

**The Effect of Vocabulary Learning Strategies Training on  
Thai University Students' Word Retention  
in the Second Language Classroom  
(Volume I)**

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*This Thesis is dedicated to*

*My beloved parents:*

*Mrs. Maleewalya & Col. Chanvuth Tassana-ngam*

## ***ABSTRACT***

This study investigates the effect of training in five vocabulary learning strategies (VLS) on Thai university students in an L2 normal heterogeneous classroom. The five vocabulary learning strategies were ‘Dictionary work’, ‘Keyword method’, ‘Semantic context’, ‘Grouping word families’, and ‘Semantic mapping’.

Following a preliminary and pilot study, the intervention interwoven with the regular teaching by the researcher, was conducted at the Department of Foreign Languages, Faculty of Humanities, Kasetsart University (KU), Bangkok, Thailand.

Sixty-nine mixed ability second, third, and fourth year university students, in both the control group (33 students receiving extra reading work) and the experimental group (36 students receiving VLS training) were from various fields of study: a) natural science (e.g. Engineering, Agriculture, etc.) and b) social science (e.g. Humanities, Education, etc.). Subjects freely chose an English Elective course: Reading English for Mass Communication (RMC - Eng. 355223, three credits) which contained three teaching hours per week for fourteen weeks, in which the intervention took place.

Data were collected utilising three research instruments namely pre-and post tests of vocabulary learning ability, think-aloud protocols and semi-structured interviews. The think-aloud method was used to elicit what types of vocabulary learning strategies the subjects employed while they memorised the vocabulary taught independently outside the class. The semi-structured interview was used at the end of the course to elicit the subjects’ attitudes and comments. In addition, questions, especially for the experimental group, were used to elicit the perceived effectiveness and ineffectiveness of the training techniques used. The data obtained from the three research instruments were triangulated to confirm the validity and reliability of the overall research findings.

The quantitative and qualitative data were statistically analysed with the Statistical Package for the Social Science (SPSS). ANOVA analysis showed that after introducing vocabulary learning strategies training (VLST) in class, subjects from the experimental group significantly outperformed subjects from the control group in their ability to learn words.

The qualitative data showed that the students had a positive attitude towards VLST. Moreover, students showed an increased awareness of the need to select a suitable vocabulary learning strategy to help remember different types of words.



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## ***LIST OF ABBREVIATIONS***

ANOVA	Analysis of Variance
BLD	Bilingual dictionary
DW	Dictionary work method
EFL	English as a Foreign Language
ESL	English as a Second Language
EV	Explanatory variable
GP	Grouping method
KU	Kasetsart University
LGPO	Log probability ratio scores for post-test
LGPPE	Log probability ratio score for pre-test
KW	Keyword method
LLS	Language learning strategy
LSSI	Language learning strategy instruction
L1	First language
MLD	Monolingual dictionary
L2	Second language
RMC	Reading for mass communication
RP	Repetition strategy
SS	Students/subjects
SC	Semantic-context method
SD	Standard Deviation
SM	Semantic-mapping method
SPSS	Statistical Package of the Social Sciences
TAP	Think-aloud protocol
VLS	Vocabulary learning strategy
VLST	Vocabulary learning strategy training

## **Chapter 1: Introduction**

This chapter consists of six main parts. The first part gives an overview of the general background of vocabulary teaching and learning in the researcher's home situation, Kasetsart University (KU), Bangkok, Thailand, especially the specific context of the study - English elective course: Reading for Mass Communications in English (RMC), ENG. 355223. It also deals with how vocabulary items are taught. The second part briefly describes the learners' problems with regard to vocabulary learning, obtained from the preliminary data. The third part elaborates how the learners' problems are likely to impede their vocabulary learning as well as after their proficiency in the English language in the four skills. The fourth part gives the rationales of the prospective study and the research questions that constitute the purpose of the main study. The fifth part describes how the thesis is organised and the final part is the summary of the chapter.

### **1.1 The context of L2 vocabulary teaching and learning in Thailand**

#### **1.1.1 Vocabulary teaching in school**

From the researcher's EFL teaching experience, of more than a decade, vocabulary teaching in class was less focused on than teaching English grammatical rules, as a part of the school syllabus. The grammar translation method (GTM) clearly played a prominent role in the English classroom in the past and still continues to do so. Thai learners inevitably struggle to memorise English grammatical rules and the main focus with regard to lexical items was on the requirement to repeat a long list of irregular verbs (e.g. wreak- wreaked/wrought-wreaked/wrought, sting-stung-stung, etc.). In terms of knowing a word and its functions, the learners were asked to memorise the parts of speech of word - such as noun [C], [U], verb [T], [I], possessive pronouns, possessive adjectives and so forth. Apart from that, vocabulary teaching in the classroom was simply restricted to giving learners a long list of English words together with Thai translations. Thus, the learners basically learned two things: the English or L2 word form and the Thai or L1 translation. Extra information about new words (e.g. English definitions, synonyms antonyms, etc.) was optional, depending on whether or not each individual

teacher provided the extra information. The learners were normally asked to learn/memorise words on their own. The only method of memorising words traditionally recommended to learners was word repetition, saying the L2 word form aloud with the L1 translation. With grammar translation being emphasised in class, we can visualise the classroom atmosphere clearly from Fox's (1987, p. 307) statements:

“Students had been learning foreign languages by a grammar translation method which flooded them with new vocabulary items and grammatical structure, but did not allow time to assimilate them much.”

It can be said perhaps that in the past both teachers and learners had little interest or enjoyment when teaching and learning vocabulary.

### **1.1.2 Vocabulary teaching and learning in KU**

All KU students from every faculty have to pass prerequisite English courses: Foundation English I, II, and III. Nine credits are awarded for Foundation English I – III courses (FE). After the students pass the courses they are required to choose one of the English elective courses, e.g. Technical English, Public Speaking in English, Report Writing in English, Communicative English for Careers, Reading Authentic English Materials, Reading for Mass Communications in English (RMC), and so forth. An elective course carries 3 credits, similar to each of the Foundation English courses. Overall students need to obtain at least 12 credits for English subjects throughout four years in the University. The students basically choose an elective course they favour or which they think will be beneficial for their future career. They are also free to choose to attend the course when they wish. Thus, there can be students from different years (particularly the 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> years) and from various fields, i.e. Engineering, Physical Education, Forestry, Fisheries, Humanities, Economics, and so on, attending the English elective course. Since the students who are freshmen need to pass the prerequisite courses, there is little rare chance that first year students attend the elective course. However, it is possible that first year students attend the elective course if their English score from the entrance examination was high, approximately from 75 percent upwards. Such students are exempted from the prerequisite courses.

At present, in the Faculty of Humanities, Kasetsart University (KU), the English elective course, in particular the RMC, vocabulary items are still being taught much

as in school. A teacher normally provides the learners with plenty of new vocabulary items in a list of L2 word forms with the Thai translation. The learners are asked to memorise the words in isolation outside classroom.

Vocabulary, in every unit, is not presented fully in class because the amount of the subject matter of each unit far exceeds the teaching time available. By 'subject matter' we mean the instructional topics, i.e. newspaper terms, headline language/vocabulary, the content of newspaper clips, all of which must be explained/taught in class (see 1.1.4 for a full account). The teachers therefore normally provide the L2 word form with the L1 translation of each word to the learners; requiring them to find more information about the words from dictionaries. Without vocabulary learning strategies being suggested and introduced, they are asked to memorise the words in order to increase their vocabulary and to pass both the mid-term and the final examinations. Hence, the learners struggle with memorising large numbers of new words throughout the entire course. In addition, they have to memorise the 'abbreviations' of national and international organisations and the 'headline words' listed at the back of the course book, from pages 211 to 215 (see the samples of RMC appendices in Appendix 1.1). Some abbreviations, which consist of rather long words, are not easy to memorise - for example, PICC: Paris International Conference on Cambodia, UNTAC: United Nations Transitional Authority in Cambodia. The 'headline words', e.g. *nab* = 'apprehend', *oust* = 'put out'; 'drive out'; 'replace'; *rap* = 'strong criticism', 'reprimand'; *row* = 'angry reaction'; 'dispute', 'disagreement', and so on, are listed with English definitions, so the learners are required to look up more explanation/detail in dictionaries. They are also asked to memorise the words. It seems that they cannot avoid having to memorise a lot of new vocabulary.

It is clear that in the absence of any new vocabulary learning strategies being recommended or introduced in class by either a teacher or a course book, only the well-known strategy of repetition is likely to be used as an aid to remembering the words (i.e. repeating the L2 word form aloud, saying/writing the L1 translation many times, reading the words silently many times, etc.). Most teachers still emphasise English grammatical rules in class and leave word repetition tasks to be handled by the learners themselves.

Clearly, the present situation reflects the statement of Aitchison (1996, p.15) cited Katz & Fodor (1963, p.183):

“...those professionally concerned with linguistics have for the last few decades laid greater stress on syntax. Words have been treated as a somewhat uninteresting jumble of miscellanea which speakers learn item by item, in more or less rote fashion.”

According to the researcher’s first hand experience in both attending and following up the National Thai TESOL Conference organised annually, there has been an increase in research on L2 vocabulary acquisition and a rise in interest in vocabulary teaching and learning. Most EFL classrooms in Thailand have been influenced and now begun to follow the modern trend. This confirms the opinion of Meara (1996, p. 27):

“A few years ago it was fashionable to describe vocabulary acquisition as a neglected aspect of language learning. Recently, however, interest in this area has unexpectedly grown at an enormous rate.”

Despite the fact that interest in teaching and learning vocabulary has grown, it is not an easy task to provide teachers with the principle concepts of vocabulary teaching and also to immediately equip them with the pedagogical ‘know-how’ of vocabulary teaching techniques. This fact is supported by Maiguashca’s (1993, p. 88) statements emphasising the underlying principle of vocabulary teaching gathered from resources (e.g. vocabulary handbooks and teacher’s manuals) concerning the concepts of vocabulary teaching and learning that: “...*giving teachers guidance on how to translate the concepts and principles of theory into pedagogical practice...*” is crucial.

To the best of the researcher’s knowledge, teachers in her home situation still have inadequate pre-service and in-service training in vocabulary teaching. They also struggle to balance or interlock vocabulary and grammar instruction in class. In addition, how to help learners to retain a large amount of new vocabulary is still a pedagogical question needing a practical solution. Maiguashca (ibid.) poses another related question arising from the vocabulary teaching and learning resources:

“How can teachers help students to develop ‘learning strategies’ for vocabulary so that they become ultimately responsible for their own lexical learning?”

It can be said perhaps that the teachers especially are novices in the vocabulary learning strategies arena, in particular on how to teach vocabulary-learning strategies in class. Moreover, they need more time to be convinced of the advantages and the



value of training in VLS in the classroom. Thus, the situation of the Thai teachers who are responsible for EFL classes in the researcher's home situation reflects the statement of Sökmen (1997, p. 237) describing the role of teachers:

“With this shift in emphasis, the classroom teacher is faced with the challenge of how best to help students store and retrieve words in the target language.”

According to the researcher's previous teaching experience, it is clear that what most teachers, including myself, have been recently doing is just simply trying more or less to adopt or adapt some direct and indirect vocabulary teaching techniques suggested in various vocabulary teaching books, and using suggested ready-made exercises, e.g. *The Confidence Book* (Davis & Rinvolutri, 1990), Internet ready-made exercises from the BBC World service, (learning English), the Bangkok Post, and so on, in an attempt to help enhance the learners' English newspaper vocabulary repertoire. Since some of the news articles presented in the course book were rather out-of-date, I had to present extra exercises to expose learners to up-to-date events or other authentic news articles. However, the weaknesses of using such materials are the lack of follow-up activities to reinforce the learners' vocabulary practice and the lack of any suggestion of strategies to help the learners memorise new words. Without knowledge of how to memorise words effectively, the extra words simply add to the burden of memorising words by rote repetition (see the samples of extra teaching materials in Appendix 1.2).

One further point still to be focused on is when to introduce VLS and how to train learners to use it in the classroom, so that they will be able to use the techniques to help them deal with vocabulary learning more effectively while learning vocabulary independently.

Presently, the major focus is on the teachers' teaching performance. The KU has been implementing the policy of the Ministry of University Affairs (MUA) in improving the lecturers' working/teaching standards. Thus, the University has begun to assess the teachers' working/teaching quality in every faculty. For example, an operational project has been launched to help develop the teachers' pedagogical techniques in the Faculty of Humanities, Dept. of Foreign Languages. More training sessions/forums are arranged annually for the benefit of Thai teachers and other related teaching staff in the Department. The session/forum organised by the administrative staff of the Department of Foreign Languages receives financial

support from the Thai Government. Support has also been given by the British Council through the provision of a teaching expert.

At the moment, however, there is no change in the English language teaching. The teachers still struggle with the vast amount of subject matter to be taught in each course book and the enormous task of checking the learners' homework. Grammar still receives a lot more emphasis over vocabulary. Vocabulary is not directly taught properly in class. No VLS are explicitly introduced in class. The learners are asked to memorise the vocabulary in isolation. Hence, the question is when we will see a change in the balance between teaching English grammar and vocabulary and the development in vocabulary teaching and learning at KU.

### **1.1.3 Implications for the present study**

Up to this point, we can see two possible areas for improvement in L2 vocabulary teaching, especially in the RMC course. The first would be to equip the teachers with the know-how to deal with direct L2 vocabulary teaching effectively in class and to balance the teaching of grammar and vocabulary in class. The second improvement would be to provide, in the classroom, training in VLS, so that learners themselves can make use of it when memorising words independently.

The researcher has chosen to focus on the second of these two areas. The reasons are as follows:

- Up till now the learners have not received much support/help in improving their vocabulary learning either at school or university.
- The researcher believes in the philosophy of learner autonomy and in empowering learners to take responsibility for their own learning.
- There is no time in class to do a lot of teaching new L2 vocabulary. It would be most cost effective to use the time to help learners use their own time better. This relates to Nation's (1990, p.159) suggestion regarding the time teachers spend on vocabulary teaching: *"It is clear that if a teacher wants to help learners cope with low frequency vocabulary, particularly in their reading, it is far better to spend time on strategies that the learners can use to deal with these words than to spend time on individual words."*
- Teaching new L2 vocabulary in class requires the researcher/teachers to provide the actual words, especially low frequency words, the learners need

to learn. It may not be possible to predict this at University. Nation (174, p. 1990) emphasises an advantage of VLS: “*Strategies which learners can use independently of a teacher are the most important of all ways of learning vocabulary. For this reason it is worthwhile ensuring that learners are able to apply the strategies and that they get plenty of help and encouragement in doing so. By mastering a few strategies learners can cope with thousands of words.*” It was more sensible, therefore, to focus on the second area, teaching learners know more vocabulary learning strategies and how to use them, so that they can apply the VLS to any words they want to learn independently.

#### **1.1.4 The English elective course: Reading for Mass Communications in English – RMC (Eng. 355223—3 credits)**

This part gives some concrete examples of how vocabulary has been taught and been learned in class along with a detailed description of the specific course, associated with this study - Eng. 355223.

The obligatory course book is a locally made piece of teaching material, designed by Assistant Professor Bhikul Bunyaratabandhu. The following is a description of the main characteristics of the Reading for Mass Communications in English (RMC) course book in relation to the classroom roles of the teachers’ teaching English and the ways in which the learners’ learn English in the classroom. The analysis of the RMC course materials is interpreted in the light of the researcher’s first hand experience of RMC teaching (prior to conducting the main research study) and information gleaned about what other teachers did when teaching the RMC course. The analysis of language teaching materials follows Tomlinson’s (1998, pp. 205-216) material development guidelines. Also our comment is based on the four principles for materials evaluation set out by Cummingsworth (1984), in particular, the course objectives in relation to teaching materials, learners’ needs, and learners’ learning process.

##### **1.1.4.1 Course objectives**

The core objective of the RMC course is to enhance and develop the learners’ ability to read authentic news articles variously extracted from national and international English newspapers (e.g. *Bangkok Post, The Nation, The Times, The*

*Guardian, International Herald Tribune, The Independent, etc.*). The course book writer, Punyaratabandhu (1998), briefly but explicitly states the main objectives of the course: “...learners’ reading ability will gradually develop from reading for the main idea to reading for comprehension, and making conclusions, inferences, judgments, and finally interpretations.”

Regarding the limitation of the RMC objectives, it is noted that the course book writer does not detail any objectives concerning newspapers specifically. Above all, the key word: *Mass Communications* is not clearly explained; in particular that it does not involve only newspapers.

Vocabulary enrichment, which also plays an important part in the course book, is not explicitly mentioned in the course book’s objectives. It seems that vocabulary is focused on implicitly. However, the researcher, who was on the RMC teaching staff at that time, used the book in teaching the elective course, was aware that the new vocabulary items of each unit were strongly emphasised and rarely skipped without any examples being given by any teachers. Moreover, some of the vocabulary items seen in each unit reappeared in both the mid-term and the final-examinations, requiring learners to memorise almost all of the vocabulary they encountered in every unit of the book, not only to enhance their knowledge of vocabulary but also to pass the examination. Thus, the learners were not merely expected to deal with new vocabulary from news articles in each unit in order to comprehend those reading passages, but also to remember the words.

#### **1.1.4.2 The course book and associated materials**

The course book provides three types of materials: a) the nine units themselves, b) appendices I and II at the end of the book, and c) the supplementary handout prepared by the course book writer containing vocabulary lists from the nine units and selected from the course book material.

The RMC course book consists of nine units, mainly providing basic knowledge about the main components/sections of English newspapers, e.g. newspaper terms, display advertisement, classified section, editorials, cartoon, sports, entertainment, and so on. The time allocated for teaching is three hours per week. Time for homework (i.e. doing reinforcement exercises provided at the end of each unit) is flexible and depends on how much and how fast learners can follow the teacher’s explanation/lecture. If they can follow the teacher’s lecture with ease, they will have

more time in class to do the reinforcement exercises in collaboration with their classmates and so do not have much homework.

Since there is no teacher's guidebook, there are no teaching guidelines and no suggestions to help teachers deal with the teaching load of subject matter/exercises in each unit. Therefore, the teachers who implement the RMC course have to adjust their teaching techniques and style to cope with their learners' English ability. They also have to figure out the most appropriate ways of teaching and to cover the major points in each unit before the mid-term and final examinations.

In the classroom, the learners are taught about the specific terms used in newspapers (e.g. Unit 1- Finding the Way Through: especially terms related to the position of news on the front page (e.g. *masthead*, *ear*, *deck*, *kicker*, and so on). The book also includes texts of various types of newspaper genres needed to be exemplified in class, such as cuts and captions, headlines, editorials, political satire, cartoons, the classified section and so forth. Because of the abundance of course book material in each unit, the learners are scarcely likely to have opportunities to practise extra activities in class (e.g. guessing/word attack strategy skill, skimming/scanning skills, dictionary skill, etc.) in classroom. Their time is used in trying to finish some mechanical exercises at the end of each unit: for example, the types of exercises which check comprehension: filling vocabulary in an incomplete sentence, matching words and synonyms, choosing the most appropriate answer from multiple choices, rewriting a full sentence from a short news headline and so on.

Since one of the purposes of the course assessment is to assess what the course book provides, the teachers spend a good deal of time explaining/covering every point mentioned in each unit. They are often in a rush to finish everything in the course book before the examination. In the worst cases, the researcher, when teaching RMC the past, had to spoon-feed the learners by translating reading texts and L2 vocabulary, and doing the exercises together with them in class. The course book contains far too much material to be completed within the teaching hours. Some points, therefore, had to be left unexplained and left to the learners to sort out themselves. Unfortunately, there is no self-study material prepared for the learners to take away to study independently (see the samples of course book materials in Appendix 1.3).

## **The course book units**

In the following paragraphs, we detail some units from the course book materials in order to clearly describe the materials and demonstrate the strong presence of vocabulary in what has to be learnt.

The course book materials Unit 1 presents fourteen terms, i.e. *masthead, deck, kicker, cut and caption, index, jump line*, etc., labelling different news positions in the front page of English newspapers. The teachers have to explain the terms and make sure that the learners understand where to find the right thing/information from the right position on the page. The learners are asked to memorise the terms so as to succeed particularly in the mid-term examination. This unit also explains what an index is. The learners are asked to take note of specific sections generally listed in the newspaper index: for instance, Business, Comics, Horoscope, and so on. They are asked to think which particular types of news articles are presented in what section/on what page. The teachers have to explain the meanings of core words/phrases, such as horoscope, feature, obituary, funeral, cover story, reader's problems, etc., so that the learners have an idea of what they are and can predict from the index what types of news articles they can find under each section. According to my past experience, in order to complete activity 4, pages 14-18, I had to first explain the key vocabulary items of each news clip/extract, for example, in extract no. 13, more than five words were new to the learners (e.g. *primordial, to take something for granted, humble, keen, appease, horde*, etc.). Obviously, in other clips there were at least a few words which needed to be explained to the learners, so that they could understand the clips and were able to match them with the proper index headings. Since the teaching time was rather limited, many new words were left unexplained. I had to ask the learners to find out more about them in dictionaries. The next task for the learners was to compare the front pages of two English newspapers published in Thailand (e.g. *Bangkok Post* and *The Nation*) and find the differences and wrote them down on the newspaper analysis form on pages 19- 20.

In short, the purpose of Unit 1 is to provide general knowledge about English newspaper terms, and the main components/sections of newspaper. There appears to be little concern about comprehension, though it is at the heart of reading skills. There are no guidelines for teaching any reading strategy, word attack strategy and memory strategy.

Unit 2 - Learning from Cuts and Captions (see Appendix 1.3), the aim of the unit is to explain what *cuts* and *captions* are and how learners can gain information from them. This unit focuses explicitly on the vocabulary in the *captions* and on the short pieces of information provided beneath a picture/cut. Implicitly word attack by guessing from the context and the picture is the main strategy taught.

However, as with every unit, no strategy training is explicitly stated there. Normally, an explanation is given of how to make use of newspaper cuts and captions to help the learners guess/predict the news story and to better comprehend it. However, no specific objective is clearly stated at the beginning of each unit. The teachers themselves have to work out how to help the learners understand the crucial points within the unit.

Obviously, each unit has its weak points and needs to be revised and improved. In this unit, for instance, extract 3, pages 25-26 (see Appendix 1.3) to some extent confuses the learners, as some learners who did not have any idea what a *Gondola* is and so could not write down/explain the meaning of the word. Besides, *Gondola* is not a cognate word in Thai. My own approach was first to elicit the learners' general knowledge about Italy and what Venice looks like. From my teaching experience I found, in the past, that with some exercises (pp. 28-35) the learners struggled to find the meanings from the alternatives given, as the alternatives themselves contain unknown words. I had to give the L1 translations of the unknown words in each item. It would be better if the learners could practise guessing words from the context. This could be done by leaving the complete caption, underlining the words to be guessed, and giving alternatives for the learners to choose from as replacements for the underlined word(s).

Furthermore, activities 3, extract 5 (pp. 36-38), requires the learners to be equipped with the vocabulary related to the pictures in order to answer the questions. Some learners who did not have a great deal of vocabulary in their repertoire might find the exercise difficult. Moreover, to guess the meaning of *downpour* is not quite so simple. My learners, for example, thought of 'sweat' instead of 'a heavy rain', as they could not figure out the correct vocabulary from the obscure picture.

Overall, the unit is mostly about learning vocabulary rather than extracting information from a newspaper. Some words seen in this unit reappeared in the mid-term examination, such as *grief-stricken*, *scavenging*, *downpour*, *scour*, *hurling*,



*pose, wipe* and so on. If the learners can memorise these words effectively, it will help them to more or less succeed in the mid-term examination.

The aim of Unit 4 - In the News Articles - is to heighten explicit awareness of the linguistic features of newspaper language, especially headlines. The skill implicitly focused on is 'writing'. Some important grammatical points need to be explained here. In my experience, it was necessary first to exemplify seven basic types of news headlines according to the examples on pages 69 - 72. The learners had to brush up their known knowledge of English grammar (i.e. present/past simple tense, present/past progressive tense, present/past perfect tense, directed-indirect/reported speech and so forth). They were then asked to practise rewriting the complete headlines listed on pages 72 - 74. Such exercises required the learners to understand what each short headline means before they could expand it to a full sentence. All this consumed too much time. For example, in item 12, page 73, *Soviet FM in London*; it consumed much time for my learners to guess what the news article was about. It was found that some learners did not know what *FM* really meant. Some of them were not sure what *FM* referred to. They made some guesses, e.g. 'frequency modulation', 'foreign minister', 'field marshal', etc. Due to the limited context of the headline and the learners' inadequate knowledge of political abbreviations, it appeared to be difficult for the learners to write a full sentence from the headline. In addition, on page 73, item 19 provides inadequate context clues. For example, the headline *HUGE BERG ON LOOSE* appeared to confuse 90 percent of the learners, as they did not know what *HUGE BERG* was. Many learners thought that *HUGE BERG* was a name of a person, like Hugo/Huge Grant. They thought that the person was on a diet in order to lose weight (confusing lose with loose). Most learners did not really know *berg* was short for 'iceberg'. Besides, they were not used to the word, as in Thailand they never saw a *berg on loose* and could not perceive its consequences. I was forced to spend a lot of time getting the learners to guess/predict the meaning of the headline of item 19 and of similar headlines.

In the same unit, activity 3 (pp. 75–77) is a very tedious one on which my learners found that they had to spend a good deal of time in order to match a word with its near synonym from 54 alternatives. Some students asked for more explanation about item 22 *exclude, prohibit* (column B) and item 39 *prohibition, prohibit* as they did not understand the difference between those words. Furthermore, some words needed more concrete examples given in a full English sentence: for



example the words *oust, axe, strife, resign, have to undergo*, and so on. In order to complete this activity, I had to organise group-work so that the learners did the matching collaboratively. I also checked, at the end, the remaining words they could not match. The unknown words were explained to those who required more concrete explanation.

Similarly Unit 6 – Display Advertisements, the focus here is to introduce the learners to new words from newspaper advertisement. The learners were asked to read an advertisement and find the information required to answer the main questions (e.g. what is the product advertised? what is the brand name? who is the manufacturer? and so on). I found, for instance, in extract 2 (p.121), the learners were unlikely to succeed in guessing the meaning from the context, as most of the words from the advertisement were new to them. So, I had to explain it, gave the L1 translations, and also explained some unknown vocabulary in multiple choices of each question.

Unit 9 consists of a general revision of all the units, containing 95 multiple choice-items. Presumably, the purpose of this unit is to check the learners' understanding of what they had previously learned from units 1 to unit 8. In fact, it does not highlight any specific points from individual units, but. It is comprised largely of traditional reading comprehension exercises focused on the newspaper terms, extracting information from authentic news articles, vocabulary and inferring from context/pictures or cuts. However, it introduces a lot of new vocabulary which has to be known already in order to complete successfully the overall exercises. For example, in extract 17 (pp. 198-202), there are at least twelve words which require further explanation (e.g. *grotesque, gruesome, coincidental, whim, fatalistic, condemn, despicable, utter, extinguish, outstanding, and underprivileged*). In order to choose the correct answer from item 76, page 200, the learners asked me to give the proper meaning of the word *condemn* according to the context. Only then were they able to pick up the sense of the phrase: *we cannot help but condemn*. In addition, I had to explain other words in the sentence, especially, the word *utter*. The learners also struggled to understand the alternatives, which were possibly made deliberately difficult. So, I had to spend more time explaining the news article, the new words and their alternatives. In the end the learners had a great many new words to memorise from this unit, just as in the preceding units.

Two appendices are added at the end of the course book, of which Appendix I, pages 211-213, contains two parts (see Appendix 1.1). The first includes abbreviations often found in news articles (e.g. *TOT*, *WHO*, *RTAF*, etc.) and the second provides abbreviations usually found in classified advertisement (e.g. *B.L*, *C.V*, *Bldg.*, *o.n.o*, etc.). The two parts contain 117 abbreviations in total.

Appendix II, pages 214-215, has a list of 111 short headline words corresponding to longer ones, with English definitions or synonyms. The words are generally seen in newspaper headlines (e.g. *bar* a short near synonym of ‘prevent’, ‘prohibit’, ‘exclude’.)

Normally teachers give more details of the abbreviations in L1 translations and the learners are then asked to memorise approximately 228 abbreviations in order to succeed in both the mid-term and final examinations. My teaching experience showed that the learners found it difficult to memorise, by employing word repetition techniques, an abbreviation that has more than one meaning, e.g. *BMA* has three meanings: 1) Bangkok Metropolitan Administration, 2) Bangkok Medical Association, 3) British Medical Association; and those that have long complete words, e.g. *PICC*, *UNTAC*, *ESCAPE*, *MCOT*, and so on. They found it tedious to memorise so many synonyms, especially the ones that have long L2 explanations containing further new words: e.g. *urge* = ‘encourage’, ‘strongly request’, ‘recommend strongly’, ‘insist’; *haul* = ‘quantity of something which has been gained’, ‘stolen’, ‘seized’, or ‘gathered’; *rap* = ‘strong criticism’, ‘reprimand’, and so forth.

The supplementary handout prepared by the course book writer is given to the learners at the beginning of the course. Presumably the purpose of the handout is to help learners know what words need to be memorised in order to succeed in both the mid-term and final examinations. The handout contains 464 words drawn from the nine units, words which presumably the course writer thinks will be valuable to help their reading. As we have said, the words in the lists appearing in each unit are not all explained in class, simply because of the limitation of teaching time. I, therefore, gave more detail and explanation of some specific words when requested by the learners, who were then asked to look up for more definitions/detail in dictionaries.

The items in appendices I and II, plus the supplementary handout including 692 words most of which will be new to the learners. Since the course lasts 14 weeks (excluding two weeks of the mid-term and final examinations), this represents

approximately 50 words per week on average for them to try to learn, unless they know some of them already. The learners are not trained in any strategies to help them memorise the words and so struggle with this throughout the entire course - (see sample of the supplementary handout in Appendix 1.4).

#### **1.1.4.3 Skills focused on**

The skill explicitly focused on is reading. After each news article, the learners are usually asked to work as a whole class, seldom in groups or in pairs, to find the answers to a set of comprehension questions of the multiple-choice type. Since teaching reading strategy and word attack strategy are not explicitly stated as course objectives, most teachers rarely teach the strategies in the classroom. Presumably some learners make use of known strategies taught in the past to help them deal with understanding each news article. On the other hand, some learners may have little idea of how to use any reading strategies at all.

Writing skills seem to be implicitly emphasised. For example, the learners may be asked to read news articles and, later on, to write down the main points of each article in their own words using English phrases/ sentences, (e.g. what happened? when did an incident happen? who did it? why? where? how? and so on.) This exercise can be seen in Unit 4, pages 86-89. Moreover, in the exercise in Unit 4, pages 72 and 73, the learners are asked to rewrite the headlines of news articles to complete sentences.

In short, the skills focused on in the RMC course book are not clearly defined. The dominant reading skill appears to be skimming and scanning for specific information or the main idea from news articles and a few word attack strategies are implicit in Unit 2 – Learning from cuts and captions. Therefore memory strategies for vocabulary are certainly needed, but they are not covered.

#### **1.1.4.4 How vocabulary is taught in the RMC course**

At a rough estimate I would say the proportion of words new/unknown in each unit to the learners would be 50 percent upwards. It is necessary to explain new words in class so that the learners can understand them when they encounter them while reading text/articles and so are able to use them correctly in the future. I found that the problem was that the amount of words to be taught was too great for the time available for teaching each unit.

It is unlikely that every new vocabulary item from the news articles in each unit can actually be taught in a class. Some words which are considered key words need to be selected and introduced in class before going through the reading text. It is necessary first to explain some of the new vocabulary to the learners so that they can understand the text. In our case, when I could not manage to teach the unknown vocabulary, I found it necessary to translate the text into L1.

According to how I conducted my own classes and to responses from other teachers about how they taught vocabulary in each unit, the explanation of a word focuses on four points, namely part of speech, the definition in English and Thai, how to pronounce the word and how to use the word in a sentence. The learners were usually told to practise the words introduced in class by doing the exercises provided. At the end of each unit the learners were asked to complete vocabulary reinforcement tasks (e.g. matching words with the right definition or synonyms, choosing the right words to complete sentences, and so on). When the time ran out, I asked the learners to practise doing the exercises as homework. In the next hour, the learners and I forwardly looked through the exercises together.

In addition, the learners were normally asked by the teachers to memorise vocabulary drawn from all the units listed in the supplementary handouts, so that they would increase their vocabulary and, more importantly, pass the vocabulary assessment in both the mid-term and final examinations. In fact, most of the less frequent new words are introduced in class not so much to enhance the learners' knowledge of vocabulary as to make sure that they had seen them and memorised them in order to succeed in an exam.

#### **1.1.4.5 The teachers' and learners' roles**

According to my experience in teaching the RMC for approximately four years, a teacher has a major influence over the learners. The RMC favours a teacher-directed instruction approach, giving the teacher a powerful control over the class. It includes activities arranged for the learners to practise communicatively what they have been taught in class. In general, the eight teachers who are responsible for teaching each class mainly aim at explaining the content or subject matter. The course book writer teaches each unit through the medium of English; six of the teachers use the L1 while teaching each unit, and I myself use the L2 for approximately 50 percent of the time, using it in the first half of each teaching period to explain the content and using the

L1 in the second half to sum up the content explained and to check the learners' understanding of the material.

With regard to my own classes, some reading strategies (e.g. skimming, scanning, word attack, etc.) were briefly mentioned in class, as were strategies for dealing with vocabulary retention. For example, word analysis, affixes, and roots were introduced as tools to help in guessing unknown words. Other techniques, believed to facilitate word retention, such as using cards, or the vocabulary card-box-technique adapted from Davis and Rinvoluceri (1990, p.13), were suggested to the learners. However, the latter strategies had never been systematically exposed to any training in vocabulary learning strategies (VLST) in class.

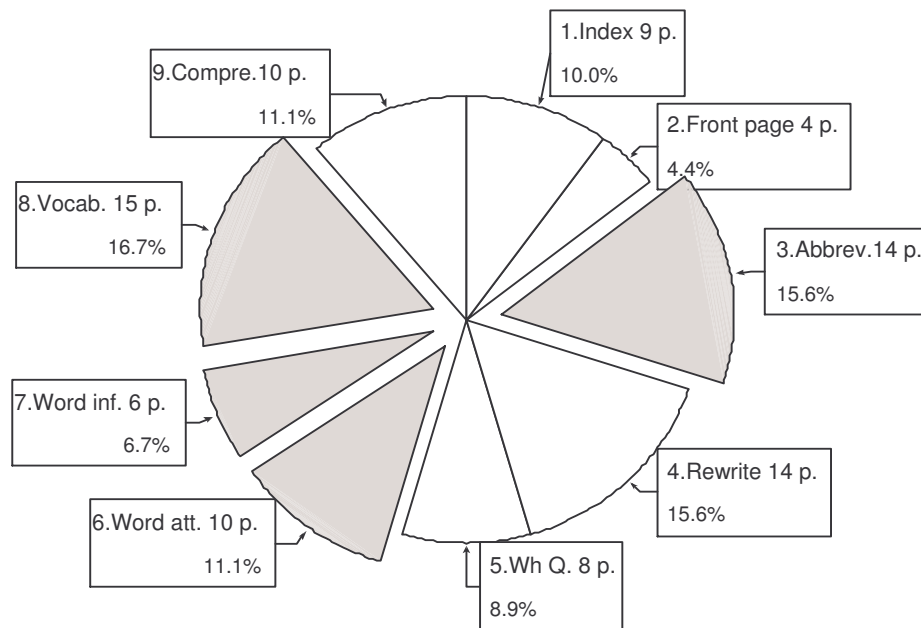
It is also probable that the other teachers also give suggestions about vocabulary learning strategies to their classes.

#### **1.1.4.6 The RMC assessment**

The test papers for the mid-term and final examinations are constructed by the course book writer to measure the learners' knowledge of the details of each unit explained in class. The guidelines, i.e. the points the examination includes for testing, are prepared by the course book writer and given to teachers. The learners are informed of these guidelines. They are expected to know the subject matter which has been explained/taught in class. The percentage of points in each part of the mid-term test paper is shown in the following figure (see the RMC mid-term test paper, 22-12-2000, in Appendix 1.5).

Next, the detail of the test paper is illustrated in Figure 1.1 which shows nine items of the test paper which are divided into four main parts. Items 1-6 are in part 1A which consists of reading for specific information (index 10%, front page 4.4%), a test of the full forms of abbreviations (15.6%) and rewriting in full the news headlines (15.6%) and finding specific information from a short news article in order to answer 'Wh' questions (8.9%). The last section of Part 1A requires either memory of learnt vocabulary or context-based word attack strategy.

**Figure 1.1 Pie chart of nine sub-sections of the RMC mid-term examination**



The learners have to read the extracts of news articles and find synonyms/near synonyms for the underlined words in the news headlines (11.1 %). The words have been taught/encountered from the previous news articles explained in class (e.g. *soar*, *boost*, *defer*, etc.) so may be memorised or otherwise guessed. Part 1B contains *cuts* and *captions* of news articles (6.7%), which tests word inference as well as word knowledge and again indirectly relates to word attack strategy. Some words taught in class reappeared, such as, *barred*, *supporter*, etc. Part 2A, testing vocabulary previously taught in class, consists purely of fifteen items (16.7%) of incomplete sentences with multiple-choices. Every word required is listed in the supplementary handouts, hence it depends on how many words the learners can memorise. Part 2B is called ‘comprehension’ (11.1%) and refers to aspects similar to those in Part 1A: for example, extract1- item1 requires information for the ‘Wh’ question and item 5 asks for the obvious answer, i.e. a near synonym of ‘workers’, which is ‘labourers’. Similarly item 6, extract 2, tests matter similar to that in Part1A (I) which asks learners to match a news extract with the correct heading. In the same way, extract 3 tests similar material and involves matching an index heading to the correct page. For example, if the word ‘horoscope’ was explained in class, a learner could memorise the word, and be able to match it with the index heading: Your Stars. Presumably the learners, especially highly proficient ones, use scarcely any reading strategies in answering the questions.

Figure 1.1 illustrates that the main concerns of the test are testing the vocabulary taught in class, i.e. vocabulary memory (items 3 and 8: 32.3%), vocabulary memory supplemented by word inferences/word attack (items 6 and 7: 17.8%). Apparently, 50% of the test paper examines vocabulary memory and aspects related to it.

Overall, the test is mainly aimed at different types of memory:

- Memory of newspaper terminology (e.g. *byline*, *index*, etc.).
- Memory of various abbreviations and the complete words they represent (e.g. *CV*, *c/o*, *wpm*, *o.n.o.*, *NZ*, *PTT*, etc.) The set of abbreviations are from the course book Appendix I, pp. 211-213.
- Memory of formal aspects of the structure of newspaper text, which types of news topic/news articles come under specific heading of news sections (e.g. under the heading of '*Letter box*', one expects to see readers' letter).
- Memory of words taught, most of which are in the supplementary sheet.

Clearly the test is unbalanced. It tends to test vocabulary memory more than genuine reading comprehension ability. Thus, the testing seems to show a mismatch between the assessment and the course objectives. One answer to this would be to improve the structure of the examination. However, the only person who has the authority to design the test paper for both the mid-term and the final examinations is the course book writer. The RMC teachers have little influence to change the test papers. Unfortunately, no RMC meetings have ever been set up to attempt to find ways of improving the RMC course.

#### **1.1.4.7 Observed problems**

Finally, there are some interesting points drawn from my own observation and that of the students.

##### a) Problems elicited from the learners of the elective English 355223 class

Since I had previously been teaching this course for a couple of years, I have had an opportunity to talk informally to the learners about vocabulary learning. Listed below are some of the problems raised:

- The main problem appears to be easily forgetting the words taught.
- The learners cannot recall the words taught, or recall the meanings.

- They are confused with polysemous words that have many meanings (i.e. bank – money, bank – river/lake, bank – cloud/fog, etc.).
- They cannot memorise the part of speech of a word, or pay less attention to it, so they often make grammatical mistakes influenced by L1 syntax (e.g. It rained *heavy* yesterday.) In Thai grammar, the adverb never changes its form when modifying the verb.
- A word's orthography often causes a problem. The learners find it difficult to spell correctly words which have strange pronunciations or have similar sounds to other known words.
- In order to memorise new words, most of the learners normally use the word repetition strategy - for example, they repeat the English word aloud with its definition in Thai, or write it several times on a piece of paper or notebook with the Thai equivalent. They use this strategy before attending an examination.
- Most of the learners have a negative attitude towards the subject of English as they feel it is boring to memorise large numbers of words.
- The learners have never been exposed to training in vocabulary memory strategies.

b) Points observed from my teaching of the RMC in the past - The general points are as follows:

- Apparently, the learners rarely used a variety of VLS techniques to help them retain or store words taught or seen.
- Most of the learners perhaps paid little attention to how to organise or plan their vocabulary learning systematically.
- Extrinsic motivation for learning vocabulary was, perhaps, likely to be higher than intrinsic motivation. In order to pass the course, the learners tended to review the vocabulary very often the night before, or just before entering the examination rooms, in the hope that most of the words would be vividly stored in their short-term memory.

Following up the aforementioned problems raised by the learners and the general observation of my home situation, a preliminary study was conducted to find out



how the learners currently deal with vocabulary learning and whether they encounter any difficulties in coping with English, especially in the RMC course.

