CHAPTER THREE

RESEARCH METHODOLOGY

This chapter details the research design and methodology adopted to gather data. It includes the pre-test and post-test, the pre-interview and post-interview, verbal report data and the learning strategy training class.

3.1 Reading Comprehension Ability

In this study, reading ability is measured by the use of the pre-test and the post-test whereby the reading section of a past semester final exam English paper for the code BEL100 is given to the students before and after the Language Learning Strategies training class. Reading Comprehension is tested in Universiti Teknologi Mara (Uitm) with the use of a reading text of about 400 words, followed by a series of questions on the passage (see Appendix 4 for the Comprehension Text). Questions are in the form of "WH-"questions, True/False, References, Vocabularies and Information Transfer.

3.2 Reading Strategy

Reading Strategies are not taught directly to students in Uitm Sarawak. They may have used some of the strategies either consciously or unconsciously when they read English texts. Some of the strategies that they have used are skimming and scanning, guessing, transferring, associating, elaborating and semantic mapping strategies.
3.3 Sample of Study

The data was collected from 58 selected Dayak students who are doing the first semester Diploma programme in UiTM Sarawak. These students are taking the standardised Preparatory English language course catered for first semester students. The course is coded as BEL100. The choice of students as the sample was deliberate because firstly, they have limited background of Reading Strategies knowledge and secondly, the first year students are assumed to experience even more difficulty in comprehending English materials compared to the second and final year diploma students. The researcher administered a pre-test during the first week of data gathering. The scores obtained from this test were used to select High achiever (HA) and Low achiever (LA) respondents based on their achievement.

3.3.1 Respondents

The Dayak students are in various diploma programmes at UiTM. Only the BEL100 Dayak students are selected for the study and they were chosen for several reasons. Firstly, the learners share a common cultural and religious background. Their social and language background are relatively homogeneous. The students are adult learners between the ages of 18 to 20.

Secondly, the students have the mastery of basic mechanical reading skills such as using contextual clues to ascertain the meaning of words
and phrases and responding to Wh-questions using complete sentences. The students studied English as a second language from the age of 7 till 18 years of age.

Thirdly, students should be exposed to learning strategies as early as possible to ensure better chances of applying the strategies before they proceed to the next level. This is the reason why the new intake in BEL100 is the best selection for this research.

3.3.2 **Description of high achiever respondents**

There are 24 subjects in this category and all are Dayaks. Four students are pursuing Diploma in Science, seven students are pursuing Diploma in Accountancy, three are pursuing Diploma in Public Administration and Business Studies respectively and seven are pursuing Diploma in Engineering. 14 out of 24 subjects had their secondary education in urban area school and the remaining 10 subjects are from the sub-urban area school. The 24 respondents scored in the range of A2-B4 for the English subject in the SPM exams.

3.3.3 **Description of low achiever respondents**

There are 34 BEL100 Dayak subjects in this category. Seven students are pursuing Diploma in Accountancy, seven pursuing Diploma in Public Administration, ten subjects pursuing Diploma in Business Studies, three subjects pursuing electrical Engineering and seven subjects pursuing
Diploma in Science. The respondents scored in the range of C5-D8 for the English subject in the SPM exams.

3.4 Research Instruments

3.4.1 Background Survey

A questionnaire on the students’ background was given to the respondents before the researcher interviewed them. The questionnaire used for this study (see Appendix 1) consisted of three parts. Part A consisting of 10 items was intended to obtain background information on the subjects. Such background information included subjects’ gender, age, ethnic group, parent’s occupations, language spoken at home and university and their scores on SPM English exam. Part B included information on subjects’ reading habits and Part C consists of questions that focussed on subjects’ opinions on their English language learning ability and the strategies that they used in general. This information was solicited to help the researcher better understand not only the characteristics of the subjects but also the results of the study in its particular context.

3.4.2 Reading Strategy Questionnaire

The Reading Strategy Questionnaire was distributed to the Dayak students towards the end of the data collection. The questionnaire was adapted from NLRC (National Capital Language Resource Centre). It
covers 18 reading strategies that the students employed as they complete a reading task and students were asked to indicate the frequency (e.g. 'never', 'rarely', 'occasionally' and 'often') of the reading strategy that they employed (see Appendix 2).

3.4.3 Strategy Inventory for Language Learning (SILL)

SILL, Version 7.0 (Version for Speakers of Other Languages Learning English) ©R.Oxford (1989) has been used around the world with students of second languages for assessing the frequency of use of language learning strategies. The SILL instrument contained 50 short statements, each describing the use of one strategy. These statements were grouped under six categories; Memory, Cognitive, Compensation, Metacognitive, Affective and Social. Subjects were asked to rate each statement, such as 'I read English without looking up new words' on a 5-point scale (Likert): 1) never or almost never true of me, 2) usually not true of me, 3) sometimes true of me (refer Appendix 13). SILL was administered to the selected Dayak students to support the data gathered on individual students after the Strategy Training class. The results were analysed using the scattered graph and will be discussed in Chapter Four.

