# **Chapter Three: Research Methodology**

#### 3.0: Overview

This chapter discusses the process of collecting data for exploring the factors that influence both proficient and less proficient EFL learners' in their choice of learning strategies in this English Language Centre. It describes the participants of the study, research design, and moves on to the research instruments used in this study. Finally, the procedures used in collecting the data are presented.

## 3.1: Participants

Thirty students were selected from the Intermediate Level or Level 4. This was because this level had the largest number of students in this language centre. In addition, the participants had sufficient knowledge of the English language, because at the Intermediate Level, the participants were well-versed in various language expressions, academic writings and presentation skills. The participants, therefore, were prepared to combine language proficiency with academic skills to successfully pursue their college education. Furthermore, these participants were chosen, because those in the lower levels (Pre-Intermediate and below) did not have enough proficiency to participate in this study.

The participants were enrolled in a four-week Intensive English Programme or in short, IEP at the English Language Centre of the Asia Pacific Institute of Information Technology (APIIT). Table 3.1.1 describes the general background information of the thirty participants.

<u>Table 3.1.1: General Background Information of Thirty Participants</u>

Number of Participants	Country	Age	Gender	Highest Education Qualification
1	Yemen	21	M	Secondary
2	Yemen	19	M	O Level
3	China	18	M	Senior Middle School
4	China	22	M	Secondary
5	Yemen	20	M	Secondary
6	Iran	28	M	Secondary
7	China	20	F	Senior Middle School
8	China	21	F	Senior Middle School
9	Iran	29	M	High School
10	Iran	19	M	Secondary
11	Iran	23	M	Secondary
12	China	19	F	Senior Middle School
13	China	19	F	High School
14	Iran	20	M	Secondary
15	Iran	19	M	Secondary
16	Sudan	19	M	O Level
17	Yemen	23	M	O Level
18	Yemen	20	M	O Level
19	Libya	37	F	Degree in Science
20	Yemen	20	M	Secondary
21	Sudan	18	M	O Level
22	Yemen	19	M	O Level
23	Iran	26	M	Secondary

Table 3.1.1 (continued)

Number of	Country	Age	Gender	Highest
<b>Participants</b>				Education
				Qualification
24	China	18	F	Senior Middle
				School
25	China	20	M	Senior Middle
				School
26	China	19	M	Secondary
27	China	19	F	Secondary
28	China	18	F	Senior Middle
				School
29	Yemen	20	M	Secondary
30	Iran	29	F	Degree

The background of the participants varied in terms of nationality, age, gender, and education level. The age of the participants was between 18 and 37. The total enrolment for Level Four for this intake was 32 students who came from different countries like Yemen, China, Iran, Sudan, and Libya. Only thirty students were chosen to participate in this research as two of them withdrew from the intensive course.

Out of the thirty students, nine were females whose ages ranged from 18 to 37. Most of the female participants had a secondary high school or O Level qualification, except for two whose highest qualifications were at degree level. On the other hand, male participants dominated in this study. The youngest male participant was only 18 years old while the oldest was 29. All the male participants had high school or O Level qualifications. All the participants studied at least one month in the IEP programme as they started at different starting points based on their language ability in the competency or placement tests. The

background of the programme is discussed in Section 3.2.

# **3.2:** Background of the Intensive English Programme (IEP)

IEP is structured into seven levels: Level Starter (Ab initio), Level One (Basic), Level Two (Elementary), Level Three (Pre-Intermediate), Level Four (Intermediate), Level Five (Upper Intermediate) and Level Six (Advanced). Students are placed in one of these seven levels based on the results obtained in the English Competency Test or Placement Test. Students are exposed to four skills; reading, writing, listening, and speaking. The grammar embedded in the instruction of the four skills enables students to transfer their grammar knowledge to their own language skills immediately during the lessons. The structure of the IEP language programme is shown in Figure 3.2.1.