The preliminary study for this research will further illuminate the students' problems with memorising vocabulary and the strategies they used to memorise vocabulary. The data from the study will support the focus of this research on training in vocabulary learning strategies that help the learner retain/memorise the words taught. The methodology of collecting the preliminary data is mainly elaborated in Chapter Three – Research Methodology and the results of it are also partly reported in 1.2, the following heading.

## **1.2 A key issue arising from the preliminary study**

This section looks at some specially relevant issues arising from the preliminary study concerning vocabulary learning (see the full account of the findings in Chapter Three, 3.1). The main issues encountered by the subjects, as drawn from the preliminary data are:

- The result from the interview shows that ninety percent (90%) of the twenty respondents mainly had a problem with vocabulary learning, especially vocabulary retention.
- According to the subjects' additional comments gained from the questionnaire, ten out of twenty respondents stressed the problem of being unable to memorise or retain vocabulary probably affects the acquisition or learning English in four skills, namely reading, writing, listening, and speaking. For instance, they described that when reading or listening to English news articles they were distracted by the unfamiliar or unknown words. This affected their comprehension. They also mentioned that sometimes guessing an unknown word does not help much and can in the end cause a misunderstanding of the passage.

This statement leads to the questions: Is it because of the subjects' lack of basic strategies skills in guessing the words or is it because they do not have enough L2 vocabulary, e.g. language proficiency, in their repertoire to be able to guess an unknown word? Perhaps the problem is caused by both. It is likely also that the reading texts may not contain adequate contexts or rich enough contexts to help

learners guess the meaning of a new word (Meara, 1995, p.8). This, too, may cause a problem when guessing an unknown word. The subjects also pointed out that pausing to think of the words to use when speaking or writing consumed time and caused frustration.

We believe the underlying reason is that these are less proficient learners and so they do not have enough known words to deal with the reading of authentic text. They failed to make use of the guessing strategy. In Laufer's (1997, p.23) study of threshold vocabulary, she found that if adult learners need to deal successfully with EFL reading comprehension of non-specialist authentic texts, they will need to possess vocabulary above the threshold level of 3,000 most frequent word families. Laufer (op. cit.) also mentioned: "*In other words, even the more intelligent students who are good readers in their native language cannot read well in their L2 if their vocabulary is below the threshold.*"

Thus, the problems of a repertoire below the threshold, or once knowing the words and later forgetting them are those the learners currently face, and which presumably impede not only the reading skill but also other skills as well.

It can perhaps be said that being unable to remember words has a domino effect and apparently, it may obstruct the subjects' processing when they have to deal with either receptive or productive skills.

We focus therefore on vocabulary learning to help the learners with their reading in the RMC course, as well as for the reasons given in previous section, 1.1.3.

### **1.3 Rationales of the main study**

Why does the main study focus on vocabulary learning, especially memory VLST in the classroom? By VLST in this study we mean, a teacher instructs, teaches or trains her learners how to use vocabulary learning strategies (VLS), particularly to help them memorise L2 words effectively.

#### **a) Reasons based on the researcher's pedagogical experience**

The researcher's prior experience in teaching the RMC course, the materials analysis, plus the preliminary study, together provide information about the current situation with regard to vocabulary teaching and learning and justify the value, for the home situation, of attempting to teach vocabulary memory strategies (see the reasons in 1.1.3 and 1.2).

Furthermore, in the researcher's home situation, there is a lot of current interest in training teachers to be more effective in using teaching techniques. The University has a new status, as a state enterprise, and one of the major concerns of the new policy is to improve and develop the quality of teaching. Accordingly a research team department for teacher development has been recently formed. The main interest of the University is improving and developing teaching techniques. Latterly each term/year has seen more teachers from the Department of Foreign Languages being supported or given grants from the Government and the University to attend both national and international EFL/ESL seminars or training courses. Clearly, all areas of teaching are highly supported. However, an area like VLS, especially an attempt to train the learner in VLS has not gained much interest or support.

This fits in with the evidence from our learners (1.2), our analysis of the RMC course (1.1.4) and our own belief in teaching learners how to learn (1.1.3) and strongly agrees with the similar idea put forward by Ellis, G. and Sinclair, B. (1989). It coincides with the international concept of education and is coincidentally in keeping with the following Chinese educator's sayings:

“Give a man a fish and you feed him for a day. Teach a man how to fish and you feed him for a lifetime.” – Chinese proverb--Lao-Tzu

In this context, the researcher, therefore, places considerable value on training learners to know how to employ VLS as a tool to help them remember vocabulary effectively. She also has a strong belief that VLS training will help learners not only to remember words but will help also in their study of other subjects.

#### **b) The interest in LLS/VLS in ELT research**

Currently LLS/VLS appears to be an important area of ELT research. Many educators in the field of ELT and others from related fields emphasise the importance of teaching VLS to help learners to learn effectively and to make use of the strategy training for their autonomous learning in the future.

We agree with Gairns and Redman (1986, p.86) that it is necessary for language teachers to attempt to understand the nature of remembering and forgetting so that they can seek a proper way that can more or less help learners deal effectively with their language learning:

“Understanding how we store information in the memory and why certain chunks of it seem to ‘stick’ while others slip away is obviously a matter of concern to anyone whose work involves helping others to learn. For language

teachers this knowledge should help to establish classroom procedures that will promote more effective learning and retention of new language items.”

The following opinions convince the researcher of the importance of training in vocabulary learning strategies in her home situation.

Brown and Perry (1991, p. 655) cited Oxford’s (1986) statement: “...a greater emphasis needs to be placed on identifying effective second language learning strategies and teaching students how to use them.” In addition, Cook (1991, p. 108) states: “Training students to use particular learning strategies improves their language performance.”

With regard to training learners in the use of more than one vocabulary learning strategy, Sökmen (1997, p. 245) cited Nation’s opinion about successful learners: “...those students who were most successful used several vocabulary learning strategies.” Sökmen adds that the idea of a mixed approach (i.e. several learning strategies combined together) was also supported by McKeown and Beck (1988) and Stoller and Grabe (1993). The idea of combining various vocabulary learning strategies together or the mixed approach presumably is appealing to learners in that “...it breaks up the class routine while building a variety of associational links. It also has a greater chance of harmonising with the various verbal and non-verbal learning styles which different students may have.” (Sökmen, op. cit.).

Our plan for the main study therefore aims to train the learner to use a cluster of vocabulary learning strategies (VLS), and focuses on cognitive strategies in relation to vocabulary memory. The areas the main study will touch on involve mainly previous applied linguistics studies and some psycholinguistic studies. Though little has been done on the teaching of VLS, there are relevant studies related to VLS themselves which we have made use of as the background to the main study. Examples of these relevant studies are (Ahmed, 1988; Atkinson, 1975; Cohen & Aphek, 1980; O’Malley & Chamot, 1987; Oxford, 1989; Levin and Pressley, 1985; Meara, 1996; Nation, 2001; Schmitt & McCarthy, 1997) and so forth.

From those studies concerning language learning strategy (instruction/training) LLS (I/T), vocabulary learning strategy training (VLST), there emerges a cluster of strategies that are claimed to help learners remember vocabulary effectively: for instance, the mnemonic method, the keyword method, the semantic mapping method, and so forth (see Chapter Two). This arouses the researcher’s interest in finding out

whether such VLS are likely to help her learners' word retention and how VLST affects learners' word retention.

The main study, therefore, explicitly aims at training VLS, based on strategies claimed to help learners to remember/retain words effectively. Implicitly, the researcher does believe that the benefits of the VLST will pave the way to the improvement in vocabulary teaching and learning at the home situation in the future.

In Thailand itself little research has been conducted on training in vocabulary learning strategies, especially to facilitate the retention of vocabulary taught in real classrooms in Thailand. However, there has been some interest in learning strategies more generally. For example, typical empirical research topics are: 'Successful English Language Learning Strategies of Students Enrolled at the Faculty of Arts, Chulalongkorn University', (Mullins, 1992); 'A Comparison of Language Learning Strategies of Thai University Students in Acquiring English Proficiency', (Torut, 1994); 'An investigation into learners' reading strategies in performing pedagogic reading tasks', (Tepsuriwong, 2001); 'The effects of reading and writing strategies on summaries written by Thai university students', (Singhasiri, 2001); 'Language Learning Strategy Use, Interaction with Self-instructional Materials, and Learner Autonomy of Thai Distance Language Learners', (Vanijdee, 2001). These researchers focus on what learning strategies Thai learners employ to acquire reading and writing skills, but not specifically with vocabulary or strategy training. Relevant aspects of these theses will be reviewed together with other related literature in the next chapter.

#### **1.4 Specific goals of the main study - research questions**

The purpose of this research is to find out whether training in five selected vocabulary learning strategies (VLS) would have any effect on the learners' ability to retain the vocabulary taught in class. Furthermore, it is interesting to find out how the training affects learners' attitudes. The main study will therefore endeavour to answer the following research questions: (\* indicates the hypothesis we expect to be confirmed).

**RQ 1: How much improvement do learners show in their retention of vocabulary taught in class after VLST (compared with subjects in the control group who do not receive VLST in class)?**

H<sub>0</sub>: Learners in the experimental group do not show any improvement in their retention of taught vocabulary after introducing VLST in class (i.e. between pre-test and post-test).

\*H<sub>1</sub>: Learners in the experimental group show an improvement in their retention of taught vocabulary after introducing VLST in class.

**RQ 2: In general how do female learners in both groups deal with remembering words taught, in comparison with male learners in both groups?**

\*H<sub>0</sub>: The female learners from both groups remember the words taught as well as do the male learners in both groups.

H<sub>1</sub>: The female learners from both groups remember the words taught better than the male learners in both groups.

**RQ 3: Are there any differential effects of VLST on the word retention scores of the male and female learners in the experimental group?**

\*H<sub>0</sub>: There are no differential effects of VLST on word retention scores of the male and the female learners in the experimental group.

H<sub>1</sub>: There are differential effects of VLST on the word retention scores of the male and the female learners in the experimental group.

**RQ 4: Does the year of learning English in the university influence the learners (in both groups) when remembering the words taught?**

\*H<sub>0</sub>: The year of learning English in the university does not influence the learners (in both groups) when remembering the words taught.

H<sub>1</sub>: The year of learning English in the university influences the learners (in both groups) when remembering the words taught.

**RQ 5: Does VLST in class affect the attitudes of the learners in the experimental group towards vocabulary learning and VLS?**

H<sub>0</sub>: VLST in class does not have any effect on the attitudes of the learners in the experimental group towards vocabulary learning and VLS.

\*H<sub>1</sub>: VLST in class does have an effect on the attitudes of the learners in the experimental group towards vocabulary learning and VLS.

**RQ 6: Are there any differences in the male and the female learners of the experimental group in their choice of types of VLS for memorising words after VLST?**

H<sub>0</sub>: There are no differences between the male and the female learners of the experimental group in their choice of types of VLS for memorising words after VLST.

\*H<sub>1</sub>: There are differences between the male and the female learners of the experimental group in their choice of types of VLS for memorising words after VLST.

**RQ 7: Are there any differences in VLS used by the learners' of the control group in remembering the vocabulary taught before the pre-test and before the post-test?**

\*H<sub>0</sub>: There are no differences in the VLS used by the learners of the control group in remembering the vocabulary taught before pre-test and before post-test.

H<sub>1</sub>: There are differences in the VLS used by the learners of the control group in remembering the vocabulary taught before the pre-test and before the post-test.

**RQ 8: Are there any differences in the use of the types of VLS between the learners in the control group and the experimental group when asked to memorise vocabulary task I?**

H<sub>0</sub>: There are no differences in the use of the types of VLS between the learners in the control group and the experimental group when asked to memorise vocabulary task I.

\*H<sub>1</sub>: There are differences in the use of the types of VLS between the learners in the control group and the experimental group when asked to memorise vocabulary task I.

**RQ 9: Are there any differences in VLS used by the learners of the experimental group in remembering the vocabulary taught before and after VLST in class as compared with the control group?**

H<sub>0</sub>: There are no differences in the VLS used by the learners of the experimental group in remembering the vocabulary taught before and after VLST in class.

\*H<sub>1</sub>: There are differences in the VLS used by the learners of the experimental group in remembering the vocabulary taught before and after VLST in class.



## **1.5 Organisation of the thesis**

This thesis consists of six chapters. This chapter focused on the context background of the main study, the statement of the problems, and the rationale and purpose of the main study. The second chapter will review relevant applied linguistic literature concerning vocabulary acquisition and vocabulary learning strategy in relation to training in vocabulary learning strategies. In particular, the literature on five vocabulary learning strategies selected to be introduced to learners in class (i.e. dictionary work, the keyword method, the semantic-context method, the grouping method, and the semantic mapping method) will be reviewed. The third chapter will cover the research methodology and procedures – first briefly the preliminary data collection, then in detail for the main research, describing which types of research instruments are used to collect data and how the quantitative and qualitative data are statistically and systematically analysed. The fourth and the fifth chapter will present and interpret in detail the results obtained from pre-post tests, think-aloud protocols and the semi-structured interview quantitative results obtained from pre-post tests analysed with SPSS. Lastly, the conclusion and pedagogical implications will be presented in Chapter Six in which we will discuss the limitations of the main study and also put forward some suggestions for future research.

## **1.6 Summary**

This introductory chapter contains important contextual information forming the background to the research study. We have previewed the general background of how English, particularly vocabulary, is taught and how learners have dealt with vocabulary learning in the past and are dealing with it at present in the researcher's home situation. The RMC course is described in details as a concrete example of how teachers deal with vocabulary teaching in the classroom and how learners normally deal with vocabulary learning. We have exposed the dominant problems concerning vocabulary teaching and vocabulary learning drawn from first hand experience and the preliminary data study. What has been revealed strongly motivates the researcher to conduct empirical research with a view to improving and developing vocabulary teaching and learning in the future. The rationale of the study was described as being to suggest five VLST to help learners deal with vocabulary learning, especially with memorising L2 words effectively. The purpose of the main study is to research these crucial questions.



## Chapter 2: Literature Review

Given the purpose and the significance of the main study described in the introductory chapter, this chapter aims to review the research studies and related literature concerned with vocabulary learning, particularly vocabulary learning strategies (VLS) and vocabulary learning strategies training (VLST). It also refers to studies related to language learning strategy instruction/training (LLSI/T). The review of literature is organised into four parts. The first part defines terms and describes the importance of lexicon and its contribution to English learning in the four skills. The second part briefly overviews the literature concerning L2 vocabulary learning/acquisition and vocabulary teaching. Then, studies concerning language learning strategies (LLS) and vocabulary learning strategies (VLS) are reviewed in the third part. Moreover, in this part we thoroughly focus on LLS and VLS categorisation in conjunction with their taxonomies. We also go into research concerning VLST, and the studies involving VLS claimed to help learners deal with vocabulary learning, especially in facilitating target word retention. The fourth part is an overall summary of the reviews.

### 2.1 The Importance of vocabulary

#### 2.1.1 Defining terms

First of all we would like to clarify terms related to ‘vocabulary’ and explain how these terms are used in this thesis interchangeably: a) lexeme, lexical unit, word; b) lexicon, vocabulary, lexis; and c) learning, acquisition.

##### A) Lexeme/lexical unit/word

*Lexeme* is defined by Carter (1998, p. 7) thus: “A *lexeme* is the abstract unit which underlines some of the variants we have observed in connection with words.” For example, ‘BRING’ is the lexeme, underlying varieties of grammatical divergence: ‘bring’, ‘brought’, ‘bringing’, which can be referred to as word-forms.

The definition by Schmitt (2000, p. 1-2) explains another aspect of the term in addition to Carter’s definition. Schmitt explains that in order to deal with similar meanings of English multiple words; terms like lexeme, lexical unit or lexical item are used.

Schmitt (op. cit.) states:

“To handle these multiword units, the term *lexeme* (also *lexical unit* or *lexical item*) was coined. These three interchangeable terms are all defined as an item that functions as a single meaning unit, regardless of the number of words it contains.”

According to his exemplification, the six examples: *die*, *expire*, *pass away*, *bite the dust*, *kick the bucket*, and *give up the ghost*, are six lexemes and each is a separate entry in a dictionary.

What counts as a single unit? – Both Carter and Schmitt (op. cit.) express a similar idea what they mean by a single unit as follows:

One lexeme can have many grammatical forms (inflections). For example, *give*, *gives*, *gave*, *given*, and *giving*, which belong to one lexeme or one lexical unit: *give*. Inflections belong to a single lexeme and involve grammatical variation, i.e. the core meaning of *give* does not change. Expressions, idioms, phrasal verbs are counted as one single lexeme. For instance, *kick the bucket*, *give up*, and the like. A word with multiple meanings or polysemy, such as, *line*: *bottom line*; *draw a line*, etc. come under the same headword: *line*. Polysemy is, thus, counted as one lexeme.

Therefore, it can be said that the terms *lexeme*, *lexical unit*, and *lexical items* share a similar definition. Later in this thesis, we use this trio of terms interchangeably when we refer to every manifestation of a word (e.g. derivatives, inflected forms of verbs, idioms, and so forth). In short, the term *lexeme* has the same meaning as the term *vocabulary item*.

Regarding the definition of *word* which seems to be clearly understood; however, Carter (1998, p. 5) remarks that it is not so simple to define what a *word* is. He describes: “*The basic stability of a word according to the fact that a word is a word if it can stand on its own as a reply to a question or as a statement or exclamation.*”

In addition, Carter and McCarthy (1988, p.18) define word as a *freestanding unit*. According to their intuitive basis of word, *laughing* and *laugh* are considered words, but not ‘*ing*’.

In this thesis, we invariably use ‘word’ not ‘lexeme’ when referring to ‘word-list’. By ‘word-list’ we mean a list of English words (L2/FL) or target words accompanied by their definitions in English, or an English word accompanied by an L1 equivalent to the English definitions. Also in ‘word’ we include both *content* (i.e.

noun, adjective, and so on) and *function* words (i.e. preposition, conjunction, and so on.).

## **B) Lexicon/vocabulary/lexis**

*The Dictionary of Language Teaching and Applied Linguistics*, Richards, Platt, & Platt (1992) define the terms as:

“(a) Lexicon is the set of all the words and idioms of any language, (b) Vocabulary is a set of lexemes, including words, compound words and idioms, and (c) lexis is the vocabulary of a language in contrast to its grammar (syntax).”

In addition, the term *lexicon* is used when talking about pure linguistic theory, language acquisition (e.g. L1/L2 lexicon acquisition), and vocabulary teaching and learning. Additionally, sometimes it is used to mean a dictionary.

Hatch and Brown (1995, p. 1) define the term *lexicon*:

“The overall system of word forms and, when we include morphology, the study of word formation in languages. The term is also used to refer to the way forms might be systematically represented in the brain, that is, the mental lexicon<sup>1</sup>.”

In addition, Hatch and Brown define the term *vocabulary* as a list or a set of words for a particular language used by individual speakers of that language.

In this thesis we use the term specifically to refer to learners’ vocabulary knowledge, i.e. their knowledge of words/lexemes.

Following these definitions of *vocabulary*, we use the term, vocabulary in the sense of *a list of lexemes*, i.e. words/multi-words, phrases, idioms, terminologies in various fields of study in any language, which are used by native speakers or non-native speakers to communicate meaningfully. In addition, in this thesis, *vocabulary* item also refers to new word-lists taught in class which learners are asked to remember.

The term *lexis*, in linguistics, refers to the total stock of words or vocabulary of a language. We focus on an adjective of lexis: lexical, often used in this thesis to form technical phrases, such as lexical item, lexical entry and so on.

## **C) Learning/acquisition**

Krashen’s (1981a, p. 99) terms: *learning* and *acquisition*, have been much debated by many educators who are interested in L2 language learning and teaching,

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<sup>1</sup> Mental lexicon - Aitchison, J. (1996, pp. 15-24): the term mental lexicon is described as ‘the dictionary which we presumably all carry in our minds’.

or in theories of SLA. Originally, in response to Krashen's term: *acquisition* refers to learner's subconscious/unconscious/spontaneous intuitive processes used to obtain a target language in a natural way, like a child's process in gaining a first language, whereas, *learning* refers to learner's conscious/deliberate processes toward target language forms, grammatical rules, and awareness of their own process, Brown (1994, p. 279).

Oxford (1990, p. 4) describes these terms as a *well-known contrast*. In her book: *Language Learning Strategies*, she uses the term *learning* as short for a longer phrase: *learning and acquisition*. It perhaps can be implied that she considers both terms equal in value, and tends to use both interchangeably, regardless of Krashen's definitions.

Furthermore, Ellis (1994, p. 6) states that there is no difference between *learning* and *acquisition*. Hence, he uses both terms interchangeably in his book: *The Study of Second Language Acquisition*.

In this thesis, we also consider both terms equally important. In fact, we tend to focus on the types of VLS which learners utilise to commit L2 vocabulary to memory. We will, therefore, use both terms interchangeably: vocabulary learning or vocabulary acquisition.

### **2.1.2 Vocabulary and its importance**

In the sphere of foreign language learning, vocabulary is seen as important for all four skills. There are various interesting views from many educators concerned with vocabulary learning/acquisition stating how vocabulary is important to language learning in the four skills. Lessard-Clouston (1996, p. 27) referred to Luo's (1992) view on vocabulary and its importance:

“Vocabulary - words, phrases, idioms, etc. is at the heart of all language usage in the skill areas of listening, speaking, reading, and writing, as well as culture,”

People also spontaneously perceive that vocabulary plays a major role in authentic communication. They thus need to have lexical repertoire to understand written texts, articles, magazines, and so on. They also need to have adequate words to handling written messages; listening texts, and conversation.

Wilkins (1972, p. 111) supports this by saying: “*The fact is that while without grammar very little can be conveyed, without vocabulary nothing can be conveyed.*” In addition, Gass (1987, p. 129) cited Hatch's (1983, p. 74) statement concerning the

importance of words: in terms of handling basic communication, lexicon is important when we have inadequate knowledge of a new language – the words probably make the communication possible.

Krashen (1989, p. 440) makes a pertinent remark about the importance of vocabulary: L2 language learners realise that knowing numbers of words is necessary for mastering a target language. Besides, they have dictionaries with them, not grammatical references. In addition, they often report the major problem is lacking vocabulary.

In terms of learners' views of vocabulary learning, Meara (1980, p. 221) indicates: "...Learners themselves readily admit that they experience considerable difficulty with vocabulary."

The importance of vocabulary stated above perhaps implies that knowing much vocabulary is beneficial for learners, as they have a chance to handle L2 in both receptive and productive skills more successfully than those whose repertoire is smaller.

In this study, we look at the importance of vocabulary in relation to reading skill, which is specially important for our students in their particular situation - (see Chapter One, 1.1.4 and 1.2). Corson (1995, p. 27) cited Garcia's (1991) remark in relation to the importance of vocabulary and learners' reading skill: "*ESL students' dearth of adequate English vocabulary severely affects their reading comprehension and their academic progress.*"

In fact, vocabulary directly affects reading skill; it may impede especially second language learners' comprehension of a written text if the learners have less vocabulary knowledge or below the threshold minimum of approximately 3,000 words. Additionally, Hunt and Beglar (1998, p. 8) cited Laufer's (1992) study stating that if the university students know up to 5,000 words, it is likely that they will have better reading comprehension. Besides, Waring (2002, p. 1) states that text difficulty probably impedes learners' success in guessing the meaning of unknown words. Hu and Nation (2000) suggest that in order to guess unknown words accurately from their context, it is essential that learners know approximately 98% or more of words in the text. If there is one new/unknown word out of fifty words, it is likely that a learner can successfully guess the unknown word. On the other hand, if the rate is one unknown word in ten: "...the probability of guessing the meaning of an unknown word is close to zero." (Waring, op. cit.).

Focusing on L2 language learners who need to master a target language, there is in fact inevitably a great amount of vocabulary or lexical items to be encountered and learned. Since “*vocabulary is central to language and of critical importance to the typical language learner*” (Zimmerman, 1997, p. 5), it is unlikely that learners will fail to notice the fact. Presumably, the more successfully they learn vocabulary, the less hindrance they encounter in achieving their target languages in four skills.

In sum, we can see how important vocabulary or lexicon is, and how it can presumably influence L2 learners mastering of the four skills in any target language.

## **2.2 The place of VLS in vocabulary learning/acquisition**

In this section, we survey the studies of vocabulary teaching and learning/acquisition. Contributions to this field have been made from many disciplines namely by EFL/ESL pedagogical educators, practitioners in Applied Linguistics, linguists, psycholinguists, sociolinguists, foreign or second language acquisition researchers, language strategies trainers and the like.

This part reviews the key thoughts of educators whose interests lie in vocabulary teaching and acquisition/learning; vocabulary reference works in foreign language learning; vocabulary learning/acquisition; vocabulary in conjunction with applied linguistic perspectives; language learning strategies and vocabulary learning strategies training; and vocabulary retention.

The specific areas of vocabulary learning/acquisition on which we focus in this thesis are vocabulary learning strategies (VLS) and vocabulary learning strategies training (VLST).

### **2.2.1 Historical development of interest in vocabulary**

From the late 18<sup>th</sup> to the early 19<sup>th</sup> century, the era of the Grammar Translation Method (GTM), priority was given to translation and grammar in teaching and learning of a foreign or second language. The educators’ notion in that era was that vocabulary was a shadow of syntax or grammar. Zimmerman (1997, p. 7) cited Sweet’s (1899/1964) statement concerning the role of vocabulary in the past: “*Even though language consists of words, we communicate in sentences, not in words. Regarding a practical and a scientific viewpoint, the word is not the unit of language, in fact the sentence is. According to a purely phonetic view, words do not*

*exist.*” In addition, Jones (1995, p. 97) states that being sidelined, after decades learning lexis is now receiving much attention.

Clearly such a view could be responsible for the lack of interest in vocabulary teaching and research into vocabulary at that time.

Workman et al. (1993, p. 23) comment on vocabulary teaching and learning during the 50’s – 70’s:

“During the periods (the 50’s-70’s), teaching of language was seen as the teaching of grammatical patterns (the skeleton), to which vocabulary (the flesh) could be attached as necessary. The vocabulary was subordinated to grammar, except when it was used to clarify the meaning of a structure or to reflect the interests of the students.”

In the late 20<sup>th</sup> century, interest in vocabulary grew, as revealed by the appearance of lexicographical research in the 1980s (Zimmerman, 1997). Later there has been great interest in the acquisition of vocabulary.

According to Scholfield’s (2003) personal communication, there are three spheres of interest in vocabulary in the late 20<sup>th</sup> century: 1) Interest in vocabulary teaching mainly associated with the communicative approach, since vocabulary is essential for communication; even though that approach has no special way of its own for dealing with vocabulary. Also the rise of ‘learner autonomy’ and ‘learner centeredness’ in teaching put emphasis on strategies for the self-learning of vocabulary; 2) Interest in vocabulary learning/acquisition comes from Krashen’s claim, in association with reading research, i.e. the idea of incidental learning via reading. Also a little is from psycholinguists’ interest in vocabulary memory; also from general LLS research (Oxford, 1989, 1994; O’Malley and Chamot, 1985; Wenden, 1987) and so forth, since many strategies turn out to be vocabulary ones. It is clearly seen that much interest is due to individual scholars who were interested in vocabulary, both teaching and learning aspects (e.g. Nation). In terms of SLA, the focus is mostly on syntax; and 3) Interest in vocabulary description mainly from dictionary makers influenced by the rise of semantics in linguistics.

When we glance through the various approaches from each period of language teaching, starting from the era of GTM, Reform Movement, Natural Approach or Direct Method, Reading Method, Audio-Lingual Method, and up to the period of the Communicative Approach or Communicative Language Teaching, vocabulary remains overlooked throughout.



Eventually, a turning point in interest in vocabulary gradually occurred around the 1990s onwards, when there was an increase in publications concerning vocabulary in relation to language pedagogy as well as research involving vocabulary, Kojic-sabo and Lightbown (1999, p. 176) citing (Maignashca, 1993) and Meara, 1981). The publications including studies related to vocabulary learning, teaching, and vocabulary learning strategies which have recently appeared are (Coady and Huckin ,1997; Schmitt, 1997, 2000; Nation; 2001), and so forth.

### **2.2.2 Vocabulary teaching and learning – current trends**

Allen’s (1983, pp. 5-6) survey of the present emphasis on vocabulary describes the interesting basic queries raised by many teachers during the professional discussion. The questions are concerned with eight issues. We look at the core topic concerned with: how to help learners learn vocabulary, e.g. one of the question focuses on how “...*teachers can encourage students to take more responsibility for their own vocabulary learning*”. Since our research aims at training learners in five VLS, we specifically focus on this topic.

With regard to current notions concerning vocabulary teaching, we will look at two pedagogical aspects: the direct and indirect approach to vocabulary teaching clearly required the teacher’s thought and plan.

According to Scholfield’s (2003) unpublished course-notes (LG 544), referring to Nation’s direct and indirect vocabulary teaching, the former involves explicit teaching and practising specific words; it also involves teaching VLS to learners. The latter is generally concerned with incidental reading; the main focus of teaching is on something else, i.e. typically the communication of messages. In direct vocabulary teaching, learners need to deliberately concentrate on language features or on strategy learning. Thus, it requires learners’ conscious learning process. These approaches can perhaps be considered as ‘learning’ in Krashen’s sense. With incidental learning, the teacher encourages learners themselves to do more incidental reading/listening materials in order to enhance their autonomous vocabulary learning. This is based on learners’ subconscious learning process regarded as ‘acquisition’, in Krashen’s sense.

We will look further at Nation and Newton’s (1997) view of ‘direct and indirect approaches’ to vocabulary teaching as follows:



1) In direct vocabulary teaching, explicit attention is paid to vocabulary (Nation and Newton, 1997). Basically, it is essential that high-frequency words are taught in class, as this is the way to get the most useful and necessary words into a learner's repertoire, so that he/she will be able to use them in a real language situation. Nation (1995) suggests: "*The most frequent 2,000 words which are essential and so worth the effort required to teach and learn them explicitly.*" (Schmitt, 2000). It is recommended that teachers find the 2,000 key words in a good source: The General Service List (GSL), West (1953). In addition attention is given not only to vocabulary explicitly, but also - "*Time may be set aside for the learning of strategies and learners' mastery of strategies may be monitored and assessed.*" (Nation and Newton, 1997).

2) In an indirect approach to vocabulary teaching, Nation and Newton (op. cit.) remark: "*...the teacher needs to ensure that learners are being exposed to materials and activities that will expand their vocabulary in useful ways.*" Clearly the teacher encourages and guides learners to do extra graded reading, and various types of communicative activities.

In terms of vocabulary teaching, some pedagogical sources emphasise the direct approach, others the indirect approach. Scholfield (2003) comments on vocabulary teaching: "*perhaps one needs both approaches at different stages.*"

In our main study, we emphasise the direct approach. With the direct approach, we train the experimental group in the five VLS in the classroom. The principle behind the VLS training is teaching the learners other types of VLS and how to operate them properly and effectively, so that they can make use of them effectively when learning L2 vocabulary independently.

According to our preliminary findings, the learners were interested in the VLST in the classroom. Obviously, in reality teachers cannot directly teach every word to the learners or a large number of specific words/phrases in the classroom. In fact, the learners have to depend on themselves where there are no teachers beside them outside class or in the future. Thus, they should be trained in other types of VLS and in utilising each one effectively so as to memorise a great number of L2 words by themselves outside class.

Nation (1990, p. 159) suggests concerning strategies instruction:

“...because of the large number of low frequency words and because of their infrequent occurrence and narrow range, it is best to teach learners strategies for dealing with these words rather than to teach the words themselves.”

In our study, we thus aim at teaching the learners the mixed set of VLS, so that they on their own will have more choices to help them retain the L2 words effectively.

According to Carter and McCarthy (1988), vocabulary now receives more focus from other related areas involving: “...*the linguistics study of lexicon, psycholinguistic investigations into the mental lexicon, the communicative trend in teaching, which aims at learner-centre in class,...*” Moreover, Coady (1997, p. 273) cited Carter’s and McCarthy’s (1988) notable point: “*What is perhaps missing in all this is more knowledge about what happens in classrooms when vocabulary crops up.*”

In the preliminary study, we found that the students had to remember a large number of L2 words either introduced or met in and outside class each week. With no VLS training in class, the students were faced with the problem of forgetting the words previously met in class. This suggests that our main study is going to be concerned with how teachers can help learners with vocabulary learning, particularly memorising L2 words effectively.

Regarding the current pedagogical view, vocabulary is equally as important as syntax. Healey (2000, p. 1) cited Coady’s (1997) view on the implications for vocabulary pedagogy. He suggests three important underlying principals for effective vocabulary teaching: firstly, teachers should give learners both definitional and contextual information about words. For L2 learners, teachers may need to introduce them to the use of the dictionary to find further information about the words. Secondly, teachers should encourage learners to process additional details of the words at a deeper level. It is necessary that teachers emphasise the importance of extra activities and provide them to L2 learners, especially authentic communicative activities. Lastly, learners need to be exposed to various types of target words.

In our study, we do not pursue any of these ideas, as in class we aim at teaching vocabulary learning strategies – teaching learners how to use VLS/tools to help them memorise L2 words effectively. However, we agree with the ideas about dictionary

access and the processing words information at a deeper level. These are included in our criteria for selecting the five VLS, which will be elaborated later in 2.3.3.

In response to the growth of research on vocabulary teaching and learning, new approaches have been suggested for teachers during the late 20<sup>th</sup> century. For instance, Oxford and Scarcella (1994, p. 235) propose a *new-research based approach* to L2 vocabulary instruction, which is compared with the *traditional approach* to vocabulary (see Appendix 2.1). The new-research based approach focuses on five issues: a) teachers are first recommended to take learners' needs analysis into account, attempting to figure out factors that involve learners' need to know words; b) vocabulary instruction should be designed to suit each individual learner' purpose (i.e. styles, goals, needs); c) learners should be taught to deal with vocabulary learning independently; d) vocabulary learning strategies (VLS) should be emphasised; or teachers should provide learners with guided practice with VLS; and lastly e) it is suggested that fully contextualised activities be emphasised (e.g. exposure to varieties of meaningful contexts in conjunction with practising the target language in the four skills in authentic communication activities) and partially contextualised activities (e.g. word association, keyword method, semantic mapping), on the other hand the use of decontextualised activities (e.g. word lists, flashcards) should be limited.

In our main study, the VLST also focuses on the third (c) and fourth (d) issues which underline the idea of teaching vocabulary learning strategies to the learners without teaching them the specific features of L2 words/phrases in class. Implicitly we also aim at the idea of building up learners' autonomous learning.

If we look closely at the current vocabulary teaching approach proposed by Oxford and Scarcella (op. cit.), it is interesting to note that there is an emergence of the notion of training the learners in VLS in the hope that the VLS will become language learning tools to help them learn vocabulary effectively and efficiently in the future. Moreover, the learners will become more confident and independent when they have to cope with language learning in the authentic situation on their own.

In addition, Hunt and Beglar (1998, p. 7) present a view of how to implement a systematic vocabulary development framework. They exemplify a combination of three approaches to vocabulary instruction and learning, e.g. a) Incidental Learning, b) Explicit Instruction, and c) Independent Strategy Development, modified from (Coady, 1997a; Hulstijn, Hollanfer, & Greidanus, 1996). There are seven principles

under each approach, which can be simply summed up: 1) the first approach aims at providing learners with extensive reading as well as listening opportunities; 2) the second approach requires teachers' consideration of which types of word learners need to know, taking into account ways of presenting words for the first time, giving detailed word information to learners, and helping learners in developing fluency with known words - for example, by designing activities that include words already encountered; and 3) the third approach focuses on enhancing learners' independent learning. For example, teachers provide strategies to deal with unknown vocabulary in text, and introduce varieties of dictionaries and train learners to use dictionaries (e.g. bilingual, monolingual, and bilingualised<sup>2</sup> dictionaries).

In our home situation, learners need more choices of VLS to help their L2 word retention. Also, we look at the combination of approaches proposed by Hunt and Beglar (op. cit.) which underlines the prominent points emphasised in the main study. Since our focus is on teaching learners the VLS, so that they will have more choices of VLS when memorising L2 words, we aim at the third approach: the explicit vocabulary learning strategies training and the independent strategy development, including teaching learners to use a dictionary effectively, especially MLD.

Both the new research-based approach to L2 vocabulary instruction, proposed by Oxford and Scarcella (1994) and the combination of three approaches presented by Hunt and Beglar (1998) highlight the key points that learners' needs are of prime importance and the emphasis is upon training some VLS to enhance learners' independent learning. However, in terms of practicality and applicability, we are aware that there are many factors which need to be considered by the teachers who know best their learners' background as well as their home situation.

### **2.2.3 Vocabulary in relation to the field of second language acquisition (SLA)**

In order to clarify the terms second language acquisition and foreign language acquisition, we will use Ellis' (1985, p. 5) definition: "*Second language acquisition is not intended to contrast with foreign language acquisition. SLA is used as a*

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<sup>2</sup> "Bilingualised dictionary includes L1 equivalent to the target language definitions, L2 definitions, L2 examples of sentences, and L1 synonyms. It was found to result in better comprehension than BLD and MLD (Laufer & Hader, 1997)." - cited by Hunt and Beglar (1998:10).

*general term that embraces both untutored (and 'naturalistic') acquisition and tutored (or 'classroom') acquisition."*

Ellis (1985, p. 5) does not distinguish between second and foreign language teaching and learning. In terms of EFL/ESL language teaching and learning, it is generally understood that a foreign language is taught particularly in class in the countries where non-native speakers do not use the target language as the major means of communication (i.e. English is considered a foreign language in Thailand, Japan, France and so forth). On the other hand, second language is taught in the countries where the target language is used as a means to communicate in the real situation, and may be learnt at the same time as L1 (i.e. English language is considered a second language in Hong Kong, Singapore, and so on).

Though in fact we consider English as a foreign language in Thailand, in our study we use the term second or foreign language acquisition/learning (SLA) in accordance with Ellis (1994, pp. 11-12): *"There is a need for a neutral and superordinate term to cover both types of learning."*

Moreover, in our main study we do not aim at the SLA area in depth. We also do not focus on Krashen's incidental learning of vocabulary. Besides, 'L2 word' in our study means English and 'L1 word' or 'mother tongue' is Thai. Hence, we use the terms second language acquisition/learning or foreign language acquisition/learning simply as meaning another language which is not a speaker's mother tongue or L1.

With regard to the area of SLA research in the past in relation to the main focus of this thesis: L2 vocabulary acquisition, Cohen (1990, p. 21) mentions that there is not much literature on second language vocabulary acquisition studies, and he also strongly suggests the need for 'empirical validation'. He also highlights the point that vocabulary was neglected in the SLA research because it focused on the acquisition of grammar/syntax: *"In fact, second language acquisition researchers have noted that the study of vocabulary acquisition has until recently been one of the most neglected areas of research (Levenston 1979, Meara 1980)."*

With regard to the above statement, Meara (1980, p. 221) describes in more detail the absence of vocabulary acquisition in the previous years of SLA research in relation to the opinion of the learners' who encounter difficulty at the primary stages of acquiring their target language. He states that:

"Vocabulary acquisition is part of the psychology of second language learning that has received short shrift from applied linguistics, and has been very largely

neglected by recent developments in research. This neglect is all the more striking in that learners themselves readily admit that they experience considerable difficulty with vocabulary, and once they have got over the initial stages of acquiring their second language, most learners identify the acquisition of vocabulary as their greatest single source of problems.”

Meara (1996, p. 27) also reaffirms that around 1980 there was an increase in interest in research in the area of vocabulary acquisition. His general view about vocabulary acquisition in the past and from the year 1980 onwards is:

“A few years ago it was fashionable to describe vocabulary acquisition as a neglected aspect of language learning. Recently, however, interest in this area has unexpectedly grown at an enormous rate. There seems to be a general feeling among teachers, publishers and researchers that vocabulary acquisition has not been treated seriously enough in the past, and that our beliefs about how people acquire vocabulary in foreign language are due for overhaul. Since 1980 or so, this tendency has become increasingly apparent in current research on vocabulary acquisition.”

In addition, Schmitt (1998, p. 282) cited Nation’s view about vocabulary acquisition from his journal interview. Nation states:

“There isn’t an overall theory of how vocabulary is acquired. Our knowledge has mainly been built up from fragmentary studies, and at the moment we have only the broadest idea of how acquisition might occur. We certainly have no knowledge of the acquisition stages that particular words might move through.”

Despite the fact that there is little knowledge about how vocabulary is acquired, there is much evidence of an effort to study vocabulary more, Schmitt (op. cit.). Meara (1987, 1992) and other scholars try to pave the way to conducting vocabulary studies. Moreover, we see a number of studies conducted in an attempt to quantify the number of words in various aspects. For example, Goulden, Nation, & Read (1990), D’Anna, Zechmeister, & Hall (1991) conducted a study to quantify how many words average native speakers know. Other scholars, such as Laufer (1992), Hazenberg & Hulstijn (1996) try to quantify how many L2 words non-native speakers need to know. Also, there is an interest from Nagy, Herman, & Anderson (1985), Huckin, Haynes, & Coady (1993) in quantifying the size of L2 vocabulary learners gained while exposed to incidental reading. Additionally, studies conducted by Cohen & Aphek (1980), Avila & Sadoski (1996) focus on quantifying the number of L2 words learners learned by employing different types of exercises, techniques, and strategies, Schmitt (op. cit.).