3.4.4 Pre and Post-interviews with participants

The pre interviews with the participants were carried out with both the high and low achievers in order to gain a deeper insight into the strategies, which they used when reading English materials. These
interviews were also carried out to supplement and confirm the data gathered from the background survey. The participants were divided into groups of three or four students, according to their courses, for the interview. The group interview lasted for 40 minutes for each group. The post interview was later conducted at the end of the data collection to get the students feedback on the Strategy Training class and their personal opinions about Reading Strategy in general.

3.4.5 Pre-test and Post-test

The pre-test and post-test were carried out to compare the students' reading performances before and after the strategy training class. The same past year's Reading Comprehension section for BEL100 test paper was given to the students as the pre and post-test. The test comprises of a long reading passage and questions relating to the passage. The questions are in the form of WH-questions, True/False questions, matching meaning of words, references and completing a diagram. A time limit of 30 minutes was imposed for the students to complete the test. The students were not informed that they are going to sit for the pre and post test.

3.4.6 Think-aloud and Retrospective Interview

Thinking aloud (TA) involves the reader verbalizing his thoughts out loud and simultaneously reading out the text. TA is carried out to find what the learners were thinking about as they were reading the passage
given. Indirectly, learners will expose the strategies that they use as they figure out the meaning of unfamiliar words in the reading passage. The reading passages selected for TA are of the same level. The researcher selected three reading passages that the students can relate to (refer to Appendix 5).

Retrospective interview was carried out after the TA as a back up for students who could not think aloud. The researcher prompted the students after they read the passage to gain more insights into the reading strategies that individual student used. Retrospective interview was seen as a means of helping readers, instructors and researchers gain further insights into readers’ thinking and reading process (Cohen, 1998). The TA and retrospective interview sessions were tape-recorded and transcribed (see Appendix 7).

3.4.7 Learning Strategy Training Class

The strategy training class was carried out for 6 sessions; 1 hour per session, within the period of one and a half month. Only LA (low achievers) Dayak students attended the class with the purpose to measure students' improvement after the Strategy Training class. The class was prepared and conducted by the researcher. The sessions covered the following learning strategies:

1. Cognitive Strategies - getting the idea quickly; skim and scan, repeating; reading the passage over and over again with different
purposes, analysing contrastively; comparing sounds, vocabulary or grammar with native language.

2. *Memory Strategies* - grouping, associating, using imagery, semantic mapping, using keywords, representing sounds in memory, structured reviewing, using physical response or sensation and using mechanical techniques.

3. *Affective Strategies* – using music, using laughter, making positive statements, taking risks wisely, rewarding yourself, listening to your body and discussing your feelings with someone else.

The researcher based the module for the Strategy Training class on Oxford’s (1989), ‘Language Learning Strategy: What Every Teacher Should Know’ book. The module (refer to Appendix 3) consists of an overview of the lesson plan for six sessions of training. Each session covers a short lecture on one major reading strategy and some co-related activities. The lectures are communicative-based and the students are encouraged to contribute their opinions throughout that time. There are a variety of activities chosen for training like Jigsaw Puzzle, skimming and scanning for information in the newspaper, group presentation and solving mysteries in pairs. To make the activities more exciting, prizes are given to the pairs or groups that complete the task first. As the students are engaged in the activities conducted, they are indirectly applying the strategies that they are exposed to that day. The students who were selected for the Strategy Training class belong mostly to the LA group. The students attended the class voluntarily.
3.5 Data Collection Procedure

3.5.1 Students Selection

The researcher started her data collection by getting the name list from respective English Language lecturers who are teaching BEL100. Names of Dayak students are later highlighted because they are the subjects for this study. Their lecturers later informed the chosen students that they needed to see the researcher on the following day. An appointment was made after the researcher met the students from each course. As the number of students was quite big (60 students), the researcher decided to divide the group to two, and another appointment was made to meet the second group.

