# **CHAPTER THREE**

# **RESEARCH METHODOLOGY**

## 3.0 Introduction

This chapter provides an explanation of the instrumentation used for the research and how the data for the research was obtained. A good research according to Leedy (1993) requires the collection and interpretation of data in an attempt to resolve the problem initiated in the research. Hence, to get accurate and valid data, the researcher has used several methods in this research. To give the readers a better understanding of the whole research methodology, the researcher will discuss in this chapter according to the sections; research questions, research premise, subjects, instruments, research process and data collection.

## 3.1 Research Questions

- How effective is NETPLUS, commercial CALL software, for the learning of English as a foreign language?
- 2. Does the CALL software used in this research, NETPLUS, motivate students to learn English as a foreign language?
- 3. What types of attitude (positive or negative) are shown by the students towards learning of English using NETPLUS?

# **3.2** Research Premise

ELS is an English language centre that caters for all levels of students who want to learn English as a second language or foreign language. Students who enrol in ELS come from various countries such as Korea, Japan, Libya, Sudan, Somalia, China, Thailand and Turkey. ELS Malaysia was established in 1990 and currently has 6 centres throughout Malaysia with 3 centres in Klang Valley. This study was fully conducted at ELS Language Centre, Kuala Lumpur.

All teachers of ELS have a degree in teaching English and have undergone special courses and training before they are allowed to teach. ELS offers courses such as CIEP (Certified Intensive English Program), CEP (Communicative English Program), IELTS, TOEFL, Business English and many others. ELS focuses on student centered activities, which is very different from teaching methods in schools. Thus, students who come to ELS will have a better opportunity to use the language and participate in the classroom. This enables the learners to learn the language in a very interactive way. A typical studying day in ELS consists of 5 hours of classroom learning and 1 hour of Multimedia learning where students are put under CALL software called NETPLUS. Students at ELS learn all the four skills everyday that is reading, writing, structure (grammar), listening and conversation and each session has a period of a month. There are 10 levels altogether beginning from Level 100-109.

## 3.3 The Software- NETPLUS

The NETPLUS program comes in 5 levels; Beginner, Pre Intermediate, Intermediate, Upper Intermediate and Business English. Students work with the program for about 1 hour everyday and get a chance to explore all the skills including pronunciation. The content of the software engages students in a very interesting way that can motivate them to learn. This program is user friendly too. Hence, even students who are computer illiterate can work on the software without much difficulty. This program emphasizes on extensive vocabulary development and cross cultural issues.

The NETPLUS program encourages learners to learn a skill through drilling. This software uses the Behaviourist Theories in its application in order to teach students effectively. This software also encourages students to keep trying until they get the correct answer instead of giving them just one chance to try. By doing so, students learn not to give up easily and they try their best to get the correct answer. This software focuses on both receptive and productive skills. Each lesson has one target grammar component and all the other skills are taught by incorporating the targeted grammar. For example, if the lesson is on the conditional "If I were" clause, students first learn how to use the clause. Then, they read a passage which has examples of the "if" clause. After that, they will be listening to speakers who use the "if" clause and then finally students are expected to write a paragraph using "If" clause.

There are 40 lessons in each level of NETPLUS. The graphics and videos in this program are also the plus points to enhance students' interest. Every lesson consists of one or more grammar component and ample exercises to further strengthen the understanding. For instance, In Unit 1, students will be taught the Verb to be and they will do some exercises on this grammar point. Even though the students are supposed to finish one lesson each day, they are given the opportunity to work at their own pace to benefit from the program. Students also have the opportunity to improve their writing through this software. In each lesson, there is a writing section using the targeted grammar and students can do the activity and send the assignment to the teachers. Teachers will then mark the assignment online and students get to see their mistakes online by referring to the marked assignments. Although there are 40 lessons altogether in a level, only 14 lessons are used for the purpose of this research due to time

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constraint. The first 14 lessons are used for the research. The 14 lessons used are listed below;