Clearly, we can see a recent strong emergence of researchers’ interest in a wide range of L2 vocabulary acquisition issues. Since the focus of our study is on vocabulary learning strategies (VLS), particularly in VLST, we will consequently

only review literature concerning L2 learners and their English vocabulary learning using their own VLS and the ones that they received from VLST sessions arranged in the natural classroom environment.

### **2.3 Language Learning Strategies (LLS) and their taxonomy**

A prior aim of this part is to present how language learning strategies (LLS) are defined, so as to establish a clear conception of what vocabulary learning strategies (VLS) are concerned with. Clearly, different educators define the term language learning strategies differently. In this part, we will look at the prominent LLS definitions and the taxonomies organized by some scholars whose LLS definitions are partly matched with our criteria in the main study.

#### **2.3.1 Language learning strategies (LLS)**

Currently, the quest for learners' language learning strategies moves on ceaselessly, even though researchers and educators realise that it is not so simple to probe the various types of learning strategies employed by each language learner. Towell and Hawkins (1994) cited Ellis (1985, p. 188) cited by: *"Peering into the 'black box' to identify the different learner strategies at work in SLA is rather like stumbling blindfold around a room to find a hidden object"*.

Though we have seen the difficulty in finding out how LLS have been recognised since 1990, a number of current investigations in the field of SLA pursue the language learning strategies instruction/training (LLSI/T), and strategies-based instruction (SBI), (i.e. O'Malley and Chamot, 1990; Chamot and O'Malley, 1994; Oxford, 1993; and so forth). Moreover, the indispensability of LLS is highlighted by many studies conducted by Wenden and Rubin (1987), Cohen (1998), and so on. In addition, the importance of LLS has been acknowledged among educators and researchers, for example, Rausch (2000, p. 1) states: *"Excessive investigation has shown the importance of LLS in making language learning more efficient and in producing a positive effect on learners' language use"*. Also, Oxford (1990, p. 1) states the importance of LLS as they are like the scaffolding of learners' communicative competence in the future: *"LLS are specially important for language learning because they are tools for active, self-directed involvement, which is essential for developing communicative competence."*



Moreover, Berry (1997, p. 22) states LLS is useful for both successful and unsuccessful learners, as it helps them to learn the language effectively. Moreover LLS can assist learners to become more self-directed, better in language proficiency, language performance, and greater in self-confidence. In terms of strategies training, Lessard-Clouston (1997, p. 3) emphasises: “*To developing students’ communicative competence, LLS are important because research suggests that training students to use LLS can help them become better language learners.*”

It can perhaps be said that if language learners are well exposed to LLS knowledge, they will be able to enlarge their LLS repertoire, and they then can make use of the LLS in order to attain their language learning goals and also achieve communicative competence in the future.

### **2.3.1.1 Defining language learning strategy**

The term LLS is defined by scholars from different streams who look at ‘*learning strategies*’ from their individual perspectives and may use other terms such as techniques or approaches, conscious actions, learning behaviour and thoughts, and so forth. In Ellis’s view (1994, p. 529): “*The concept of ‘strategy’ is a somewhat fuzzy one and not easy to tie down.*” However, Ellis proposes a general definition of strategy: “*...a strategy consisted of mental or behavioural activity related to some specific stage in the overall process of language acquisition or language use.*”

We also look at the core definition of the term ‘learning strategy’ defined by Ellis (1994, p. 712g):

“A learning strategy is a device or procedure used by learners to develop their interlanguages. It is one type of learner strategy<sup>3</sup>. Learning strategies account for how learners acquire and automatise L2 knowledge.”

Ellis further states that learning strategies “*contrast with communication and production strategies, both of which account for how learners use rather than acquire L2 competence.*”

Moreover, Oxford (1990, pp. 1-2) states that, as learning strategies now receive more recognition from many scholars, they have been named differently, for example, learning skills, learning-to-learn skills, thinking skills, and problem-solving skills. A summary of Oxford’s diagram of language learning strategy system is

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<sup>3</sup> Learner strategies are the behaviours or actions that learners engage in, in order to learn or use the L2. They are generally considered to be conscious or, at least potentially conscious (Ellis, 1994:712g).



shown in [Appendix 2.3](#). Furthermore Oxford (1990, p. 9) presents a clearer view of learning strategies by illustrating twelve features of LLS:

“1) contribute to the main goal, communicative competence, 2) allow learners to become more self-directed, 3) expand the role of teachers, 4) are problem-oriented, 5) are specific actions taken by the learners, 6) involve many aspects of the learner, not just the cognitive, 7) support learning both directly and indirectly, 8) are not always observable, 9) are often conscious, 10) can be taught, 11) are flexible, and 12) are influenced by a variety of factors.”

One of the features, which can presumably support the idea of LLSI/T is feature no. 10, which states that language learning strategies can be taught.

In relation to independent learning, in Rubin’s (1987) LLS definition, she states that the learning strategies have a direct effect upon learner’s learning, and in the case of learners who utilize effective strategies they will be able better to learn independently or autonomously learning. She states:

“Learning strategies are strategies which contribute to the development of the language system which the learner constructs and affect learning directly. Students who use effective strategies are better able to work outside the classroom by themselves, once the teacher is not around to direct them or provide them with input.”

Since our main study focuses on SI/ST, especially VLST, we look primarily at the LLS definitions defined by scholars whose studies are concerned with LLSI/T in relation to VLST. Thus, the core points of LLS differently/similarly defined by various educators or experts are tabulated in Table 2.1 following the ticks ✓ in each column indicate the consensus of LLS criteria given by the scholars.

**Table 2.1 Definitions of Language Learning Strategies**

Scholar	Behaviour contribute directly to learning	Concern use and comprehension as well as learning and meaning	Consciousness	Deliberate, intentional	Device or procedures	Facilitate the acquisition, storage, retrieval or use of information	Lead to autonomous learning, self-directed	Mental processes (not observable)	Not only cognitive but also social, affective, metacognitive	Observable	Problem related	Process contributes directly to learning	Specific actions, or techniques, tools	Success related
Chamot et al. (1987)				✓		✓		✓	✓				✓	
Cohen (1990)	✓		✓	✓		✓			✓			✓	✓	✓
Ellis (1994)	✓				✓			✓			✓			
O'Malley & Chamot (1990)		✓							✓					
Oxford (1990)	✓		✓			✓	✓	✓	✓	✓			✓	✓
Rubin (1987)	✓						✓					✓		
Wenden (1987)	✓		✓	✓		✓	✓	✓	✓	✓	✓		✓	

The table summarises the LLS criteria based on the definitions used by the key scholars to whom we refer in our study. Thus, we include the LLS criteria given by O'Malley and Chamot, Oxford, Rubin, Wenden, Cohen, and Ellis.

Nation (2001, p. 217) states that it seems to be difficult to make a clear-cut definition of 'what a strategy means'. However, in terms of methodology and pedagogy, he suggests that teachers should look at the characteristics of 'strategy' according to its four distinguishing aspects:

“1. involve choice, that is, there are several strategies to choose from, 2. be complex, that is, there are several steps to learn, 3. require knowledge and benefit from training, 4. increase the efficiency of vocabulary learning and vocabulary used.”

In a broader view of LLS, McDonough (1995, pp. 4-5) claims that the term 'strategies' in relation to language learning, entails various implications. He lists four categories: a) the term is considered as '*an organising principle or policy*', which yields the meanings in the sense of "*an articulate plan for meeting particular*

*problems, not a piece of problem-solving in itself.*”, b) second, it is related to the sense of psychology. Strategies in this sense are dealt with human memory associating with cognitive knowledge, e.g. a child makes use of a strategy to help him/her recognise some forms of language rules; c) third, the term is linked to ‘*compensation (strategies)*’. The strategies appear in L2 studies involving L2 learners attempting to utilise strategies to help them communicate in L2 successfully, e.g. using simple L2 known words to communicate when a learner has limited vocabulary knowledge; d) lastly, the term is linked to ‘*planning*’. McDonough associates the fourth definition of ‘*strategies*’ with types of plans that many good language learners (GLL) employ in language learning. With regard to ‘*planning*’, McDonough (op. cit.) cited Stern’s (1975, p. 31) view which shows a similar concept underlying indirect strategies for general management of learning in relation to metacognitive strategies stated by Oxford (1990, p. 136): “*centering your learning, arranging and planning your learning, and evaluating your learning*”.

Apart from cognitive and social-affective strategies, O’Malley and Chamot (1990, pp. 46-47) also stress the significance of metacognitive strategies: “*Planning is a key metacognitive strategy for second language acquisition, involved in directing the course of language reception and production.*” Rubin (1987, p. 23) refers to the importance of metacognitive strategies which is summed up by O’Malley et al. (1983, p. 6): “*Students without metacognitive approaches are essentially learners without direction and ability to review their progress, accomplishments, and future learning directions.*”

In the main study we explicitly focus on the VLS categorised as cognitive strategies in relation to consolidation strategies and determination strategy, in accordance with Schmitt’s (1997) VLS taxonomy. Metacognitive strategies are implicitly emphasised.

Apart from the definition of LLS, the term ‘*learner strategies*’ is to some extent related to LLS. The latter is defined in three ways by Wenden (1987, p. 7): a) It is first referred to “*language learning behaviours learners actually engage in to learn and regulate the learning of a second language.*” It is emphasised that language learning behaviours are called strategies; b) Second, the term means anything that “*...learners know about the strategies they use, i.e. their strategic knowledge.*”; and c) The final explanation of the term involves learners’ knowledge of how they learn.

For example, the focus is on learners' opinion about how easy or hard in learning a language is, or how learners use the language, well or poorly, and so forth.

Clearly there are differences in the way various scholars define LLS. However, it appears that the various definitions also share a core similarity. They to some extent involve three prominent categories: cognitive, metacognitive, and social/affective strategies, as clearly mentioned in (O'Malley and Chamot, 1990, p. 126; Oxford, 1990, pp. 15-21).

Perhaps it can be simply summed up that learning strategies normally refer to what learners do to help them learn a target language, to become more effective users and learners. To use a figure of speech, learning strategies are like robotic arms or tools, which assist learners to master their target language effectively and efficiently. Since each tool has its own specification, which one is chosen as best suited to a particular learner will depend on his/her style or preference.

#### **2.3.1.2 Subtypes: O'Malley & Chamot's - Oxford's LLS taxonomies**

Referring the LLS definitions and criteria summarised in Table 2.1, we can see that the classification of learning strategies is based on cognitive psychology, metacognitive knowledge, and language learning theory in relation to '*declarative and procedural knowledge*'<sup>4</sup>, Anderson (1985). Our main study looks at how classification of LLS has been used to establish a VLS taxonomy. Therefore, the special emphasis is placed on O'Malley and Chamot's (1990), Oxford's (1990) learning strategies taxonomies.

O'Malley et al.'s (1985) LLS classification, based on Brown and Palincsar's (1982) classification scheme consisted of metacognitive and cognitive strategies. The LLS taxonomy was devised after O'Malley et al. had conducted a study in 1983, in which seventy high-school ESL students and twenty-two teachers took part. Three instruments were used to in the study: a) student interview guide and b) a parallel teacher interview guide and c) the observation form. We elaborate the study further in 2.3.1.4. The LLS taxonomy contains three categories: a) Metacognitive strategies, b) Cognitive strategies, and c) Social strategies, O'Malley and Chamot (1990, p. 119)

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<sup>4</sup> Two ways in which information is stored in LTM, i.e. declarative - consciously known facts, concepts or ideas and procedural – unconsciously known knowledge of how to do things, (Richards et al., 1992, p. 97).

(see Appendix 2.2). The taxonomy is later used as the initial model of the LLS –VLS classification.

O'Malley and Chamot (1990, p. 103) note some distinct points about LLS classification schemes and point out that, though Wenden's (1983) work had suggested Rubin's learning strategies classification scheme for future research in her (1987a) work, which aims at metacognitive strategies, she emphasises that Rubin's (1987, p. 25) metacognitive strategies, e.g. using to oversee, regulate or self-direct language learning, a more specific component of the strategies should be added in order better to confirm the focus of the strategies: the process of learning or a manipulation of learning opportunities.

O'Malley and Chamot (op. cit.) further criticise the early classification scheme of Oxford (1985): the scheme poses a parallel LLS conception to Dansereau's (1978, 1985) 'primary strategies' and 'supporting strategies'. Oxford's 'Primary strategies', include learning strategies: inferencing, mnemonics, summarising, practice, and so forth; 'supporting strategies' includes, for example, attention enhancers, self-management, affective strategies, planning, cooperation, and so on. Additionally, there are sixty-four more strategies listed in her excessive classification scheme. In fact, both aforementioned earlier classification schemes show similarities to the terms Rubin's (1981) describes in her strategy classification. Nevertheless, the differences lie in the actual definitions and specific learning strategies.

O'Malley and Chamot (op. cit.) raise the problem concerning Oxford's (1985) extended scheme: "...this extended listing is far removed from any underlying cognitive theory, fails to prioritise which strategies are most important to learning, and generates subcategories that appear to overlap." Despite the partial weakness of Oxford's (op. cit.) extended scheme, O'Malley and Chamot (op. cit.) mention the strong point of the scheme in that it yields: "...the foundation for generating items for a questionnaire designed to assess use of learning strategies in second language acquisition (Oxford 1986)."

However, O'Malley and Chamot (op. cit.) do not refer to Oxford's (1990) LLS classification, which has been applied in recent years by number of scholars and researchers as a model for establishing LLS taxonomy. For instance, "Schmitt (1997, pp. 207-208) developed an extensive taxonomy organised around Oxford's (1990) social, memory, cognitive and metacognitive categories.", cited by Nation (2001, p. 217). In Schmitt's (1997) VLS taxonomy, Affective Strategies are not included in the

two main classifications of VLS, i.e. ‘discovery strategy’ and ‘consolidation strategy’.

According to Oxford’s (1990, p. 17) taxonomy, language learning strategies are divided into two main groups, ‘direct strategies’ and ‘indirect strategies’. Each group includes three different types of LLS. The former involves memory strategies, cognitive strategies, and compensation strategies; the latter contains supporting LLS, which are metacognitive strategies, affective strategies, and social strategies. As a matter of fact, Oxford includes the key classifications: cognitive, metacognitive, social and affective strategies, which are similar to O’Malley and Chamot’s LLS taxonomy. Sub-categories in Oxford’s LLS are linked to the four skills of language tasks, i.e. speaking, listening, reading, and writing.

However, Oxford (op. cit.) remarks:

“At this stage in the short history of language learning strategy research, there is no complete agreement on exactly what strategies are; how many strategies exist; how they should be defined, demarcated, and categorised; and whether it is-or ever will be possible to create a real, scientifically validated hierarchy of strategies.”

It is argued by Oxford (1990, p. 22) with regard to her LLS taxonomy: “*This system provides, albeit in imperfect form, a comprehensive structure for understanding strategies.*” She claims that her LLS system is “*a very useful way to examine such strategies*”, according to many teachers’ experience. Also, Oxford’s LLS taxonomy comprises the key strategies, i.e. COG, MET, & MEM, which can be accessed easily.

Obviously problems in classifying strategies remain unsolved. Besides in fact at present not many comprehensive structures of LLS taxonomies exist. In our study, we have to base our criteria on the most practical learning strategies system: Schmitt’s (1997) VLS originally based on Oxford’s (1990) LLS taxonomy, further elaborated in 2.3.2.1.

### **2.3.1.3 Names people use for LLSI/T**

The core point that learning strategies can be taught has been confirmed by Chamot and O’Malley (1987) who present the applicable pedagogical sequence, which had been developed for what they call the Cognitive Academic Language Learning Approach (CALLA). The purpose of CALLA is “*to develop the academic language skills of limited English proficient (LEP) students in upper elementary and*

*secondary schools.*” Also, CALLA emphasises: “*the acquisition and use of procedural skills that facilitate academic language and content learning.*” (O’Malley & Chamot, 1990, pp. 190-191).

The CALLA model encompasses three components: a) the content-based curriculum, i.e. content topics like Science, Mathematics, Social studies, and language arts are aligned with an all-English curriculum; b) academic language development: LEP students’ academic language in the four skills is developed, i.e. “*developing the learner’s skimming of a scientific article, taking notes on a chapter in a social studies textbook*”, and so forth; c) the crucial component: learning strategy instruction, i.e. the methodology of LLSI involves four key issues: learners’ mentally active, strategies can be instructed/taught, transfer of LLS taught to new similar tasks, and academic language learning considered more effective with learning strategies (O’Malley & Chamot, 1990, pp. 193-196).

In employing the CALLA lesson plan model, a five-phase method of learning strategies instruction is introduced to the students in order to familiarise them with choices of learning strategies and the students are exposed to various types of learning strategies demonstrated by the teachers. The five phases require the teacher to prepare, demonstrate or teach the learning strategies, practice, evaluate, and finally expand. The underlying conception of CALLA is to train the students to choose a suitable strategy to help them learn effectively. Moreover, it aims to build their self-confidence in language learning bit by bit until they will accept the full responsibility for learning by themselves or in the hope that they will eventually become autonomous learners in the future when there are no teachers to help them. The CALLA framework for strategies instruction has been used by other scholars, who focus on strategies training (e.g. Robbins, 1996; El Dianry, P.B. & Brown, R., 1992; Bergman, J.L., 1992; Pearson, P.D., & Gallagher, M.C., 1983). Robbins (1996, pp. 169-194) adopted the idea of CALLA into her workshop for Japanese students at Doshidha Women’s College of Liberal Arts, Japan under the title: ‘*Language Learning Strategies Instruction in Asia: Cooperative Autonomy*’. In Robbins’ workshop, she presented the figure of the CALLA framework (see Figure 2.1) containing a five-phase sequence of strategies instruction originally developed by Chamot et al, (1987) at Georgetown University, for learners who studying a foreign language in the U.S.A. (e.g. French, Spanish, and so on).



With regard to Robbins's demonstrating an adaptation of the metacognitive model of LSI to the Japanese students in the real classroom setting, the students' evaluation of the demonstration reveals positive attitudes to the LLS taught in class and appreciation of the value of the experience. Robbins also recommends teachers to apply the CALLA framework as a successful LLSI in the real classroom situation. Robbins (1996, p. 188) states:

“I hope that you will be met with the smiling faces of students who are empowered by their knowledge of language learning strategies and have become cooperatively independent learners.”

### **2.3.1.3.1 A model framework (VLST) used in the main study**

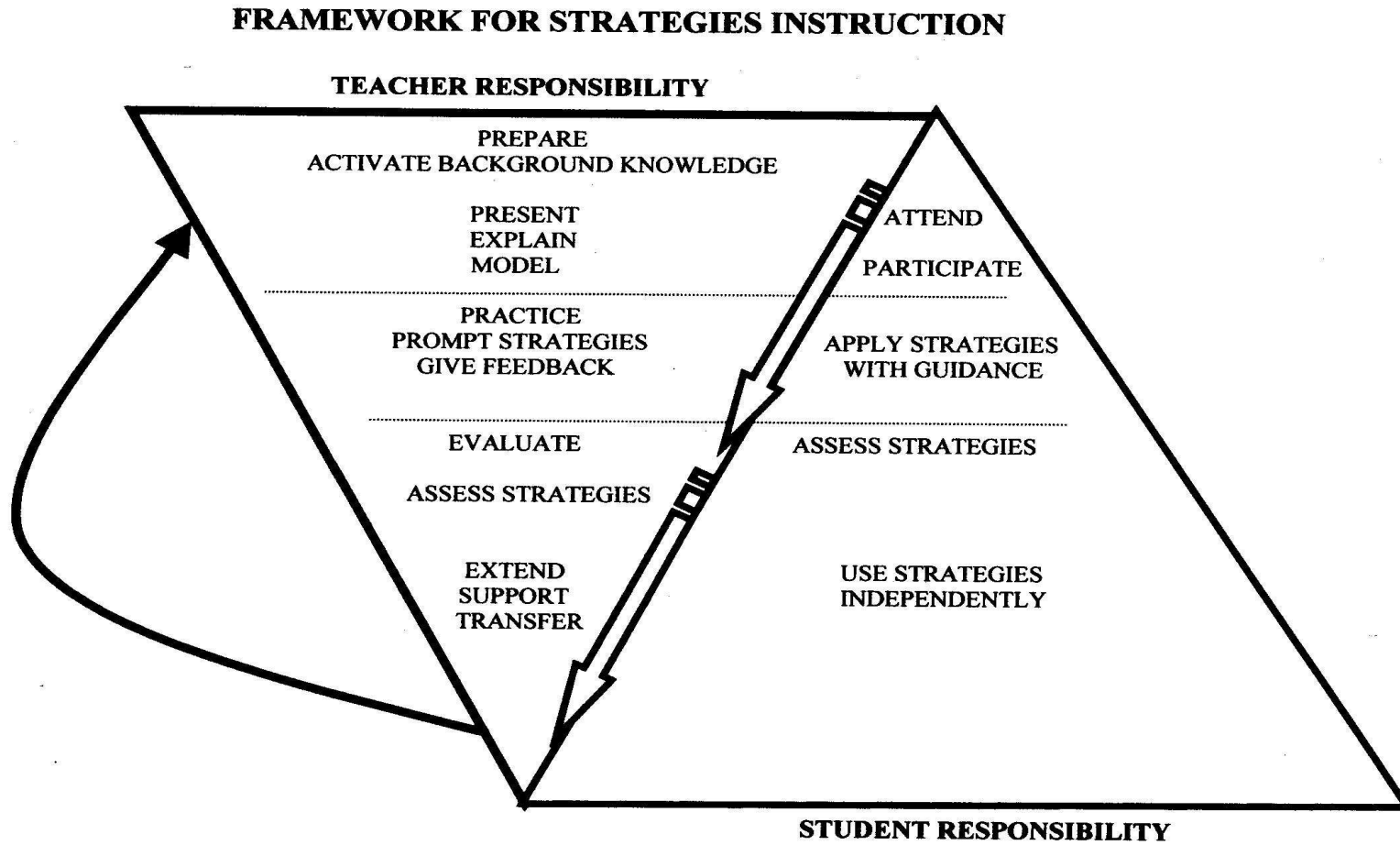
Regarding Figure 2.1, we partly adopted the underlying principles of the CALLA framework when training in the five VLS in the L2 classroom. The five phases of teacher responsibility, especially first three, were administered in class. The model framework of our VLST designed to be implemented in the main study is presented in Figure 2.2. The last two phases were implemented after the training sessions in the forms of the post-test and the semi-structured interview. The details of the VLS intervention will be elaborated in the part on research methodology in the next chapter (see 3.2.2.2.3.4).

Our model framework of the five VLST, therefore, consists of four procedures shown as follows:

- The first procedure is the teacher centre. It involves E and I: elicitation and introduction. We generally elicit techniques or methods the learners have already used to help them memorise L2 words. We then introduce other vocabulary learning strategies with more operational steps. The learners will be asked to draw out the advantages of VLS, especially the ones having many operational steps.
- The second procedure entails the objectives of the five VLS. We emphasise the value of each VLS to be taught. At this stage the characteristics of each VLS will be demonstrated and exemplified in detail. We explicitly detail the operational steps of each VLS. Also, the value of the depth of processing ( Craik & Lockhart, 1972) is clarified as it is the main criterion in choosing the five VLS.



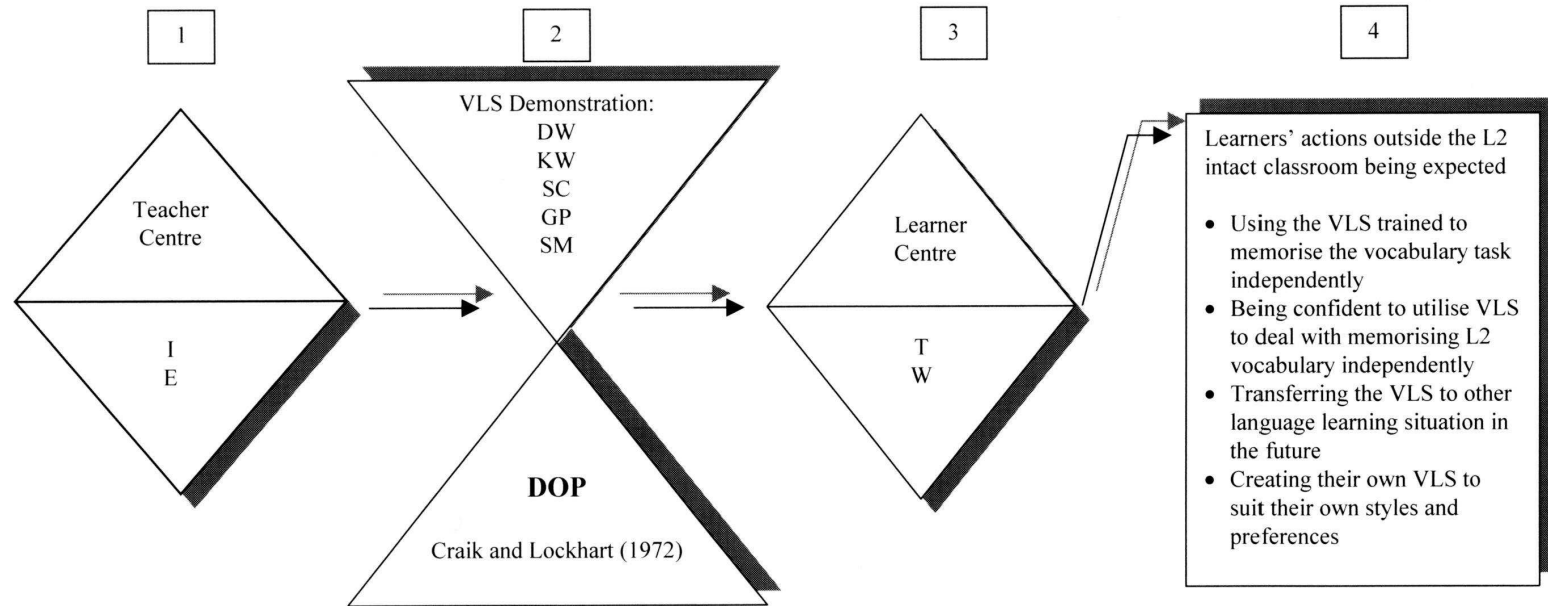
Figure 2.1 CALLA Framework - SI presented in Robbins' (1996, p. 171) workshop



- The third procedure is purely learner-centred. The learners are asked to do reinforcement tasks in order to truly get the gist of each VLS. This is also to make sure that they understand the operational steps of each VLS. The wrap-up comes at the end of the overall training sessions, which is to recheck the learners' understanding of the five VLS. At this stage the teacher (researcher) gives feedback after every task and also welcomes the learners' queries concerning the VLS taught. Moreover, she encourages the learners to continue using the five VLS in their language learning in the future.
- The fourth procedure includes the learners' actions outside class, i.e. using the five VLS to help them memorise the vocabulary task independently, adapting the techniques taught in class to improve their L2 word retention, or creating their own VLS as more suitable for their vocabulary learning, and so forth.

We will further detail our criteria in 2.3.3 for choosing the five VLS, i.e. 'dictionary work' (DW), 'keyword method' (KW), 'semantic context' (SC), 'grouping word families' (GP), and 'semantic mapping' (SM). Also, the characteristics of each technique, particularly the dominant parts, including the similarities and differences of each one will be described in the section.

**Figure 2.2 A model framework: VLST used in the main study**



Procedures:  
 1,2, and 3 - in the intact L2 classroom  
 4 - outside the classroom

I: Introduction  
 E: Elicitation  
 T: Tasks  
 W: Wrap-up  
 DOP: Depth of processing

A further model related to LLSI, introduced by Cohen et al. (1996), is the strategies-based instruction (SBI) approach which has been implemented especially in a foreign language classroom at the University of Minnesota. The term SBI entails two key components: “1) ...students are explicitly taught how, when, and why strategies can be used to facilitate language learning and use tasks, and (2) strategies are integrated into everyday class materials, and may be explicitly or implicitly embedded into the language tasks.” - Cohen et al. (1996, p. 6). The core purpose of SBI is to help language learners become more effective and responsible for their efforts in FL learning and utilising the L2 language successfully.

Comparing CALLA and SBI, the two frameworks have important similarities: a) emphasis upon teaching LLS in class; b) emphasis upon LLSI/T both explicitly and implicitly particularly on direct strategies instruction in a regular class; c) underlying learners’ independent learning and transferring the use of strategies trained to the new learning context; d) raising teacher’s awareness of the value of LLSI and also raising learners’ awareness of the need to be more responsible and effective in learning and using L2.

Unlike CALLA, SBI consists of two components, whereas CALLA encompasses three: content-based curriculum, academic language development, and central LLSI/T. In addition, SBI does not specifically or basically aim at helping only LEP students in upper elementary and secondary schools.

Up to this point we have seen confirmation that LLSI/T is plausibly teachable in as much that LLS and VLS have been shown to be teachable. However, in terms of teaching and learning theory, the researcher does agree with Stevick’s (1980, p. 16) statement: “*One cannot claim to have taught unless someone else has learned.*” Thus, it perhaps can be said that learning strategies can be taught successfully when it is known that the learners have more or less taken in the strategies.

In the following section, we will look at the LLSI studies based on CALLA, SBI, and other prominent ones related to LLSI/T, e.g. - O’Malley’s (1987, pp. 133-144) study: *The Effects of Training in the Use of Learning Strategies on Learning English as a Second Language*, will be considered briefly in 2.3.1.5.

#### 2.3.1.4 Studies of language learning strategy

This section reviews the previous studies of the LLS students normally employ in their language learning. We focus on: a) the research methods, particularly the research instruments, the researchers used to elicit learners' LLS; b) the types of strategies frequently used in vocabulary learning; c) and other interesting issues concerning learners' use of LLS.

Ellis (1994, p. 545) specifically points out two groups of LLS studies: "*In one set of studies, the strategies that 'good language learners' reported using, have been examined. In another set of studies, the relationships between strategy use (with regard to both frequency and type) and criterion measures of learning have been explored using statistical techniques.*" Ellis (op. cit.) adds there is a number of interesting studies which look into the types of strategies learners employ for vocabulary learning.

By looking at studies examining the types of learning strategy used by language learners, Chamot (1987, pp. 73-76) investigated the learning strategies of 70 ESL students and 22 teachers from three suburban high schools in northern Virginia. In order to collect data, Chamot employed class observation guides and interview guides for both teachers and students. The findings reveal that class observations failed to provide fruitful information because "*...classes tended to be teacher directed and students had few opportunities to engage in active learning with observable strategies*". The findings match the results from other studies conducted by Naiman et al. (1978) and Cohen and Aphek (1981) in that the observation was not effective in giving precise information about learning strategies, especially learners' mental processes when using LLS or it manifested "*inadequacies of classroom observation for identifying learner-generated mental strategies.*" According to Brown and Palincsar (1982), Rubin (1981): "*An examination of the strategies identified in the literature and described by language learners shows that many are mental activities with little external behaviour, and are therefore not observable.*"

With regard to the aforementioned criteria for LLS (see 2.3.1.1), we are then aware that strategies are actions that can be observed, but some are mental processes, which probably cannot be simply observed. Thus, in our main study we do not use classroom observation nor observation check-sheets as research instruments to elicit our learners' VLS.

Moreover, Chamot (1987, pp. 75-76) found that teacher interviews were not a source of useful data, as the teachers were unable to differentiate learning strategies and teaching strategies and they could not therefore say with certainty which strategies learners used.

However, Chamot (op. cit.) mentions that the instrument which seemed to work more effectively than those previously mentioned was learner's interviews. The findings from the interviews show that learners used a wide range of learning strategies in 638 instances. The strategies were categorised in three parts (i.e. metacognitive, cognitive, and social-affective strategies). Interestingly, the result shows that "*Students used most learning strategies for vocabulary and least for listening activities requiring inferencing.*" The number and percentage of students using strategies for different learning activities among beginners and intermediate level students illustrates that strategies for vocabulary learning were used most by beginner level students: 17.4%; intermediate level students used strategies for vocabulary learning: 15.3%.

Hence the research instrument considered applicable and useful to elicit learners' LLS is the interview. In our study we thus utilise a 'semi-structured interview' to gather the data concerning the types of VLS the learners employed in our study, and the information from the learners were later triangulated with other findings obtained from other research instruments. We describe in detail each type of research instrument in the next chapter: research methodology (see 3.2.3).

With regard to the strategies used by 'good language learners' (GLL), Bremner (1997) examined the relationship between LLS use and L2 proficiency among 149 learners at the City University, Hong Kong. Oxford's SILL questionnaire was used to obtain the data. The results show that the highest mean (3.36) use of learners' strategies is compensation strategies, followed in order by metacognitive, cognitive, social, memory, and affective strategies. These findings were then compared with two other studies: (Klassen, 1994; Yang, 1994) cited in Oxford and Burry-Stock, (1995), which report that the Taiwanese students and People's Republic of China (PRC) students most frequently used compensation strategies; the mean being 3.4. Goh and Kwah's (1997) survey study shows that the students from the PCR used compensation strategies extensively (3.46), and metacognitive strategies (3.54). All three studies show that the strategies least employed by the students are memory strategies.

However, a contradiction arises in Goh and Kwah (op. cit.), who pointed out that Chinese students might traditionally utilise memorisation strategies. *“They presume that the students might not understand what the specific techniques mentioned in the SILL...”* (Bremner, 1999, p. 502). Their questioning point was confirmed from a number of students’ interview data. Bremner’s study concludes that the results obtained from his study show similar findings to the aforementioned studies in that the compensation strategies and cognitive strategies were employed more than memory strategies. However, Bremner (op. cit.) points out: *“Further research into memorisation techniques used by Chinese learners would be necessary to establish whether the SILL was an appropriate instrument for investigating their strategy use in this area.”*

Furthermore, LoCastro’s (1994) study is concerned with learning strategies and learning environments. She used Oxford’s SILL and unstructured group interview to obtain the data. She examined the kind of effort made by good or successful Japanese learners to develop their English language skills in large classes. The results obtained from SILL showed that learners most frequently employed management of learning and less frequently used memory strategies. She pointed out that this data did not correspond with the data gained from the interview, which showed that the Japanese students reported their main learning strategy was memorization. She remarked that possibly Japanese students employed the memorisation techniques to manage their learning rather than to manage the language. She also emphasises the dubious point: *“The respondents’ reactions to the SILL clearly raise questions as to the extent to which such research tools and concepts can transfer across learning environments. The inventory may not be sensitive to the concerns of the respondents and thus may not generate a clear picture of the nature of their learning strategies.”* The findings obtained from LoCastro’s study to some extent reveal similar results to those obtained by Goh and Kwah’s (1997) study. Hence, it presumably initiates the quest to establish conclusively whether Oxford’s SILL can be generalisable when used to quantify language learners’ strategies that are based in different environments.

In our main study, we did not use SILL, as we are aware that similar difficulties might occur with our students when exposed to fifty items in the SILL questionnaire (version 7.0). Even though it can be translated into the mother tongue, the words in L1 and L2 do not mean absolutely the same thing and to some extent it may confuse our learners who are not familiar with the concept of LLS. Besides, SILL is used to



gather learners' general LLS, not specifically learners' use of VLS which is the main concern of our study.

Rong (1999) conducted a study concerning LLS in a sample of tertiary-level students in the PR China and states that the Chinese people are “*traditionally influenced by the experiences of past generations, who learned classical Chinese through repetition, memorisation and habit formation.*” The instruments used to gain data from 265 third-year university students from three majors (Science, Arts, and English) consisted of the College English Test (CET) recognised within China. The subjects were classified as successful and less successful according to the CET. Oxford's SILL and interview schedule were employed. According to the data obtained from SILL, subjects highly employed compensation strategies extensively (mean = 3.52) and memory strategies were the least used (mean = 2.94).

Rong (1999, p. 5) remarks: “*Contrary to the common belief that Chinese learners are predisposed to using memorisation as a major learning technique*”. Regarding the data obtained from open-ended questions in the questionnaire and interviews, he reports that the characterisation of a Chinese learner as one who depends on repetition and reproduction approaches to learning still has some validity. However, the sample of Chinese EFL learners (tertiary-level) have changed from utilising only rote-learning to employing various strategies, such as practising, i.e. watching video and movies, listening to radio, self-testing, and so on. Similarly to the previously mentioned results, we see the confirmation from Rong's interviews and open-ended questionnaire results that the subjects still depended on using rote memorisation. In contrast, the data from SILL shows that the subjects widely reported using compensation strategies and employed memory strategies less.

Thai students are of course from the same region as Chinese learners, and both can be called Asian learners. Our preliminary study confirms Rong's report obtained from the interviews and the open-ended questions in the questionnaire in that our learners, Thai university students, employed repetition strategies of many types in order to memorise L2 words (see Figure 3.4).

In addition, Rong concludes his subjects did not rely mainly on rote learning. The interesting point is raised: “*The subjects were inclined to employ various strategies, especially those strategies to make up for the constraints of an unsupportive EFL learning environment in China.*”



Thus this supports the main purpose of our main study: to train in various types of VLS in a L2 classroom in our home situation, and to investigate whether the VLS has any effect on learners' vocabulary learning, especially L2 word retention.

Oxford (1989, p. 242) refers to a number of studies that come up with the broad conclusion: "*Oriental students seem to prefer strategies involving rote memorisation and language rules (Politzer, undated; Politzer and McGroarty, 1985; Tyacke and Mendelsohn, 1986), as opposed to more communicative strategies. Orientals, compared with Hispanics, responded less positively to strategies training (Russo and Stewner-Manzannares, 1985; O'Malley et al., 1985b).*" Additionally, Oxford's (1994) statement concerning factors influencing the choice of L2 learning strategies also refers to cultural background: "*Rote memorisation and other forms of memorisation were more prevalent among some Asian students than among students from other cultural backgrounds.*"

The above research reports seem to contrast with the findings obtained from Oxford's SILL mentioned earlier. Perhaps firstly we may presume that the L2 learners' perspective of LLS, especially Asian learners, has gradually changed to a more positive one because most learners, including oriental, learners have recently been exposed to LLS introduced in class much more than was the case seventeen years ago. However, in our situation, Thai learners still have little experience of LLSIT in the classroom. Secondly, we may need to look at Oxford's SILL questionnaire, as suggested by LoCastro (op. cit.): "*The inventory may not be sensitive to the concerns of the respondents and thus may not generate a clear picture of the nature of their learning strategies.*" Or, perhaps, any researchers inclined to use Oxford's SILL should be aware, at the administration stage, of the need to check informants' understanding before asking them to answer the SILL questions.

In short, perhaps it can be said that SILL is considered an initial research instrument used by numbers of researchers to gather data on learners' use of general LLS which later on are systematically categorised into LLS taxonomies either by basing on O'Malley et al.'s (1987a) classification: cognitive, metacognitive, social/affective; or on Oxford's (1990) classification: direct and indirect strategies.

With regard to studies concerning Thai learners' LLS previously conducted by some Thai researchers for their PhD research-based projects, we specifically look at

the research instruments employed, and some findings, which may lead to some relevant issues for our study.

Thepsuriwong (2001) investigated the reading strategies of Eighteen (n =18) first-year students studying in Science and Technology fields at King Mongkut's University of Technology, Thonburi (KMUTT), Thailand in performing a pedagogic reading task. The subjects, 17-18 years of age, had 8-9 years experience in studying English as a foreign language before entering the university. The think-aloud method and semi-structured interview were used to elicit the learners' reading strategies. The findings reveal that the proficient subjects used a number of strategy types and strategy instantiations in every task. In contrast, the less proficient subjects stayed with the bottom-up approach, concentrating on the one by one word meanings. Thepsuriwong (op. cit.) reported that the learners who had inadequate knowledge of vocabulary and structural knowledge found it difficult to comprehend the reading texts. She also reported that the less proficient learners had more problems while reading and tried to compensate for their inadequate language knowledge by relying on word level clues, basing their comprehension of the text on lexically-based reading, associating words together to create meaning regardless their structural functions in the text.

Vanijdee (2001) similarly investigated LLS use in relation to an interaction with self-instructional materials, and learner autonomy of three hundred and ninety one (n = 391) Thai distance language learners, Sukhothaidhammathiraj Open University (STOU), Bangkok, Thailand. Vanijdee used O'Malley and Chamot's typology of LLS as a model to systematise the strategies obtained from the subjects. The instruments used in data collection from the 51 subjects were a questionnaire survey for 391 students, think-aloud protocols, semi-structured interviews, and a proficiency test. Two of the interesting findings are: Thai distance language learners used cognitive strategies, e.g. repetition, resources, direct physical response, translation, grouping, note-taking, and so forth with a relatively high rate of frequency; less frequently used strategies are metacognitive strategies, and Socio-affective Strategies the least in evidence. Another interesting point is "*...the strategies necessary for distance language learning are relying on grammar and rules, practising, using various approaches to vocabulary learning, self-management, seeking help, using resources, and affective control.*"

Mullin (1992) conducted a study titled: Successful English Language Learning Strategies of Students Enrolled at the Faculty of Arts, Chulalongkorn University (CU), Bangkok, Thailand. Mullin used Oxford's SILL version 7.0 to gather LLS employed by one hundred and ten successful Thai students (n = 110) majoring in English; ten subjects were randomly selected to participate in the interview session. In addition, Mullin herself developed a set of questionnaires and used it to collect the subjects' demographic data. The results obtained from SILL show that the learners extensively used compensation strategies (mean frequency of use = 3.50); the remembering strategies were less employed (mean = 2.81). It should be noted that CU is officially rated as the number one state University in Thailand. The fact is that CU is the first choice of high proficiency learners. Thus, it may be implied from the result gained from SILL that good learners employ direct strategies in relation to compensation strategies and use memory strategies less in language learning. However, in conclusion, Mullin states that the SILL has a limitation in that it provides inadequate ranges of strategies that Orientals/Thai subjects may employ.