Figure 3.2.1: The IEP of APIIT

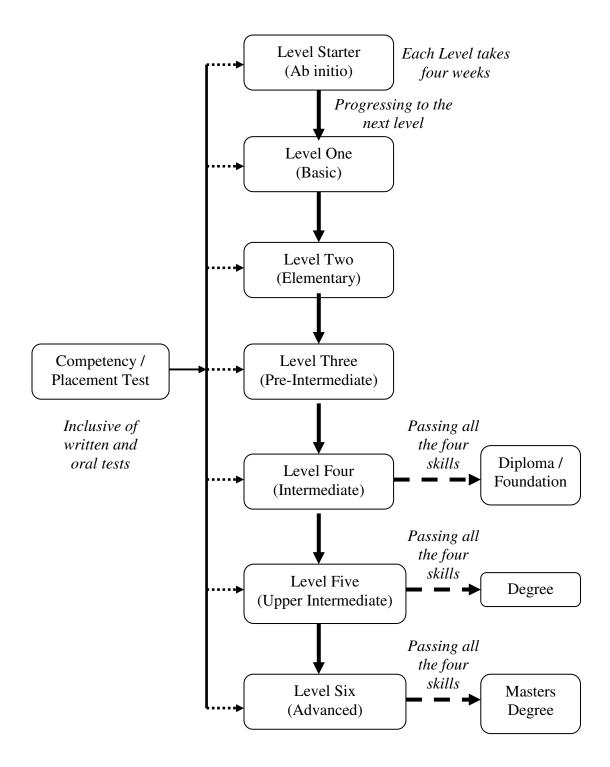


Figure 3.2.1 shows the structure of IEP of APIIT. It stresses that it is compulsory for students to sit for a Competency or Placement Test if they do not obtain sufficient scores set by APIIT. The medium of instruction for all programmes at this institution is English; thus, students need to provide certified proof of their competency in English, particularly if the medium of instruction in their previous education institute had not been in English. Students who fall short of meeting the English Proficiency Competency Test requirements are required to attend the IEP programme to upgrade their skills to the required level before starting the programme of study in the main stream. The Competency Test comprises reading comprehension, essay writing and oral test.

Besides the Competency Test, Figure 3.2.1 also indicates Level Starter and Beginner Level. At these levels, students learn to comprehend English for simple daily life activities. Elementary and Pre-Intermediate levels emphasise on combining language skills and grammar knowledge acquired from the previous levels. Intermediate, Upper Intermediate and Advanced levels introduce study skills, academic writing skills, research skills and presentation skills to students pursuing college education.

In the four-week programme, each module covers about four to six hours per week. Students also spend about four hours per week on Online English Learning. The Online English Learning is an interactive programme that functions as a self-study version and it requires students to have access to the Internet. In

short, the students spend about 100 hours for the entire four-week programme.

Students who pass all four skills at Level Starter are allowed to progress to Beginner Level (Level One) and subsequently to the following levels. Students who pass the Intermediate Level are allowed to progress to Diploma or Foundation Level. On the other hand, students who fail are not allowed to progress further. They are given a chance re-sit their failed modules. If they fail again, the students will have to repeat the failed modules in that particular level until they pass that level before advancing to the main stream programme.

The researcher's choice of participants was based on accessibility and convenience. Accessibility to information on the participants' background information is quite confidential; thus, the researcher decided to seek permission from the centre to obtain basic information like their age and education profile. Finally, the information on the participants is collated and utilised based on the research design, which is discussed in Section 3.3.

## 3.3: Research Design

As Creswell (2003) commented, researchers have a freedom to select the best methods, techniques and procedures that best explain their objectives and needs of their research. Having reviewed the methods of research design on language learning strategies thoroughly, two mixed modes of data collection were decided – quantitative and qualitative methods, which had been used to produce a complete picture of the factors that influenced the participants in choosing their language learning strategies. Firstly, quantitative data were collected to obtain an overall picture of the frequency of usage of learning strategies by 30 participants. Then, a qualitative method was designed to obtain a greater insight into the different language learning strategies employed by eight proficient and eight less proficient EFL learners. Each design is discussed in Sections 3.3.1 and 3.3.2 respectively.

### 3.3.1: Quantitative Method

A quantitative method is used to find out the frequency of language learning strategies used by EFL learners through SILL questionnaires and also to determine the proficiency levels of participants through ongoing assessments. Therefore, descriptive statistics in the form of frequency and percentage are used to describe the level of usage of learning strategies (high, medium or low), and in the form of percentages to determine the scores gained by proficient and less proficient learners. In other words, collecting standardised information from

groups of participants through quantitative methods (fixed design) is appropriate with "what" research questions (Robson, 2002).