- Unit 1- Verb To Be
- Unit 2- Contractions (He's ,She's,It's,I'm)
- Unit 3- 'Wh' questions and Yes/No questions
- Unit 4- Adjectives and Plural Forms
- Unit 5- Have/Has Got
- Unit 6- Possessive Pronouns
- Unit 7- Simple Present Tense
- Unit 8- Some/Any
- Unit 9- Verbs
- Unit 10- Subject/Object Pronoun
- Unit 11- Frequency Adverbs
- Unit 12- Articles
- Unit 13- Modal (Can/Can't)
- Unit 14- Preposition

The content of the program is taken from a book by Simon Greenall entitled "Reward". The "Reward" series comes in 6 levels which are Elementary, Pre Intermediate, Intermediate, Upper Intermediate, Advanced and Business English. For the subjects of this research, "Reward Elementary" is being used as it deals with basic grammar rules and provides many activities as a form of drilling. "Reward" offers unique choice and flexibility in learning English.

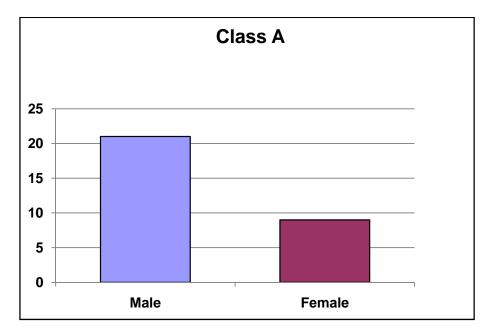
# 3.4 Subjects

The subjects for this research are all from the beginner level which is level 101A, 101B and 101C. They have been selected as the core respondents of this research. The subjects were then divided equally into two groups; 30 students in 101A and 30 students in 101B. These students come from countries such as Libya, Saudi Arabia, Korea, Japan, Iran and China. All of them underwent a placement process where they were tested on their listening, grammar, speaking and writing skills. A placement test is actually a test done after a student registers for the Certified Intensive English Program. The students will do a listening and grammar test followed by a writing test. After a student has completed all the tests above, he/she will be interviewed by a teacher to put him/her in an appropriate level based on his/ her spoken proficiency. Students of this level possess very little knowledge of English. Therefore, the subjects of this study are homogenous based on the factors below:

- English is a foreign language for all of them.
- All of them have the same level of proficiency in English.

The researcher feels that this would be a suitable group to test on since they all possess minimum ability of using the language or the same proficiency level.

Subjects A1 - A30 are taken from level 101 A. Altogether there are 23 male students and 7 female students. Likewise, subjects B1-B20 are from Level 101 B and there are a total of 21 male students and 9 female students. Some of the students are here to further their studies in Malaysia and some are on their vacation. As English would be the medium of instruction in all the higher learning institutions, the students who are here for academic purpose are required to take up an English language course to improve their skills in English. These students are put into the CIEP program where they spend 6 hours in ELS everyday learning English for 20 consecutive days. At the end of the session, students are tested through ELS quizzes and if they pass the quizzes, they could go on to the next level.



Below are the particulars of students summarized into charts below;