Torut (1994) examined LLS in three suburban Universities in Thailand. The subjects were six hundred and eleven university learners (n = 611) who came from the Humanities, Science and Technology, and Social sciences. Oxford's SILL was used as the research instrument. The result reveals that learners widely used compensation strategies, 68.38% and memory strategies, 58.20% and that the strategies least employed were affective strategies, 49.63%. An interesting result shows that students with high ability in English used more LLS than those with low English ability. Torut similarly pointed out that using SILL might not adequately elicit Thai learners' LLS. In order to confirm the reliability and validation of the data, other instruments should be considered.

The last study concerning LLS to be briefly reviewed was conducted by Wareesiri (2001) who investigated the effects of reading and writing strategies on summaries written by Thai university students, learners' think-aloud protocols used as the research instruments showed which writing strategies learners employed while summarising reading passages. Also, Wareesiri looked at both teachers' knowledge of teaching summarising and the LLS that twenty subjects (n = 20) employed while performing summaries tasks. The subjects were from two faculties, Engineering and Science, King Mongkut's University of Technology, Thonburi (KMUTT), Bangkok, Thailand. The research instruments for collecting information from the three teachers

were a semi-structured interview and observation in class. The data obtained from the last instrument shows that the teachers' instruction affected the learners' performance in summarisation in both processes and products. In short, the other findings revealed that English proficiency influences the frequency of use of reading and writing strategies.

Clearly, the aforementioned studies broadly encapsulate the research interest in the field of LLS in Thailand. Presumably most researchers are interested in examining or investigating types of LLS learners employed when performing reading and writing tasks. Apparently, we see little of the research recently conducted by Thai researchers aimed at teaching various types of VLS in the classroom setting.

We notice that in order to elicit learners' LLS used while performing language tasks, the researchers used instruments similar to those in the aforementioned studies, i.e. semi-structured interview, think-aloud protocols, and Oxford's SILL version 7.0.

With regard to the research aspect, the aforementioned instruments noted by Wenden (op. cit.) have been used by a number of researchers to elicit language learners' learning strategies. It appears that many studies of LLSI for both L1 and L2 consider using questionnaires, think-aloud methods, interview, diary and so on to investigate learners' language learning strategies – for example, Weinstein and Underwood (1985), Jones et al. (1987), O'Malley and Chamot (1988), and Hosenfeld et al. (1981), cited by O'Malley and Chamot (1990, pp. 158-159).

In our main study we thus consider using the think-aloud method in order to gain learners' verbal report during the learning process, especially while memorising L2 words independently. The information gained from the think-aloud protocols possibly reveal the types of VLS the learners employed while they are memorising the vocabulary tasks outside class. We also design a semi-structured interview to elicit the types of VLS employed by the learners when performing vocabulary tasks (see Chapter Three - 3.2.3).

#### **2.3.1.5 LLS studies -Training in language learning strategies**

A well-known study focusing on LLST was conducted by O'Malley (1987, pp. 133-144) is '*The Effects of Training in the use of learning strategies on learning English as a Second language*'. The training was introduced in L2 classes in order to examine: a) the effect of LLST on learner use of strategies in L2 learning; b) to find out whether strategies training improves learning in integrative language tasks (e.g.

listening, speaking) and for discrete language tasks, e.g. vocabulary; and c) to see if there are differences in the effectiveness of strategy training for different students.

There were seventy-five subjects of mixed nationalities, all high school students attending an EFL course. The subjects were divided into three groups: two treatment groups and one control group. Treatment group 'A' was directly trained in the use of one metacognitive strategy, e.g. self-evaluation; cognitive strategies: grouping words and imagery, for grouping words the learners were taught how to group word in a list according to common features/semantic similarity (e.g. skillet, kettle, mug, etc. are grouped as items used in a kitchen). For imagery, the learners were taught to create a mental image by closing their eyes, and trying to imagine placing each type of utensil together in a kitchen. Treatment group 'B' was trained in only the same cognitive strategies, i.e. grouping and imagery as treatment group 'A'. The control group received no strategy training, but were asked to learn the words according to their own normal ways.

The interesting finding was that learners, especially the Asian students in the treatment groups, had difficulty implementing the vocabulary strategies. Those students neglected to use the strategies taught (e.g. self-evaluation, grouping and imagery). They maintained the traditional ways of learning vocabulary: using rote repetitive strategies. In contrast, Hispanic learners had a positive response to the strategies taught. Thus, the results from post-tests revealed that the Asian students in the treatment group did poorly when compared with the Asian students in the control group.

Corresponding to the results in Sutter's (1987) study about learning strategies training, it seems convincing that if the strategies taught did not match learners' preference, which is related to the learners' ethnicity or cultural background, as Sutter claims, '*disaster resulted*'. However, Sutter points out that it is necessary to "*camouflage the new strategies under the guise of old, familiar ones*", cited by Oxford (1989, p. 243). At this point, Sutter's finding does not convince us, as we explicitly or directly introduced and trained the five new clusters of VLS training in the normal classroom without any camouflages or guises. According to the TAPs, and the results from semi-structured interviews, the subjects (Thai students/Oriental) did enjoy the new exposures to VLS. The findings are elaborated in Chapters Five and Six.

In addition, Cohen (1998, p. 68) emphasises:

“The goal of strategy training is to explicitly teach students how, when, and why strategies can be used to facilitate their efforts at learning and using foreign language. By explicitly teaching students how to develop their own individualised strategy systems, strategy training is intended to help students explore ways that they can learn the target language more effectively, as well as to encourage students to self-evaluate and self-direct their learning.”

The study based on SBI was conducted by Cohen, et al. (1996) and titled: ‘*The Impact of Strategies-Based Instruction on Speaking a Foreign Language*’. The venue of the research experiment was the University of Minnesota and the participants were fifty-five intermediate level FL classes (e.g. French and Norwegian languages). Teachers taught a broad range FLL and use strategies, emphasizing speaking skill, i.e. a) before you speak (e.g. lower your anxiety, prepare and plan; b) while you are speaking (e.g. feel in control, be involved in the conversation, monitor your performance); and c) after you speak (e.g. evaluate your performance, plan for future tasks). The participants were asked to perform three speaking tasks: *self-description*, *story-telling*, and *city description*. The major finding demonstrates the success of SBI, especially in the post-test; the experimental group was superior to the comparison group on the third task- city description. When looking at the overall mean performance of the advanced intermediate and intermediate French students grouped together, no significant differences appeared. In terms of vocabulary, it reveals that the learners in the experimental group were rated higher on the vocabulary scale for the first speaking task: *self-description*.

More studies about LLST were conducted, e.g. Hosenfeld et al. (1981) taught reading strategies to high school students, Western New York. Students were trained to use think-aloud while reading, as a means to identify reading strategies, to help students understand the concept of strategies, to recognise successful and unsuccessful strategies, and so forth. Ferris, in Holec (1981) cited by Wenden (1987, p. 163) trained students at the Language Institute in England to use self-assessment in order to evaluate their oral communication skills. It showed that students who attended the training, “...enjoyed the activities and felt a sense of achievement when they perceived progress had been made...”, (Wenden, op. cit.).

Also, Robbins and Dadour (1996, p. 166) conducted two studies in Egypt and Japan. The purpose of both studies was to investigate the effectiveness of strategies instruction (SI) on developing the EFL university students’ speaking ability. The

subjects were one hundred and twenty-two first-year and fourth-year Egyptian students and fifty Japanese students of English at two universities in Kyoto. The duration of strategies training was three months. The SI is based on five steps of the CALLA framework in which scaffolding is emphasised. The subjects were introduced to the concept of LS, then the teachers demonstrated and explained how to use them. The subjects had an opportunity to practise the strategies taught. The teachers reduced their role and encouraged the subjects to be responsible for selecting and using the strategies independently. The subjects were asked to evaluate the efficacy of the strategies employed so as to pave the way for the transfer of strategies use in the future. The main instruments used in both studies were Oxford's SILL and questionnaire and other proficiency tests (e.g. the clear oral proficiency examination, the EFL Teacher's Speaking Skills Inventory, etc.). The second study was to discover the feasibility of LSI in Japan. Both studies reveal positive results. They show that most subjects understood the reasons for using LS. They realised the usefulness of strategic planning. Seventy three percent of fifty Japanese students wanted to learn more strategies for speaking and listening.

Currently, little is known about any studies in Thailand to teach LLS in real classroom situations. Perhaps, it is because of the lack of government educational budget to conduct research in languages, or it is probably that teachers' and researchers' teaching time and extra activities and responsibility overwhelm the time to conduct any research. Or it might be because Thai teachers and researchers have not yet realised the importance of LLST. In fact, there are various factors and constraints, which are likely to obstruct the growth of LLST in Thailand. Hopefully, we will see more interest in conducting research, involving varieties of LLS training of Thai learners in the future. The following part will then look at some studies aimed at training language learners in LLS.

Thus, we intend to conduct our main study in training in the various types of VSL in a natural classroom environment mainly aiming to see the effect of VLS training on the learners' L2 vocabulary retention.

The following section focuses on some studies concerning VLS, which specifically involving studies investigating types of VLS L2 learners employ when learning L2 vocabulary.



### **2.3.2 Vocabulary learning strategies (VLS) and the VLS definition used in the main study**

For more than two decades, LLS has received recognition from educators and researchers, especially in the field of SLA. This, to some extent, affected the increase of interest in VLS because learning strategies include VLS, as stated by Nation (2001, p. 217): “*Vocabulary learning strategies are a part of language learning strategies which in turn are a part of general learning strategies.*”

At this point we would like to clarify what we mean by VLS in our main study. Since VLS are clearly related to LLS, we tend to go by the stated criteria, used in the previous literature (see 2.3.1.1). In our main study, VLS means techniques, tools, or devices consciously employed by the learners to facilitate their vocabulary retention. Moreover, the VLS are teachable in that learners can be taught other types of VLS and how to operate them effectively. Thus, they are provided with a choice of VLS and are taught how to use them so as to develop their vocabulary learning or to solve their vocabulary learning problems effectively.

Additionally, VLS taught in the classroom probably builds up learners’ confidence to learn vocabulary independently. Most VLS share similarities and differences under the taxonomies devised by Schmitt (1997, pp. 207-208), i.e. determination strategies, consolidation strategies, initially based on Oxford’s (1990) LLS taxonomy, and O’Malley and Chamot’s (1990, p. 126) LLS taxonomy classified as metacognitive strategies, cognitive strategies, and social-affective strategies.

Even though the main attention was to varieties of LLST in the past, a few studies had been conducted in response to the moderate to low interest in L2 vocabulary learning. Those studies were conducted by scholars such as Atkinson and Raugh, 1975; Levin et al., 1979; Levin and Pressley, 1983; and so forth. The studies involved the well-known strategy: ‘keyword method’ (KW) which is primarily based on mnemonic technique or aiding memory (Higbee, 1979) cited by Thompson (1987, p. 43). This technique is included in the five VLS chosen to be introduced to the learners in the main study. We will further elaborate and exemplify the KW method and the other four techniques in 2.3.3.



### 2.3.2.1 The Classification system for VLS

Despite the fact that vocabulary acquisition/learning and vocabulary learning strategies have recently gained more interest from SLA researchers, there is still inadequate work on vocabulary learning strategies. Schmitt (1997, p. 203) mentions that though learning strategies in fact entail vocabulary learning strategies, we see the lack of studies in the latter field, especially the lack of a comprehensive list or taxonomy.

Since our study mainly concerns training in the vocabulary learning strategies, we will first look at the VLS taxonomies which are used as the models to classify our vocabulary learning strategies obtained from the subjects' verbal protocols. To date there are two prominent VLS taxonomies; the first by Schmitt (1997, pp. 207-208), and the second by Nation (2001, p. 218).

In Schmitt's taxonomy, fifty-eight VLS were obtained from the survey of a sample of 600 Japanese students who had taken and were still taking EFL classes. The detail of the survey method will be discussed in the part reviewing VLS studies (see 2.3.2.2). Schmitt's VLS taxonomy is shown in Table 2.2.

Schmitt based his VLS taxonomy on Oxford's (1990) LLS classification because of its practicality in categorising VLS. He states: "*Of the more established systems, the one developed by Oxford (op. cit.), seemed best able to capture and organise the wide variety of vocabulary learning strategies identified.*"

Hence, he basically selected four strategy groups (e.g. Social, Memory, Cognitive, and Metacognitive) which he considered useful for his VLS classification. The fifty-eight were grouped under two main headings: *Discovery Strategies* and *Consolidation Strategies*. The former entails strategies which are used to obtain "...initial information about new words", i.e. identifying affixes and roots of a new word. The latter involves strategies learners use to help them memorise the words once taught or encountered, such as using semantic maps, using new words in a sentence, and so forth.

Table 2.2 VLS Taxonomy originally compiled and classified by Schmitt (1997)

Strategies for the discovery of a new word's meaning	
DET	Analyse part of speech
DET	Analyse affixes and roots
DET	Check for L1 cognate
DET	Analyse any available pictures or gestures
DET	Guess from textual context
DET	Bilingual dictionary
DET	Monolingual dictionary
DET	Word lists
DET	Flash cards
SOC	Ask teacher for an L1 translation
SOC	Ask teacher for paraphrase or synonym of new word
SOC	Ask teacher for sentence including the new word
SOC	Ask classmates for meaning
SOC	Discover new meaning through group work activity

Strategies for consolidating a word once it has been encountered	
COG	Verbal repetition
COG	Written repetition
COG	Word lists
COG	Flash card
COG	Take notes (in class)
COG	Use vocabulary section in your textbook
COG	Listen to tape of word lists
COG	Put English labels on physical objects
COG	Keep a vocabulary notebook
MEM	Study word with a pictorial representation of its meaning
MEM	Image word's meaning
MEM	Connect word to a personal experience
MEM	Associate the word with its coordinates
MEM	Connect the word to its synonyms and antonyms
MEM	Use semantic maps

Strategies for consolidating a word once it has been encountered	
MEM	Use 'scales' for gradable adjectives
MEM	Peg Method
MEM	Loci Method
MEM	Group words together to study them
MEM	Group words together spatially on a page
MEM	Use new words in sentences
MEM	Group words together within a storyline
MEM	Study the spelling of a word
MEM	Study the sound of a word
MEM	Say new word aloud when studying
MEM	Image word form
MEM	Underline initial letter of the word
MEM	Configuration
MEM	Use keyword method
MEM	Affixes and roots (remembering)
MEM	Part of speech (remembering)
MEM	Paraphrase the word's meaning
MEM	Use cognates in study
MEM	Learn the words of an idiom together
MEM	Use physical action when learning a word
MEM	Use semantic feature grids
MET	Use English-language media (songs, movies, newscasts etc)
MET	Testing oneself with word lists
MET	Use spaced word practice
MET	Skip or pass new word
MET	Continue to study word over time
SOC	Study and practise meaning in a group
SOC	Teacher checks students' flash cards for word lists for accuracy
SOC	Interact with native speakers

## KEY Abbreviations:

SOC	Social strategies: Use interaction with other people to improve language learning
MEM	Memory strategies: Relate new material to existing knowledge
COG	Cognitive strategies: Manipulate or transform the target language
MET	Metacognitive strategies: A conscious overview of the learning process and making decisions about planning, monitoring, or evaluating the best ways to study.
DET	Determination strategies. Discover a new word's meaning without recourse to another person's expertise.

It should be noted that some strategies appear under more than one category. For example, word list(s) and flash card share the value of both *determination strategies* (DET) and *cognitive strategies* (COG), because both strategies have flexible characteristics and assist learners to discover the meaning of a new word and also to memorise the new word once taught or encountered. Schmitt (1997, p. 204) states in regard to the problem of classification of learning strategies: “*In practice, it was quite difficult to decide where to draw the line between different strategies in their numerous variations.*” Hence, it can be said that a clear-cut VLS taxonomy has not yet been devised.

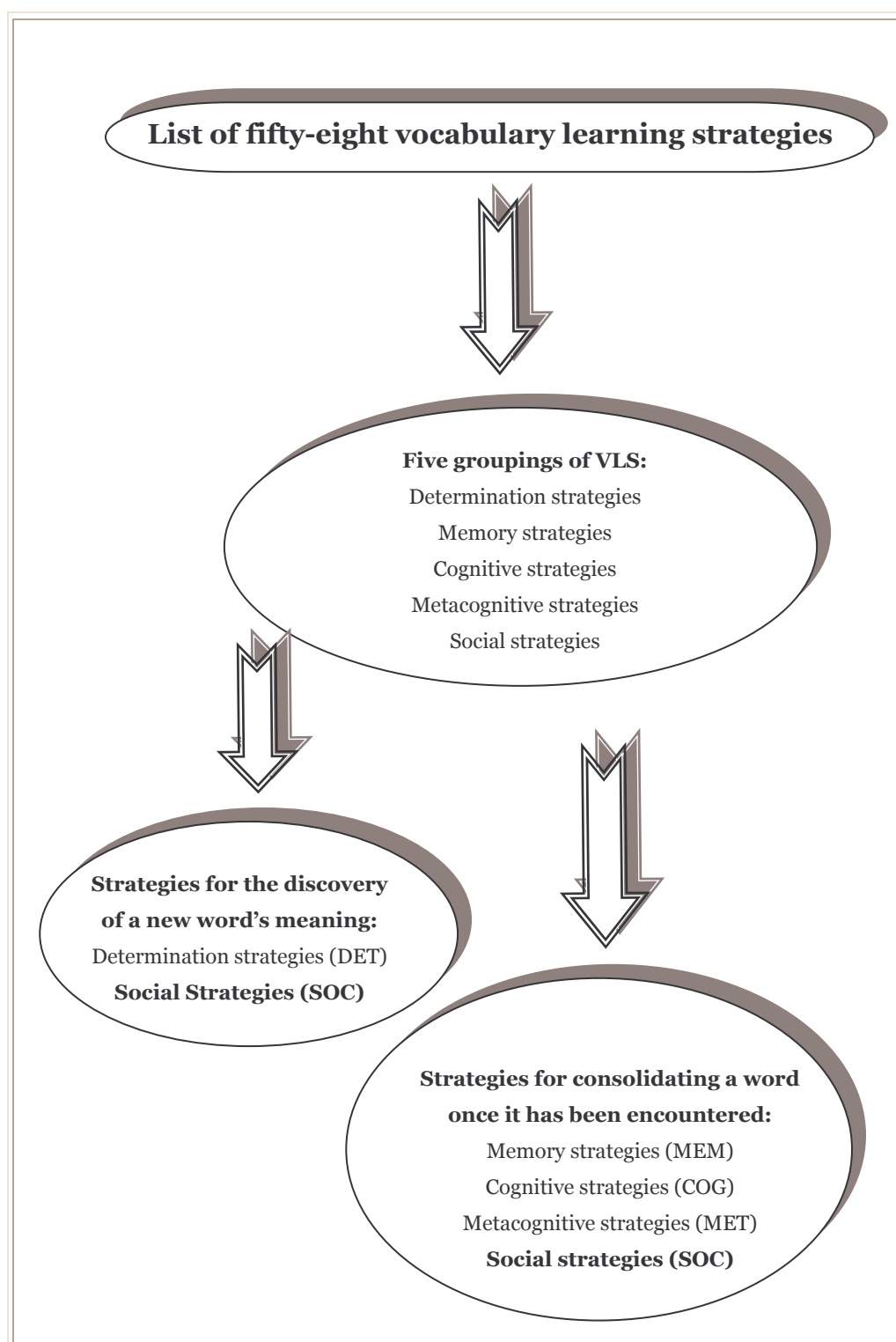
In Schmitt’s (1997) VLS taxonomy, primarily based on Oxford’s notion of LLS taxonomy, there are concrete examples of various types of VLS classified under the two main strategies groups (*discovery strategies* and *consolidation strategies*), each group containing direct and indirect strategies namely: determination strategies, cognitive strategies, memory strategies, metacognitive strategies, and social strategies. However, Schmitt does not include affective strategies (e.g. lowering your anxiety, encouraging yourself, and taking your emotional temperature) in his VLS taxonomy.

Schmitt (2000, p. 135) explains the steps taking in building up his VLS taxonomy. We depict the steps in Figure 2.3.

The five steps are elaborated as follows:

- The fifty-eight VLS obtained from the survey of 600 Japanese students (junior high school, high school, university students, and adult learners) were compiled.
- The strategies are categorized into two groups: discovery strategies or strategies for the discovery of a new word’s meaning; and consolidation strategies or strategies for retaining a word once it has been encountered.
- The strategies grouped under the two major categories were again scrutinised and classified into five groupings, which are: determination strategies (DET), memory strategies (MEM), cognitive strategies (COG), metacognitive strategies (MET), and social strategies.

Figure 2.3 Schmitt's (2000) system of VLS classification

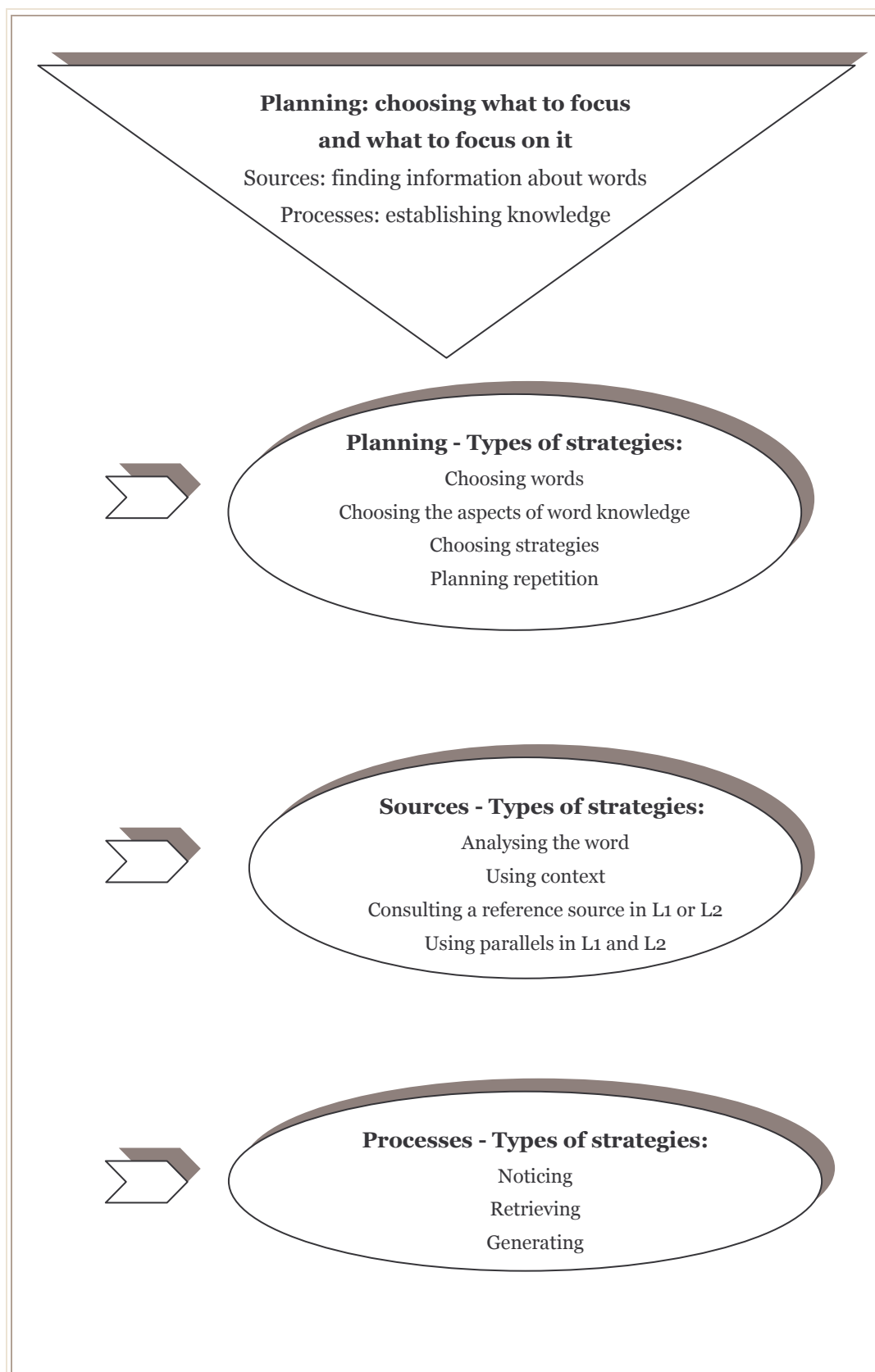


- In the discovery strategies group, there are finally nine determination strategies (e.g. analyse part of speech, analyse affixes, check for L1 cognate, analyse any available pictures or gestures, etc.); and there are five Social Strategies (e.g. ask teacher for an L1 translation, ask classmate for meaning, and so on).
- The consolidation strategies group consists of nine cognitive strategies (e.g. verbal repetition, word lists, etc.), twenty-seven Memory Strategies (e.g. imagine word's meaning, connect word to personal experience and so on), five metacognitive strategies (e.g. testing oneself with word lists, continue to study word over time, etc.), and three social strategies (e.g. study and practise meaning in a group, interact with native speakers, etc.).

Nation does not in fact describe exactly how he developed his VLS taxonomy. He briefly describes the purpose of VLS classification: “*The following taxonomy tries to separate aspects of vocabulary knowledge (what is involved in knowing a word) from sources of vocabulary knowledge, and learning processes.*” (see Nation’s Taxonomy in Figure 2.4).

However, a close look at each general class of strategies perhaps reveals similar principles to those forming the learning strategies taxonomy influenced by Rubin (1987), O’Malley and Chamot (1990), and Oxford (1990). For example, the first general class of strategies, *planning*: choosing what to focus on and when to focus shares the similar principle of Metacognitive Strategies. O’Malley and Chamot (1990, p. 47) state: “*Planning is a key metacognitive strategy for second language acquisition...*” The metacognitive strategies involve selective attention, planning monitoring, and evaluation. Rubin (1987, p. 25) explains metacognitive strategies: “*Metacognitive strategies are used to oversee, regulate or self-direct language learning.*” Oxford (1990, p. 136) states: “*Metacognitive strategies are actions which go beyond purely cognitive devices, and which provide a way for learners to coordinate their own learning process.*”

**Figure 2.4 Nation's (2001) taxonomy of VLS**



Regarding the practicality of LLS, Nation's taxonomy seems to reduce the complexity by not listing all the specific strategies in his classification. It seems easy for L2 language learners to comprehend and to use effectively. However, it is perhaps unclear to learners how to directly utilise what Nation says.

Nation's (2001, pp. 218-219) VLS taxonomy was generally established under the three categories: *Planning*, *Sources*, and *Processes*. Each general class of strategies entails different types of strategies. For instance, *Planning* includes four types of strategies: a) choosing words, b) choosing the aspects of word knowledge, c) choosing strategies, and d) planning repetition. *Sources* also involve four types of strategies: a) analysing the word, b) using context, c) consulting a reference source in L1 or L2, and d) using parallels in L1 and L2. *Processes* encompass three types of strategies: a) noticing, b) retrieving, and c) generating. Thus, there are altogether eleven types of strategies classification.

Nation (op. cit.) states the taxonomy of VLS attempts to: "...*separate aspects of vocabulary knowledge (what is involved in knowing words) from sources of vocabulary knowledge, and learning processes.*" Hence, it can perhaps be implied that he literally puts an emphasis on the importance of raising learners' awareness of vocabulary learning as well as choices of methods/strategies that learners need to select for vocabulary learning in order to achieve the language goal.

To take each general class of strategies in turn, under *Planning*, Nation refers to the characteristics of successful language learners described in Gu and Johnson's (1996) study. Also, planning repetition is based on an informal schedule for revising words previously taught: Nation refers to the studies of Baddeley (1990) and Pimsleur's (1967) concerning the use of 'increasingly spaced retrieval'.

In addition, a more organised review using a computer or filing system mentioned in the study of Mondria and Mondria-de Vries (1994) is referred to and suggested as a way to contribute to 'planning repetition.' The crucial notion of this class suggests that learners have to know their goal of vocabulary learning so that they pinpoint the core words which they basically want to know. Then, they have to be aware of what aspects of words they need to focus on in relation to each different language skill (e.g. reading, listening, writing, and speaking). For example, the main aspect of a word is not just its meaning, but other aspects also need to be attended to concerning when to use a word in either speaking or writing. Next, the learners need



to know what types of strategies to use, which can be used first and which will be applied later, and when to apply each strategy appropriately.

The final step is to make a plan for effective revision of the words once learned or encountered. It seems that the dominant feature of Nation's first class of strategies matches the notion of Oxford's (1990), O'Malley and Chamot's (1987), Wenden and Rubin's (1987) LLS taxonomy in relation to metacognitive strategies (i.e. planning, managing vocabulary or language learning, and self-directing to become confident language learners, and so forth).

The *Sources* class of strategies: finding information about words, involves four subsets of strategies (i.e. analysing word parts, using context, consulting a reference source, and using parallels with other languages). Clearly the first two are word attack strategies, which probably help learners guess the meaning of unknown words, and perhaps assist in memorising words once taught or encountered). Consulting a reference source entails both animate and inanimate references. The former refers to teachers, classmates, native speakers, and so on. The latter refers to various dictionaries, glossaries and the like. The last strategies are based on the idea of making use of similarities between L1 and L2. Nation (2001, pp. 220-221) refers to Swan's (1997, p. 166) 'equivalence hypothesis': "*L2 learners might use when drawing on L1 patterns to use in L2*". The core point is that learners perhaps learn L2 by comparing the structures of L1 and L2 languages or grammatical rules. Moreover, they may make use of cognate words in order to help them remember the target words. However, Nation sums up a point about Swan's hypothesis: "*More sophisticated versions of learners' equivalence hypotheses take account of linguistic and cultural distance.*"

Clearly, this class of strategies matches the concept of Schmitt's (1997) discovery strategies groups relating to determination strategies (DET) and also the social strategies (SOC). Learners utilise these sets of strategies primarily to receive information about unknown or new words.

The last class of strategies, *Processes*: establishing vocabulary knowledge, includes three subsets of learning strategies (noticing, retrieving, and generating). The 'noticing strategy' refers to recording strategies concerning writing words in a vocabulary notebook, on word cards and lists. Nation considers this type of strategy: "*...a very useful first step towards deeper processing of words.*" Moreover, repetition of words aloud and silently is included in the noticing strategy. This is classified as



one of the cognitive strategies under the classification of consolidation strategies groups, in Schmitt's (1997) VLS taxonomy, as learners who use these strategies presumably make an effort to remember the words once taught or encountered.

Retrieving strategy refers to '*recall of previously met items*', Nation (op. cit.). A retrieving strategy needs a cue (e.g. productive/receptive, oral/visual, overt/covert, in context/decontextualised) in order to help recall a word once met. Nation describes this strategy in terms of receptive cues; learners need to make use of the written or spoken form in order to be able to recall the meaning or use. Correspondingly, learners need to notice the cues like meaning or use, so that they probably recall the word form to demonstrate their productive skills. According to Nation (2001, p. 222), 'retrieval strategies' are valuable: "*If learners keep vocabulary notebooks, they should become familiar with ways of covering up part of the entry so that they are encouraged to retrieve that information.*" In fact, in a deeper sense, learners may need oral or visual, or other sensory cues to make a successful retrieval. However, if learners read words either aloud or silently once or twice or more from their notebooks, they may cover the entries to check whether they can remember the definitions of the entries. This presumably involves cognitive strategies such as the self-test strategy. However, we think that more findings from future research are needed to confirm Nation's remark.

Perhaps we should say briefly that retrieval strategies are in Schmitt's classification of cognitive, not memory, though many people would call them memory strategies, which strengthen learners' memorisation processes.

Another interesting group *Generating* or *generation strategies*, involves associating new knowledge of words with known knowledge. It appears in Schmitt's definition of MEM. Nation (op. cit.) explains that it is similar to retrieval strategy and that it includes several types of generation: "*...receptive/productive, oral/visual, overt/covert, in context/decontextualised. From instructional viewpoint, generating involves 'rich instruction'.*" From Nation's description we see that teachers are recommended to introduce learners to some strategies such as mnemonic strategies (e.g. the *keyword method*), word analysis, semantic mapping, using scales and grids, which perhaps refer to semantic feature grid. It also includes using a new word in new contexts, making sentences "*...across the four skills of listening, speaking, reading, and writing.*" In fact, these generation strategies which help reinforce

learners' memorisation processes, are the strategies which Schmitt categorises as cognitive strategies and memory.

Clearly Nation attempts to suggest a new kind of VLS taxonomy, which does not explicitly follow the previous structure of VLS or LLS taxonomies (i.e. mainly presenting LLS under cognitive, metacognitive, socio-affective, or direct/indirect strategies, and so on) established by scholars like O'Malley and Chamot, Oxford, and Wenden and Rubin. In fact, he seems literally to base his VLS categories on his own theory of vocabulary teaching and learning in relation to LLS. In establishing his taxonomy of VLS, Nation in part refers to some earlier findings of LLS research concerning VLS conducted by Oxford (1990); Gu and Johnson, 1996; Schmitt (1997), and Williams (1985), but we see that much of his proposal actually closely matches Schmitt using different labels.

Though Nation attempts to build up a concise and comprehensible VLS taxonomy, he adds that the taxonomy includes “...a wide range of strategies of different complexity.” Clearly, Nation's taxonomy concisely provides concrete examples of individual VLS. However, it is not easy to grasp the gist of each subset of the general class of strategies. For example, retrieving, retrieval or recall seems to be firmly integrated with retention, and they may be classified under memory strategies (i.e. 'keyword method'). Thus, in reality it is perhaps difficult to make a clear-cut distinction between which VLS assists retrieval and which helps retention. Nation's VLS taxonomy looks simply and concise, but we find it fails to provide precisely defined VLS categories.

Comparing the two systems of VLS classification, we find that Schmitt's VLS taxonomy best serves the purposes of our study, as overall it gives more concrete definitions of VLS which have been more influential in the determination of each strategy classification. The main point of this study is training in the five VLS, particularly those claimed to help learners retain words (consolidation strategies). Nation did in fact also cover these; however they are not so clearly listed.

Schmitt's is the only VLS taxonomy clearly illustrates each individual VLS listed as consolidation strategies, so we will use it as a major model to systematise our VLS classification.

### 2.3.2.2 Studies concerning vocabulary learning strategies (VLS)

In the early stages of VLS research, researchers tend to focus on a single strategy. Not much research on clusters of VLS has been conducted. Moreover, VLS taxonomies still to some extent present an incomplete picture of the VLS in use. Schmitt (1997, p. 199) states:

“The research which has been done on vocabulary learning strategies has tended to deal with individual or small numbers of strategies, with very few studies looking at the group as a whole. The current state of the area is typified by the lack of a comprehensive list or taxonomy of lexically-focused strategies.”

We are now beginning to see the appearance of more vocabulary research in relation to vocabulary teaching and learning, L2 vocabulary acquisition, effects of LLS on vocabulary acquisition, and so forth. However, there are still not many studies focusing on VLS. We will next look at the studies investigating the types of VLS employed and thought on whether they are useful or less useful, especially to L2 learners, both highly proficient and less proficient ones.

Ahmed (1989) investigated the VLS used by three hundred Sudanese learners of English. Think-aloud, observation, and semi-structured interview were utilised as the research instruments. Ahmed divided the subjects into groups according to school and university levels. A cluster analysis revealed that good and poor learners had different ways of using strategies. For example, good learners made full use of other learners as a vocabulary knowledge resource, and they tended to use references like monolingual dictionaries as well as bilingual dictionaries as tools to search for further related information. On the other hand, poor learners clearly employed not many strategies to help them learn vocabulary and likely refrained from practising strategies. Ahmed (1989) reports that individual learners learnt vocabulary differently. He found that most learners took notes on vocabulary and wrote vocabulary information in the margins of their books.

Gu and Johnson (1996) investigated university students' use of vocabulary learning strategies and its outcomes for their English learning. They used a questionnaire to collect data from eight hundred and fifty Chinese second-year students studying at Beijing Normal University. The results showed that the subjects tended to employ “...*more meaning-oriented strategies than rote strategies; contrary to popular belief about Asian learners, the subjects generally did not dwell on memorisation*”. The group of less proficient learners strongly believed in the repetition of word lists, Gu and Johnson (1996, p. 668).

Nevertheless, the findings obtained from the study remain dubious to some extent. For example, the mean of self-reports illustrated in Table 2, page 652, seems contradictory, showing that the Chinese students believe in *'Learning Vocabulary and Put It to Use'*: mean = 5.74; in contrast, the mean of *'Activation Strategies'* was 3.80. The mean of *'Learning Vocabulary and Put It to Use'* (5.75) was on 7-point scale, ranging from *'Extremely Untrue of Me'* (1) the lowest point to *'Extremely True of Me'* (7) the highest point. The mean 5.74 is thus above the midpoint of 4, whereas the mean of *'Activation Strategies'* (3.80) is below the midpoint. There is no further explanation in the appendix about what activation strategies were involved. Moreover, only one instrument was used to collect the data, which might be inadequate in terms of data triangulation – to support the reliability of the findings. Also, Nation (2001, p. 226) remarks about Gu and Johnson's study, that there are some interesting points worth considering: *"Firstly it is based on self-report questionnaire data. What learners say they do does not always represent what they actually do. Secondly, there is no way in the study of determining how well learners used the strategies they said they used."*

Schmitt (1997) conducted a survey of six hundred Japanese learners who were taking EFL classes. The subjects were categorised into four groups: junior high school students, high school students, university students, and adult learners. The survey was designed to focus on gaining information concerning strategy use, learners' perception of the helpfulness of each strategy, rating the discovery and consolidation strategies according to usefulness. The researcher focuses only on the most interesting results, showing the few strategies rated 'the most helpful': for discovering meaning this was 'bilingual dictionary' (95%), for consolidating meaning 'saying new word aloud' and 'written repetition' (91%). The least helpful strategy for discovering meaning was 'skip new word' (16%); and for consolidating meaning 'image word's meaning' (38%). In addition, the strategies which were rated 'helpful' were 'bilingual dictionary' followed by 'monolingual dictionary' (discovery of word's meaning); with 'written repetition' and 'verbal repetition' rated 'helpful' for consolidation. In addition, the trend of vocabulary strategy use was indicated by the university students reporting using a bilingual dictionary, 95%; guessing from the context, 93%; written repetition, 75%; studying the spelling of the word 70%; imagining the word's meaning, 57%. Finally, the VLS perceived as

'helpful' by the Japanese learners were connecting the word with synonyms and antonyms, 93%; asking the teacher to use the new word in sentence, 85%.

Schmitt's (1997) survey results elicit the varieties of vocabulary learning strategies orientals rated helpful/least helpful, and which they used. These strategies Schmitt later categorised and used them in his VLS taxonomy, as described above.

Sanaoui's (1995) study is concerned with '*Adult Learner's Approaches to Learning Vocabulary in Second Language*'. The study focuses on eight adults studying French as a second language in a conversation course and investigates the approaches and mnemonic procedures used.

Sanaoui first conducted an exploratory study, including fifty beginner and advanced (intensive course) ESL learners. The aim was to find the approaches learners use in vocabulary learning. The second investigation involved four case studies of ESL learners; and third investigation included eight case studies. The learners' approaches to vocabulary learning and learners' use of mnemonic procedures were investigated. Sanaoui's (1995, p. 26) main findings were:

"Learners who had a structured learning approach were more successful in retaining vocabulary taught in their class than learners who had an unstructured learning approach. The research suggests that helping learners gain control over processes for managing their own learning of lexis is an important step in vocabulary learning and teaching in the L2 classroom."

Kojic-Sabo and Lightbown (1999) surveyed learners' use of vocabulary learning strategies and their relationship to success. They examined two different groups of learners: forty-seven ESL learners and forty-three EFL learners. The results indicated that ESL learners had a better chance to practise using vocabulary to which they were exposed in a real life situation, so it seemed that ESL learners were in a better position to acquire vocabulary naturally. In contrast, EFL learners had to search for an opportunity to practise new vocabulary, for example, by taking notes and reviewing the words regularly. Both groups of students made use of a dictionary for vocabulary learning. Moreover, the result from cluster analysis confirmed Sanaoui's finding: "*Extensive strategy use is linked to success in language learning, whereas lack of effort on the learners' part related to poor achievement.*" - Kojic-Sabo and Lightbown (1999, p. 190). They further concluded that the findings from their study indicated similar results found in other studies concerning LLS conducted by O'Malley and Chamot, 1990; Oxford, 1990; Wenden and Rubin, 1987; and it also

revealed the results similar to the studies concerning vocabulary learning strategies conducted by Oxford and Crookall, 1990; Oxford and Scarcella, 1994.

Lawson and Hogben (1996, p. 109) investigated what types of VLS fifteen University students in Adelaide, Australia, employed while learning twelve Italian nouns. The learners were asked to make an introspective report (think-aloud method). Nation (2001, p. 227) comments: “*This investigation looked at what learners can do, rather than at what they say they do.*” ...“*Their study not only gathered data about what learners could do, but also to a degree gathered data on how well the strategies were applied.*” The three main findings were: a) Learners who used a number of strategies and often used them could succeed in recalling more words. In contrast, learners who were unable to recall many words used less successful strategies; b) Elaboration strategies were superior to repetition and word feature analysis strategies; c) The strategies most frequently used were repetition strategies. It was found that the rehearsal strategy was effective, but not other repetition strategies.