### 3.3.2: Qualitative Method

The qualitative method aims to further examine how other variables had a bearing on the achievement of the proficient and less proficient learners. In line with that, eight proficient and eight less proficient learners have been pre-selected to undergo the semi-structured interview. The purpose of the semi-structured interview is to find out in detail what made those sixteen participants adopt differing learning strategies. Studying all these factors will give the researcher an opportunity to gain a comprehensive understanding of the various factors that affect a learner's choice. Hence, qualitative methods are suitable with "how", "why", and "in what situation" research questions. The flexible design is used to develop detailed and intensive knowledge of a small number of related cases (Robson, 2002). The research instruments used for the two mixed methods are discussed in Section 3.4.

### 3.4: Research Instruments

The research instruments used were the SILL questionnaires and the semistructured interview. The description of each instrument is discussed in Sections 3.4.1. and 3.4.2.

### 3.4.1: SILL Questionnaire

Oxford's Strategy Inventory for Language Learning (SILL) has been used for language learning research (refer to Appendix 1). SILL has been used extensively by researchers around the world as the tool to indicate high validity, reliability and utility (Oxford & Burry-Stock, 1995; Wharton, 2000; Kaur, 2003; Rajak, 2004). Wharton (2000) reported that university students who regarded their proficiency as "good" and "fair" employed SILL strategies more often than those who were rated as "weak". In addition, in P. Kaur's study (2003), SILL was used to assess the frequency in which ESL learners employed learning strategies and also as a guide to frame the questions that were used in the interviews. It is also the tool adopted consistently by learners (Hsiao & Oxford, 2002). In the local context, Hashim and Syed Shahil (1994) used SILL to study the learning strategies of ESL students.

In this study, the Strategy Inventory for Language Learning (SILL), version 7.0 (Oxford, 1990) is utilised to obtain scores for the type of learning strategy employed. SILL is a self-scoring survey for students of English as a second or foreign language. Students will have to answer 50-item questions on their language-strategies based on a five-point Likert scale ranging from "never or almost never true" to "always, or almost always true". This questionnaire comprises six categories:

- a) memory strategy for storing and retrieving new information;
- b) cognitive strategy for manipulating and transforming learning materials;
- c) compensation strategy for overcoming insufficient knowledge in that language;
- d) metacognitive strategy for directing the learning process;
- e) affective strategy for regulating emotions; and finally
- f) social strategy for increasing learning experience with other people.

The structure is based on Oxford's classification system, whereby strategies are divided into two groups: direct and indirect strategies. The findings from the SILL questionnaire were analysed using the SILL analysing sheet (Version 7.0 – ESL-EFL) to identify the frequency of the strategies used. For this study, an average score for each strategy used by an individual learner was calculated, and the results from the questionnaires tabulated to match with the findings of the semi-structured interviews. Based on the average score for each group, the EFL learners are categorised as high, medium, and low level users of

strategies. To compute the average score for each group, the scores based on the responses for each statement in the group are summed up and the total is divided by the number of statements in that group. Categorisation of EFL learners into their learning strategies is shown in Table 3.4.1 (a).

Table 3.4.1 (a): Categorisation of EFL Learners According to their Strategies

Level of Use	Frequency of Use	Average Score
High	Always or almost always	4.5 to 5.0
	used	3.5 to 4.4
	Usually used	
Medium	Sometimes used	2.5 to 3.4
Low	Generally not used	1.5 to 2.4
	Never or almost never used	1.0 to 1.4

(Oxford, 1990)

The categorisation of the average scores for language learning strategies in Table 3.4.1 (a) is taken from Rebecca Oxford's *Language Learning Strategies:* what every teacher should know.

The average scores obtained from an analysis of the questionnaires were presented in six sections based on the individual strategies stated in the SILL. An example of SILL Students' Profiles is shown in Table 3.4.1 (b).

