answer the first research question.

3.4.2 Analysis of Comprehensibility of Written Works

After all the students' written works were analysed for errors, the ratio of global errors per written work was established by using the following formula taken from Hendrickson (1981):

$$\text{Global Error Ratio} = \frac{\text{Number of Global Errors}}{\text{Number of Words}}$$

In calculating the ratio of global errors per written work, the number of global errors in each of the students' written works was tallied and divided by the number of words in the same written work.

After the ratio of global errors of every student's written work was established, the cut-off point used as a basis for dividing the students' written works into two groups: 1) more incomprehensible, and 2) less incomprehensible was established by using the following formula:

$$\text{Cut-off point} = \frac{\text{Total Global Error Ratio}}{\text{Number of Written Works}}$$

In calculating the cut-off point, the ratio of global errors per written work was added up and divided by the number of all the students' written works. The written

works with a higher global error ratio than the calculated cut-off point were classified as more incomprehensible and those with a lower global error ratio were classified as less incomprehensible. Those written works identified as more incomprehensible were then summarised for the types and frequency of global errors in percentages to answer the second research question.

To ensure that the cut-off point was a reliable tool of dividing the students' written works into two groups, the students' written works were randomly sampled and were then read by three Thai teachers of English who were not involved in analysing the data for the study. They were required to classify the sample written works into two groups depending on the comprehensibility of those written works.