In fact, we rarely see much research into the training of LLS/VLS. However, an exception Alseweed’s (2000) is ‘*The Effect of Proficiency and Training on the Word-Solving Strategies (WSS) of Arab EFL Readers*’. The purposes of the study are: a) to investigate the Saudi undergraduates’ use of WSS or word attack strategies while reading English texts; b) to examine the effect of teaching WSS to the students in a normal classroom environment; and c) to find out the differences in data - gathering methods from four research instruments: individual think-aloud (ITA), pair-think-aloud (PTA), immediate interview (IIN), and later interview (LIN). Alseweed carried out sixteen hours of training in WSS (i.e. contextual guessing, morphological guessing, cognate guessing, skipping, and appealing for assistance) over six week. Nineteen (n = 19) Saudi male undergraduate university students in their final year studying the English language volunteered to participate in the study. Their ages ranged from twenty-three to twenty-six. According to the general English final examination assessment, eight students were high proficiency level and the rest low proficiency. Their ability in English was classified by their teachers. Some interesting results were revealed: a) “*...training in WSS can increase the use of all observed WSS.*”, b) the high-proficiency learners used WSS more frequently after training, c) when dealing with unknown words in a written text, low proficiency learners turned to the dictionary as their first choice, whereas the high proficiency



level ones utilised contextual guessing strategies to deal with the unknown words in the text, and d) the data obtained from ITA and PTA methods provide better or richer data concerning the learners' use of WSS than the LIN and IIN methods.

The finding gained from Alseweed's study confirms the promising prospects for VLST in the normal classroom setting. In particular, one of the results reveals that the learners benefited from the strategies training. The other finding also confirms the efficacy of using the TA method to elicit the learners' verbal reports of using the strategies. Since Alseweed's study has similar purposes to ours, it raises our awareness of how our main study should be conducted and also gives us a clearer vision of how to make a well-prepared plan to serve the aims of our study. One of the WSS, i.e. appealing for assistance, training in dictionary reference strategies is similar to one of our five VLS, *dictionary work* (DW). This is described in more detail in 2.3.3.1.

### **2.3.2.3 Vocabulary learning strategies training (VLST)**

The application of VLST studies, particularly training in clusters of VLS in a real classroom setting, appears sporadically. The renowned studies which are often referred to are those by Cohen and Aphek (1981); Brown and Perry (1991); O'Malley et al. (1985). In this part we review the studies involving training in vocabulary learning strategies which help learners memorise discrete L2 lexical items, and retain L2 words from the context. Since our main study is based on *cognitive strategies*, we look at VLS studies relating to *consolidation strategies* in conjunction with *memory strategies*. We also include some studies associated with *determination strategy*, e.g. monolingual dictionary (MLD) under the category of *discovery strategies*.

#### **2.3.2.3.1 VLST Studies: training in consolidation strategies**

Clearly we see a number of studies which examine the effect of training in a well-known memory strategy, e.g. the keyword method, initially developed by Atkinson (1975) in an experimental context. Up to now, the keyword method (KW) has appeared in several studies conducted in order to examine its effectiveness on learners' L2 word retention. For instance, Raugh and Atkinson (1975) found that KW successfully helped learners in learning Spanish nouns (Cohen & Aphek, 1980). Nation (2001, p. 311) states that over one hundred studies have been conducted to

find how effective the keyword method is. Nation also adds: “*The keyword technique is primarily a way of making a strong link between the form of an unknown word and its meaning.*” Keyword method involves two core operational steps. For example, a learner may think of an L1 word which has a similar sound to L2 word, and then the learner creates an imagery linkage of both L1 and L2 meanings in order to retain the new word effectively, (see more explanation of KW in 3.2.2.3.4).

Many proponents of the keyword method, for example, Pressley, Levin, and Delaney (1982); Avila and Sadoski (1996); Rodriguez and Sadoski (2000); Gray (2002); Kaminska (2000); Kasper (1993), and so forth claim that the technique probably benefits language learners in terms of facilitating L2 word retention. We, therefore, will look at some studies reporting teaching the KW method in a normal classroom environment.

Cohen and Apeh (1980) conducted a study titled: “*Retention of second-language vocabulary overtime: investigating the role of mnemonic association*”. Twenty-six adults, English-speaking learners learning Hebrew as L2 were briefly trained to remember L2 vocabulary through mnemonic association. After one month, they were examined in their use of this strategy. Finally, the results indicated: “*After being trained in making associations, students were relatively successful in recalling second-language vocabulary learned through these associations.*” (Cohen & Apeh, op. cit.). However, the study has its limitations, since they state there was no control group, so the result obtained from the experimental group could not be statistically compared.

Brown and Perry (1991) trained sixty Arabic students in three learning strategies, i.e. keyword, semantic, and keyword-semantic, and compared the learners’ performance in ESL vocabulary acquisition. Semantic method requires a learner to relate or link a new L2 word with his/her known words semantically. Keyword-semantic is using both methods in combination in order to retain a new L2 words effectively. The students in each class spent the first day of training learning how to use each method, and the second day on instruction and practice testing. The findings from the immediate cued-recall tests show that the ‘keyword method’ helped lower proficiency learners in vocabulary acquisition. The delayed tests obtained from recognition and cued-recall tests reveal that the combined keyword and semantic method was significantly superior to the other two methods, i.e. keyword and semantic methods. It was noted that the result was consistent with the depth-



oprocessing theory stated by Craik and Lockhart (1972); Craik and Tulving (1975): “...when elaboration occurs at a number of levels, memory traces are even stronger.” Brown and Perry (op. cit.) assumed that strategies involving a greater level or depth of processing would result in better retention, (Ellis, 1994, p. 554). Moreover, Brown and Perry added an interesting point: their study initially suggests evidence that KW method combined with the semantic processing method was promising better vocabulary acquisition than using the KW method alone.

Brown and Perry’s (1991, p. 662) *Semantic Strategy* shares certain characteristics with the *Semantic Context Strategy* which appeared in the studies of McDaniel, Pressley, and Dunay (1987); Wang and Thomas (1995). The strategy provides a chance to learn a target word in an English sentence. It is noted that this strategy provides “...an elaborative encoding of the word’s meaning that promotes definition memory.” (McDaniel, Pressley, & Dunay, 1987, p. 87). This strategy shares the sameness of ‘semantic-context’, which is one of the five VLS introduced in the classroom in our main study. We will further define the term ‘semantic-context’ (SC) in 2.3.3.3.

In addition, Avila and Sadoski (1996, p. 379) conducted two training sessions in the keyword technique with eight teachers and their assistants. The first session was arranged in order to provide information about KW, and the second session was a ‘warm-up session’ to check teachers’ understanding of the technique as well as the procedures of training in the technique to sixty subjects of Mexican descent, divided into an experimental group and an control group. The study reveals a positive finding: “*The keyword method produced superior recall and comprehension both immediately and after one week; moreover, the keyword method is readily adaptable to the actual ESL classroom.*”

Rodriguez and Sadoski (2000) examined the effects of four clusters of strategies (rote rehearsal<sup>5</sup>, context, keyword, and context/keyword) on immediate and long-term retention of EFL vocabulary in the normal classroom. Two instructors were randomly assigned to teach two different methods in four normal classes. The mean results showed that in the delay condition, the combined ‘context/keyword method’ had superiority over the other methods. The context method used in this study shared

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<sup>5</sup> Rote rehearsal is a learning strategy which involves learner’s repetitions of an L2 word, phrase, or sentence until it is memorised or retained. This technique is sometimes described as a ‘surface’ or ‘shallow’ strategy; as the learner primarily deals with the form of the target word not its detail in depth (Richards et al., 1992).

the characteristics with the ‘semantic method’ which appeared in Brown and Perry’s (op. cit.) study.

Lastly, Pressley and Levin’s (1981) study suggests that the keyword help learners recall L2 vocabulary (Pressley, Levin, and Delaney, 1982). In addition, a number of studies consecutively conducted by Pressley et al., in 1977, 1979, 1980, 1981, and 1982 reconfirm the consistent findings: most of their studies indicate that most of the experimental groups using the ‘keyword method’ outperform the control groups. Presumably it can be noted that the KW method has a positive effect on learners’ word retention and recall.

Other sub-types of *consolidation strategies* are ‘grouping’ and ‘semantic mapping’. Both these strategies are also claimed to assist learners with memorising and recalling words. Grouping strategy is claimed as a systematic way of memorising words by a number of researchers (e.g. Cohen, 1990; Gairns & Redman, 1986; Schmitt, 1997) and so forth. It is noted: “*If the words are organised in some way before memorisation, recall is improved. (Cofer, Bruce, and Reicher, 1966; Craik and Tulving, op. cit.)*” (Schmitt, 1997, p. 213). In fact, there are many ways of grouping words, for example, a) according to part of speech (p.o.s.), e.g. noun, verb, adverb, adjective, and so forth, b) according to word families, e.g. happy, happily, happiness, and so on, c) according to topic, e.g. cooking utensils, sports, and the like. The ‘grouping strategy’ will be described in more detail in 2.3.3.4.

Clearly, the studies of ‘semantic mapping strategy’ rarely appear. This strategy is also considered as a tool to aid memory in terms of a visual reminder of associations between the lexical items and to help learners enrich their vocabulary (Sökmen, 1997). The significant feature of this strategy is associating new L2 words with known L2 words. It thus enhances “...*deep levels of encoding, and establishing concreteness*” (Sökmen, 1997). In order to create a semantic map, a new word is normally placed at the centre of related known words. Like web or diagram, lines are linked from the central word to other associated words. Oxford (1990, p. 62) remarks that: ‘semantic mapping’ can be integrated with other memory strategies: grouping, using imagery, and associating/elaborating. She adds: “*This strategy is valuable for improving both memory and comprehension of new expressions.*” Also, Cohen (1990, p. 36) adds that this strategy shows the association of related words and visual diagram in combination.

We will later describe the characteristics of the ‘semantic mapping’ technique in 2.3.3.5.

#### **2.3.2.3.2 VLST Studies: training in ‘determination strategy’ - Dictionary**

A dictionary, in Oxford’s sense, is classified under *cognitive strategies*. In our study, we based our VLS coding on Schmitt’s (1997) VLS taxonomy - both bilingual dictionary (BLD) and monolingual dictionary (MLD) are, thus, grouped together as one of the sub-categories called *determination strategies (DET)*, under *discovery strategies*. In our study we also focus on training in *dictionary work (DW)*, especially MLD, as mentioned by Sökmen (1997, p. 245).

Truly, dictionaries are word information resources. In a real situation, clearly both native and non-native speakers, especially language learners, consult them for both comprehension and production purposes. Dictionaries are within the same boundary as lexicons, thesauruses and so forth. Thus, they are simply recognised as vocabulary reference works (Scholfield, 1997, p. 279). By ‘*dictionary work*’ we mean one of six categories related to mixed approach or various types of VLS suggested by Sökmen. According to the study of Thomas and Dieter (1987), DW provides an opportunity to set up memory links from visual as well as motor traces (Sökmen, op. cit.).

Despite the fact that dictionaries are necessary tools, especially for FL/SL learners, to assist them with English in four skills, studies concerning dictionaries have rarely been reported. Regarding the similar findings from the studies of (Hartmann, 1983, p. 198); Bogaards, 1988, p. 144; Kipfer, 1984, p. 47; and Bejoint, 1981), usually most students do not read or pay attention to the information provided in the introduction on how to make the best use of a dictionary. Presumably, they encounter problems if they do not know how to use the reference effectively.

The finding supports the results obtained from the preliminary data of our main study, in particular that the interviewees responded that they did not know how to make use of dictionaries effectively, especially the MLD.

Graves (1987, p. 175) states that students also need to know a number of things about the particular dictionary they use, for example, what the entries for individual words contain and how they are arranged, what aids to its use the dictionary itself provides, and what features beyond the basic word list the dictionary includes. Much of the important information appears in the front of the dictionaries themselves, but it

is very seldom read, and simply asking students to read it is hardly sufficient instruction. Thus, direct instruction in how to use specific dictionaries is needed. Atkins (1985, p. 23) asserts that a dictionary is: “...*a tool to be used by people who need to know something about a language. But you can’t use it properly unless you learn how it works.*”

Alseweed (2000, p. 82) conducted his research concerning training 19 Arabic undergraduate students in Word-solving strategies (WSS), contextual guessing, morphological guessing, cognate guessing, skipping, and appealing for assistance, i.e. asking someone and using dictionaries. He suggests: “... *in order to help students to use their dictionaries effectively there might be a need for teaching them the dictionary use strategies.*” His students were trained how to effectively make use of information given in the MLD, such as, symbols, abbreviations, alphabetical searching for a word and stems of words, and so on.

Moreover, Ronald (2001) probed into the effectiveness of MLD on the seventy-eight Japanese students whose English was rated as intermediate level. The subjects were divided into ‘the dictionary definition group’ and the example sentences group. The students in the first group were given a set of definitions drawn from the MLD for the target words; the other group received a set of typical corpus drawn example sentences. The subjects were instructed to study the materials, and asked to write the Japanese equivalent to the English definitions. After two weeks they were given a word retention test. The main results indicated: “*The Example sentence group performed worse than the Dictionary Definitions group in the test requiring them to give translation equivalents for the target words.*” This might imply that MLD or other types of dictionaries, to some extent, assist learners’ word retention. (Ronald, op. cit.).

Interestingly Summers (1988, p. 115) remarks: “*It is always valuable to keep questioning how words are best retained – whether they are learned in context or as a result of exposure to the isolated forms of the word encountered in a dictionary entry.*”

At this point we presume that while learners are using dictionaries, especially an MLD they may need to encode the information more elaborately. By performing such a deep learning process, they may improve their retention of the information obtained from the MLD.

In sum, we will teach 'DW' in our main study in the hope that the learners will learn how to use it effectively and thus facilitate their L2 vocabulary learning. The characteristics of DW will be described in 2.3.3.1.

### **2.3.3 VLS claimed to reinforce L2 word retention and criteria used in selecting the five VLS**

Hedge (2000, pp. 126-127) suggests numbers of VLS, which probably help learners retain words, for example, *keeping notebook*, *word networks* – which have a similar principle to *semantic mapping* strategy, using antonyms/synonyms, asking learners to look up words in a dictionary. She emphasises: “*Some of these strategies require more processing from the learner and will aid retention.*” Also other consolidation strategies are recommended, such as Oxford’s (1990) ten memory strategies, (e.g. grouping, association, placing a new word into context, meaningful sentence, using semantic mapping, using keyword method, and so forth).

In addition, Sökmen (1997, p. 245) describes how to use a variety of techniques to enhance vocabulary learning. She refers to Nation (1982), who states that most successful learners employ multiple VLS, which are labelled: ‘*mixed approach*’. McKeown & Beck (1988); Stoller & Grabe (1993) also favour this approach. Moreover, Sökmen suggests a pedagogical idea involving vocabulary strategies. She divides the techniques into six groups which could be clustered as mixed approach, i.e. dictionary work, word unit analysis, mnemonic devices, semantic elaboration, collocation and lexical phrases, and oral production.

Chin (1999, p. 4) remarks: “*It is believed that a mixed approach (i.e. a combination of strategies) would be more profitable than relying on a sole strategy.*” Holden (1999, p. 43) supports this statement, saying that different learners have their individual learning styles, each learner will not naturally respond in the same way to different strategies “*...it is therefore important that learners be presented with a number of strategies from which to choose.*” Holden (1999) cited earlier research by Stevick (1976); Johnson-Laird (1983); Brown and Perry (1991), concerning the effectiveness of a combination of strategies use. The findings reveal: “*Integrative strategies have a positive effect on retention because words are stored in associative networks.*” He furthermore suggests: “*Repeated exposure to new lexical items using a variety of means is the most consistent predictor of retention.*” In addition, in order to succeed in improving learners’ ability to recall words, they should also be

introduced to the various types of memory aids, e.g. visual, verbal, tactile, textual, kinaesthetic and sonic memory aids. (Holden, op. cit.).

In addition, Nation (2001, p. 203) emphasises the importance of training in a combination of VLS, and suggests teachers teach three strategies to help learners deal with low frequency words, and this saves teaching time as well. The three strategies he suggests are guessing from context, using mnemonic techniques, and using word parts.

Many educators including Sökmen (1997); Hatch and Brown (1995); Hedge (2000); Nation (1990, 2001); Oxford (1990); McDaniel, Pressley, and Dunay (1987), and so forth, refer to the VLS which reinforce learners' word retention: the keyword method (KW), semantic mapping (SM), grouping (GP), dictionary work (DW), and semantic- context (SC) (see more detail of the five strategies in 2.3.3).

When considering the VLS claimed to be beneficial to word retention, we notice that the aforementioned strategies share the same prominent feature: requiring learners' deep learning processes. In response to Craik and Lockhart's (1972); Craik and Tulving's (1975) Depth (or levels) of processing principle (DOP), presumably learners who put more effort into or give more cognitive energy to manipulating their language learning processes, will retain the knowledge effectively. Schmitt (1997, p. 3) adds: "*The implications extend to pedagogy, suggesting that exercises and learning strategies which involve a deeper engagement with words should lead to higher retention than 'shallower' activities.*" Moreover, Cohen's (1990, p. 22) remark is based on cognitive psychologists' view concerning vocabulary learning that if one really wants to learn lexical items, "*it pays to analyse and enrich them by associations of images – the 'depth of processing' principle, Craik and Lockhart 1972, Craik 1977.*"

In addition, Cook (1991, p. 53) gives an interesting report concerning how people memorise effectively. It is concerned with the deep level of processing in the sense that if a learner learns vocabulary meaningfully, he/she can potentially achieve the best retention of the words he/she wants to remember. He reports:

"How well people remember something depends on how deeply they process it. Repeating words as string of sounds is low-level processing and badly remembered; working out how words fit in the grammatical structure of the sentence is deeper and leads to better memory; using the meanings of words together within the whole meaning of the sentence is the deepest level of processing and ensures the best memory."



The significant feature of our five VLS is that they are based on deep processing, but we also consider other views in selecting them. Our selection is based on the following criteria:

- The five vocabulary learning strategies share the same underlying principle: based on DOP principle stated by Craik & Lockhart, 1972; Craik & Tulving, 1975.
- The time constraints of the course in which we will be able to introduce the strategies mean that we realistically can cover only five strategies. It can be seen that they represent complementary methods covering a range of approaches: KW relies on sounds, images and L1 cognates; GP relies on lexical morphology; SM relies on meaning, SC relies on collocation, phraseology, context; and DW potentially involves all the above aspects and may be more (e.g. grammatical aspects).
- We did not intend to teach strategies that students already knew, so we conducted a preliminary study (reported in 3.1.6, Figure 3.4) from which it was learned that the strategies the learners employed very frequently were shallow strategies (e.g. repetition strategies). They did not report using deep strategies (e.g. KW, SC, and so on) or any of the five VLS selected.
- We believe there are individual differences in styles and preferences. Thus, we focus on a variety of VLS as well as their effectiveness and select the five VLS which it is claimed to help reinforce learners' word retention.

The following part briefly describes the characteristics of the five VLS.

### **2.3.3.1 Dictionary work (DW)**

By 'dictionary work' we mean consulting an MLD to look up other meanings of an L2 word in addition to the meaning that has been often met; also looking up the sample English sentences, part of speech (p.o.s.), word stresses, derivatives, and so forth. A learner may as well copy an L2 word and look up the meaning, and restate the meaning in his/her own words. Moreover, learners may make a set of cards or a notebook by copying the words and details (i.e. p.o.s., IPA transcription of a word, samples of English sentences etc.) into each card or a notebook for the purpose of memorising the words and definitions effectively.

According to Sökmen (op. cit.) dictionary work (DW) consists of six aspects which are presented briefly here. We look at the core points of each one: 1) highlighting and glossing the definitions of the word, 2) copying a word many times while saying it aloud, 3) copying a word and looking up its meanings, 4) copying a word, looking up its meaning and paraphrasing it, 5) creating a word card, and 6) matching a word with its meanings, in traditional exercises or on vocabulary programs.

In order to make our training beneficial to the learners and match with the time allocation of our training timetable, we considered choosing some aspects which will possibly lead to the following advantages:

- A dictionary is good for checking those words that keep coming up and that are not readily understood from context.
- A dictionary can be used to correct errors in writing and eventually prevent such errors
- A dictionary is good for finding the meaning of unknown words that seem to be crucial to the meaning of the utterance.
- With regard to the prospective benefit of MLD, “*The monolingual dictionary requires more effort than a bilingual one, and so deeper processing occurs, and better retention.*” (Scholfield, 1997, p. 296).
- Focusing on the selection of an appropriate or right meaning, if a word has more than one definition.

We, therefore, tend to explicitly emphasise Sökmen’s (1997, p. 245) two out of six aspects of DW classification (i.e. matching a word with its definitions, etc., copying a word, looking up its meaning and paraphrasing it). Besides, we partly adapt the scope of Alseweed’s (2000, pp. 78-83) dictionary training, e.g. ‘macrostructure strategies’ and ‘microstructure strategies’. The former involves training learners in the basic information set out in the introductory part of MLD. For example, the learners will be introduced to the symbols used in the dictionary, the full forms of abbreviations, IPA symbols, alphabetical order of headwords, and so on. The latter is concerned with training the learners to be aware of a word with multiple definitions. They will be exposed to some tasks to reinforce choosing the right meaning for the right word. They will be guided to make use of clues or context



of the sentence/passage to help them select the right meaning. The DW training is described in detail in 3.2.2.3.4.

### 2.3.3.2 Keyword method (KW)

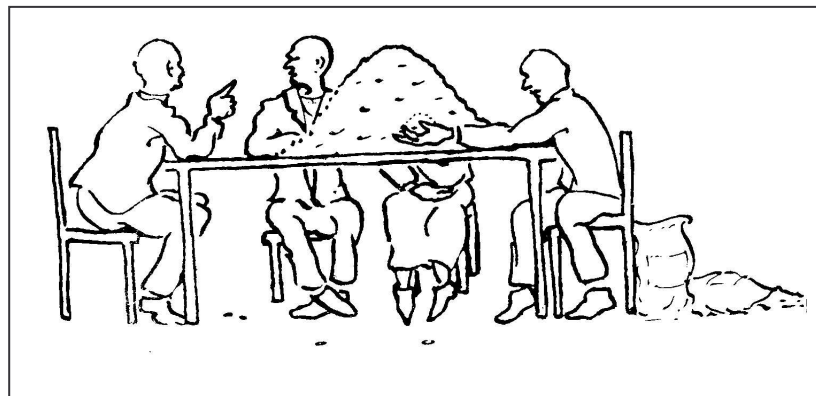
This method is simply defined: “A *two-stage procedure for remembering materials that have an associative component.*” (Pressley, Levin, and Delaney, 1982, p. 61). To use this method, we have to create a sound or image linkage between a new word of the target language (L2) and a mother tongue word (L1). Thus, the KW method encompasses two main linkages, i.e. acoustic and mental. For example, using an L1 word as a key word, which has a similar sound to an L2 word or part of it. For example, the underlined part of a Thai word ซ่อนเร้น /sawn<sup>F</sup>-ren<sup>R</sup>/, meaning ‘to hide’ ‘to conceal’, or ‘to store something away’, has a similar sound to the final part of the L2 word - ‘deterrence’. Then an imaginary linkage could be created to associate the meanings of both words, e.g. ‘Some bandit’s weapons were hidden in secret ambush, it deterred the attacking plan.’

In our study, we allow learners to create a link between the sound and image of the L1 phrase, or part of the phrase, with the L2 word, or part of it which has similar sound to the Thai phrase or keyword. For example, *gargantuan* (L2 word) can be separated into two parts, i.e. *gargan* and *tuan*. The first part - *gargan* could be linked to the L1 word – ‘กางเกง’ ‘kangkeng<sup>M</sup>’ or ‘trousers’. The second part - *tuan* could be linked to another Thai word ‘ouan<sup>M</sup>’, meaning ‘big’ or ‘enormous’. Thus, one L2 word *gargantuan* can be associated with Thai phrase: ‘กางเกงอ้วน’- ‘a big or enormous pair of trousers’. In Thai grammar, an adjective follows the noun it modifies. The sound of Thai phrase: ‘kangkeng<sup>M</sup>’ (n.) and ‘ouan<sup>M</sup>’(adj.) is similar to L2 word – *gargantuan*. A Thai learner possibly associates the sound and the image with the meaning of L2 to L1 or vice-versa, so it will be perhaps: ‘A person is wearing very big (size XXL) trousers.’

Nation’s (1990, pp. 166 -168) view of KW method is: “In this technique learners create an unusual association between the words.” He also adds: “The more imagination you have, the more useful the technique.” In Nation’s sense, the associations can be created between L1 and a new L2, or between a new L2 and already known L2 words. He uses a Thai word as an example - the English word is council which has a similar sound to the Thai word, ชาวสาร. It is pronounced

according to Thai transliteration: /kaow<sup>F</sup>- saan<sup>R</sup>/ meaning ‘rice’ in Thai. The imagery linkage could be visualised in a learner’s mind as shown in Figure 2.5.

**Figure 2.5 Imagery linkage – keyword method, Nation (1990, p. 167)**



Pressley et al. (1982), Paivio and Desrocher (1981) provide comprehensive reviews of the experimental research on the keyword technique. In the survey of almost 50 studies of the keyword technique, eight conclusions are presented. We sum up four dominant points in relation to KW characteristics as follows:

- The KW method helps in learning foreign vocabulary; it is more effective than other methods, e.g. ‘rote repetition’, ‘placing vocabulary in a meaningful sentence’, and ‘using pictures’ or ‘synonyms’.
- The KW method can be used to help memorise concrete nouns, verbs, abstract nouns, and adjectives.
- The KW method does not impede the recall speed of the L2 word meanings.
- One problem of the KW method is that it is often hard to think of keywords (L1) which sound like the L2 word.

We therefore bear in mind the issues obtained from the comprehensive survey as well as the KW characteristics. The operational steps of the KW method are presented in the next chapter in 3.2.2.3.4.

### 2.3.3.3 Semantic-context method (SC)

To begin with, this method is described by McDaniel, Pressley, Dunay (1987, p. 87): “*Semantic-context method involves the presentation of sentences or paragraphs illustrating how the word is used.*” Hence, SC is using an English sentence which is composed by a learner to help memorise an L2 word. It could happen that the sentence composed by the learner might not be perfect, correct in terms of the English grammar, collocation, or styles, and so on. In addition, the sentence may contain funny or strange ideas, however, it will still convey the meaning of the L2 word. The context of the sentences would probably assist the learner to memorise effectively the word embedded in the sentences. Presumably, the SC method enhances an elaborative encoding of the word’s meaning that promotes definition memory.

Chin (1999) explored the efficacy of three methods on eighty-five low level EFL readers’ vocabulary acquisition: a) context, b) word form or analysis of affixes, and c) combined context with word form analysis, three different treatments were taught to three experimental groups. She used fill-in and multiple-choice tests to measure the effects immediately after vocabulary instruction. Immediately after each treatment had been taught, the learners in each group were asked to perform 12 items of multiple-choices and later on 12 items of fill-in post-tests. The main result indicated that students in the context and the combined treatments significantly outperformed students in the word form analysis treatment. Interestingly, the context treatment group significantly attained higher scores than the combined treatment group. Chin finally emphasises the importance of introducing to learners to a combination of strategies, which is claimed to significantly assist learners’ vocabulary development. Those strategies were context, word roots, affixes, including dictionary use.

In addition, Wang and Thomas (1995, p. 468) describe SC strategy:

“In this technique, learners acquire a new vocabulary item by studying it within a meaningful context. For example, when studying the word ‘claymore’, a large 2-edged sword formerly used by Scottish Highlander, learners would be supplied with a sentence like: the warrior pulled his claymore from its sheath.”

In our study, we encourage learners to make their own English sentences. They can consult their MLD in order to see how words are used grammatically in sample sentences in the dictionary. For example, a learner would like to memorise the new L2 word - ‘flutter’ (v.t.) (v.i.) meaning to flap/move the wings quickly. He/she could

make an English sentence in order to help remember the new word. For instance, a learner may construct an English sentence: 'I saw thousands of colourful, gigantic butterflies *fluttering* in the sunflower field.'

It can be assumed that the context of the sentence assists the learner to imprint the meaning of the new target word firmly in his/her memory.

#### **2.3.3.4 Grouping method (GP)**

Oxford (1990, p. 59) describes 'grouping' as a way of selecting similar things and putting them together under the same topic. For example, a learner may categorise new L2 words according to their grammatical functions, e.g. pronouns – *you, he, she, they, someone*; adjectives – *hard, easy, kind, soft*; adverbs – *soft, quickly, heatedly, markedly, completely*. New L2 words can thus be grouped under conceptual similarities, e.g. hot, warm, fire, and so on. Also, they can be grouped into grammatical and meaning similarities, such as, motion verbs, e.g. ride, run, stroll, gallop, soar, and so forth.

Gairns and Redman (1986, p. 69) group vocabulary into lexical sets which consist of semantically similar items. For example, vocabulary which is similar in meaning, e.g. pretty, lovely, attractive, and the like. Some lexical items which can be related by topic, e.g. fruits, sports, food, and so forth, can be grouped together. Moreover, L2 new words can be grouped according to types of word families, e.g. biology, biologist, biological, biologically, psychology, psychologist, psychological, psychologically, and so on.

Presumably, learners may write new words in groups in their notebooks, on cards, in diaries and so on. They may also record the words on their tape recorder or other language learning devices.

In our study, the GP method is to do with grouping L2 words according to word families (e.g. sharing the same root, but different part of speech). For example, the words shown in Table 2.3 below - beauty, damage, and attraction are grouped according to word families and they are categorised in various forms as various parts of speech.

**Table 2.3 Grouping word families**

<b>Noun</b>	<b>Verb</b>	<b>Adjective</b>	<b>Adverb</b>
Beauty	Beautify	Beautiful	Beautifully
Damage	Damage	Damageable	-
Attraction Attractiveness	Attract	Attractive	Attractively

In addition, this technique is mentioned by Cohen (1990, p. 35): “*Whether the words appear on cards or are stored in some other format, one way to study them would be according to meaningful groups.*” Moreover, he adds: “... ‘group’ can be set up according to type of words (e.g. noun, verb, adjective, or function words)”.

We also suggest the learners look up more information about the different functions of each word. Since Thai words do not have inflected forms to identify their function, this will perhaps raise Thai learners’ awareness when making a thoughtful memorisation of L2 words with different spellings and slightly different meanings.

### **2.3.3.5 Semantic mapping technique (SM)**

Sökmen (1997, p. 249) asserts that theoretical evidence firmly supports utilising semantic mapping. She presents the conclusion of Hague (1987) and Machalias (1991), stating that meaningful tasks, exercises, or activities which basically enhance associations and establish learners’ ‘semantic networks’ effectively promote long-term retention.

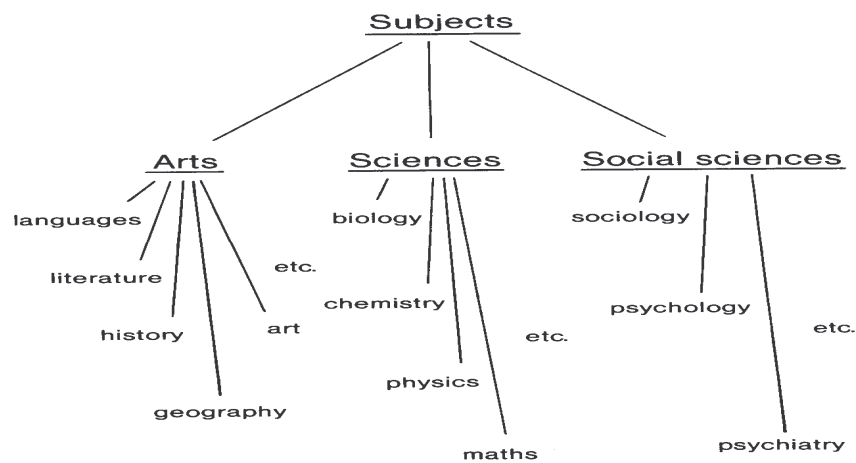
Sökmen also states (1997, p. 250): “*Semantic mapping generally refers to brainstorming associations which a word has and diagramming the results.*” Learners link a new L2 word with known words in relation to the meaningful basis of the words considered and put them in the map.

Hence, this method is relating new L2 word(s) to known word(s) by semantic relationships. Normally, the new word is placed at the centre of the map and lines or arrows are used to form the nets or webs of related words (Figure 2.6 and 2.7). Semantic mapping can be created in many shapes or forms in order to suit learners’ own styles and preferences. Presumably, the visual images can be firmly imprinted in learners’ minds. Thus, it may possibly help learners memorise the new word and related ones effectively.

Figure 2.6 Semantic Map for 'Hair' Using Related Words, Oxford (1990, p. 64) refers to the original source: Brown-Azarowicz, Stannard, & Goldin (1986, p. 32)



Figure 2.7 Semantic Map created in tree shape for memory and storage (Gairns & Redman, 1986, p. 97)



The five vocabulary learning strategies clearly support each other. For example, learners can use a dictionary, especially MLD, to facilitate the other four strategies. For example, when a learner wants to make a sentence, he/she can look up an English sample sentence in a MLD. If a learner wants to find a word with its families, inflections, or derivatives, he/she also can consult a MLD.

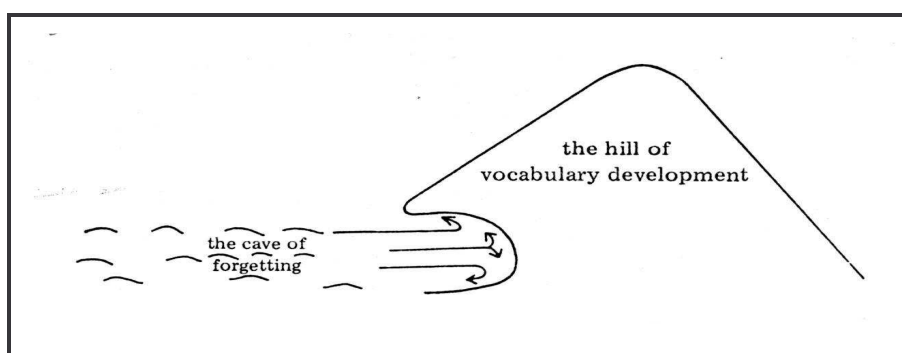
Truly, each language learning strategy and vocabulary learning strategy has both strong points and weak points within itself. In terms of strategies training, therefore, we bear in mind that our learners are clearly informed about the characteristics of each strategy. It is necessary they know how to use and choose the right tools to

serve the right purpose. Apart from that, they may create their own VLS by adapting from the five VLS.

In sum, we believe that the five VLS have potential efficacy not only in enhancing learners' L2 word retention, but also in being efficient tools to uphold the “*hill of vocabulary development and not to let the foundation weaken*” as further described by Brown (1980, p. 1):

“If vocabulary development is thought of as a hill increasing in height, forgetting is like erosion taking place at the foundation.”

**Figure 2.8 Brown's (1980) concept - the hill of vocabulary development**



## 2.4 Summary

This chapter reviews the studies specifically relating to vocabulary learning strategies and vocabulary learning strategies training. It briefly details the importance of vocabulary including definitions of the important terms, for example, lexeme, lexicon, lexical unit, vocabulary, and so forth. In addition, it briefly refers to SLA in relation to vocabulary learning/ acquisition as well as vocabulary teaching and learning. Taxonomies of language learning strategies established by O'Malley and Chamot (1987), and Oxford's (1990) are exemplified and tabulated. Moreover, the taxonomies of vocabulary learning strategies organised by Nation (2001) and Schmitt (1997) are illustrated and described. We also specifically refer to the studies involving LLST and VLST. Finally, we describe the characteristics of five VLS, i.e. 'dictionary work', 'keyword method', 'semantic context', 'grouping word families', and 'semantic mapping', claimed to help L2 vocabulary learning and retention effectively and we describe the criteria for selecting the five VLS. The next chapter will further detail the research methodology, including the VLST procedures for the experimental group.

## **Chapter 3: Research Methodology**

This chapter describes the research methodology of the main study used to answer the research questions and hypotheses listed in the introductory chapter. The first part elaborates on how the preliminary study was conducted and presents the data obtained. The second part covers the research design of the main study, focusing on subjects, materials, research instruments, research procedures, data collection, and data analysis. The third part provides the summary of the chapter.

### **3.1 Preliminary study**

The preliminary study was conducted in August 1999 at the Department of Foreign Languages, Faculty of Humanities, Kasetsart University (KU), Bangkok, Thailand. The duration of the data gathering was three weeks.

The purpose of the preliminary study is to find general information on how students deal with vocabulary learning, whether they have any difficulties with it, what kind of techniques/strategies they have been using to help them deal with it, and how they feel about an idea of training in vocabulary learning strategies in the classroom.

The data obtained is used to help decide which vocabulary learning strategies (VLS) the learners do not need to be taught/trained in for the main study, as they already know them, and to see whether they would be receptive to being taught VLS, as was intended in the main study.

#### **3.1.1 General background of the subjects**

The thirty subjects, ten males and twenty females, of mixed ability, were enrolled on an elective English course: Reading for mass communication (RMC), ENG.355223 organised by the Department of Foreign Languages, Faculty of Humanities. The subjects were from various fields, i.e. Engineering, Business, Fisheries, Physical Education, Humanities, Social Science, Home Economics, Science, Statistics, Biology, and Technological Agriculture. Their levels of English language ability were intermediate to advanced levels according to the KU



standardised tests. Their age range was from nineteen to twenty two. Twenty subjects from the same L2 normal classroom environment were randomly selected to participate in the semi-structured interview session. All subjects, thirty students, including the twenty participants interviewed, were asked to complete the questionnaires later on. In our main study, we have exactly the same sort of students as in the preliminary study, but a different specific group of students.

### **3.1.2 Instruments**

Two instruments: semi-structured interview and questionnaire were employed. Data obtained from both instruments were triangulated to confirm the validity of the findings. The questions used in both instruments concerning vocabulary learning strategies were partly adapted from Oxford's SILL (1990, pp. 293-300), Chamot (1987, pp. 71-72), and Schmitt (1997, pp. 199-227).

Both English and Thai versions of the instruments were tried out on five Thai MA and PhD students studying at the University of Essex. They were from various fields, namely Linguistics, Physics, Law, and Economics. After receiving the comments and feedback from the try-out, we improved the contents and the instructions of the instruments to make them simpler and clearer for the participants/subjects of the preliminary study to comprehend.

#### **a) Semi-structured interview**

The purpose of the semi-structured interview (conducted in Thai) is to gather the subjects' spontaneous ideas about their vocabulary learning. It is also used to find out whether they have any difficulties or problems with vocabulary learning, and to ask how they learn vocabulary and how they deal with new vocabulary taught in the classroom. Finally, it is used to elicit subjects' opinion about training in vocabulary learning strategies in the classroom (see Appendix 3.1).

#### **b) Questionnaire**

The purpose of the questionnaire is to elicit what types of vocabulary learning strategies are used by the subjects, and to find their attitudes to vocabulary learning and their opinion on vocabulary learning strategies training. The questionnaire is divided into three parts. Part A contains eight questions which aim to elicit subjects' personal information. Part B contains 31 rating items concerned with subjects' vocabulary learning. Part C includes three open-ended questions, which aim to gain

learners' opinions in general about their vocabulary learning, including their further comments on vocabulary learning strategies and to elicit their opinion of the idea of introducing vocabulary learning strategies in class (see Appendix 3.1).

### **3.1.3 Procedure of the data collection and analysis**

First, the researcher asked for permission to conduct the preliminary study from the Head of the Foreign Languages Department and the key organiser of the RMC course.

In week one, after the permission had been granted, she was allowed to present the objectives of the preliminary study to the thirty subjects in the L2 classroom. She pinpointed the advantages of the preliminary study to the subjects, and also asked for their cooperation in the semi-structured interview sessions and in completing the questionnaire. It was emphasised that the subjects' opinions, answers, or any comments would not have any effect on their scores/performance in the RMC course. For the interview session, the subjects were not obliged to participate if they did not want to.

In week two, twenty subjects were randomly selected by drawing lots. All subjects willingly participated in the interview. The semi - structured interview was administered to the twenty subjects before distributing the questionnaires, so as not to provide the subjects with any prompts concerning vocabulary learning strategies. The researcher asked the first ten subjects to participate in the morning of the first interview session and the other ten subjects were asked to attend the second session the following morning. Approximately three hours were arranged for both interview sessions. One subject at a time was asked to freely share his/her opinions by answering the six semi-structured interview questions in the researcher's office. Each subject's oral answers in Thai were tape-recorded. At the end, the researcher expressed her appreciation to each participant for his/her co-operation. Later on the interviewees' answers were translated from L1 to L2 and then summarised by the researcher.

In week three - before distributing the questionnaires (Thai version) to the thirty subjects, the researcher spent fifteen minutes explaining how to answer the questionnaire in detail. Every subject was told to raise any queries to make sure he/she understood every part of the questionnaire. Then, the thirty subjects were

asked to answer the questionnaire within the allocated time: forty-five minutes. The subjects were asked not to write their names on the questionnaire sheets, so as to ensure they felt comfortable and free to provide their comments/ideas in either positive or negative terms. To avoid the subjects being subjective in self-rating, the researcher asked them to be honest in rating their ability of general English according to their previous scores from the English test organised by the Department of Foreign Languages. Moreover, the researcher clearly stated that their information would be kept confidential and emphasised her trust in their answers. Also, they realised and understood the objectives of both instruments, by providing the facts to all questions. Finally, the researcher collected the questionnaires after every subject had completed them. Later on she calculated percentage and mean rating summary measures for the whole group for each question, as appropriate.

