#### **CHAPTER 3**

#### **METHODOLOGY**

## 3.0 Introduction

This chapter will provide a description of the research design. It will first start with a description of the theoretical approach in which three instruments used in the study will be described. Then, it will be followed by the description of the school and the subjects selected for the study. The discussion will continue with the instrumentation used and the pilot study. Finally, the procedures involved in the data analysis will be presented.

#### 3.1 Theoretical Framework

It is the purpose of this study to identify male and female students' perceptual learning style preferences and strategies and whether there are any similarities or differences from the findings based on gender differences. To be able to carry out the objectives, three sets of questionnaires were used in a survey manner. Subjects were asked to answer all the questionnaires in a seating to ensure validity.

The first questionnaire was the student's background questionnaire. The items in this questionnaire were built to obtain students' background and their perceptions towards learning English language. It is a short single page questionnaire which also works as 'ice-breaker' to the whole survey.

The second questionnaire is Reid's (1987) Perceptual Learning Style Preference (PLSP) questionnaire which is used to identify students' learning style preferences in a classroom setting. Reid (1987) developed this questionnaire and carried out a study to identify Malay students' learning style preferences studying in America. Several factors, which include gender, were found to influence a student's learning style preference. Study by Rossi-Le (1989) and Reid (1987) have also found that personal differences in the subjects such as gender can have an effect on the learning styles of the students.

As explained in the previous chapter, based on gender differences, this study will identify secondary students' learning style preferences using Reid's (1987) Perceptual Learning Style Preferences questionnaire.

Based on the findings, the subjects will be made aware of their learning style preference according to which category their learning style fall, either major, minor or negligible category. Their score will determine the learning style they prefer.

The third questionnaire is based on Oxford's (1990) Strategy Inventory for Language Learning (SILL) which is used to identify the students' preferences on learning strategies. The first SILL was developed by Oxford in 1986 and was used in a study at the U.S. Foreign Service Institute and later simplified in 1990 to determine learning strategies in ESL. It has since been used widely by many researchers to identify students' learning strategies.

This self-scoring questionnaire will determine whether the student's learning strategy fall under high, medium or low level use. High level user means the student is much likely to use the strategy more often than the other strategies in learning the language.

In this study, students from a school in, Puchong, Selangor were chosen to be the subjects. Form 2 students of the schools were selected because the researcher feels that at this year, the form two students are now familiar with the secondary syllabus. They have passed the introduction stage which was when they were in form one - the year they entered the new world of the secondary school after completing their primary school. This year is also the crucial year where they would learn almost the entire topics of the whole lower secondary syllabus because when they reach the Form Three, they are going to sit for the Lower Secondary public examination which is *Penilaian Menengah Rendah* (PMR), before the year ends. Therefore, they are seen to be the best subjects for this survey.

The researcher also feels that when the students discovered their own learning styles and strategies in acquiring the language at this very young age, they would be able to use suitable and the best learning strategies in order to master the language at no time. The findings too, would help the teachers enhance their teaching skills and stimuli which would benefit the students.

## 3.2 Study Site

The school, founded in 1984, for the purpose of confidentiality, the school will be referred to as School A. School A is a non-residential secondary school and is situated in the heart of Puchong. This school is considered as a rural school based on the original number of population which did not reach the urban status. However, the school is being considered to be changed to become an urban school since the population has grown tremendously over the past few years. The school has about eighty teachers and a student population of approximately 1,300 students. The school consists of Form 1 to Pre-University (Form 6) students. The students reside in and around Puchong Jaya, Taman Mawar and Batu Lapan residential areas within the vicinity.

## 3.3 Profile of Subjects

The subjects of this research consist of 90 students who were in Form 2 secondary school students from School A. Students from three different classes of the same secondary school were selected based on their grades obtained in the English proficiency class. They are the good students of 2 A, the average students of 2 B and weak students of 2C. Table 3.1 shows the composition of the students.