Table 3.4.1 (b): An Example of SILL Students' Profiles

Students	Memory	Cognitive	Compensatory	Meta-	Affective	Social
				cognitive		
1	1.78	2.57	4.17	3.11	2.17	3
2	2.44	3.93	4.5	3.89	2.83	4.67
3	2	3.5	3.17	3.11	3.33	4
4	2.67	3.07	2.83	2.56	3.83	4
5	4.22	3.93	4.5	4.67	4	4
6	3	3.29	2.67	3.45	2.33	4.33
7	3.78	4.36	4.17	4.67	3.33	4.33
8	3.44	3.43	3.17	4	3.67	4.17
9	3.45	4.57	3.83	4.33	4	4.5
10	2.78	3.21	3.5	3.33	2	2.67

The total average scores were compared and discussed thoroughly to identify the most and least use of strategies by all the 30 participants in Table 3.4.1 (c): The Total Average Scores of Frequency of Use.

Table 3.4.1 (c): The Total Average Scores of Frequency of Use

Average Level	Strategy	Points
High	Social Strategies	3.95
(Usually used 3.5 to 4.4)	Metacognitive Strategies	3.71
	Compensatory Strategies	3.61
	Cognitive Strategies	3.60
Medium	Affective Strategies	3.30
(Sometimes used, 2.5 to 3.4)	Memory Strategies	3.06

As it is shown in Table 3.4.1 (c), social strategies were the most frequently used language learning strategy by the participants, followed by other strategies: metacognitive strategies, compensatory strategies and cognitive strategies. However, affective strategies and memory strategies were not so frequently employed by the participants. Besides the SILL questionnaires, the semi-structured interview was also used as another research instrument to find out the

factors that influenced the selected sixteen participants in choosing the language learning strategies. The description of the semi-structured interview is discussed in Section 3.4.2.

#### 3.4.2: Semi-structured Interview

The advantage of the semi-structured interview is that the researcher will be able to discover the participants' methods of learning the language in detail. According to Wenden (1998), a good way of collecting information on how the participants go about a learning task and helping them become aware of their own strategies is to have them report what they are thinking, and when they are using those learning strategies. The interview sessions allow the participants to report as well as for the researcher to get an idea of the factors that affect these EFL learners in choosing their strategies.

Kaur (2003) made use of the semi-structured interview as part of the qualitative methods in her study. In her study, Kaur prodded the students to further clarify their ideas and ascertain what they meant in choosing the language learning strategies. Hence, the semi-structured interview is an appropriate tool for the researcher to ensure the participants provide relevant answers to the SILL questions. It also allows the participants to give their views and reasons on why they select a particular learning strategy. (Refer to Appendix 2).

Purposive sampling procedure was used to select eight proficient and eight less proficient learners for the semi-structured interview. Selecting a small number was appropriate because it was easier for the researcher to focus on the details, and gain access to the participants.

The interview session was carried out on a one-to-one basis. The duration of this interview ranged from 45 to 60 minutes. During the session, both tape-recording and note-taking were used to ensure information given by the participants was not omitted. Tape-recording enabled the researcher to re-analyse the data after the event. Note-taking helped to detect central issues and recorded various contexts. The interview was transcribed later.

Before the interview sessions were conducted, the participants' proficiency levels were obtained from their ongoing assessment scores. The scores are discussed in Section 3.5.

## 3.5: Ongoing Assessments

As mentioned earlier, out of thirty students, sixteen were selected for the semi-structured interviews. The participants were selected based on the results of the scores: 49 percent and below for less proficient learners and 70 percent and above for proficient learners. The grading system of the institution stipulated that students who score 49 percent and below are considered unsuccessful, while others who score between 50 percent and 59 percent are regarded to have succeeded (Pass). This is followed by Credit (60 percent to 79 percent) and Distinction (80 percent to 100 percent). In brief, the grading system of the institution is stated in Table 3.5.1 (a).

Table 3.5.1 (a): Grading System of the English Language Centre in APIIT

Range Scores	Grading System	
80 % to 100 %	Distinction	
60 % to 79 %	Credit	
50 % to 59 %	Pass	
49 % & below	Fail	

The purpose of using the scores from the ongoing assessments is to determine the proficiency level of both the proficient and less proficient groups after they had attended five lessons. From lessons one to five, the participants had to demonstrate how far they had grasped the key concepts of each language skill. The items in these assessments were designed according to the lesson objectives of each skill. All language skills were tested in the ongoing assessments: reading, writing, listening and speaking. Marks obtained in each skill were calculated in percentages. These tests were conducted by their own respective module teachers

in the class.