#### **3.1.4 Results obtained from the semi-structured interview - part one: learners' problems concerning vocabulary learning**

**Question one:** Do you have any problems with vocabulary learning? If so, what is your problem? Please discuss.

Ninety percent (90%) of the interviewees said they had problems with vocabulary learning in general. Particularly, they could not retain vocabulary taught/encountered effectively. This confirmed our intention to focus on VLS for consolidation/retention in the main study.

Two interviewees loved learning English. They mentioned that they like memorising vocabulary. They regularly reviewed and learned by heart new words they had been taught, so they could remember the words taught. However, they said that they had a problem with using the words taught ungrammatically. For example, when they wanted to use a word, they often made a subject-verb agreement incorrectly. Also, they had a problem dealing with words that had more than one meaning. Some extracts of subjects' responses randomly selected are listed as follows:

S. 11: *"It is difficult to use words that have many meanings properly and grammatically."*

S. 15: *"I forgot the words taught pretty fast. Many words taught are seldom used in a real situation. It is thus hard to remember them."*

S. 21: *"I cannot remember words taught effectively. It's very easy to forget words taught within a few days."*

For the main study it may be implied that the subjects' memory problems are not because they did not try, but perhaps because their VLS are not effective. So, again this supports our intention to teach better ones in the classroom.

### **Part two: Vocabulary learning strategies (VLS)**

**Question two:** Do you use any techniques/methods that help you deal with vocabulary learning? If yes, what methods do you use?

One hundred percent (100%) of the interviewees simply used rote-learning strategy (e.g. saying and writing English words with Thai equivalents). Three subjects (15%) grouped words taught alphabetically or sometimes they grouped words with their synonyms and antonyms. Then, they learned them by heart especially before an examination. The term 'learning by heart' means subjects orally repeated the English word as a whole; also, they repeated it letter by letter and said the definition in Thai or in English aloud.

Three interviewees (15%) recorded words taught in their notebooks or on a piece of paper and learned the words by heart when they were free.

Three interviewees (15%) always/frequently wrote words taught whenever they learned each word by heart. Additionally, they sometimes thought of the imaginary pictures of the concrete words previously taught when they repeated them. Also, one respondent mentioned that in order to remember words, she sometimes associated new words with other words which were similar in spelling. Some extracts of subjects' responses randomly selected are listed as follows:

S. 14: *"Yes, the techniques I used were recording the words taught in my notebook and reviewing them regularly and reading English passages/articles, then orally translating them into Thai."*

S. 18: *"No, I just simply made an oral repetition, i.e. saying aloud English words and Thai translations."*

S. 22: *"Yes, I arranged the words alphabetically and learned them by repeating aloud the words and meaning in Thai."*

Implication for the main study: this confirms that association VLS, widely regarded by experts as useful are not widely used. So, we consider teaching two of association strategies, i.e. 'keyword method' and 'semantic mapping method', in the classroom.

**Question three:** Do you use any dictionaries (e.g. bilingual, English-Thai/Thai-English, monolingual dictionaries) to help you learn vocabulary? If yes, what type? Why and when do you use it? If no, why not? Please discuss freely.

All subjects (100%) said they preferred a bilingual dictionary (BLD) to a monolingual dictionary (MLD). The reason is that the former is easier to use and the definition in Thai easier to understand than the latter. However, all subjects (100%) agreed that a monolingual dictionary was very useful in that it provided more useful information about a word, e.g. explanation of different meanings of a word, usages, synonyms, examples in English sentences, and so on. Also, they would like to be trained how to use the monolingual dictionary effectively.

Three subjects said that it was likely that a monolingual dictionary would help them retain words effectively, as they had to spend more time reading an explanation, definitions, and other information. In short, they thought that when they spent more time looking up a word, they could memorise the word effectively.

They claimed to use an English-Thai dictionary after reading an English reading passage/ while reading it and also when they wanted to look up any words they did not know or could not remember.

They used Thai-English dictionary when they forgot an English word, which had been taught. Also, when they wanted to look for some new English words, which they wanted to know they usually spent more time looking up those words outside class. Furthermore, they needed to look up some words in an MLD when they needed to know more English definitions/explanation of the words in detail in order to use them grammatically. So, they also checked how to use each word in each example provided in the MLD. They said that the MLD was useful, but they seldom used it, as it was difficult to understand the English explanation. Besides, it was rather expensive to buy.

In sum, all subjects thought that all types of dictionaries were very useful in different ways and really helped them deal with the partly known words, new words or unknown words.

Clearly, all subjects (100%) realised the usefulness of the references, i.e. bilingual (BLD) and monolingual dictionaries (MLD). It was easier for most of the subjects to use the BLD than the MLD. The subjects' responses (100%) wanted to be trained how to use the MLD effectively. It may be implied that the subjects had some difficulty in understanding the basic methods of use and other information described

in the MLD. It may be better for them to be trained to use the MLD in the classroom, so that they would get used to it and gradually become confident to use it more effectively.

### **Part three: Learners' point of view about their vocabulary learning**

**Question four:** Which techniques do you think are most worth using to help you with your vocabulary learning? Please discuss.

Techniques currently known by the subjects and which they thought of as worth using were only: rote learning, i.e. saying or writing words repeatedly with Thai translation of the English definitions, recording words taught in a notebook and occasionally reviewing them.

Two subjects used the techniques introduced by special tutors from some language centres - for example, listening to the words on cassettes and repeating them aloud on their own. Subject no. 26 said that she sometimes memorised the words taught by making use of the technique of rhymes or rhythm, like chanting the English words with their Thai translation. By chanting, they meant by making use of alliteration or assonance of English words/phrases with each other, and they repeated the words rhythmically to make it harmonious and easy to remember. For example, subject no. 26 repeated: 'arrange, cope with, deal with; and run, operate, manage, perform'. According to the subject's interview, the groups of words have a repetition of the same/similar words/ sounds (e.g. 'with', and similar sound of vowel: 'rate' and 'nage'). In the subject's opinion, it was helpful to repeat the groups of words rhythmically, and it made it easier to memorise the words and the meanings.

Three subjects said that they often pronounced a word syllable by syllable (e.g. vo-ca-bu-la-ry, a-bi-li-ty); they pronounced the word with no stresses or monotonously, similarly to Thai words, as in the Thai language there is no stress variation within each word. Then, they also added the meaning in Thai equivalent to English definitions after each word. By doing this they inevitably ignored the stress and English pronunciation.

Also, two subjects memorised the words taught by making use of the roots of words. They also used pre-fixes/suffixes as a clue to make them memorise the words and the meanings.

The rest (thirteen subjects) normally learned vocabulary by heart – for example saying words aloud or writing a word repeatedly with its Thai equivalent and adding an English synonym/antonym for some words.

Some extracts of subjects' responses randomly selected are listed as follows:

S. 13: *"I use prefixes and suffixes to help me memorise the words taught."*

S. 19: *"I orally repeat the words taught with their Thai meanings."*

S. 26: *"I use chanting/rhythm to help memorise English words with their Thai definitions, e.g. arrange, cope with, deal with, run, operate, manage, perform, following by saying aloud the Thai equivalent: ควบคุม (kuab<sup>F</sup>- koom<sup>M</sup>), ดูแล (doo<sup>M</sup>-lae<sup>M</sup>), จัดการ (jud<sup>L</sup>-gahn<sup>M</sup>)."*

We use the superscripted capital letter <sup>M</sup> symbolising 'mid' tone or 'normal' tone, <sup>F</sup> representing 'falling' tone, and <sup>L</sup> for 'low' tone (see Appendix 5.4).

**Question five:** In your opinion, what makes words easy or difficult for you to remember? Please discuss.

All subjects said that it was difficult when a word was long and had many meanings. Also, the words which had strange or irregular spelling, e.g. 'phenomenon', 'ignore', 'restaurant', 'schizophrenia', and so on were difficult to memorise. In addition, words, which had strange or difficult pronunciation, were hard to remember. These are well known to make vocabulary learning harder (Mackey, 1965, pp. 187-188). All subjects said that it was easy when the words were used/seen very frequently. The words which were short and had one or two syllables, such as, 'zap', 'quail', 'exude', were not too difficult to memorise.

Some extracts of subjects' responses randomly selected are listed as follows:

S.25: *"Short words are easy to remember. Words, which have strange pronunciation, are difficult to remember, e.g. 'phenomena'."*

S.16: *"Words, which have similar spelling at the beginning or at the end, are easy to remember. Words seldom used or seen are difficult to remember."*

S. 23: *"Words frequently seen/used are easy to remember. Words that have many meanings are confusing and difficult to remember."*

**Question six:** Do you think you need any training in vocabulary learning techniques? If yes, why? If no, why not? Please discuss.

All subjects (100%) agreed and said that it would be very useful/helpful to be provided with training so that they could make use of such techniques practically. They really needed them to help effectively retain the words taught. Also, they believed that the techniques could enhance and develop their vocabulary learning in the future.



Some extracts of subjects' responses randomly selected are:

S. 12: *"Yes, it will be useful to help deal with word retention."*

S. 17: *"Yes, it will give an idea about how to deal with remembering words effectively."*

S. 24: *"Yes, it is good in that it will make English more interesting, not only grammar but also vocabulary. Some techniques will possibly be applied to help deal with word retention effectively."*

Additional suggestions gained from subjects' semi-structured interview:

Some miscellaneous points made at the end were:

a) One subject mentioned some techniques, which he/she believed could help make vocabulary learning more enjoyable in class. For example, vocabulary games, cartoons and songs could make English vocabulary more enjoyable to learn and remember. He/she suggested that the teacher provide such techniques in class.

b) Two subjects mentioned turn-taking dictation. According to their idea taking-turn dictation meant one friend said one English word at a time and the other wrote down the word with its definition in Thai or English (synonyms/antonyms). Then, the roles were swapped. For example, a learner said an English word to his/her friend. Then, the Thai equivalent was written or given orally. They believed that the dictation could help them deal with L2 word retention effectively. It was thus collaboration and a social strategy (e.g. asking friends to help dealing with vocabulary learning).

Since the semi-structured interview employed in the preliminary study served its purposes, e.g. eliciting the subjects' vocabulary learning and their problems in learning L2 words in general, etc., we can therefore focus on the points of the problems raised by the learners while they were learning vocabulary (i.e. lacking of effective techniques to help in memorising L2 words, showing interest in VLST, and showing positive response to know how to use English-English dictionary effectively). This therefore affects the researcher to decide to introduce meaningful choices of VLS in class and teach learners to know how to use them effectively in order to help them cope with their vocabulary learning.

### 3.1.5 Data from questionnaire - Part A: gender, pre-university education, and age

Thirty subjects, twenty females (66.7%) and ten males (33.3%) were asked to participate in the preliminary study. The difference in percentages of male and female subjects, basing on the researcher's RMC teaching experience, is due to gender make-up of classes. KU registration office arranged the classes, and it was likely that by chance more male subjects registered in other groups/classes.

Pre-university education: Eight subjects (26.66%) were from government secondary schools located in eight different provinces in Thailand. Twenty-two (73.33%) subjects were from government secondary schools in Bangkok.

Twenty subjects were under twenty-one; ten were over twenty. Normally, the average age of first year university subjects in Thailand is eighteen.

Thus the normal range of learners' ages in the university is shown as follows:

First year	=	±18-19
Second year	=	±19-20
Third year	=	±20-21
Fourth year	=	±21-22

Remarkably, it was possible to see learners whose ages were below or over the normal range in the different years, as shown above.

Of the normal classroom, where the preliminary study was conducted, twenty subjects were under twenty-one and ten were under twenty-one. Looking at the raw data of subjects' academic years, twenty-three subjects were in the third year, six were in the fourth year, and one was in the second year. Thus, the range of the subjects' ages was between twenty and twenty-two, which is within the normal range stated above. The question about learners' ages, however, needs to be improved by leaving a blank for learners to enter their exact age so that the researcher would be able to group them precisely by age.

#### **Subjects' fields of study**

Thirteen subjects were from social science. Six subjects were from Science (Statistics and Biology). Five subjects were from Humanities, language field (two of them English majors and the rest Japanese majors). Three subjects were from Home Economics. There was one subject who was from applied arts: Mass Communication. One subject was from Engineering and one was from Agricultural Industry.

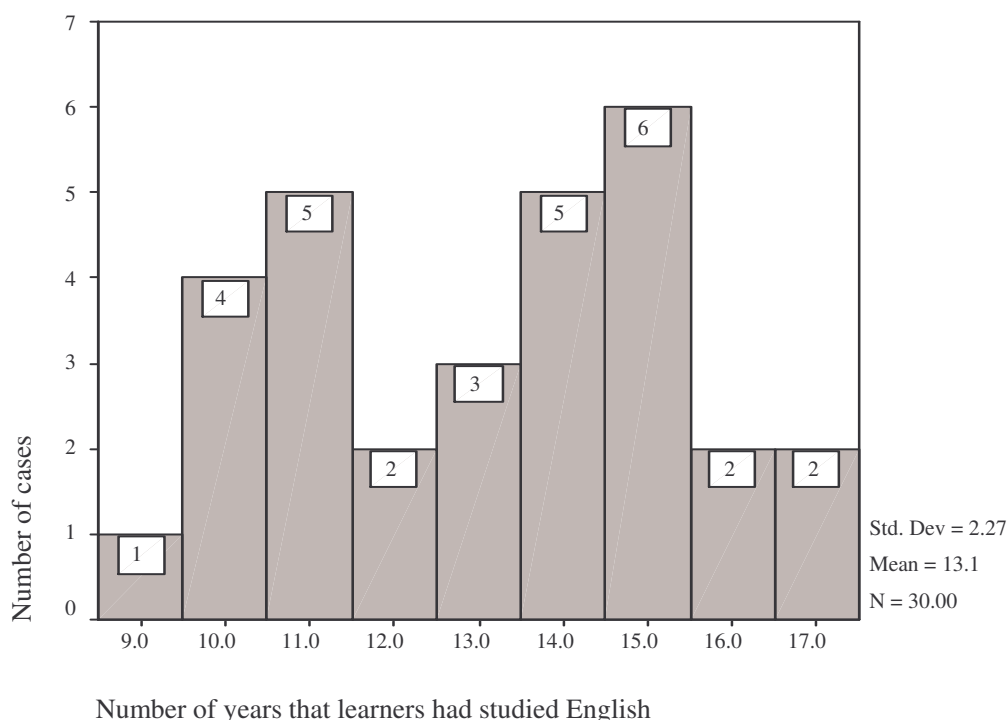
### Subjects' experience in English learning

Figure 3.1 illustrates subjects' experience in learning English. Their minimum English learning experience was approximately nine years and their maximum approximately seventeen years. The average number of years of experience was 13.1.

Despite the fact that they had been studying English for fifteen years, subjects no. 4 and no.7 rated their ability in vocabulary at 1: poor. Subject no. 11 who had 14 years of learning English rated it at 4: excellent. Subjects no.12 and 23 rated their vocabulary ability at 2: fair; they had 15 and 14.8 years of learning English respectively. It is remarkable that the length of English experience did not affect the subjects' claimed ability in vocabulary learning.

Therefore, it can perhaps be interpreted that some learners might lack proper strategies to deal with vocabulary learning, i.e. strategies to help them remember words effectively. On the other hand, they might not be interested in learning vocabulary.

**Figure 3.1 Subjects' experience in learning English as a foreign language**



The varying length of experience arose from the different ages at which the subjects had started learning English language. Some who had many years of experience in learning English had had the chance to be exposed to English when they were approximately three and a half years old, when Basic English was

introduced to young children, especially in some private kindergartens. In fact, learners who could not pass the university entrance examination may have taken one or two years' extra English tutoring in order to prepare themselves for the next university entrance examination. Thus, they had more years of experience in learning English.

#### **Extra English class**

Eighteen subjects (60%) had improved their English by attending an extra English class arranged by private institutes/language schools where special English language tutoring courses were offered to the general public. They mainly studied English in all four skills. The emphasis in the lesson was on English grammar, vocabulary, English for everyday life and conversation.

#### **Travelling to an English speaking country**

The data reveal that only four subjects (13%) had been to English speaking countries. One of them said that they went there to attend a summer course for a month and rated himself 2 (fair) in his English ability in the four skills. Another said that the purpose of going there was to attend a six-month speaking course. He rated 3 (good) for reading and speaking skills, and 2 (fair) for the rest. He noted that his vocabulary learning was fair and his grammar was poor. The participant who went abroad for two weeks rated 3 (good) for reading and speaking. He noted that his vocabulary learning was good, and his writing skill was fair. He was poor at speaking skill and grammar. The last participant who spent an 8-day vacation abroad rated herself 3 (good) for reading skill and grammar. She noted that her listening and writing skills were fair, but her speaking skill was poor. Her vocabulary learning was fair.

In Thailand English is a foreign language and there is little opportunity to practise using it outside classroom. It can be implied that those students who had been to English speaking countries were trying to find an opportunity to use English in a real situation. Apparently, not everyone could afford to go abroad in order to be exposed to real life English communication. Thus, it leaves the problem unsolved. The lack of practising/using English clearly likely leads to less proficiency in English.

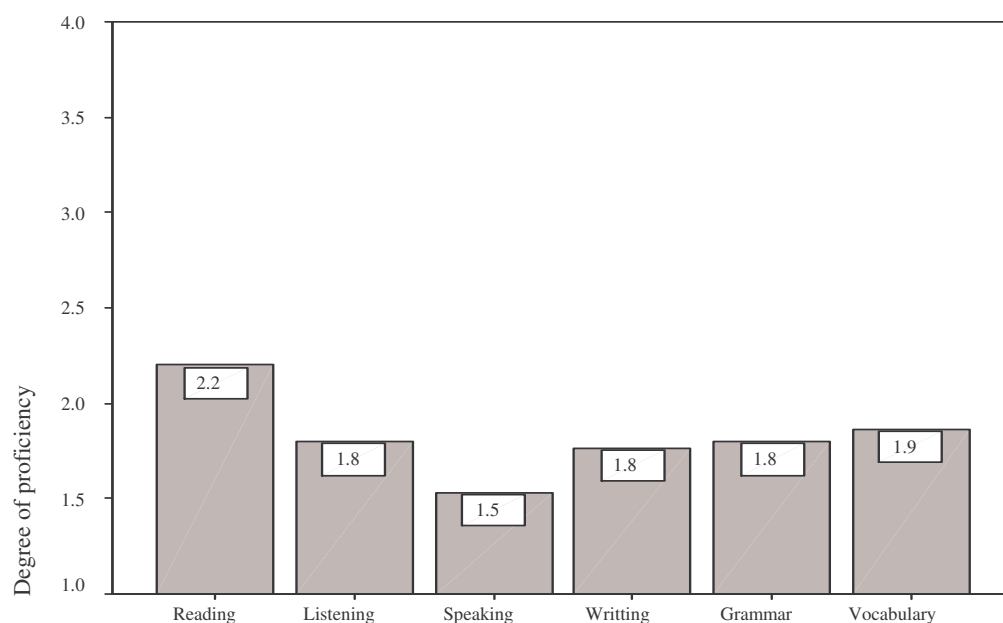
### Subjects' ability in English

All subjects were asked to rate their English ability according to their English scores obtained from the final examination (achievement test), Foundation English III. The subjects took the same set of test papers provided by the Department of Foreign Languages, Faculty of Humanities, Kasetsart University. The English scores were reported mainly by using 5 grades, set by the Foundation English Courses committee authorised by the Department of Foreign Languages, i.e. A, B, C, D, and F. Grade A is equal to 4 which means excellent; grade B equals 3 which is good; grade C equals 2 which is fair; grade D equals 1 which is poor. Grade F is fail, which is equal to 0.

The questionnaire does not tell them to refer to these grades. It just asks for a rating on a 1 - 4 scale. The rating scales used in this questionnaire for marking the subjects' ability in English are: 4 = excellent, 3 = good, 2 = fair, and 1 = poor, and F = 0 very poor.

In terms of asking the subjects to rate their ability in English learning, the researcher relied on the subjects' cooperation and truth in rating their ability in English. However, in order to confirm the validity of the data directly provided by the subjects, it is more sensible that, in future research, the researcher should check subjects' previous grades in English ability in the records of the Department of Foreign Languages.

**Figure 3.2 Subjects' ability in English learning**

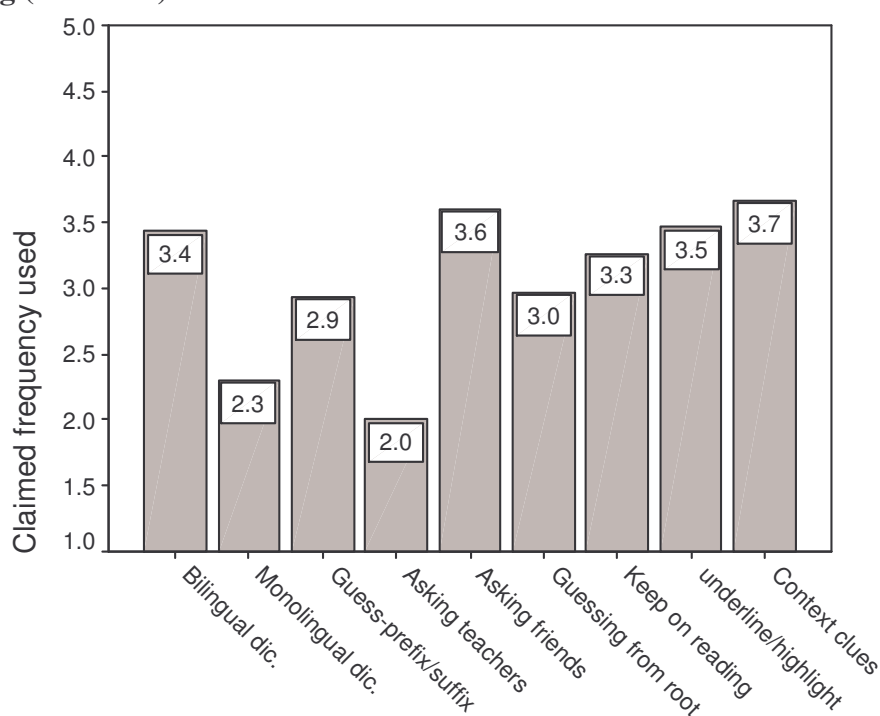


As shown in figure 3.2, the highest English ability of the subjects is in reading. The average is 2.2, or fair. The lowest average ability, speaking, is 1.5, that is in the range of poor to fair. The other four abilities, listening, writing, grammar, and vocabulary are also in the range of poor to fair. The learners rated their vocabulary proficiency at 1.9 which was rather high compared with other abilities. However, it is clearly low in terms of the range of the rating scale.

### 3.1.6 Data from questionnaire - Part B: vocabulary learning

The purpose of part B of the questionnaire was to elicit how subjects learn vocabulary and what types of vocabulary learning strategies (VLS) they normally used to help them deal with vocabulary learning. Figure 3.3 shows the mean claimed frequency (on 1 – 5 scale) of strategies employed by learners when they met words they did not know while they were reading.

**Figure 3.3 Questionnaire - Part B: 1 -How I deal with words I don't know when reading (items 1-9)**



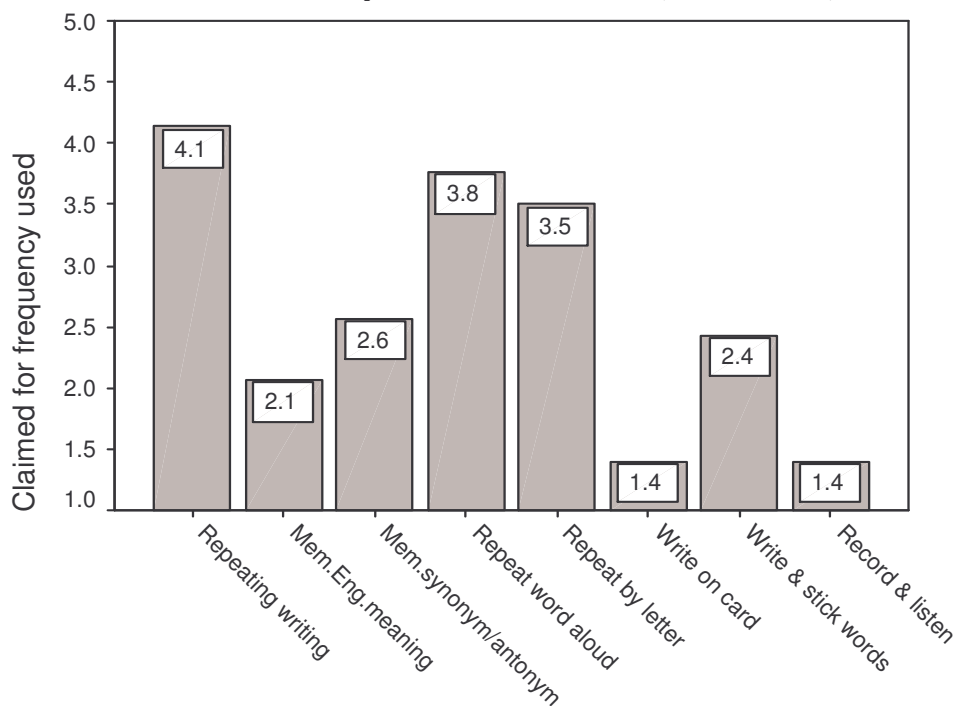
Two strategies showed relatively high means of 3.7 and 3.6. It can be interpreted that most participants dealt with words they did not know while they were reading an English passage by asking friends to explain them and by using context clues to guess unknown words in the passage. Presumably, they chose to ask their friends

who were good at English. Also, they tried to guess an unknown word by using surrounding words or context clues whether or not they looked it up in a dictionary afterwards. The lowest mean is 2.0, which revealed that not many participants chose to ask either native or non-native teachers to explain difficult words or words that had many meanings. Presumably, the factor of Thai culture affects this strategy. Seniority has always been highly valued in Thai tradition. Young persons were asked to pay respect and to keep their distance from older people, or anyone higher in position/rank. Teachers, for example, have been placed on the same level as sacred idols. Thai learners are taught to be obedient and should listen to what elders taught. This is also stated in Littlewood's (2000, p. 33) study: "...the stereotype of Asian students as obedient listeners". The finding was obtained from the responses (12-item questionnaire) of 2,307 students from eight East Asian countries, and 349 subjects' responses from three European countries. Thus, it is suggested that the use of the strategy of asking teachers was probably influenced by the culture. However, the researcher found that a teacher's less authoritative character could help increase student and teacher interaction. For example, in the past, in the researcher's class (the RMC course), approximately 50 percent of the students often asked her various questions about the reading texts previously taught after class. Nevertheless due to the national culture, it is difficult to change the Thai traditional value of/belief in seniority or the respect in teachers. Hence, Thai students still often feel uncomfortable about communicating with their own teachers, as was confirmed by the data shown in Figure. 3.3

Figure 3.4 summarises the data from the second part of B which shows how subjects memorised the words taught.

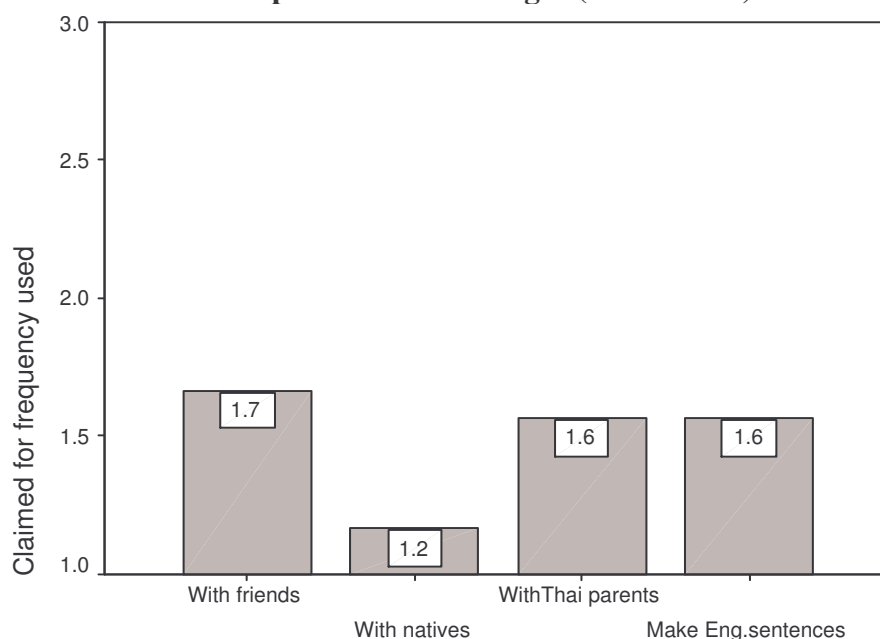


**Figure 3.4 Part B: 2 - How I try to memorise words (items 10 -17)**



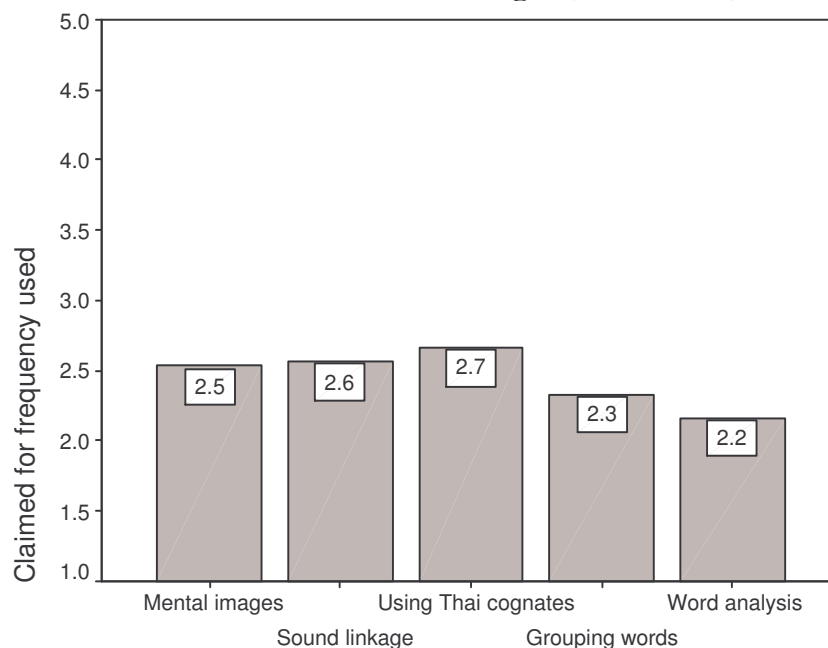
It reveals that three strategies stood out with high mean frequency ratings, writing repetition 4.1, repeating words aloud 3.8, and repeating word letter-by-letter 3.5. It can perhaps be interpreted that subjects mainly used repetition strategies to memorise words as we also saw in the interviews. To the researcher's knowledge, the strategies chosen are seen as a typical style of vocabulary learning of Thai learners. Moreover, these strategies are clearly not too complicated to execute. By contrast, items 15 and 17 received very little favour - (the mean is 1.4). It can be said that in order to memorise words, participants' least favourite strategies are those that require many steps to execute, i.e. writing each L2 word with its definition in Thai on a card, a piece of paper and revising regularly, or recording each L2 word and definition in L1 translation and L2 definition, then playing the tape to listen to the word again and again. Notably, although the less favoured strategies involve many steps to perform, they clearly enhance the depth of processing, which is likely to promote vocabulary retention ( Craik and Lockhart, 1972; Craik and Tulving, 1975). Strategies that do not involve many steps and shallow strategies tend to lead to less acquisition and poorer retention (Wakely, 2003). Implication for the main study – hence once again we see the need to teach some VLS - more elaborate strategies/deep strategies, i.e. strategies that involve many operational steps. Figure 3.5 reveals the subjects were unlikely to practise words taught in any sort of conversation.

**Figure 3.5 Part B: 3-How I practise words taught (items 18-21)**



The mean ratings of three of the strategies (i.e. using words with friends, using words at home, and using word in sentences) are at the same level, that is 1.7, 1.6, and 1.6. This is perhaps because the subjects were less successful in organising their vocabulary learning to create opportunities to speak. In particular, they might be unaware of metacognitive strategies basically involving planning, organising, reviewing well and so forth (Oxford, 1990). Or perhaps they might not have been shown how to manage their vocabulary learning effectively. The lowest mean is 1.2, using words with native speakers. Obviously, in real life Thai learners hardly ever have an opportunity to practise their English orally with native speakers or foreigners who use English. Clearly, L1 is an official language whereas L2 is recognised as a foreign language. Thais do not normally use it as a means of communication in real life situations. Figure 3.6 reveals that the subjects claimed to use a variety of association methods, but all at a much less frequent rate than the top three repetition methods. The graph below shows that they used Thai cognate and sound links to help them memorise words taught (means 2.7 and 2.6).

**Figure 3.6 Part B: 4-How I associate words taught (items 22-26)**



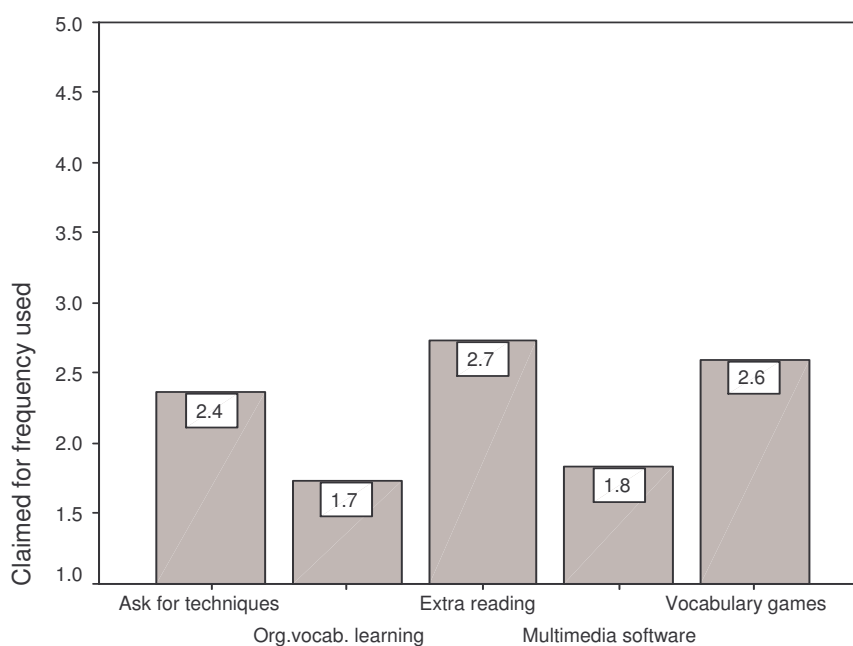
By cognate we mean a Thai word that has similar sound and similar meaning to an English word. For example, *rim* means ‘margin’ which has the similar sound and meaning to the Thai word: รีม/*rim*<sup>M</sup>/. On the other hand, the subjects who linked the similar sound of Thai consonant/vowel/syllable to an English word mentioned that this strategy helped them memorise the words taught.

Another example is *คมนาคม* /*ka-ma-na-com*<sup>M</sup>/: to travel by means of air, sea, road, etc. Clearly it has a similar sound to the L2 word: communication, which means an act of transmitting, message, exchange information or opinion. This in fact is a ‘false friend’, i.e. the L1 which has the similar sound to the L2 word, but is different in meaning.

Grouping word refers in the questionnaire only to grouping the L2 word according to the meaning category (e.g. animals, mammals, vehicles, etc.). In fact, there are various ways of grouping words (Gairns and Redman, 1986). We do not know exactly whether the subjects used other grouping methods. However, the mean of each item is still in between 2 ‘hardly ever’ and 3 ‘sometimes’. Hence this again justifies our plan to cover some association strategies in our VLS training in the main study.

The last part of part B of the questionnaire was designed to elicit other techniques the subjects employed to help them with vocabulary learning. Figure 3.7 shows the highest mean (2.7) for extra reading.

**Figure 3.7 Part B: 5 - Other strategies employed (items 27-31)**



It suggests that most subjects read an extra English newspaper, magazines, and so on in order to help them memorise new vocabulary. The lowest mean is 1.7, for organising and planning. It clearly confirms the data shown in part three that the subjects did rather little in organising/managing to practise the words taught. This is in accordance with the researcher's knowledge that in the RMC class, metacognitive strategy was less emphasised. This perhaps reflects the subjects' low attention to organising their vocabulary learning, i.e. planning a reviewing timetable and so forth.

### **3.1.7 Data from questionnaire - Part C: open-ended questions**

The subjects were asked to express their ideas freely by writing down what they thought or felt about other types of vocabulary learning strategies they employed; their feeling about vocabulary learning and teaching, and about VLS training.

Question one: Besides the above techniques, do you use any other ways of learning vocabulary?

According to the qualitative data obtained from question one, fourteen subjects said 'no'. Sixteen subjects said 'yes'; they employed strategies other than those listed in Part B of the questionnaire. The sixteen subjects (53.33%) who said 'yes' were grouped according to the extra strategies employed, as shown in the following table.

**Table 3.1 Other strategies employed by sixteen subjects**

NO. SS	Other strategies	Remarks
2	Making correct pronunciation of L2 words, i.e. pronouncing a word part or syllable-by-syllable according to L2 pronunciation.	Repetition by pronouncing of L2 words – writing L2 pronunciation in L1 words to make it easy to memorise
7	Watching English sound track films/videos, English language programmes, English news, listening to English songs regularly, watching English films with sub-title in Thai	Increasing L2 vocabulary by visual and aural practicing
7	Studying vocabulary from English comic books	Learning more words/increasing L2 words by practising, i.e. reading
	Collaborative learning vocabulary (e.g. having dictation with friends)	Social strategy asking help from friends
	Noticing/reading the English advert signposts often and memorising the English words from the adverts	Repetition of L2 words by reading them
	Memorising the idiosyncrasies of L2 forms and pronunciation (e.g. irk, grotesque, gruesome, and so on)	Memorising L2 words by repeating them with regard to the strange spelling or visual affecting
	Memorising L2 emotional words or descriptive words (e.g. whim, gorgeous, flickering, heart-felt, and so on)	Memorising L2 words by repeating the emotional or descriptive words related to affective factors

In short, most subjects employed simple strategies for vocabulary learning with no complicated operational steps. Most of the strategies were based on repetition in various ways, and received positive responses from the subjects.

It perhaps can be implied that most learners normally chose a simple strategy, e.g. repetition of many types, to help them memorise L2 words. This may be because such a strategy does not involve any complicated steps. So it is easy for the learners to use. No learners are observed to mention the complicated vocabulary learning strategies, i.e. keyword method, semantic context, and so forth. This leads to the researcher's intention to introduce the deep/complicated vocabulary learning strategies to the learners in order to examine the effect of these strategies.

Question two: What do you think about the vocabulary teaching and learning in the classroom? Please discuss freely.

Twenty-five subjects (83.33%) stated that normally vocabulary was taught mechanically and was less emphasised, i.e. a teacher gave the Thai translation of an English word and asked the learners to memorise the new words on their own. Learners were asked to learn the words by heart (i.e. either oral or written repetition with Thai equivalent). Most teachers gave an inadequate explanation of the new

words. In fact, they did not teach the new vocabulary, they just provided Thai translations of the English definitions. Vocabulary learning strategies had never been introduced in class. In short, both vocabulary teaching and learning needed to be emphasised, improved and developed.

Five subjects (16.66%) expressed their general opinions:

Teachers should introduce vocabulary games/activities that would make vocabulary learning in the classroom more enjoyable/interesting.

Teachers should introduce ways of learning vocabulary systematically and encourage/motivate the learners to do it effectively.

Teachers should introduce vocabulary learning strategies in the classroom in order to help learners deal with the load of L2 words they have to memorise.

Question three: What do you think about training in a vocabulary learning technique in the classroom, to help you deal with vocabulary learning? Is it necessary or not? Why? or Why not?

Twenty-eight subjects (93%) answered 'yes'. They were interested in the VLS training and thought that it would be beneficial to their vocabulary learning, particularly in facilitating the retention of L2 words.

*S.27: "Yes I think the vocabulary learning strategies training is very necessary. Memorising words effectively is very important. If learners can remember many English words, they will not find it difficult to communicate with foreigners."*

*S.28: "Yes training in the vocabulary learning strategies in the classroom is very necessary. Vocabulary needs to be memorised. Learners cannot learn only grammar. They should learn how to memorise L2 words effectively, so that they can better comprehend English reading passages. Also learners may be better in learning English and have fun with it. Knowing or memorising not many L2 words can cause a language barrier between English language teachers, especially native speakers, and the learners."*

Two subjects (6.66%) answered 'no'.

*S.9 mentioned: "Each learner should have his/her own techniques to help him/her cope with vocabulary learning."*

*S.16 said: "It was quite hard to even memorise techniques of vocabulary learning."*

Still this majority in favour of VLS training encouraged us to pursue our main study as planned.