The first meeting with the students was at 4.00 p.m., after their class. The researcher first introduced herself and stated the purpose of the meeting. The students were also told the reason why they (only the Dayak students) were chosen as subjects. The students were later asked to do the pre test. After they completed the test, the researcher made appointments with the students for the pre interview session two days later. The second meeting was at 6.00 p.m. on the same day. The same procedures applied to this group.
3.5.2 **Pre-test**

During the sixth week of the semester, a standardised test (pre test), which comprised of the Reading Comprehension section from BEL100 previous exam paper, was given to the students. Based on the pre-test results, the researcher divided the students into two categories; high achiever students (HA) and low achiever students (LA). Those who had obtained 70% and above in the pre-test were placed in the high achiever category, whereas those who obtained less than 70% were placed in the low achiever category. Though a standardised test was used to determine whether students fall under the high and low achiever categories, the researcher also referred to their SPM English paper's results to confirm whether students should be placed into each category.

3.5.3 **Background Survey**

Before the pre-interview session the researcher asked the students to fill in the background survey. The responses in the survey on students' background are tabulated in terms of question number and responses calculated in percentage. Frequencies of common strategies used by students were tabulated from responses gathered from questions 9 and 10 (results in Chapter four). Reading habits and other relevant influences like geographical and status factors are measured by the responses to the background factor in section one of the questionnaires. These were tabulated to give the general picture of background influences to
subjects' overall achievement. The researcher was present when the students answered the survey to clarify any doubts or queries.

3.5.4 Pre-interview

Learners from the two groups were then interviewed a week after the pre-test. The students were interviewed in groups, about three to four students a group. The group interview session took around 40 minutes per group. The pre-interview session was an elaboration of Part C in the background survey, to get more insights on the students' personal views. The researcher also interviewed the students based on open-ended questions (refer to Appendix 1) on students' employment of reading strategies.

3.5.5 Reading Strategy Training Class

The Reading Strategy Training classes were carried out two weeks after the interview session. The researcher conducted the classes at night during weekdays with the consent of the students involved and their respective lecturers. The Learning Strategy classes were done outside the class hours. The researcher conducted six sessions of the Learning Strategy classes, which took about one hour per session. Students were given lectures on learning strategies for reading specifically. Activities and written exercises based on reading strategies were also given to the students during the Language Learning Strategy Training classes. The materials used were prepared and adapted by the researcher.
3.5.6 Coding and Analysis of Think Aloud (TA) Protocols and Retrospective Interview

The students were first asked to verbalize their thoughts onto a tape-recorder to get some practice in thinking-aloud while reading the selected passage that is given to them. Then they were told that they have to think aloud while planning the answers to the reading comprehension tasks. The students were told in advance before the taping was done. Each taping was done individually.

As a back up to TA, students were then interviewed on the strategies that they use as they answered the comprehension questions on the reading passage. This was done because students, generally, were not able to think aloud as they read the passage. The students instead read aloud the passage. Due to this, the researcher had to query them to explore students’ behaviour as they complete a reading task.

3.5.7 Post Test

The post-test (similar to the pre test) was carried out to compare the students' results before and after the Learning Strategy Training classes. The results would confirm whether the students did improve after the training classes. The researcher could also find out if the students were
able to apply the strategies that they have been exposed to. The results of
the post test would be discussed in the following chapter.

3.5.8 Learner’s Profile and Researcher’s Observation

The students’ learner’s profile was created to focus on only eight Dayak
learners who underwent the Strategy Training, to get detailed results on
the reading strategies that each individual employs. The learners’ profile
is a documentation of the students’ background and researcher’s
observations.

Throughout the Strategy Training class, the researcher collected field
notes on her observations of the students’ behaviours. These comments
were generally on the students’ reactions as the lectures and activities
were conducted during the training sessions. The researcher has recorded
some note worthy moments with the students as she conducted the class.
The researcher however, made the observations alone.

3.5.9 SILL (Strategy Inventory for Language Learning)

SILL was only given to eight students who undertook the Strategy
Training class. The researcher, through the class lecturer distributed
SILL and students were asked to fill in the questionnaire within a given
time frame. The respective lecturers were present when the students
answered the questionnaire in case the students needed some explanation
with regards to the questionnaire. The completed questionnaires were later handed to the researcher to be analysed.

3.5.10 Post Interview

The post interview was carried out a week after the post test to obtain the students' responses regarding the Learning Strategy Training class and their perceptions on learning strategies as a whole. The researcher also managed to derive some recommendations from the students on this matter. Only the controlled group was interviewed.

3.6 Data Analysis Procedure

Analysis of the data gathered from the questionnaire was carried out using the Statistical Package available in Microsoft Excel 97. Both descriptive and inferential statistical techniques were used. Descriptive statistical analysis including frequencies, percentage was carried out to summarise the subjects’ responses.

In conclusion, this chapter discusses the methods that I adopted for this study. It also elaborates on the procedures that were carried out throughout the data-gathering period. The analysis and the results of the data gathered will be discussed in the next chapter.