Based on the results of proficiency tests, the subjects were divided into two groups: high proficiency group (ranging from 70% and above) and low proficiency group (ranging from 55% and below). Eight subjects were selected from each proficient and less proficient group to sit for the semi-structured interview sessions.

Table 3.5.1 (b): Average Scores of Proficient Learners' Ongoing Assessments

Sample No.	Reading (%)	Writing (%)	Listening (%)	Speaking (%)	Subject Total	Average Score (%)
1	75	60	70	80	285	71.25
2	65	73	74	87	299	74.75
3	73	78	45	83	279	69.75
4	60	62	82	80	284	71
5	73	71	53	80	277	69.25
6	80	64	70	84	298	74.5
7	87	65	73	75	300	75
8	86	68	90	75	319	79.95

Based on the Table 3.5.1 (b), six out of eight proficient learners scored 80 percent and above for the speaking assessment. In this speaking assessment, the learners were required to present an individual presentation of a local product from their own respective countries. The learners scored between 60 percent and 78 percent for writing assessment. In this writing assessment, the proficient learners were assessed on writing compare-and-contrast essays. Majority of these proficient learners scored more than 60 percent for each respective language skill

assessment, except for two samples. Sample three obtained 45 percent and sample 5 obtained 53 percent for listening assessment. The following Table 3.5.1 (c) showed the average scores of less proficient learners' ongoing assessments.

Table 3.5.1 (c): Average Scores of Less Proficient Learners' Ongoing

<u>Assessments</u>

Sample No.	Reading (%)	Writing (%)	Listening (%)	Speaking (%)	Subject Total	Average Score (%)
1	70	44	43	58	215	53.75
2	50	34	40	61	185	46.25
3	50	36	53	60	199	49.75
4	43	33	32	87	195	48.75
5	57	44	50	70	221	55.25
6	33	53	27	67	180	45
7	70	56	18	75	219	54.75
8	43	53	40	80	216	54

Among the four language skills, the listening skill was the weakest language skill for this group of less proficient learners. Out of eight samples, two samples passed the listening assessment with the scores of 50 percent and 53 percent. This was followed by the writing skill which was the second weakest language skill, with only three passes: 53 percent for two samples and 56 percent for sample seven. From the scores above, it was shown that the speaking skill had the highest passing rates with two samples obtaining 80 percent and above. Therefore, it showed that these less proficient learners were doing quite well in their speaking assessment compared to the other three language skills.

Based on the proficiency scores, both proficient and less proficient learners were further questioned on their selection of language learning strategies in attempting their language learning tasks. The collected data from the interview was further explained and it was compared with previous studies in order to find out whether this current research was consistent or inconsistent with the previous findings. This finding could be found in the following sections of 4.3.1 and 4.3.2 respectively.

#### 3.6: Data Collection

The data was collected by the researcher for four months: from April to August 2009. After seeking approval from the head of the centre for allowing Intermediate students to participate in the study, the researcher fixed the time with the students. The researcher went to each English class (two groups of Level Four) to hand out the SILL. Participants were told that the questionnaire contained questions about their use of English learning strategies. They were given directions how to use it. The participants were encouraged to seek any clarification that might arise. They were assured that only the researcher would have access to their responses. Their names would not be used in reporting the results. A consent letter was also given to the participants to confirm their participation in this study. (Refer to Appendix 3).

Most of the students had no difficulty in understanding the questionnaire except for the less proficient ones who needed extra guidance while answering the SILL questions. The less proficient learners had difficulty in understanding some items such as "remember a new English word by making a mental picture of a situation," "use flashcards", and "use rhymes to remember a new English word". The researcher explained those statements by giving some examples. The administration of SILL took 30 minutes for each class to answer the list of questions. The data collection procedure is explained in the Figure 3.6.1.