Table 3.1: Subjects of the Study

Level of Proficiency	Class	Male Students	Female Students	Total
Excellent	2 A	15	15	30
Average	2 B	15	15	30
Poor	2 C	15	15	30
Total		45 (50%)	45 (50%)	90 (100%)

The student sampling is selected to allow a comparison to be made with the objective of finding out whether there would be any difference in their perceptual learning styles and strategies used in the classroom between the male and female students

## 3.4 Instrumentation

Three sets of questionnaires were used in this study. Student's background questionnaire, Reid's (1987) Perceptual Learning Style Preference (PLSP) questionnaire and the Oxford's (1990) Strategy Inventory for Language Learning (SILL) were used in order to carry out the objectives of this study. The following sections describe all the questionnaires.

## 3.4.1 Questionnaire 1: Profile and Perception towards Learning English

The first questionnaire was developed to obtain student's background and their perception towards learning English language. First, subjects need to indicate their gender and class details. There are only 2 questions and all items are close-ended questions. For the first item the subjects need to rate the importance of each skill to them as a student. The last item asks them whether they enjoy learning English in school. This short questionnaire works as 'ice-breaker' to the whole survey (see Appendix A).

## 3.4.2 Questionnaire 2: The Perceptual Learning Styles Preference (PLSP)

The preferences on the learning style of the subjects were measured using the Perceptual Learning Style Preference (PLSP) questionnaire (see Appendix B) which was developed by Reid (1987). This instrument was chosen for this study as it encompasses both sensory and sociological learning style preference.

There are several reasons behind choosing this instrument; it is easy to administer, it is easy to interpret, it is self-scoring, and not scored by an external agent, it is relatively quick to administer and complete, it has easily reportable scales, and it has reliability and validity supported by past research.

The questionnaire consists of 30 statements pertaining to the six learning styles, which are, Visual, Auditory, Kinaesthetic, Tactile, Group and Individual learning. There are five statements in each of these six learning styles. These statements have been arranged randomly in the questionnaire. The response for each statement is measured using a five-point Likert scale ranging from 5 for "strongly agree", 4 for "agree", 3 for "undecided", 2 for "disagree" and 1 for "strongly disagree". For each statement in the questionnaire, the students were requested to respond by ticking in the appropriate box. Each box has a certain numerical value attached to it. Each learning style preference has its own set of statement.

**Table 3.2: Answering Questionnaire 2** 

NO	SA (5)	A (4)	U (3)	D (2)	<b>SD</b> (1)
	V				

Table 3.2 below is an example on how the respondent should answer.

As this set of questionnaire is a self-scoring, at the end of the questionnaire, the respondent is required to submit their names for the researcher to counter check the personal scoring. This questionnaire is provided with the method for calculating the score for each of the learning style preferences (Reid, 1987). In order to obtain the score for each learning style, the respondent needs add all the score from each answer from the statements which come under the same category. Then, the total score from the same category should be multiplied by 2. For example, to obtain score for visual learning style, the respondent added the scores for statements 6, 10, 12, 24 and 29 and then multiplied the total by 2. The subjects need to do the same procedure to get the score for all the learning style categories. For example, if the respondent answered 'Strongly Agree (SA)' for question 6 (a visual question), he should write a number 5 (SA) on the blank next to the question below. Table 3.3 shows an example of how a respondent should write the scoring.

**Table 3.3: Scoring for a Learning Style** 

QUESTION	SCORE
6	5 (SA)

The scores obtained by the subjects enabled them to determine whether they belonged to major, minor or negligible categories of learning style preference. If the score for a particular learning style preference was between 38 and 50, the respondent were said to have a major learning style preference. If the score fell between 25 and 37, the respondent were said to have a minor learning style preference. Scores between 0 - 24 indicate the respondent has a negligible style preference. (See Appendix B1 and B2)

#### 3.4.2 Questionnaire 3: Strategy Inventory for Language Learning (SILL)

This questionnaire consists of an inventory of 50 items with simplified language for students was used in this study (Oxford, 1990)

The SILL was originally devised by Oxford (1986) for use in the Language Skill Change Project of the US Army Research Institute for the Behavioural and Social Sciences. The questionnaire was later revised with simplified language for ESL students (Reid, 1990).

The SILL was chosen because it has been specifically designed for assessing second language learning strategies. It provides a comprehensive inventory of strategies derived from previous research and unlike other instruments, it has been systematically validated in a variety of settings. The SILL is a self-reporting instrument which is accompanied with notes and tables to enable the subjects to identify his or her learning strategies. The strategies are categorized into six groups (A-E).