Chart 3.1: Composition of male and female students in Class A



Chart 3.2: Composition of male and female students in Class B

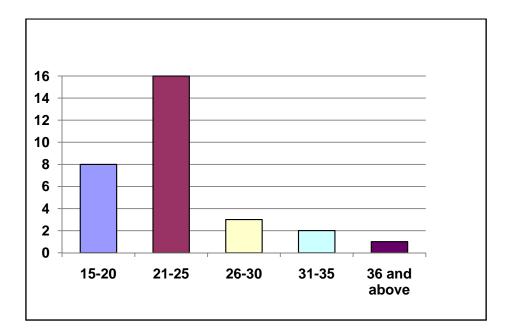


Chart 3.3: Age groups of students in Class A

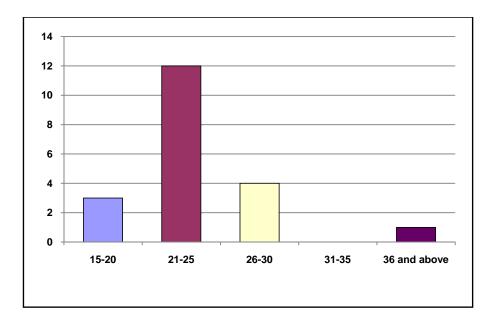


Chart 3.4: Age groups of students in Class B

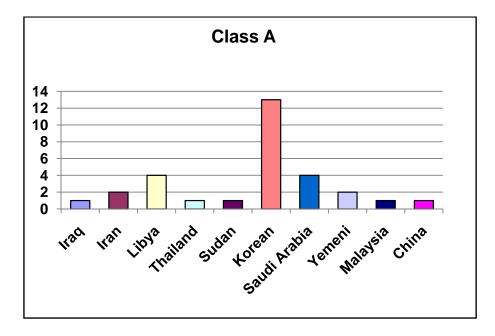


Chart 3.5: Nationalities of students in Class A

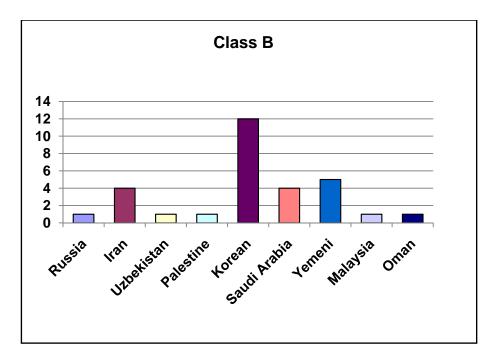


Chart 3.6: Nationalities of students in Class B

As learners who are at the beginners' level of English, these students need guidance and a lot of help from instructors due to their limited knowledge in English. The students have a limited vocabulary in English and they are still trying to grasp the basic rules of English. As English is totally a new language for them, they need ample opportunities to speak and practice the language. 3 Malaysian students were also included in this study. Although English is considered a second language in Malaysia, from the interview and initial placement test conducted, it was found that these students have not learned English before coming to ELS. Results of the placement test also revealed that these students are in the low proficiency group. Hence, it does not affect the fact that the group is homogenous.

All the students were put under the NETPLUS program where they use the selflearning method to increase their proficiency in English. These students spend 1 hour everyday in the Multimedia Lab (MML) working on the program NETPLUS. There are 20 units to be covered in this program but students are allowed to finish the lessons at their own pace. This also means that they are not required to do all the units in the program considering the fact that some of them are slower than the rest.

Since these students do not have a strong base, their ability to learn the language through NETPLUS program is questionable and the effectiveness of the program to these learners is still a question mark. Thus, the researcher hopes to shed some light on these areas by the end of the research.

## 3.5 Instruments

There are a few instruments that were used to obtain data in this research. They are questionnaires, interviews and tests.

## **3.5.1** Questionnaires

Questionnaire 1 (Appendix 2) was given in the first week to sought background information including nationality, age, gender, first language, computer experience and

first impression of the software. Most of the questions asked were open ended because this questionnaire aims to obtain information to build a students' profile database. Questions 1-4 aimed to get the students' background information whereas Questions 5-10 focused on students' English language background and computer literacy.

Questionnaire 2 (Appendix 3) was given at the end of the study focused on the motivation level of students involved in this research. A total of 20 questions were asked about motivation in CALL and emotions involved during CALL lessons. Questions 1-10 focused on the attitude of learners' of the CALL software-NETPLUS In order to get a concrete idea on students' reaction, mood and feelings when they were working on the program, another 10 questions were asked. This is to determine the kind of emotions shown while working on CALL-NETPLUS. Based on the responses to the questionnaires, the researcher then would be able to give concrete opinion on how students feel about having to work on the software. From this we can know whether students are highly motivated during the course or not. This is important to determine the motivation level of the students involved as to answer the research question.

There were no open ended questions asked in questionnaires 1 and 2 because the students in level 101 do not have sufficient knowledge in the English language to respond to open ended questions. The students answered the questionnaire in the presence of the researcher. This enabled the researcher to assist them in terms of paraphrasing the questions asked considering the fact that the students are from a low proficiency level.

#### 3.5.2 Interviews

The researcher also felt that comments and views from a Multimedia Lab Instructor and an English Instructor would help to increase the accuracy and validity of the research by providing answers to the research questions below:

- Does the CALL software used in this research, NETPLUS, motivate students to learn English as a foreign language?
- 2. What types of attitude (positive or negative) are shown by the students towards learning of English using NETPLUS?