The subjects' additional opinions:

a) Fourteen subjects (46.66%) thought that repetition helped them memorise words effectively in a short time. The rest mentioned the other types of techniques also help them memorise L2 words, for example, practising, keeping notes, reviewing, grouping words, word associations, collaboration, picturing words in mind, self-motivation, pronouncing words correctly, and using the bilingual dictionary to find further information about the new words.

b) Thirty of the subjects (100%) mentioned that the MLD was useful; however, they had difficulties in using it. For example, they were confused about some of the symbols used in the MLD, the international phonetic alphabets, and explanations of the grammatical usage. They thought that teachers should introduce the use of the MLD in class. The subjects realised the importance of the MLD and needed teachers' guidance in how to use it effectively. They mentioned they had never been taught how to use the MLD. Some of them gave their opinions as follows:

S.19 expressed his opinion: *“The English-English dictionary should be introduced in class, as the learners will know how to look up new words effectively and it will make them enjoy looking up English vocabulary and other relevant information.”*

S.20 said: *“The English-English dictionary should be introduced in class; I believe it would probably help me memorise words more effectively for a longer period of time.”*

S.30 said: *“Introducing the English-English dictionary in class is very necessary. It will raise the learners' interest in using it. Some learners have the dictionary, but they do not really know how to make use of it purposefully and effectively. Knowing how to use the dictionary will also help the learners understand the meanings of words correctly. It will help them to choose the right word when they want to make English sentences.”*



### 3.1.8 Discussion

The preliminary data from both semi-structured interview and questionnaire generally reveal the results that serve the purposes of the preliminary study. The summary of the results from both instruments is presented in Table 3.2.

**Table 3.2 Summary of the results obtained from the preliminary study**

Semi-structured interview	Questionnaire
<ul style="list-style-type: none"> <li>90% of subjects mainly had a problem learning vocabulary, especially vocabulary retention.</li> </ul>	<ul style="list-style-type: none"> <li>As shown in Figure 3.4, the vocabulary learning strategies frequently used by the subjects in order to memorise the L2 words were repetition strategies of many types.</li> </ul>
<ul style="list-style-type: none"> <li>Twenty interviewees (100%) said they learned vocabulary mechanically either by repeating words, letter by letter aloud with Thai equivalent or writing it and its definition in Thai several times. They used other strategies such as recording words in notebooks and associating the sound and the word part/form of the new vocabulary with the known words.</li> <li>Vocabulary learning strategy training (VLST) had never been taught in the elective course - Reading for Mass communication.</li> </ul>	<ul style="list-style-type: none"> <li>83% of the thirty subjects mentioned that vocabulary was taught mechanically. There was no motivation in learning vocabulary. With less interest in vocabulary teaching, teachers gave inadequate explanation for vocabulary.</li> <li>Teachers did not give adequate information about new words. They gave a Thai translation for the meaning of an English word. Learners were asked to memorise words on their own.</li> <li>Teachers never introduced VLS in class.</li> </ul>
<ul style="list-style-type: none"> <li>Twenty subjects (100%) were interested in the idea of the training in VLS in the classroom with the hope that they could apply the methods to help them memorise words effectively.</li> </ul>	<ul style="list-style-type: none"> <li>Twenty-eight subjects (93.33%) were interested in the training in VLS in the classroom and had a positive attitude to the training.</li> </ul>
<ul style="list-style-type: none"> <li>Twenty subjects (100%) thought that the MLD was useful as it provided adequate information of L2 words, i.e. samples of English sentences, various definitions, and so on. They were interested in learning how to use it effectively.</li> </ul>	<ul style="list-style-type: none"> <li>Thirty subjects (100%) were interested in training in how to use the English-English dictionary effectively.</li> </ul>

Main points to be considered - Regarding the results shown in Table 3.2, the majority of the subjects similarly used word repetition strategies of many types to memorise L2 vocabulary. For example, the words taught were repeated aloud or were written many times with their L1 equivalents. Also, the word was repeated letter by letter or pronounced syllable-by-syllable separately.

The preliminary study reveals the similarity to Schmitt's (1997, p. 219) survey. The most and least used strategies drawn from his survey conducted in Japan reveals 600 Japanese learners (e.g. junior high school, high school, university, and adult learners) most employed various types of word repetition, i.e. verbal repetition (76%), written repetition (76%), to consolidate the meaning of words. Moreover,

they rated them as the most helpful strategies for consolidating meaning: the former 91% and the latter 84%. However, 46.66% of our subjects pointed out, in the additional opinion section (see 3.1.7), that the repetition helped them memorise words effectively in a short time.

Why was the word repetition strategy the subjects' favourite?

Perhaps, of the various types of word repetitions, rote repetition is a simple, 'least effort' way of remembering words; it has no complicated procedures. It is also useful for learning the discrete words in the early stages of language learning, i.e. names of months, irregular verbs with meanings and so forth. However, in order to retain vocabulary items for a longer period of time, learners require 'a far deeper level of processing' (Gairns and Redman, 1986, p. 93).

Presumably, the vocabulary learning strategies have never been emphasised in class. Most learners were novices in terms of not having been exposed to other vocabulary learning strategies (VLS). In the researcher's experience VLS is rarely introduced in the pre-university classrooms nor in university classes.

Besides, the cultural factor may influence the learners' VLS use. For instance, Thai education normally originated in a 'Wat' or a temple. The Thais, 95% of whom are Buddhists and are acquainted with religious chanting - the Buddha's Bali and Sanskrit praying. It is like a rehearsal/repetition-oriented learning which is possibly transferred to the process of learning anything that needs to be remembered. It is also applied to other schools subjects.

Word repetition strategy is a simple way of remembering words. Obviously, it has no complicated operational steps. Wakely (op. cit.) generally stated in his article: "*Strategies are classified as ranging from 'shallow' to 'deep'.*" By 'shallow strategies' he means those strategies such as keeping repeating words many times in order to retain them, which are easy and fast to employ. However, those strategies do not help much in ensuring learners' L2 word memorisation or retention. Whereas 'deep strategies' are strategies which "*...take more time but ensure greater retention and ease of retrieval from memory.*" (Wakely, op. cit.).

Since the subjects mainly memorised the words taught by using rote-learning strategies, obviously they are unlikely to have reached a depth of processing in vocabulary learning. Hence, the preliminary result revealed that ninety percent of Thai subjects claimed that they had the problem of easily forgetting the words taught. Nation (1990, p. 43) cited Craik & Lockhart (1972); Craik & Tulving (1975), as

saying it is considered that repetition is not an indispensable factor in helping vocabulary learning. In fact ‘attention’ is the factor that affects vocabulary learning. In addition, Hedge (2000, p. 121) cited Craik and Lockhart (1972); Craik and Tulving (1975):

“Learners are more likely to remember a word if they worked on its meaning actively; in other words, input becomes intake if there is a depth of processing.”

It is noticeable that most subjects organised vocabulary learning less systematically. It may be interpreted that they found that managing the process of the overall operational steps of those strategies was complicated. They thus had less interest in managing, planning, and organising their vocabulary learning.

It may be assumed that if learners were shown how to use ‘deep strategies’, they could perform better in vocabulary learning.

Moreover, the subjects’ positive answers support the idea of accepting the vocabulary learning strategies training. They realised the significance of vocabulary, and it also reveals their interest in VLST in the classroom. Thus, we have the support for our main study to find out whether they will improve their words retention after being introduced to deep vocabulary learning strategies training.

In order to serve the needs of the learners, VLS training is our main consideration, with an expectation that it will help the learners deal with vocabulary retention effectively. According to Nation (1990, p. 174):

“By mastering a few strategies learners can cope with thousands of words. Any time spent on these strategies is well repaid.”

In addition, as the subjects showed an interest in training in the use of the MLD, it is sensible to consider the learners’ need in order to give them more choices of vocabulary learning strategies. Moreover, it is interesting to examine the learners’ attitudes towards the MLD and how much it affects their vocabulary learning. Hence the rationale and the research questions (stated in - 1.3 and 1.4) of the main study were based on the preliminary data. The research methodology of the main study will be elaborated in the following part.

### **3.2 The Main study**

The main study was conducted at Kasetsart University (KU), located in Bangkok, Thailand. KU is one of the Thai government universities established in 1943 under the Ministry of University Affairs (MUA). The aim of the University is to promote education related to the agricultural sciences. Hence, the subjects in our main study were basically from scientific fields. The main study is a classic pre-post comparison of performance of the experimental group with the VLST intervention, and of the comparable control group with other activities instead. Performance changes are assessed both in strategies use and in word learning ability.

#### **3.2.1 Subjects**

Initially seventy-nine Thai students at KU were entered into the study during the second term of the academic year: October 2000 to February 2001. There were altogether eight RMC groups. Since the researcher asked to intervene in two groups during the academic term, the RMC course director arranged group 6 and group 8 for her.

The subjects freely chose to attend the English elective course: Reading for mass communication (RMC-Eng.355223) arranged by the Department of Foreign Languages, Faculty of Humanities. They were from the different Faculties, i.e. Engineering, Forestry, Fisheries, Agriculture, Science, Social Sciences, Economics, Business Administration, Humanities, and Education. To make it easier to categorise the subjects, we grouped the field of studies into: a) 'natural science', e.g. Engineering, Forestry, Fishery, Agriculture, and Science, and b) 'applied science', e.g. Social Science, Economics, Business, Home Economics, Humanities, and Physical Education.

In the end, the researcher had to eliminate ten students from the main study, five students from the control group, and another five students from the experimental group. One student from the experimental group did not attend class properly due to his personal problem, i.e. looking after his father in hospital, and another had to work part-time in order to earn money for studying. The rest could not participate in the classroom activities and the VLS training sessions. Five students from the control

group did not attend class regularly; they also missed the pre-test and post-test sessions. Thus, full data were obtained for sixty-nine students in the main study.

In the context of University teaching, actual classes had to be used for the VLS training and the control treatments. The subjects had been divided into eight groups by the KU Registration Office upon enrolment in the RMC course arranged by the Department of Foreign Languages, Faculty of Humanities. The mixed ability heterogeneous groups initially consisted of 38 and 41 students respectively. Group 6, which had 38 students, was randomly chosen by the researcher to be the control group, and group 8 was the experimental group. The former contained 30 females and 3 males; the latter consisted of 24 males and 12 females. The age range of the subjects was from nineteen to twenty three.

According to the Government University EFL standard test, the subjects' ability in English as a Foreign Language ranged from the intermediate to advanced level. All of them had passed the compulsory courses, e.g. Foundation English I, II, and III. During the four years of study, every student is required to complete twelve English course credits, three credits for each course. Normally, the first and the second year students need to pass a prerequisite English course before taking electives such as the RMC course. So, we only see a small number of students from the first and second years attend each elective English course. However, a few first and second year students who achieve the high scores in English in the University entrance examination, i.e. seventy-five to eighty percent upwards, are exempted from the foundation English courses.

On the Departmental score scale, highly proficient students scored 70 upwards; moderately proficient students scored 60 to 69, and low proficiency students scored 50 to 59, and very low proficiency students scored below 50. We use the same criteria to group the subjects who participated in the main study.

It can be seen, therefore, that there are similarities with the preliminary study. The majority of the students who chose the elective English course were third year students. The small number of fourth year students may have opted for the elective English course in the first term of their final year. Normally, students choose to complete the elective English course in their third year, as they actually need to devote most of their time to complete every module of their major fields and the project work in the final year.

In the main study, both the control and the experimental groups, thus consisted of second, third, and fourth year students in combination.

### **3.2.2 Teaching materials and procedures**

In this part we firstly provide an introduction to the normal course. Secondly, teaching and intervention materials are exemplified along with the procedures into three phases: pre-intervention, intervention, and post-intervention.

#### **3.2.2.1 Overview of the RMC course**

Normally the RMC course lasted sixteen weeks, including the mid-term examination (week eight) and the final examination (week sixteen). The researcher is responsible for teaching nine units for the control and the experimental groups during the fourteen weeks. Each week the subjects have to attend a regular three-period class. The teaching periods (three hours) are divided into two of one and a half hours over two days: Tuesday and Thursday. The total time allocation for the whole course (14 weeks) is forty-two hours. Twenty-seven hours are allocated to the regular RMC teaching (9 units), the rest to extra activities and intervention, i.e. the discussion sessions for the control group and the VLST for the experimental group. The extra hours are needed for the semi-structured interviewing sessions and teaching the rest of unit eight and unit nine.

It is a course requirement that learners attend at least 85% of classes. If they fail to fulfil this requirement, they are not allowed to sit the examinations. Basically, there are five grades set by the course-book writer, i.e. a (4), b (3), c (2), d (1), and f (0) (fail), for measuring the learners' course achievement. So, the subjects whose scores 'a' were classified as 'excellent', 'b' were 'good', 'c' were 'fair', 'd' were 'poor', 'f' were 'very poor'.

The course-book writer, who is the main course coordinator, designs the test contexts and contents; she also sets the scores for each examination. The total score is 200, which is divided into 3 parts: 45% for the mid-term examination, 45% for the final examination, and 10% for class attendance and class activities.

According to the academic timetable, every teacher has to finish teaching Unit four, 'In the News Articles' before the mid-term examination, week eight. Then they have to start Unit five in week nine and finish Unit nine in week fifteen, before the final examination in week sixteen.

### **3.2.2.2 Timetable of the regular teaching, intervention, and data gathering activities**

The time allocated to regular teaching and the intervention activities is summarised as follows and a summary of the timetable for the control and experimental groups is shown in Table 3.3 - (see the further detail in Appendix 3.2).

- Teaching each of 9 units takes 3 hours approximately; the total teaching hours are 27.
- Think-aloud training session takes **one and a half hours**. The researcher arranges TA training sessions for both the control and the experimental group.
- Six Discussion sessions for the control group take 9 hours, including one wrap-up session.
- Training in 5 VLS takes 7:30 hours (five strategies - 5 training sessions and one wrap-up session which takes one and a half hours); training in all VLS and a wrap-up session take 9 hours.
- Teaching vocabulary comprises two sets of one and a half hours each. We teach both sets in the classes for the control and the experimental groups.
- Pre-test and post-test are arranged for both groups seven days after the introduction of new vocabulary. Each test takes one and a half hours.
- Interviewing takes approximately 4 hours. We randomly select twenty subjects from each group by drawing lots.

The researcher taught group 6 (the control group) on Tuesdays and Thursdays from 8 to 9:30 am. On the same days, she taught group 8 (the experimental group) from 11 am. to 12:30 pm.

**Table 3.3 Summary of regular timetabled teaching activities and intervention and data gathering activities**

<b>Control group</b>	<b>Time</b>	<b>Experimental group</b>	<b>Time</b>
Attending normal class (Eng. 355223—9 units) 3 hours for teaching one unit	27 hours	Attending normal class (Eng. 355223—9 units) 3 hours for teaching one unit	27 hours
Think-aloud training session	1:30 hours	Think-aloud training session	1:30 hours
Extra vocabulary teaching set I	1:30 hours	Extra vocabulary teaching set I	1:30 hours
Pre-test (7-day cued recall test-type) Voc. Set I	1:30 hours	Pre-test (7-day cued recall test-type) Voc. Set I	1:30 hours
Six discussion sessions (DS) mainly involve: <ul style="list-style-type: none"> <li>• Extra news articles to be presented by learners; the content of each news article is discussed in class.</li> <li>• The discussion discovers genre of news article (i.e. style of writing and presenting headline, lead, body, and conclusion parts, style of news column, a distinctive type of writing)</li> <li>• Queries concerning the content of each unit (in course book –Eng. 355223), are welcomed.</li> </ul>	9 hours	5 VLS training sessions including one session for VLS wrap-up <ul style="list-style-type: none"> <li>• Dictionary work</li> <li>• Keyword method</li> <li>• Semantic context</li> <li>• Semantic mapping</li> <li>• Grouping</li> <li>• Wrap-up 1.30 hrs</li> </ul>	9 hours
Extra vocabulary teaching set II	1:30 hours	Extra vocabulary teaching set II	1:30 hours
Post-test (7-day cued recall test-type) Voc. Set II	1:30 hours	Post- test (7-day cued recall test-type) Voc. Set II	1:30 hours
Semi-structured interviews of 20 randomly selected students	4 hours	Semi-structured interviews of 20 randomly selected students	4 hours
5:30 Extra hours added to the 42 hours normally available	Total hours: 47:30 Excluding course exams	5:30 Extra hours added to the 42 hours normally available	Total hours: 47:30 Excluding course exams

### 3.2.2.3 Teaching materials, intervention materials, and procedures

Teaching materials consist of four types: a) the RMC course book and supplementary vocabulary lists, b) the discussion sessions (DS) materials and tasks for the control group, c) the RMC lesson plans and the DS lesson plans, and d) the VLST materials and the procedures used with the experimental group.



### **3.2.2.3.1 Teaching Materials: the RMC course-book and the supplementary vocabulary lists**

Since we partly described both materials in (1.1.4), at this stage we briefly focus on their core details.

The RMC course-book consists of two parts: units 1-9, and appendices. It is designed for the learners who choose to attend the RMC. It is also dedicated to developing English reading skills, particularly reading news articles from authentic L2 newspapers.

The course-book writer also designed the supplementary vocabulary lists. The L2 words from each unit presented in the RMC course-book are selected by the course-book writer and listed for the learners to study outside the classroom. Presumably, she chose the L2 words which she thought might be necessary and new for the majority of the students. In fact, some of the words will appear in both the mid-term and final examinations.

**Teaching procedure:** The researcher followed the course-book in the classroom during her regular teaching. Both the control and the experimental groups were required to have the course-books with them in class, so that they could do the activities/exercises in each unit.

The supplementary vocabulary lists to the nine units, without either English or Thai definitions, printed on A4 sheets, were distributed to every learner at the beginning of the course. The researcher provided the learners with definitions of the vocabulary in the lists (in L1) and other relevant information, i.e. parts of speech, synonyms, antonyms, and so on.

The supplementary vocabulary lists were used at the end of each unit. We asked the learners to write down the definitions of the L2 words and other relevant information about the words given in L1 translation, also some synonyms and antonyms given in L2 to the learners. They were also asked to memorise those words independently.

### **3.2.2.3.2 Lesson plans for the lessons using the RMC course-book**

The researcher prepared the nine lesson plans according to the RMC course-book materials. The purpose is to help facilitate and organise the teaching process throughout the entire academic term. She used the same lesson plans when teaching both the control and the experimental groups. The objectives of each lesson are based

on the overall objectives stated in the RMC course-book, i.e. to help EFL learners to familiarise themselves with mass media English, to help them to learn how to make good use of mass media English in improving their language proficiency, and to assist them in reading mass media materials more effectively. The RMC course-book writer also emphasised that the learners' reading ability would gradually develop from reading for the main idea to reading for comprehension and drawing conclusions, making inferences, judgements, and finally interpretations.

Since the course-book writer did not explicitly state in the objectives of the development of learners' reading strategies, i.e. skimming, scanning, word attack, and so forth. The researcher did not focus on developing those strategies in the lesson plans. The learners in both groups did not therefore have enough opportunity to practise these strategies. The researcher just explained the contents of subject matter of each lesson in class. She set out the objectives of her lesson plans as follows:

- To help systemise and organise teaching procedures
- To help teaching achieve the course objectives (i.e. directing what exactly the researcher wants to do/teach)
- To reflect on the steps used in teaching
- To make the researcher aware of classroom management
- To help the researcher assess her own teaching performance
- To help improve and develop her performance so as to properly serve the learners' needs
- To help the researcher handle the research experiment effectively
- To help the researcher anticipate possible difficulties and plan how to deal with them.

Each step of every lesson plan was flexible and was adjusted to suit learner's needs and interests, the time, situation, and atmosphere. Materials and teaching support are adjusted to suit the learners' interest and the teaching/learning time allocation. The following example in Table 3.4 is the lesson plan of unit one.

**Table 3.4 Sample of RMC lesson plan: Unit one ‘FINDING THE WAY THROUGH’**

Relevant Information	Steps of presenting First period (90 minutes)	Steps of presenting Second period (90 minutes)
<p>UNIT ONE: Allocated time: 3 hours per week The researcher teaches each group twice a week; one period is one and a half-hours. Learners: the control and the experimental groups Skill focused: Explicitly reading, implicitly writing Level: Intermediate to advanced (mixed ability) The medium of discussion/instruction: English and Thai (50%: 50%) Lesson Objectives: By the end of the unit, the learners should be able to:</p> <ul style="list-style-type: none"> <li>• Recognise and understand the technical terms of mass media. These terms do not appear on the front page of an English newspaper. Particularly the journalists themselves use them, e.g. masthead, ears, deck, by line, jump line, rules, main headline, etc.</li> <li>• Know how to search for more detail of each news article on the front page</li> <li>• Understand and learn more vocabulary items and synonyms, antonyms presented in the unit</li> </ul> <p>Materials and teaching</p>	<p>First period: Step I to step IV (1hour: 30 minutes) <u>Step I:</u> Introduction: Ice-breaking (5 minutes) The first period of the course, in order to enhance friendly atmosphere in the classroom, the learners are asked to make an informal interview in pairs. The main questions are: What is your name?, etc. What kinds of articles in English newspapers do you like most?, etc. Learners are asked to say what his/her pairs favourite news articles in English newspapers are. <u>Step II:</u> (15 minutes) The researcher guides the learners in what is expected in the answers, information on the subject matter of the first lesson. She later elicits the learners’ general knowledge about current hot news, national and international news. Questions used to link with the content of the lesson: For example: What do we normally find on the front page? Give some examples of the news topics that we often find in the newspapers. Since there are various types of news in each newspaper, how can we easily find the interested news/topic quickly? <u>Step III:</u> Definitions of the front-page terminology (40 minutes) On the whiteboard, the researcher shows an example of an English newspapers, front-page. When she points at each position of the front-page (e.g. masthead, ears,</p>	<p>The second period: Step V to Evaluation (1 hour: 30 minutes): <u>Step V:</u> Index (10 minutes) The researcher elicits the learners’ general knowledge about what an ‘index’ is. She asks them to talk generally about the usefulness of an index. OHP – The researcher shows some examples of some news articles extracted from the English newspaper published in Thailand and asks an individual learner what each extract is about, and under what heading the extract should be found. <u>Step VI:</u> (20 minutes) Teaching the vocabulary items -- Due to the constraints on teaching time, some main words in each news article that are unknown to the learners are explained in class. She gives both English and Thai definitions, parts of speech of new words, synonym, antonym, and how to pronounce those words. Since the vocabulary items in each chapter will reappear in the mid-term and the final examinations, she also aims at teaching the vocabulary items drawn from each chapter, shown in the supplementary vocabulary lists. Other vocabulary items are explained where the learners ask for more explanation. <u>Step VII:</u> (20 minutes) The researcher asks every learner to do activities 2 to 4 in the course book to practise matching the news extracts with the proper headings. Then she gives the feedback. <u>Step VIII:</u> Post-task (20 minutes) To reinforce activity five, newspaper analysing, she assigns a post-task to the learners. The learners working in pairs are asked to select one of the English newspapers, i.e. <i>The Nation, Bangkok Post</i>, which are provided. Then, they are assigned to analyse it by following the analysis form shown in activity five in the course-book. Each pair voluntarily presents the analysis and the researcher gives the feedback. <u>Revision:</u> (20 minutes) Activity: Groups of 5/6 learners The researcher checks the learners’</p>

Relevant Information	Steps of presenting First period (90 minutes)	Steps of presenting Second period (90 minutes)
supports: <ul style="list-style-type: none"> <li>• An example of front page selected from a few English newspapers (e.g. The Guardian, The Independent, and The Sun, etc.)</li> <li>• Extracts of mixed news articles</li> <li>• English newspapers (<i>Times, The Independent, The Guardian, The Sun</i> etc.)</li> <li>• The RMC course-book</li> <li>• OHP</li> </ul>	headline, by line, index etc.), she asks the learners to talk about it. For example, on the top of the front-page what kind of information can we find here? Questions from activity one (in the course-book) are also used. <u>Step IV: Checking understanding (20 minutes)</u> In pairs, learners are asked to sum up what they have seen/known about the front page and the definition of the terminology.	understanding by asking them to place the labels with the terminology on the front page of the newspaper provided. Then, they collaboratively prepare to give the definition of each term. The learners are asked to categorise 10 extracts of the news articles and place them according to the index headings provided, e.g. comic strips, horoscope, weather, editorial, classified, sport, etc. The learners, in groups, are asked to present a rough analysis of the newspapers. Vocabulary items: The learners are asked to make at least five sentences including five new words and underline the new words; then give the parts of speech and the definitions of the words in English or in Thai or in combination of L1 and L2.

Due to space limitations, we are unable to present a sample of the lesson plans of all nine units. We thus include only the lesson plan for unit 3 shown in [Appendix 3.6](#).

### 3.2.2.3.3 The discussion sessions (DS) materials and tasks for the control group

The discussion session was an extra activity arranged by the researcher in order to ensure that the learners in the control group gained the same academic benefit as the learners in the experimental group.

Each session's DS material provides extra news articles, advertisements, and readers' letters extracted from current English newspapers. The news articles are more up-to-date than those in the RMC course-book, but are parallel to those in the book. The DS materials challenge the learners with more current news stories and different topics to discuss.

The DS material for session 6 is designed as a wrap-up session. Its intention is to check learners' understanding of the general knowledge from reading the English news articles. During this session the learners are free to ask questions about either the topics previously discussed during the DS or the previous lessons that seem unclear to them. Since it is designed as a discussion session, the learners mainly participate in group-work. The allocated time for each session is 90 minutes. The time is flexible and so are the presentation steps of each DS task.

**Teaching procedure:** The discussion sessions were scheduled during the regular teaching periods in the same weeks as the VLST sessions were arranged for the experimental group.

Table 3.5 shows a summary of DS1 implementation steps. It includes the objectives with the presentation steps - (see the complete set of DS plans, implementation steps, materials, and learners' tasks in [Appendices 3.3, 3.4 and 3.5](#)).

**Table 3.5 Discussion sessions and implementation steps arranged for the control group**

Discussion sessions (DS): 1:30 hrs (90 minutes) per one session	Steps
<p><u>Session one:</u> News Headlines</p> <p>Objectives:</p> <p>a) To familiarise the learners with current news headlines from English newspapers, e.g. <i>The Times</i>, <i>The Nation</i>.</p> <p>b) To provide an opportunity for the learners to discuss the general characteristics of English news headlines, and c) to enhance the learners' vocabulary</p> <p>Language focus: Passive voice, vocabulary from news headlines and synonyms</p> <p>Class activity: Group work</p> <p>Teaching support: OHP</p>	<p><u>DS one:</u> Week no. 5 News Headlines</p> <ol style="list-style-type: none"> <li>1. Researcher explains the objectives of the first DS to the learners. (5 min.)</li> <li>2. Researcher writes an example of an English news headline on the whiteboard and elicits the learners' general knowledge about the basic characteristics of a news headline. (10 min.)</li> <li>3. Learners are asked to form groups of 5/6. Researcher gives DS task 1 to each group and asks them to cooperate in predicting and discussing what the plausible news stories of each headline could be. (20 min.)</li> <li>4. Researcher asks each group to present its prediction and discussion. Then, researcher gives feedback. (20 min.)</li> <li>5. Researcher asks each group to match the underlined words of each headline to the meanings provided. (15 min.)</li> <li>6. Researcher asks each group to give the answers and gives feedback including brief information, e.g. about the part of speech of each word. She provides an L1 translation for all vocabulary items. (20 min.)</li> </ol>

#### 3.2.2.3.4 VLST materials and training sessions procedures

A pilot study was carried out to check the practicality and appropriateness of the VLST materials designed for the intervention stage of the main study in which they were all tried out on three PhD students studying in the U.K. After the pilot we improved the materials, i.e. pre-post tests, the VLST demonstration materials and the tasks to make them more effective in the real research situation. The details of the pilot and the associated testing procedures are summarised as follows:

The piloting of VLST materials involved VLS training sessions and the pre-post testing procedures. This took place from 4<sup>th</sup> to 24<sup>th</sup> August 2000. The three subjects

were female students studying for PhDs in the U.K. Their fields of study were Pure Linguistics and Applied Linguistics.

Before the pilot study we arranged the preparatory stages as follows:

- Discussed the idea of a pilot trial with the researcher’s supervisor
- Selected forty less frequent L2 vocabulary items from English newspapers to make two sets of discrete vocabulary lists (The vocabulary items were drawn from various sections, e.g. business, politics, world news and so forth. The less frequent words selected were taken from West’s (1953) General Service list of English words.)
- Prepared five sets of VLST demonstration materials and tasks
- Prepared main topics for informal interview about the pilot materials and methods

We then set up the procedures of the pilot as shown in Table 3.6 below:

**Table 3.6 Procedures of the piloting of the VLST materials**

<b>Pre-stage</b>	<b>While-stage</b>	<b>Post-stage</b>
<ul style="list-style-type: none"> <li>• First, each subject was told the objectives of the pilot study.</li> <li>• Next, the researcher provided the first set of 20 vocabulary items. She asked a subject to mark the unknown L2 words. The unknown words were explained. The researcher gave the L1 equivalent of each word. Further explanation about the vocabulary was given if required.</li> <li>• The researcher told the subjects that they would be given a seven -day cued recall test. She told them that they had to record below each word how they had remembered it.</li> <li>• After seven days, the researcher administered the pre-test. She also reminded all subjects to write down how they had memorised the vocabulary items and L1 translations. The pre-test lasted 1 hour.</li> </ul>	<ul style="list-style-type: none"> <li>• The following week, the researcher presented five vocabulary learning strategies (VLS) to every subject.</li> <li>• First, she described the objectives of introducing VLST and exemplified each strategy. <i>Queries</i> were welcomed. The researcher asked the subjects to try to use the techniques to help them memorise the vocabulary items in set II.</li> <li>• Next, vocabulary set II was presented. Here the researcher followed the same steps as before.</li> <li>• The researcher emphasised the use of VLST and told the subjects that they would be given a vocabulary test after 7 days and that they had to write down how they memorised the L2 words in vocabulary set II.</li> </ul>	<ul style="list-style-type: none"> <li>• The researcher conducted an informal interview in order to find out:</li> <li>• How they normally memorise new words,</li> <li>• What the subjects thought about the procedures, the VLST, and both tests.</li> <li>• Ideas and comments about the overall procedures of the pilot study and other related matters.</li> <li>• (The informal interview lasted 20-30 minutes approximately.)</li> </ul>

The time allocation was flexible throughout. The time allocated to the individual procedures was presenting vocabulary and extracting unknown words from vocabulary list set I: 30 minutes; set II: 30 minutes; implementing VLST: 2 hours.

Each subject was asked to do a pre-test and a post-test: 60 minutes for each set. We arranged an informal interview of 20 to 30 minutes for each subject.

In order to distinguish when the strategies were employed by each subject, we put the capital letter(s) ‘B’, ‘A’, ‘B&A’ in the parentheses at the end of following sentence. (B = before VLST, A = after VLST, and B&A means the strategy is used both before and after VLST).

### **Subject 1**

<b>Before introducing VLS Vocabulary set I</b>	<b>After introducing VLS Vocabulary set II</b>
Unknown vocabulary: 15 items out of 20 items	Unknown vocabulary: 15 items out of 20
Results from 7-day cued recall: Score: 13 out of 15 She could not remember the definition of 2 words.	Results from 7-day cued recall: Score: 14 out of 15 She could not remember the definition of one word.

### **VLS employed by S1 before and after introducing VLST:**

S1 used the same strategies to memorise the list vocabulary set I and II, before and after introducing VLST.

- Reviewing words (reading silently) and definitions Thai to English, and also reading the list in reverse order. (B&A)
- Checking words and definitions silently twice. (B&A)
- Rehearsing words and definitions silently. (B&A)
- Remembering new words by linking the meanings of the new words to known L2 words that have similar meanings- for example the word *eradicate* was linked to the known idiom: *to get rid of*. (B&A)
- Remembering the English meanings of new words as provided. The subject said that it was easier for her to memorise English meanings of new words directly, with no L1 translation. (B&A)
- However, she normally just repeatedly read the words silently back and forth or in reverse order – only then could she memorise the words previously seen/taught. (B&A)

### **S. 1’s informal interview**

Subject 1 said that she preferred memorising words by reviewing them silently. She did not think of employing any VLS because she found it easier to remember



words immediately a teacher explained the definitions to her. She also said that she felt it was time-consuming to think about techniques or strategies that have too many steps. She thought it was rather complicated for her.

She preferred rereading words silently. She also said that she could immediately remember most new words that had been introduced or explained by the researcher.

However, she thought that the VLS introduced were interesting, and believed that they would be helpful to Thai learners, especially moderate and less proficient learners. She believed that high proficiency learners could devise their own VLS to cope with memorising new words.

## Subject 2

<b>Before introducing VLS Vocabulary set I</b>	<b>After introducing VLS Vocabulary set II</b>
Unknown vocabulary: 17 items out of 20	Unknown vocabulary: 15 items out of 20
Results from 7-day cued recall: Score: 10 out of 17 She could not remember the definition of 7 words.	Results from 7-day cued recall: Score: 14 out of 15 She could not remember the definition of one word.

### VLS employed by S 2 before and after introducing VLST:

- Checking some of which she was unsure words and definitions in the monolingual dictionary and bilingual dictionaries in an attempt to remember them. (B & A)
- Remembering the English meanings of the new words rather than Thai translations. (B & A)
- Remembering some L2 words at once after listening to the researcher's explanation the meaning of the L2 words in the mother tongue. (B&A)
- Remembering new words by linking their meanings to known words that have similar meanings- for example, the word *humdrum* was linked to the known words: *dull* and *monotonous*. (A)
- Subject 2 said that when she remembered the word *humdrum* and its definition, she thought of the Thai repeated sound of bees: /heumg<sup>M</sup>/ which to her had a similar pronunciation to *humdrum*. \*[The word /heumg<sup>M</sup>/ is onomatopoeic representing the monotonous sound of bees or a revving car engine]. So, she linked the sound to the word *humdrum* and this helped to memorise the meaning of the new word. (A)
- Using the imagination - for example, she remembered the word *quench* and its meaning by linking its meaning to the known word *squeeze*. She then imagined



squeezing a lemon or an orange or some other fruit, to make fruit juice. The fruit juice helps stop the thirst. (A)

(The researcher's views are added in square brackets.)

### **S. 2's Informal interview**

The subject said that to remember words she also associated the meaning of a new word with a known word that had a similar meaning.

She mentioned that when she could not remember a word in the vocabulary sets she skipped to the next. When she returned to the word she had skipped, she could successfully think of its meaning. This suggests that she needed more time to think about the meaning of the word. [The researcher considered this technique likely to be one of the test-taking techniques; it was not a memory technique.]

Regarding the VLS introduced to her, she thought that every strategy raised her awareness of using VLS, especially memorising words seen or taught.

Her final comment was that all types of strategies would be useful for Thai learners and would help them to learn vocabulary more effectively. She suggested that each strategy needed to be demonstrated and explained as clearly as possible to the learners so that they would not have any difficulty when using the strategy by themselves.

### **Subject 3**

<b>Before introducing VLS Vocabulary set I</b>	<b>After introducing VLS Vocabulary set II</b>
Unknown vocabulary: 18 items out of 20	Unknown vocabulary: 17 items out of 20
Results from 7-day cued recall: Score: 14 out of 18 She could not remember the meaning of 4 words.	Results from 7-day cued recall: Score: 15 out of 17 She could not remember the meaning of 2 words.

### **VLS employed by S 3 before and after introducing VLST:**

- Remembering the English meanings of new words. (B & A)
- Remembering some L2 words at once after listening to the researcher's explanation about the meaning of the L2 words in the mother tongue. (B&A)

- Relating the new word and its meaning to a known word and making a story to relate both words - for example, she associated the meaning of *haberdashery* with *embroidery*. This made her remember the meaning of *haberdashery*. (B&A)
- Linking a syllable of a new word to a similar sounding Thai word - for example, she linked the second syllable of *delinquency*, a similar sounding Thai word **ลิง** /ling<sup>M</sup>/ which means ‘monkey’ in English. Then she created a story to link the meaning of the known word to the new word, in that a monkey often behaved badly. (B&A)
- Remembering new words by grouping words that have a related meaning -for example, she linked the meaning of a new word *skulk* to a known word *skunk*. She then made a meaningful association that a skunk has a very strong smell so a person needs to sneak away or move furtively away from it. (B&A)
- The subject said that when she remembered the word *spew* and its definition, she thought of the Thai word **ปลิว** /plew<sup>M</sup>/ which has similar sound to L2 word, meaning ‘to be blown’. Then she linked the meaning of the L1 word to the meaning of the English word *spew*. She imagined undigested food being blown out from a person’s mouth. This helped her to remember the word *spew* and its meaning. (B&A)

### **S.3’s Informal interview**

The subject said that to memorise new words she normally associated the meaning of a new word to a known word (s) that had a similar meaning.

Regarding the VLS introduced to her, she thought that every strategy raised her awareness of vocabulary learning and the use of strategies to help memorise new words. She had applied some strategies before to help her remember words, e.g. keyword technique. She had her own technique to help her remember new words -for example, she thought of making up a story using L2 words that had related meanings.

The subjects said that all strategies introduced to her were very useful in facilitating vocabulary retention. She did not use every strategy, as she chooses the strategy that suited her style and preference in remembering L2 words.

Remarks: All three subjects thought that providing discrete vocabulary items (e.g. vocabulary set I and set II) to Thai learners seemed to be difficult, mechanical and boring and it might discourage learners. They also thought that both sets of vocabulary were rather difficult, as most of the items had seldom been seen. All of them agreed that providing news articles with underlined words in each passage was a meaningful and natural way of learning. They felt it was reasonable to ask learners

to identify unknown words from authentic news articles, as they normally do when they study reading for mass communication (the RMC elective course). The advantages and drawbacks of the VLST materials pilot and the pre-post testing procedures are summarised in Table 3.7.

**Table 3.7 Advantages and drawbacks of the piloting**

<b>Advantages</b>	<b>Drawbacks</b>
<p>It raised the researcher's awareness that each research procedure must be correctly condensed in the main study.</p>	<p>Due to time constraint, VLST was carried out for only two hours. The researcher simply explained the gist of each strategy and how it helped in memorising L2 words. She also asked the subjects to try using the techniques introduced in memorising vocabulary set II. Since the subjects were advanced and were from a field related to Linguistics and Applied Linguistics; they did not have difficulty in understanding the objectives and operational steps of the five VLS.</p>
<p>The researcher received some useful suggestions to improve the VLST instructions; presenting news articles instead of just discrete vocabulary items. Rather than asking learners to write their thoughts about how words were remembered, we found that it was better to ask them to record their verbal report freely while memorising vocabulary items/tasks, since the former took time and the learners might not remember what techniques they used to memorise each word. We had the opportunity to adjust the length of each task to suit the time allocated in the real situation.</p>	<p>Three subjects were very advanced students and were in the field of Linguistics and Applied Linguistics and had some previous experience in VLST. Hence, it was not a clear-cut conclusion that their improvement in memorising words in the post-test was because they employed some of the VLS introduced.</p>
<p>The researcher considered the suggestions and improved the VLST demonstration materials and learners' tasks.</p>	<p>The subjects in the pilot study did not perform free think-aloud (TA) verbal report and so could not give broader comments about how to deal with free TA verbal report.</p>
<p>The researcher set up criteria for the selection of news articles containing vocabulary items from various news sections and involved the course book writer and supervisor in checking the easiness and difficulty of L2 words.</p>	<p>The researcher did not receive comments or points of view from less proficient learners or intermediate learners.</p>
<p>From what the pilot subjects wrote under each word, it was found that sometimes they could not explain clearly what methods they used, e.g. they said that they remembered immediately after the researcher told them the meaning of the word. This raised the researcher's awareness of the importance of giving a Think-aloud training session. The researcher noted that she needed to ask the learners in the real research situation to spell out as clearly as possible</p>	

Advantages	Drawbacks
what they thought/used in memorising L2 words.	
The comments from the informal talk gave a useful guideline for the specific questions to be used in the semi-structured interviews in the main study.	

The VLS materials and tasks were thus improved and readjusted to be used appropriately in the main study. The materials consisted of the VLS training demonstration examples and the reinforcement tasks for the five techniques, i.e. dictionary work (DW) keyword (KW), semantic context (SC), semantic mapping (SM), and grouping (GP). We used the demonstration materials to introduce the five VLS in the classroom and used the VLS reinforcement tasks to check learners' understanding and to provide an opportunity for them to practise using each technique properly. Samples of VLST demonstration materials, wrap-up materials, and reinforcement tasks are shown in [Appendix 3.9](#).

There were six VLST sessions totalling 9 hours. Each session lasted one hour and thirty minutes. The first session took place in week five, November 2000, and the last session in week thirteen, January 2001. The subjects were initially informed of the objectives and the value of each VLS and later were trained to employ the techniques.

The training procedures are described along with the materials of the five VLS in the following parts.

The training sessions for both the control and the experimental groups were fitted into the normal teaching timetable, as shown in [Appendix 3.2](#) and [Table 3.3](#).

### **Intervention phase: VLS training session I - Dictionary work (DW) (Week 6)**

This session aimed to train the students how to use the monolingual dictionary (MLD) according to the 'guide to the dictionary' in the *Longman Dictionary of Contemporary English* (1995, pp. xiv-xxii), as a self-study aid to word retention.

The objectives of training in the 'DW' technique are

- To provide an opportunity for the learners to make use of the MLD as a tool to assist them in enhancing vocabulary learning, especially with an expectation that the method probably facilitates learners' vocabulary retention.
- To introduce proper ways of using the MLD as one of several vocabulary learning strategies to help learners memorise vocabulary independently.