The six groups of strategies and questions are below listed in the inventory are:

- A. Remembering more effectively (Memory)
- 1. I think of relationships between what I already know and new things I learn in English.
- 2. I use new English words in a sentence so I can remember them.
- 3. I connect the sound of a new English word and an image or picture of the word to help me remember the word.
- 4. I remember new word by making a mental picture of a situation in which the word might be used.

- 5. I use rhyme to remember new English word.
- 6. I use flash cards to remember new English word.
- 7. I physically act out new words.
- 8. I often review English lesson.
- 9. I remember new English words or phrases by remembering their location on the page on the board or on a street sign.
- B. Using all your mental processes (Cognitive),
- 1. I say or write new English words several times.
- 2. I try to talk like native speakers.
- 3. I practice the sounds of English.
- 4. I use the English words in different ways.
- 5. I start conversation in English.
- I watch English Language TV shows spoken in English or go to movies spoken in English.
- 7. I read for pleasure in English.
- 8. I write notes, messages, letter, reports in English.
- 9. I first skim an English passage (read over the passage quickly) then go back and read carefully.
- 10. I look for words in my own language that are similar to new words in English.
- 11. I try to find patterns in English.
- 12. I find the meaning of an English word by dividing it into pars in English.
- 13. I try not to translate word for word.
- 14. I make summaries of information that I hear or read in English.

- C. Compensating for missing words (Compensatory),
- 1. I say or write new English words several times.
- 2. I try to talk like native speakers.
- 3. I practice the sounds of English.
- 4. I use the English words in different ways.
- 5. I start conversation in English.
- 6. I watch English Language TV shows spoken in English or go to movies spoken in English.
- 7. I read for pleasure in English.
- 8. I write notes, messages, letter, reports in English.
- 9. I first skim an English passage (read over the passage quickly) then go back and read carefully.
- 10. I look for words in my own language that are similar to new words in English.
- 11. I try to find patterns in English.
- 12. I find the meaning of an English word by dividing it into pars in English.
- 13. I try not to translate word for word.
- 14. I make summaries of information that I hear or read in English.
- D. Organizing and evaluating knowledge (Metacognitive),
- 1. I try to find as many ways as I can to use my English.
- 2. I notice my English mistakes and use that information to help me do better.
- 3. I pay attention when someone is speaking English.
- 4. I try to find out how to be a better learner of English.
- 5. I plan my schedules so that I will have enough time to study English.
- 6. I look for people I can talk in English.

- 7. I look for opportunities to read as much as possible in English.
- 8. I have clear goals for improving my English skills.
- 9. I think about my progress in learning English.
- E. Managing emotions (Affective), and
- 1. I try to relax whenever I feel afraid of using English.
- 2. I encourage myself to speak English even when I am afraid.
- 3. I give myself a reward or treat when I do well in English.
- 4. I notice if I am tense or nervous when I am studying or using English.
- 5. I write down my feelings in a language learning diary.
- 6. I talk to someone else about how I feel when I am learning English.
- F. Learning with others (Social).
- 1. If I do not understand something in English, I ask other people to slow down or to say it again.
- 2. I ask English speakers to correct me when I talk.
- 3. I practice English with other students.
- 4. I ask for help from English speakers.
- 5. I ask questions in English.
- 6. I try to learn about the culture of English speakers.

The overall purpose of the SILL is to assess the frequency with which second language learners use various strategies (Oxford, 1989). Based on the average score for each group, the learners are categorized as high, medium or low level users of the strategies. To compute the average score for each group, the score associated with the responses for each

of the statements in the group is totalled and then the total is divided by the number of statements in that group. For example, to get the score for Compensation strategy, the respondent needs to add all the score and later divide the total score with 6, for there are 6 statements under the strategy. Categorization of these learners into their learning strategies is shown in Table 3.3.