Therefore, two instructors were interviewed in this research hoping that they would be able to answer questions on motivation level and attitude of students while working on NETPLUS. The researcher used tape –recording method to obtain the linguistic data in order to get a more valid data. The questions asked in this interview were all open ended questions and the two subjects were well informed of the type of questions that will be asked. The researcher also explained the purpose of the interview and how the data will be used prior to the interview session.

Interviewee 1 is a Multimedia Lab Instructor and Supervisor. She has been handling students from all levels and guiding them during the NETPLUS program. She has been working in ELS for more than a year and spends most of her time assisting students during the MML hour. The researcher feels that by interviewing this person, she might be able to find answers to questions on how students react to the English language and the usage of CALL. Most of the questions discuss the behavior of students while working on the software.

Interviewee 2 is also an MML Instructor who has been working for more than 4 years. The same set of questions was asked to obtain more concrete data for this research. Basically, these two instructors are suitable as subjects for this interview because they work in the research premise and have always dealt with students. These

instructors are well aware of students' attitude because they are always there when the students are working on NETPLUS. Not only that, they also deal with complaints from students and conduct some surveys on the acceptance of NETPLUS. Therefore, obtaining their personal views helps the researcher to gather more information and the researcher is able to draw conclusions based on their responses.

To obtain more concrete answers on effectiveness of CALL, the researcher also interviewed 10 students who were selected randomly from both the classes. Below are the details of the students selected for this interview.

Subjects	Nationality	Country	Sex	Age
1. Subject A10	Korean	Korea	Female	36 above
2. Subject A28	Saudi	Saudi Arabia	Male	26 - 30
3. Subject A29	Saudi	Saudi Arabia	Male	15 – 20
4. Subject A4	Thai	Thailand	Female	15 – 20
5. Subject A12	Malaysian	Malaysia	Male	15 – 20
6. Subject B4	Korean	Korea	Female	21 - 25
7. Subject B26	Uzbek	Uzbekistan	Female	21 – 25
8. Subject B23	Iranian	Iran	Male	21 – 25
9. Subject B21	Palestinian	Palestine	Male	15 – 20
10. Subject B20	Korean	Korea	Female	21 – 25

Table 3.1: Students selected randomly for the interview.

The researcher felt that the response from these students will further strengthen the results of the questionnaire. The students were asked seven questions on the effectiveness of CALL which covers sub topics such as their opinion on CALL, learning experience, pacing, motivation, advantages, disadvantages and suggestions (Refer to Appendix 4). Although the students were not highly proficient due to their limited vocabulary in English, the researcher managed to understand what they were trying to say by simplifying the questions and helping them with words. The students also used the help of electronic dictionary to express their thoughts However, some of the students could speak proficiently and answer the questions accurately despite being a beginner in English.

# 3.5.3 Language tests

Language tests will be another research method used in this research where the subjects will be watched closely as they complete tests after their sessions in either a CALL or a non- CALL environment. This method is used to collect data to determine the effectiveness of NETPLUS. Since the aim of this research is to know if the CALL program (NETPLUS) is effective for the second language learners, the subjects will work on computer for 7 days and the remaining 7 days on text books provided by the school which have the same content as the program. The subjects will only be observed for 14 days due to time constraint and external factors such as exams, public holidays and other activities by ELS.

There are two classes involved in this research which are Class 101A and Class 101B with 30 students in each class. Students in Class 101A are called Class A while students in Class 101B are called Class B. Both Classes 101A and 101B will work on the same lesson but only in different medium. When one class is working with the software NETPLUS, they are said to be in a CALL environment. Whereas if they are to work outside of the computer lab (without computers), they are said to be in a Non CALL environment. In a CALL environment, students work on the lesson given for the day using NETPLUS. They will read and answer questions posted on the screen of the

computer monitors. In a Non CALL environment, students work on books called "Reward". For instance, if students from 101A are working on lesson 1 in CALL environment with NETPLUS, class 101 B will also work on Lesson 1 in a Non CALL environment with textbook "Reward". Teachers are not present to assist students with their lessons in both environments; however, they are there to help if the students have problems with their computers or prints. Both classes will be doing the same lesson simultaneously and after each session, both classes will sit for a short test on what they have learnt. These classes will change roles according to the schedule given by the MML supervisor. The classes are required to do 7 lessons on CALL and 7 lessons in a Non CALL environment. This will continue for 14 days. After each session, regardless of the learning medium (computer or book), subjects will sit for an assessment where they will be tested on the grammar component learnt for that particular day. Their marks will then be recorded and their progress will be monitored carefully to see if there are any differences in scores when they work with two different mediums.