Figure 3.6.1: Data Collection Procedure

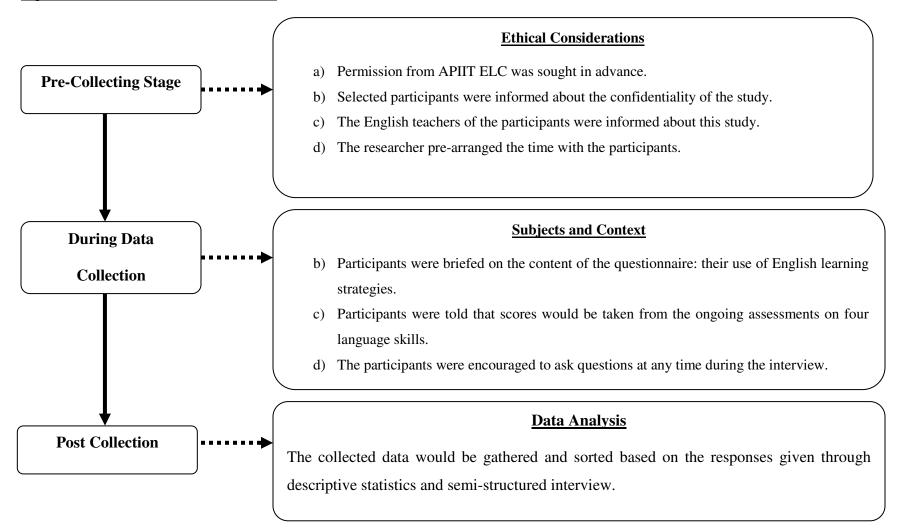


Figure 3.6.1 summarises how the data was collected by the researcher. There were three stages of collecting the data. The first stage was called the precollecting stage. At this stage, the researcher ensured the participants that ethical issues were taken into account. Firstly, permission was sought from the head of the English Language Centre (ELC), because it was important to gain her support so that the researcher would be granted enough time to carry out the tasks. An official permission letter was issued by the Faculty of Languages and Linguistics of University Malaya to support this activity of the researcher. The letter was given to the Head of APIIT ELC as a reference. (Refer to Appendix 4).

After seeking permission from the head, the participants were notified about the confidentiality of the study. In addition, the names of the participants would not be revealed in this study. Participants were also ensured that the study would not affect their examination scores or grades. The English teachers of this centre were also informed about this survey. The researcher then arranged with the participants for a suitable time to attend the sessions.

The second phase started with data collection. Participants were briefed on the purpose of the study, the duration, and the content of the questionnaires. During this period, participants were encouraged to pose questions on any matter that they did not understand. They were also told that there were no right or wrong answers in the questionnaire. After answering the questionnaire, the study

group was also informed that the scores would be taken from the ongoing assessments on four language skills. The selected participants were encouraged to ask questions at any time during the interview sessions.

The final stage was post collection. At this level, descriptive statistics were used to analyse quantitative data. The average scores for language learning strategies used by both proficient and less proficient learners were tabulated. The researcher also explained the answers given by the sixteen participants during the interview sessions. Comparisons between proficient and less proficient learners are explained in the next chapter.

# 3.7: Triangulation

Triangulation was used to indicate two methods in this study with a view to confirm, cross-validate or corroborate findings within a single study (Creswell, 2003). In general, this approach uses separate quantitative and qualitative method to offset the flaws produced within one method with the strengths of the other method. Creswell (2003) also argues that this strategy usually incorporates the findings of the two methods during the interpretation phrase. This interpretation can either explain any lack of convergence that may result or strengthen the findings.

SILL questionnaire was employed to find out the frequency of use of language learning strategies by the learners. Through the questionnaire, the average score was obtained to determine the most frequent, medium and less frequently used. Analysing the average score was insufficient to explore other possible variables that might influence their choice of learning strategies. Thus, semi-structured interview was included to scrutinise the factors in details. Chuo and Yen (2005) also adopted triangulation strategy in their study. Their primary sources of data were collected through individual semi-structured interviews. SILL questionnaire was employed as a secondary source for cross-validation. Triangulation strategy was popularly used in studying learners' belief (Li, 2004). According to Li (2004), interviews were used for the objective of allowing Chinese EFL learners to explain their aspects of beliefs which were not addressed in the questionnaires.

### 3.8: Conclusion

To sum up, the research methodology is basically designed to cover the process of collecting data in this study. The method mainly discussed how the participants were selected for this study, the research instruments used, how the information was collected, sorted into categories and interpreted together with the findings from the interview sessions. The findings would provide answers to the research questions. The next chapter will focus on data analysis and findings from the participants.