**Table 3.4: Categorization of Learners According to Their Learning Strategies** 

LEVEL OF USE	FREQUENCY OF USE	AVERAGE SCORE
	Always or almost always used	4.5 to 5.0
HIGH	Usually used	3.5 to 4.4
MEDIUM	Sometimes used	2.5 to 3.4
	Generally not used	1.5 to 2.4
LOW	Never or almost never used	1.0 to 1.4

(Source: Oxford's Strategy Inventory for Language Learning (SILL), 1990)

## 3.5 Pilot Test

A pilot test was conducted involving 10 subjects drawn from the same population of sample of the study of the same school who were not selected to be the subjects of the actual study. This class consisted of students who obtained grades A, B, and C for English in their examination results. Thus, the researcher felt that they could be used in this pilot test as they comprise the good and the average students in the class. The subjects were requested to seek clarification for any of the questionnaire items that were unclear. This was done to check the level of difficulty and ambiguity of the questions.

After getting the feedback from subjects in the pilot study, a few adjustments were made in order to make sure that the findings would answer the research questions posed earlier.

#### 3.6 Procedures of Data Collection

Following the procedure for an academic exercise using school children, the researcher first had to obtain approval from various government departments in the following order.

- The Educational Planning and Research Division, Ministry of Education.
- 2. The Selangor State Education Department. (SMK Batu Lapan is under its jurisdiction)
- 3. The Principal of SMK Batu Lapan, Puchong, Selangor.

Once permission was granted from the school Principal, the details were worked out so that there would be minimal inconvenience and interruption of lesson time for the students participating in the survey.

## 3.6.1 Administering the Questionnaires

90 students were seated in a small hall. The students were told that they had to answer three questionnaires pertaining to the objectives of the survey. The researcher first explained the purpose of the survey and later explained briefly the statements contained in all questionnaires accordingly to ensure that they could understand the items and able to answer them in the questionnaires. The whole process of administering the questionnaires took approximately 2 hours. The sequence of administering the questionnaires is shown in Table 3.5.

**Table 3.5: Sequence of Administering the Questionnaires** 

No.	Length of		
	Time	Details	
	(minutes)		
1	5	Introduction – explanation to the purpose of survey	
2	5	Distribute Questionnaire 1 and give explanation on how to answer	
3	10	Administer Questionnaire 1	
4	5	Collect Questionnaire 1 and distribute Questionnaire 2	
5	10	Explain terms and scoring of Questionnaire 2	
6	30	Administer Questionnaire 2	
7	5	Collect Questionnaire 2 and distribute Questionnaire 3	
8	10	Explain terms and scoring of Questionnaire 3	
9	30	Administer Questionnaire 3	
10	5	Collect Questionnaire 3	

With an aide of three teachers, who were supposed to have their lessons with 2A, 2B and 2C classes at the time the survey was conducted, Questionnaire 1 was distributed to all the subjects. The subjects were told how to answer the items. After they were given about 10 minutes to answer, the questionnaire was later collected.

Questionnaire 2, The Perceptual Learning Style Preference (PLSP) questionnaire was the next one distributed to the students. The researcher explained briefly the meanings of each statement in the questionnaire and how to answer them. The subjects were also explained on how to count their scores as this was a self-scoring questionnaire. They were given about 30 minutes to answer and calculate their scoring.

The final questionnaire, the Strategy Inventory for Language Learning (SILL), was distributed to the subjects after Questionnaire 2 was collected. For this questionnaire, the researcher explained briefly each part in the questionnaire for some terms may be quite difficult for the rather weak students to understand. The researcher also explained how the scores should be calculated for this questionnaire is also a self-scoring questionnaire. Then the students were given about 30 minutes to answer and count their scores.

After the researcher has carried out the survey, all the questionnaires were collected and brought home to be recorded and finalised. A short meeting with all the subjects were made on the next day in order for the researcher to return the subjects' questionnaires and told their results. The researcher explained what each result meant to them so that they could benefit the findings and understand how they could learn language better.

# 3.7 Data Analysis

The items in the questionnaires will be analyzed to obtain frequency counts. The data will be analyzed and presented in tables and charts.

#### 3.8 Conclusion

The foregoing account, describes the theoretical framework, instruments used, data collection, pilot study, and data analysis. Analysis of data and the result findings will provide answers to the research questions. This is discussed in detail in Chapter four.