## 3.6 Research Process

Subjects for this research came from 2 different classes; 101 A (Class A) and 101 B (Class B). While Class A worked on computers, Class B worked outside of the lab using the core text "Reward" or notes from the "Reward" book. The NETPLUS program is extracted from the "Reward" books. Class A reads and does all the activities using the program NETPLUS in a CALL environment whilst Class B reads and does the activities from the book through a self learning method in a Non CALL environment. At the end of the lesson, Classes A and B will be given a short test on the lesson learnt and each test carries 20 marks. The tests only focuses on the lesson learnt for the day. Students were given 30 minutes to complete the test. (See 3.7 for details of the test) The scores of the test will be recorded.

The next day, the groups will change roles. Class A will now work on the books (Non CALL) and Class B on computers (CALL). The same procedure will be repeated for 14 days. Thus, each group will be working on the computers for 7 hours and books for 7 hours. The scores of the tests will be recorded daily to monitor the progress of the students while working on the computers or books. The tests were carefully designed to test students on the components learnt in each unit. For example, if Unit 1 focuses on Verb To Be, the students will be given a test pertaining to the lesson. Although, the study is only scheduled for 14 days, the researcher had prepared extra lessons for students who are absent on a particular day. However, during the 14 days, no students were absent and they co-operated well by attending all the lessons. Thus, the research could be carried out without any problems.

# **3.7** Data collection

There were several methods employed in this research to obtain concrete data for this research. The process of data collection began with Questionnaire 1 (see Appendix 2) which was given in the first week of the program to seek information on the students' background.

Then, for the period of fourteen days, students were given tests after their session in MML. Students who worked with the computers will sit for the same tests as the students who worked on books. The scores from the test were recorded and presented in tables shown in Chapter 4. Each test consists of 20 questions. The tests given were related to what students learnt in each unit. However, the students are mainly tested on the main targeted grammar of each unit. For example, if the unit teaches them preposition, the students will be given a test on the correct usage of preposition. The questions were in various forms such as rewriting sentences, filling in the blanks, matching and multiple choices. Students were given 30 minutes to do the test after their session in MML. There were 3 invigilators altogether including the researcher while the tests were conducted. Upon completion, the invigilators collected the test scripts and they were given to the researcher. The researcher marked the tests manually giving a score of 20 for each test. The answer key is provided by the "Reward" book from which the content of NETPLUS is taken from. The scores were recorded as data for the research. The researcher also prepared extra tests in the event of absenteeism. However, since ELS is very strict when it comes to attendance, rarely are students absent for classes. Therefore, the tests could be conducted everyday without any disturbance or interruption.

As soon as the tests are done, interviews were carried out to get views and ideas on the effectiveness of NETPLUS from two experienced teachers who work in the Multimedia Lab. To further strengthen the data, ten students were selected randomly to be interviewed. This is done to seek personal opinions on the usage of NETPLUS.

Lastly, a set of questionnaires was administered at the end of the study to obtain answers on motivation and students' attitude towards NETPLUS. (see Appendix 3)

## 3.8 Data Analysis

The data obtained through the observation is tabulated and presented in graphs to give readers a better picture of the research. Scores from the tests taken in CALL environment and Non CALL environment were recorded and tabulated. Then, they were compared and studied to see how students performed in two different environments. Two sets of questionnaires were also given to the subjects of this study. The responses are carefully analyzed and presented in pie charts in Chapter 4.

# 3.9 Conclusion

As a conclusion, this chapter tells us how the data has been collected for the research. Thus, this is a very important chapter which enables the readers to understand the process of the research and the collection of data. The data collected through the interviews, questionnaires and observation is presented in the next chapter.