- To familiarise learners with the use of an English-English dictionary and to provide an opportunity for learners to practise MLD skills, especially matching words with appropriate definitions.
- To provide learners with a helpful tool when using the other four VLS, i.e. KW, SC, GP, and SM, independently.
- To build up learners' confidence when consulting the MLD for additional information about the words once seen or taught in class after they had finished their reading tasks. It is likely that if learners independently consult a dictionary for the new words met, it will help retention and future use.
- To serve the learners' need for MLD training in a RMC learning environment, a need which had been identified in the pilot study.

Clearly, the learners need to put more effort into consulting the MLD; they probably remember vocabulary items better and more effectively. Scholfield (1997, p. 296) mentioned the MLD in relation to retention: *“The monolingual dictionary requires more effort than a bilingual one, and so deeper processing occurs, and better retention.”*

The researcher adapted the DW technique as described by Sökmen (1997, p. 245): *“Dictionary work, including practising good dictionary skills, is useful as an independent vocabulary acquisition strategy.”*

According to Thomas and Dieter, 1987 cited by Sökmen (op. cit.) - dictionary work, particularly the copying of words gives: *“... an opportunity to set up memory links from visual as well as motor traces.”*

Additionally, in an attempt to design tasks to be meaningful and practical for the learners, the researcher adapted an idea of using a dictionary for self-correction described in an article titled: ‘Writing, Vocabulary Errors and the Dictionary’ described by Scholfield (1981, pp. 31-40). The researcher, then, focuses on three types of vocabulary errors out of seven. The three types are ‘wrong meaning’, ‘wrong inflectional morphology’, and ‘wrong spelling’.

The reason that three types of vocabulary errors are focused on is that the learners tend to consult dictionaries as they want to check the meaning, spelling, and use (Wright, 1997, p. 22). In addition, Nation (1990, p. 135) refers to the studies of the use of dictionaries by both native and second language learners; the studies suggested that dictionaries were used primarily to check meaning. Moreover,

learners frequently consulted the dictionaries in order to check spelling and pronunciation (Bejoint, 1981; MacFarquhar & Richards, 1983) - Nation (op. cit.).

The tasks designed are mainly based on matching a word with its definition, checking meaning. We also emphasise in class that the copying of L2 words, meanings, and other related information, e.g. pronunciation, inflectional morphology, spelling, etc. was very helpful in terms of facilitating L2 word retention.

### **Procedures: demonstration and training session - DW**

(Steps one and two: 10 minutes, steps three to six: 30 minutes, and step seven: 10 minutes)

- The researcher first emphasised the objectives and the value of the 'DW' technique.
- She showed a sample of her MLD (*Contemporary English*, New Edition 1995, *Longman Dictionary* and other MLDs. The focus was on some features covered in 'Explanatory Chart and Guide to the dictionary'. For example, she briefly exemplified the meaning of signposts, i.e. the information given in square brackets, the abbreviations for word class (e.g. *n. pro. conj. interj.* etc.). The characters of the International Phonetic Alphabet (IPA) were shown and pronounced with the aid of an OHP. Learners were asked to repeat the pronunciation of a few words.
- The learners were introduced to some homographs with explanations (e.g. lead/ $\lambda\iota\bar{\delta}$ /, lead/ $\lambda\varepsilon\delta$ /, and homophones, e.g. 'Don't tell a lie', 'Those children lie down on the floor'. A few phrases and idioms were presented. Particularly, the researcher aimed at words with more than one meaning, e.g. 'fast', 'drive', and so forth. The words that had more than one meaning were drawn out and the different meanings highlighted. She showed two pages of the MLD (pp. 503,504) on OHP and asked the learners to look up the meanings of 'fast'. The three sentences shown as an example below the copy were adapted from McCarthy's and O'Dell's (1994, p. 11) 'Using your dictionary', exercise item 5.



Figure 3.8 DW training material and task

**fast**<sup>1</sup> /fɑːst||fæst/ *adj* **1** quick; moving or able to move quickly: *a fast car|the fast train to New York* (=one that travels fast and stops at few stations)|*the fast growth of the oil industry|fast music|a fast runner* —see FASTNESS (USAGE) **2** taking a short time compared to other people or things: *a fast journey* **3** firmly fixed and unlikely to move or change: *The colours aren't fast, so be careful when you wash these towels.*|*The label says this shirt is colour fast.*|*He made the rope fast* (=tied it firmly) *to the metal ring.* **4** [F; after *n*] (of a clock) showing a time that is later than the true time: *My watch is fast|is five minutes fast.* **5** having or being a high photographic speed: *a fast lens|a fast film* **6** [A] allowing quick movement: *There had been an accident in the fast lane of the highway.*|*a fast pitch*|*Cook it in a fast* (=very hot) *oven.* **7** *old-fash* wanting too much pleasure and spending too much money: *James belongs to a very fast set at college.* **8** *fast and furious* (esp. of games and amusements) noisy and active **9** in the 'fast lane taking part in the most exciting or risky activities: *With all her money and film star friends, she really lives her life in the fast lane.* **10** *pull a fast one* (on) *infml* to deceive (someone) with a trick —see also FASTNESS, SPEED

**fast**<sup>2</sup> *adv* **1** quickly: *She drives very fast.*|*Their population is growing fast.* **2** firmly; tightly: *The car was stuck fast in the mud.* **3** ahead of a correct time: *The train's running five minutes fast.* **4** *old use* close; near: *a brook fast by* **5** *fast asleep* sleeping deeply **6** *play fast and loose with old-fash* to treat in a selfishly careless way —see also **thick and fast** (THICK<sup>2</sup>)

**fast**<sup>3</sup> *v* [I] to eat little or no food, esp. for religious reasons: *Muslims fast during Ramadan.*

**fast**<sup>4</sup> *n* an act or period of fasting: *Friday is a fast day.*|*He broke his fast by drinking some milk.*

Directions: Write down the definition number of the entry that appropriately fits/conveys the same meaning of each sentence provided. Reference: Longman Dictionary of Contemporary English (1995, pp. 503-504).

1. Some religious persons fast more than six months. (Def. no. \_\_\_)
2. The greyhound was fast but not a good jumper. (Def. no. \_\_\_)
3. The colour of my T-shirt is not fast, so it made other clothes become grey. (Def. no. \_\_\_)

- The researcher also emphasised the advantages of the MLD, e.g. adequacy of explanation of the words and samples of English sentences with the word, various pictures accompanying groups of a certain types of vocabulary (e.g. vegetables, driving, people, and so on.).
- She then explained the guideline to using the dictionary extracted from the *Longman Dictionary of Contemporary English* (1995). The learners were generally expected to know how to find words; they were also introduced to special symbols (e.g. ~, ||, etc.), abbreviations (e.g. *BrE*, *AmE*), grammar codes, e.g. [u], [c], [v.i.], [phr. v.], pronunciation (e.g. /T//δZ//τΣ/, etc.) This extra information, particularly special

symbols and the phonetic symbols were new to the learners. They had seldom been introduced to the learners in the classroom. Besides, the information rarely appears in the RMC course-book or in bilingual dictionaries.

- After that, she demonstrated how to use the MLD to check some errors in meaning, spelling, inflectional morphology, and pronunciation. Samples of sentences containing the word *light* shown on OHP for the learners to practise matching the word to each sentence according to its proper definition. Also, exercises in words with alternative spellings, British/American words, spelling correction, and finding the right meaning were shown on OHP. She asked the whole class to do the exercises.
- She welcomed queries from the class.

### **Procedures: the reinforcement task: DW method**

(Steps one, two, and three: 30 minutes, steps four and five: 10 minutes)

- After the DW demonstration, learners were asked to perform some DW tasks.
- The researcher provided copies of five pages of the MLD to every learner.
- In pairs, the learners were assigned to complete the DW reinforcement task provided (see Appendix 3.9). The task was designed to give them an opportunity to match the right meaning with the underlined words.
- They were also asked to search for the part of speech and the pronunciation of some words.
- After the learners had finished all the tasks, the researcher asked for the volunteers to present their work orally.
- She gave oral feedback at the end of the tasks.

VLS Training session 2: Keyword method (KW) (week 7) - the keyword method is based on making an association between target language words, which learners really want to memorise, and remarkable characteristics of L1, especially the ones that have a similar sound to L2.

The objectives of training in the KW method:

- To suggest a choice of strategy claimed to help learners memorise L2 words effectively
- To provide an opportunity for the learners to experience a different way of memorising L2 words



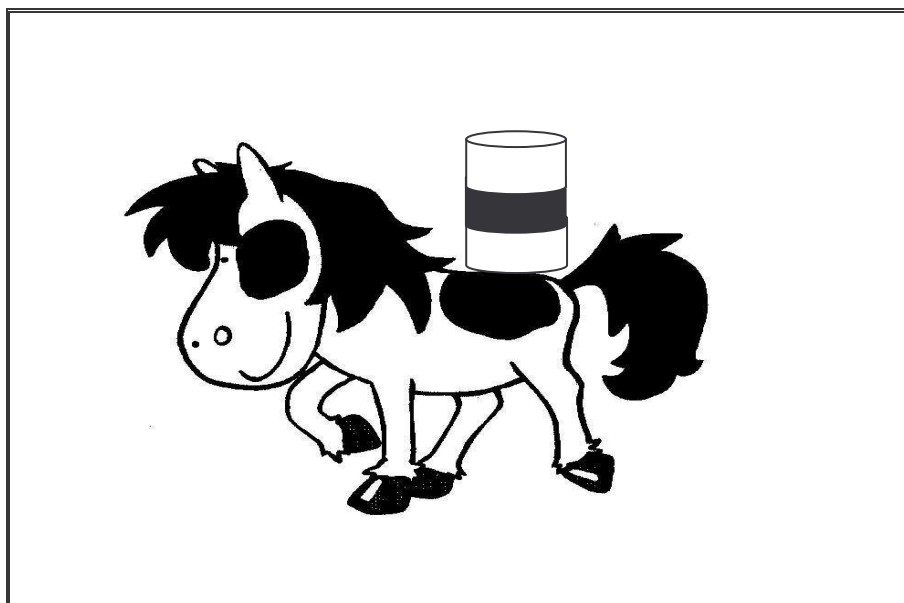
- To build up learners' repertoire of strategies which the learners could employ while learning vocabulary independently
- To enhance learners' creative ability when making an imagery linkage between a new L2 word and a L1 word which has a similarity of sound
- To inspire learners to create their own techniques to deal with word retention

### **Procedures: demonstration and training session – KW method**

(Steps one and two 10 minutes, steps three to six 40 minutes)

- We first emphasised the main objective of this method.
- Then we explained what the keyword method was and exemplified how to use it.
- Some L2 words, e.g. 'pinto' (n.), garnish (v.), and so on, were used as examples. She asked the learners which L1 words had similar sounds to the L2 words. Most learners' answers for the first L2 word were ปิ่นโต /pin-to<sup>M</sup>/ meaning 'lunchbox'. We elicited the meaning of the word from the class. After that, the meaning of 'pinto' or 'piebald' (*BrE*), i.e. *AmE a horse with irregular markings of two or more colours*, was explained using the *Longman Dictionary of Contemporary English*, 3<sup>rd</sup> edition (1995, p. 1068). Thai words are written according to Thai transliteration. A superscripted capital letter is placed at the end of a syllable/word to indicate the Thai 5 tone, e.g. L = low, M = middle, H = high, F = falling, and R = rising, are - (see Appendix 5.4 for Thai transliteration).
- Next, we gave an explanation with the picture shown in Figure 3.9, i.e. the picture of a horse with black and white round spots carrying a few cases of lunchboxes on his back. It showed the linkage of the similar sounds and the imagery linkage between the meaning of the L2 word and the L1 word or vice versa. The learners were involved in helping to create other imagery linkages between the two words in order to reinforce their understanding of how to operate the KW operational steps. It was emphasised that surrealistic linkage or very creative imagery linkage probably facilitated learners' word retention. Since many L2 words have many definitions, we asked the learners to be aware of choosing a meaning of each word appropriate to its original context. The learners were encouraged to consult the MLD to gain other extra information, e.g. different meanings, samples of English sentences, grammatical explanation, and so forth.

Figure 3.9 KW method: L2 word -‘pinto’ and L1 word – ปิ่นโต (pin-toh<sup>M</sup>)



- The researcher gave another example of an L2 word: *garnish*, showing on OHP how to link the similar sound of each syllable to an L1 word and make an imaginary link to the meaning of the L2 word (see Appendix 3.9). After the learners were familiarised with how to form an imagery linkage, the researcher also encouraged them to employ KW when they wanted to memorise L2 words, and to see how they could remember the words.
- The researcher welcomed all learners’ queries about the KW method.

#### **Procedures: the reinforcement task: KW method**

(Steps one and two 10 minutes, step three: 20 minutes, and step four: 10 minutes)

- The researcher asked the learners to form groups of 5/6, and then she presented the KW task (see Appendix 3.9) to every group and asked them to work together to finish the task.
- After that the learners were asked to use the KW technique to help them create the mental linkage between L1 and L2.
- Finally, each group was asked to orally present their task to the whole class by showing what L1 words they chose to link with the L2 words provided and explain how they formed the imagery linkage.
- The researcher gave feedback and welcomed questions from the class about the operational steps of the KW method. Also, she asked them to look up more

information on L2 words in the MLD. She also encouraged them to make use of the DW previously introduced in class.

### **VLS training session 3: Semantic-context method (SC) (week 8)**

This method mainly involved the presentation of how the word was used in sentences. The researcher emphasised that an English sentence containing the L2 word that the learners wanted to memorise was the key to help them retain the L2 word effectively. They were asked to note the sample English sentences in the MLD so that they could use them as an example to make their own English sentences grammatically and meaningfully.

The objectives of the SC method:

- To provide an opportunity for the learners to practise using an L2 word taught/met in an English sentence
- To build up the learners' confidence in using an L2 word taught/met properly and grammatically in English sentences constructed by themselves
- To encourage the learners to make an English sentence in order to help them remember an L2 word effectively

### **Procedures: demonstration and training session – SC technique**

(Steps one and two: 10 minutes, steps three to five: 30 minutes, and step six: 5 minutes)

- First the researcher emphasised the core point of practising the semantic context method to help the learners memorise L2 words. They were encouraged to make a creative or funny English sentence, so that the sentence could help them remember the L2 word effectively.
- Next, she gave an L2 word as an example. She wrote the word: *hypnotic* (adj.), gave the English meaning and asked the learners to help translate it into L1. When every learner had learnt the meaning of the word, she asked them what they would write about the word in an English sentence. The idea was formed and the sentence was written on the whiteboard: 'The steady ticking of the clock had a hypnotic effect on Dr. John's patient.'
- After that, she elicited from the learners two L2 words previously learned and asked them to help make the English sentences by saying each sentence aloud. She wrote two sentences on the whiteboard: a) SS' original sentence: Policemen dispersed a group of violent people. b) SS' original sentence: Poor farmers run away from the drought. The researcher praised the learners who made those sentences. Clearly the

learners were unlikely to make a perfectly/grammatically correct English sentence, so the researcher did not mind that the sentence(s) contained language errors. In fact, the learners will learn how to correct and improve their L2 in order to cope with real communication, since, when using this strategy in real life, the student would not necessarily have someone there to improve it for them.

- Then she asked everyone to help improve the sentences. So, everyone helped rewrite those sentences: a) The riot police *dispersed* the mob by using tear gas. b) Poor farmers (from the north-eastern provinces of Thailand) ran away from (fled from) the *drought*.
- The researcher welcomed the learners' questions about the technique. She then emphasised the strong point of the SC technique: the learners needed to put an effort into making an English sentence on their own. It was like learning by doing. The effort of making a sentence would probably enhance the learners' effective retention of the L2 word. However, to make a proper or grammatical sentence they may need to look up the examples of English sentences in the MLD accompanying the L2 word entry. The learners perhaps need to make a sentence similar to the examples. Later on they would be able to develop and be better at constructing a grammatical English sentence on their own.

### **Procedures: the reinforcement task: SC technique**

(Steps one and two: 10 minutes, step three: 15 minutes, step four: 10 minutes, and steps five and six: 10 minutes)

- The learners were asked to work in groups of 5/6.
- The researcher asked them to make four English sentences; each sentence contained one of the four words provided in the task. They were encouraged to make their own sentences by not worrying too much about grammatical points. They were allowed to look up the examples of the English sentences given in the MLD if they wanted to.
- She asked each group to write the sentences on the whiteboard.
- After that, the class was asked to look at each sentence and see if they could be improved.
- The researcher welcomed learners' questions and she gave feedback.

#### **VLS training session 4: Semantic mapping technique (SM) (week 9)**

The distinguishing feature of this technique is to make an association of the new word to known words that have a related meaning either semantically or pragmatically.

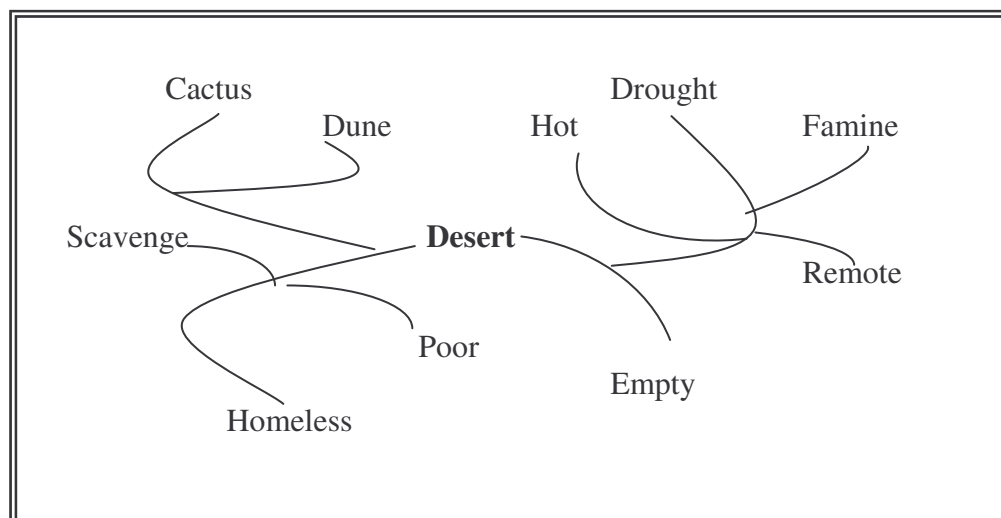
The objectives of SM technique:

- To introduce another type of word association technique in facilitating learners' word retention
- To provide the learners with an opportunity to create their own semantic map of the new L2 words with the known words
- To develop the learners' memorisation in meaningful and systematic ways by forming the meaning connections map of the L2 words.

**Procedures: demonstration and training session - SM technique** (Steps one and two: 10 minutes, steps three and four: 20 minutes, steps five and six: 15 minutes)

- The researcher stated the objectives of the technique.
- She demonstrated how to form a semantic mapping by showing a picture of the semantic-mapping example (Oxford, 1990, p. 64) - (see Appendix 3.9). She then pointed to the central word '*hair*' on the OHP. She also asked the learners to look at the other words, which were on the related mapping. They were asked to deduce how those words were linked to the central word.
- Then, she asked for a volunteer to think of an L2 word previously learned. The volunteer chose the word: *desert*. She wrote the word on the whiteboard and asked every learner to link it with other known words that had a meaning related to the central word. (This step had not been planned ahead in the demonstration material, but was done spontaneously in class.)
- To encourage the learners to focus on the related words, she started putting a related word as examples: '*drought*'. She then asked the learners to try to think of other related words. After that, more words were given, e.g. *hot*, *famine*, *poor*, and so on. She expanded the map by drawing more lines to link the words given by the learners. The semantic mapping was shown in the following figure.

**Figure 3.10 Example of semantic mapping demonstrated in class**



- Next, she emphasised that the learners could put other new words in the same map if they thought that the new words were semantically related to the words on the map. Since they had a chance to see the words on the map organised systematically, it is likely that they had memorised the new words effectively.
- Finally, she welcomed the learners' queries about the operational steps of the technique and gave the feedback.

**Procedures: the reinforcement task: SM technique**

(Steps one and two: 20 minutes, step three 20 minutes, step four 5 minutes.)

- The researcher asked learners to form groups of 3/4.
- She provided the SM task, every group was asked to draw semantic mappings of the words provided - (see Appendix 3.9).
- After they had finished making the semantic map, they were asked to present the task on the whiteboard and explain how they thought the words in the maps were related.
- Finally, she gave feedback, welcomed learners' queries about the technique, and encouraged learners to try using this technique to help them memorise words taught in class or met elsewhere.

### **VLS training session 5: Grouping method (GP) (week 10)**

- Words are grouped in various ways, e.g. grammatical similarity, spelling or sound similarity, similar meanings, related topics, word families or derivatives, and so forth (Gairns and Redman, 1986, p. 69).
- The grouping method probably helps language learners to organise target words previously met or taught so that they can memorise words effectively in a systematic way. The grouping method introduced to the learners was grouping words according to ‘word families’ (e.g. happy, happily, happiness, unhappiness), i.e. by lexical morphology.

The objectives of GP method:

- To introduce a technique of memorising words systematically to enhance learners’ retaining words effectively
- To provide an opportunity for learners to organise words previously taught or met according to their ‘families’
- To raise learners’ awareness of how to use each word correctly according to its different functions, i.e. noun, verb, adverb, and adjective.
- To enable the learners to see similar word families based on the same root

### **Procedures: demonstration and training session - GP method**

(Steps one and two: 15 minutes, step three: 15 minutes, steps four and five: 15 minutes)

- The researcher mentioned the objectives of the GP method.
- She then wrote examples of the word ‘family’ of *beauty*, i.e. *beautify*, *beautiful*, and *beautifully*. She asked the learners to give the family of the word: *happy* and they gave *happily*, and *happiness*.
- She wrote two words previously taught, i.e. *flammable* and *disagree*, on the whiteboard and asked everyone in class to find the families of the words and the meanings. They were allowed to consult the MLD if they wanted to. She put the word families, i.e. *flammable*, *inflammable*; *agree*, *disagree*, and *disagreement* given by the learners into the table on the OHP, as shown in Table 3.8.



**Table 3.8 Grouping method: grouping L2 words according to word families**

<b>Noun</b>	<b>Verb</b>	<b>Adjective</b>	<b>Adverb</b>	<b>Definition</b>
Flammability	Inflame	Flammable Inflammable	Inflammably	Easy to set on fire easily, Burnable
Disagreement	Disagree	Disagreeable	Disagreeably	To be of unlike or opposite opinion

- In order to emphasise the process of the method and check the learners' understanding, she asked them to talk about the operational steps of the grouping method.
- She finally welcomed the learners' questions and gave the feedback.

**Procedures: Reinforcement task: GP method**

(Step one: 5 minutes, step two: 15 minutes, steps three and four: 20 minutes, step five: 5 minutes)

- The learners were asked to form themselves into groups of 5/6.
- The researcher provided them with the GP tasks and asked them to find five headwords and the word families previously met in class and group them according to their parts of speech (see Appendix 3.9). They were also asked to put either English definitions or L1 translations of those words. They were allowed to consult five-page copies of the MLD provided earlier or their own MLD to check the word families and the definitions.
- Every group was asked to present their task.
- She encouraged the learners to create other types of grouping method, e.g. grouping words that have similar meanings, grouping words under the same topic, and so forth, so that they could find a method that suited them for use in the future.
- She welcomed the learners' queries and gave the feedback.

Notes: The reinforcement tasks were collected at the end of each session, so that the researcher rechecked the learners' written work. Then she made some photocopies of the learners' tasks (see the samples in Appendix 3.9).

### **VLS Wrap-up session (week 11)**

The researcher arranged the last session of VLST as a revision session. The learners, therefore, had a chance to practise the overall VLS tasks in order to be assured that they thoroughly understood the operational steps of each technique previously introduced in class. Moreover, the researcher would have an opportunity to re-emphasise the objectives of each technique and to encourage the learners to employ the techniques when they had to memorise the vocabulary task to be assigned in week 12.

### **Procedures: VLS Wrap-up session**

(Steps one and two 10 minutes, step three 50 minutes, step four 20 minutes, steps five and six 10 minutes)

- The researcher asked the learners to think of the techniques previously taught in the classroom. She also asked them to talk briefly, sharing their knowledge of the five VLS. She also emphasised the main features of each technique and stated the main objectives of the techniques.
- She then distributed the five VLS wrap-up tasks to the class and asked them to finish the tasks within 50 minutes. The learners were asked to work individually (see [Appendix 3.9](#)).
- She showed a transparency of the wrap-up task on OHP and asked the learners to answer each item of the task. She gave the feedback and explanation if required.
- She collected the tasks in order to check them.
- She finally encouraged the learners to make use of the VLS taught in class to help them deal with memorising the words taught or met elsewhere.

### **3.2.3 Data gathering, instruments, and procedures**

In order to find the answers to the research questions, the following instruments were employed to collect the data: pre-post-tests, think-aloud protocols, and semi-structured interview.

### 3.2.3.1 Data collection

The quantitative and qualitative data were gathered from three instruments, i.e. students' TA protocols, pre-post-tests, and semi-structured interview. We collected the data from the control and the experimental groups by following the procedures shown in Table 3.9.

**Table 3.9 Procedures of data collection**

<b>Data collection: The control group and the experimental group</b>
<p>Pre-intervention stage</p> <ul style="list-style-type: none"><li>• The researcher informed the learners of the purpose of the experiment. She did not mention anything about the VLST to the control group. Moreover, she did not tell the experimental group that she wanted to prove or find out whether the VLST was successful.</li><li>• She arranged a think-aloud training session in the second week.</li><li>• The learners were asked to verbalise and record their verbal report while they were memorising vocabulary task set one and set two. They were asked to keep the cassette tapes for recording the verbal report outside class.</li><li>• Pre-test was administered in the fourth week, seven days after the unknown vocabulary from the news articles set I were taught in the classroom. The researcher later checked the pre-test papers and recorded the raw scores of the words retained by the learners in the SPSS file.</li></ul>
<p>Post Intervention stage</p> <ul style="list-style-type: none"><li>• The learners were asked to record their verbal report while memorising the L2 words from the vocabulary set II.</li><li>• The researcher administered the post-test in week fourteen, seven days after teaching the unknown words from the news articles set II. Similarly, she checked the post-test papers and recorded the scores in the SPSS file.</li><li>• In week seventeen, she asked the learners to return the TA cassette tapes.</li><li>• In the same week, she administered the semi-structured interview of forty subjects – twenty from the control group and the twenty from the experimental group. They were randomly selected from both groups. The interviewing was arranged in the researcher's office. The interviews were conducted over two days. Each day, ten subjects were interviewed in the morning and the rest in the afternoon.</li></ul> <p>*The subjects' TA verbal reports and the interviewees' answers were translated into English and summarised later.</p>

### 3.2.3.2 Think-aloud

In our main study we asked our subjects to verbalise their thought freely while performing vocabulary task I and II outside class. The reason for giving an opportunity to make a free verbal report is that learners will feel comfortable, relaxed, and free to express their thoughts no matter when or where they memorise the vocabulary tasks independently. Learners' think-aloud protocols revealed the information about VLS which they employed while freely learning the vocabulary tasks before pre-post-tests.

Think-aloud (TA) material was designed to familiarise subjects with the operational steps involved in giving their introspective report or verbal report while they were carrying out their language learning task, memorising vocabulary taught independently. The importance of training in TA is confirmed by Cohen (1987, p. 38), *“The fact is that respondents may need training in how to provide the desired form of data. It would appear that some pertaining and specific instructions may be necessary in order to have respondents reveal their learning processes.”*

Clearly the TA method is favoured by researchers who are determined to elicit learners’ cognitive process which is unlikely to be observed easily. For instance, Hosenfeld (1997) used the think-aloud type of introspection to gain which types of reading strategies were employed by successful and unsuccessful L2 learners. Cohen (1987) used the think-aloud method to reveal learners’ learning processes while they were trying to memorise Spanish words.

The usefulness of the TA method was obviously recognisable. Regarding Hayes and Flower’s (1983) statement about verbal report protocols cited by Cohen (1987, p. 38): *“The collecting of verbal report data is still beneficial in that it provides direct evidence about processes that are otherwise invisible, yields rich data and thus promotes exploration of cognitive process.”*

Thus, we think that it is necessary for the learners to receive prior training in the TA method in order to facilitate the process of their verbal report and to produce the desired TA protocols during the pre-intervention and post-intervention phases.

### **Training Materials**

The materials used during the think-aloud training session were: demonstration material and TA reinforcement task. The former was a writing task demonstrated by the researcher to show how to make a verbal report while writing an English passage. She aimed at using writing skill as an example so as to avoid providing an explicit hint to subjects of the use of VLS. The subjects were, therefore, guided to verbalise their opinion of how to write a passage. The latter was a reading task assigned to subjects to practise verbalising their thought and to check their understanding of how to make a verbal report while dealing with the task (see the complete TA training materials/ reinforcement task in [Appendix 3.7](#)).

### **Training procedure**

The think-aloud training session was arranged for both the control and the experimental groups in the second week and lasted for one hour and thirty minutes. It

was organised in a language laboratory of the Department of Foreign Languages, where recording devices were available, so it was convenient for subjects to control the recording process while they were performing the tasks assigned.

- In order to help subjects receive a clear picture of the technique, first we explained the objectives of the think-aloud method. They were also told that they would use the TA method later on when they were assigned to memorise vocabulary set one and set two.
- We then demonstrated all the operational steps by showing them how to verbalise a factual report while writing (i.e. paragraph writing). Our verbal report was recorded and played to the class, so that the subjects saw and heard the concrete example. The writing task was shown by OHP; we demonstrated how to think aloud while we were dealing with the writing task. For example, we said aloud when we did not know how to make a complex sentence; or when we were pretty sure about an inflected form of some irregular verbs; or when we did not know which words could be put properly in the written context. Moreover, we emphasised that subjects needed to say aloud what they thought when they had any problems while working on a task, or when they could cope with the task with no difficulties at all. Subjects were welcome to ask questions to clear their doubts about the operational steps of the think-aloud method. (Approximately 30 minutes were taken by the demonstration stage.)
- Next, we provided reading tasks for the subjects to practise thinking aloud on their own and asked them to record their thoughts while they were reading the passages. We assured the subjects that verbalising their report would not have any effect on their grade of Eng. 355223.
- The subjects were asked to read extracts of each news article within thirty minutes. They were asked to verbalise their thoughts while they were reading the passage. For example, they were encouraged to speak out when they encountered any difficulties or problems and to explain why they thought they had such problems/difficulties or why they do not have any problems while reading the text.
- They were also free to use either English or Thai or a combination of both languages so long as they felt comfortable. In addition, the researcher asked the subjects not to rewind the tape to correct their mistakes, or to make a re-recording. To ensure that every step in the process was smoothly recorded, we emphasised that the subjects worked on their task alone and they were asked not to disturb or cause any interference while their friends were verbalising. The subjects were informed that

they did not have to worry about any mistakes they might make. They could continue thinking aloud at their own pace and style.

- While the subjects were dealing with the reading task, verbalising their thoughts, the researcher observed and listened to their practice from the console in order not to disturb them. We were ready to assist any subjects who needed help while reporting their thoughts.
- After thirty minutes, we asked the subjects to stop their recording and then asked for a few volunteers to tell the class in brief what they had reported, e.g. what they thought about the reading passage, problems with vocabulary, syntax, pronunciation, etc., how they explained the ease or difficulty of the passage, and so on. (15 minutes)
- In the end, we checked the subjects' understanding of the whole process of the think-aloud method. We asked them to talk about each operational step in plenary and later on we gave feedback or additional explanation to clear any doubts about the TA method. (15 minutes)

### **Procedure for recording learners' verbal reports**

- Blank cassettes tapes were given to learners in the control and the experimental groups in the third week after we finished the TA training, and teaching vocabulary set one.
- Learners were asked to verbalise their thoughts independently while memorising vocabulary tasks (set I and set II) for the pre-post tests.
- Then, the cassette tapes were collected in week seventeen. The data gained from the think-aloud protocols mainly revealed what types of VLS learners from the control and the experimental groups utilised to help them memorise vocabulary items and definitions explained/taught in class.

### **3.2.3.3 Vocabulary learning - extra news articles and pre-post-tests**

#### **Extra news articles materials set one and two**

The purpose of using the extra news articles materials in set one and two is to draw out learners' unknown words to be learnt for the pre-post tests respectively. The unknown words from both sets were taught in class for both the control and the experimental group seven days before the cued-recall test.

## Materials

Both sets of news articles materials (see Appendix 3.8) contain news stories on various topics. Both sets were extracted from various authentic English-language newspapers, such as, *The Times*, *International Herald Tribune*, and *USA Today*. The first set consisted of five news articles, i.e. ‘Grandma’s cake saves drink-driver’, ‘Pakistan pledges to aid rebels’, ‘Learning disabilities don’t hinder learning’, ‘New King coal assumes crown’, and ‘Sutton thriving with Petta’s assistance’. The second set consists of four news articles, i.e. ‘Sisters battered woman, 87, to death’, ‘The Karadzic case’, ‘Russian church canonises last czar’, and ‘Refusal to bury the past has broken Pinochet’s spell’.

In order to select the news articles, we mainly focused on the vocabulary presented in each article according to the following criteria:

- The news articles contained many low frequency words or words outside levels one, two, and three (e.g. Levels 1 and 2 contain the most frequent 2,000 words of English as headwords, inflected forms, and derivations. Level 3 contains about 800 words frequently found in secondary and university level reading materials) The words are presented in the frequency level checker based on Nation’s et al (1984) University word list (UWL).
- The news articles in English/American newspapers were extracted from a range of specialist sections, e.g. sport, international news, education, politics, etc.
- The news articles chosen were parallel to the articles presented in the RMC course-book.
- The RMC course-book writer was asked to check appropriateness, i.e. *not too easy or not too difficult news articles*, and the low frequency words, particularly content words, in the news articles selected.

We typed both sets of news articles and underlined 30 low frequency words in each article, particularly content words e.g. 30 mixed verbs, nouns, adverbs, and adjectives in set one and similarly 30 mixed content words in set two. The reasons that we had to set an exact amount of the low frequency words were:

Teaching-time constraint - in order to complete the steps of presenting the materials as well as teaching unknown words in class, the researchers had to control and plan to teach not more than 30 unknown words within the limitation of the teaching period.

Task simplicity for the learners - it probably saves learners spending time looking for the words in each article, so they can focus on the underlined words and check if they know those words or not.

Notes: Besides the underlined low frequency words, it is likely that the learners might not have known other words in those news articles. The researcher encouraged them to find more information about the words outside class, and she welcomed additional queries about the words from the learners after class.

### **Teaching procedure**

We presented the first set of news articles in the third week or during the pre-intervention phase. The second set was presented in the thirteenth week or after the intervention phase. We used the same procedures in presenting both sets of news articles materials for both the control and the experimental groups, the difference being that first set of materials was presented before pre-test, and the second one was presented before post-test.

### **Procedures:**

- We first emphasised the objectives of presenting the news articles materials. The learners were informed that they would gain benefit from the materials, as they had an opportunity to be exposed to various types of news articles from real English newspapers and to encounter up-to-date news articles. They also had a chance to gain more knowledge of new vocabulary. (10 minutes)
- Next, the learners were asked to work in groups of five or six. They were asked to read the set of news articles, scanning for the main idea and to check whether they knew the meaning of the underlined words. (20 minutes)
- After that a representative of each group presented the L2 words they knew together with the proper definition in Thai or a combination of English and Thai. Thus, every learner in the class knew the same list of words and their list of unknown words was also identical. During that time the researcher ticked the words the learners knew on the OHP transparency. (20 minutes) – (see Table 3.10 for numbers of unknown words claimed by both groups).
- Next, we asked the learners for the main idea of each news article, (e.g. what was the story about? What was an interesting point?, etc.)
- Then we gave the meanings of the unknown words in each article, including related information (e.g. parts of speech, pronunciation, synonym, antonym) in L1 translation and asked learners to write down the meanings. (30 minutes)



- Finally, we asked the learners to memorise the words, which had just been introduced in class, and they were informed that they would have a test on the meanings of the words after one week. Above all, we asked learners to record their thoughts while they were memorising the words independently on the cassettes previously provided. We mentioned that the learners should record as they had practised during the TA session. We emphasised that they need to verbalise their thoughts about how they memorise the words. (10 minutes)

The number of words claimed to be unknown and known are presented in the following table.

**Table 3.10 Numbers of words claimed by the learners from each group to be unknown**

<b>Groups</b>	<b>News articles Set I Number of words claimed as unknown (Out of 30 )</b>	<b>News articles Set II Number of words claimed as unknown (Out of 30 )</b>
Control	29	27
Experimental	22	26

### 3.2.3.3.1 Pre-post tests

The pre-test and post-test were used to measure how well subjects retain or memorise vocabulary items taught which had been drawn from the news articles (set one and set two) presented in class (see Table 3.11 for procedures of administering pre-test and post-test).

The test-type was adapted from the tests implemented in the studies conducted by Cohen and Apeh (1980); Avila and Sadoski (1996, 2000). They used the pre-post tests to measure how well their subjects retain the L2 words after being taught VLS. It was seen that the test-type was applicable in terms of using to measure L2 learners' word retention. We, therefore, adapted the characteristics of test-type and improved it to suit our study (see [the list of words – pre-post tests in Appendix 3.10](#)).

### Test procedures:

- Both tests consisted of L2 words listed without definitions. The students were asked to give the definitions for those words in Thai or in a combination of Thai and English - (see samples of pre-test and post-test in Appendix 3.10).
- The pre-test was administered seven days before intervention or after the researcher had taught vocabulary set one to the control group and the experimental group. The post-test was administered seven days after intervention or teaching of vocabulary set two had been completed.
- Each test lasted 1 hour and fifteen minutes. The researcher used the first fifteen minutes for administration. The administrative steps for the pre-test and post-test were equivalent. The control and the experimental groups naturally had both tests in the classrooms.

### Criteria for scoring pre-post tests:

The researcher herself checked the test papers of both groups and used the following criteria.

- Each correct item, i.e. learner gave fully correct definitions, 1 point
- Partly correct item, i.e. learner gave incomplete or partly correct definitions, ½ point
- Incorrect item, i.e. learner gave wrong definitions or did not give any definitions, 0 point.

**Table 3.11 Procedures of administering pre-test and post-test**

<b>Pre-test and post-test for the control group and the experimental group (Week 4 pre – intervention phase) (Week 14 post – Intervention phase)</b>
Procedures: <ol style="list-style-type: none"><li>1. The researcher spent fifteen minutes explaining the instruction and checking learners' understanding about how to do the test.</li><li>2. She provided test papers with only unknown vocabulary items to every learner.</li><li>3. Learners were asked to give definitions of the twenty-nine words either in Thai or in English or in a combination of both languages.</li><li>4. Learners were asked to finish the pre-test within 75 minutes.</li><li>5. She collected the test papers after the time allocated.</li></ol> [The researcher gave the learners their scores the following week.]

### 3.2.3.4 Semi-structured interviews

The semi-structured interviews were used to elicit learners' attitudes towards VLS and VLST in class, and to figure out how learners deal with remembering vocabulary taught, and what kind of VLS they employed. We hoped to find out whether the subjects from the control group employed their own VLS techniques, and whether the subjects from the experimental group employed strategies previously taught, either one strategy or in combination of vocabulary learning strategies.

There were two sets of semi-structured interviews, i.e. one for the control group and the other for the experimental group, administered at the final stage of the experimental procedure. Twenty subjects from the control group and twenty from the experimental group were randomly selected by drawing lots, to participate in the interviewing sessions.

#### a) Semi-structured interview with the experimental group

Key questions designed for the semi-structured interview with the experimental group (see [Appendix 3.11](#)) were divided into four parts and were mainly designed to gather information concerning subjects' opinions about vocabulary learning strategies training. Part one looked back at their use of VLS (trained or not), part two asked about the outcome and future use of VLS after VLS training, part three probed into learners' attitude towards VLS and VLS training; and part four asked for learners' additional views about vocabulary teaching.

The objectives of the semi-structured interview, set one, were:

- To elicit which of the VLS in which they had been trained were utilised by subjects
- To ask for some clarification of the strategies that they employed and any difficulties they might have encountered
- To find out whether subjects had encountered any difficulties while they were employing strategies in which they had been trained
- To find out subjects' attitudes towards the VLS training sessions provided during the course
- To find out how subjects felt about their vocabulary learning before and after being introduced to VLS training
- To seek subjects' opinion about how vocabulary should be taught and learnt in the future

### **b) Semi-structured interview with the control group**

The key questions were divided into four parts: Part one: learners' vocabulary learning strategies (VLS), Part two: learners' point of view on their vocabulary learning, Part three: learners' views on VLST, and Part four: views on the extra work done in class (see Appendix 3.11).

#### **The objectives of semi-structured interview were:**

- To find out whether subjects had utilised any of their own technique(s) to help them deal with vocabulary learning
- To investigate what type of strategies (without VLS training) subjects themselves employed to help them memorise vocabulary taught in class
- To find out whether they encountered any difficulties or problems while they memorised the vocabulary introduced in class
- To seek learners' opinions and attitudes about vocabulary learning and teaching in class.
- To find out whether learners wanted any vocabulary learning strategies training in the future

#### **Procedures:**

- The researcher administered the semi-structured interviews (two days) for both groups in week seventeen.
- The interviewing of both groups was arranged in the morning and in the afternoon to suit interviewees' convenience. The procedures of interviewing were the same for both groups.

**Table 3.12 Post-intervention - Procedures of semi-structured interview**

<b>Semi-structured interview - the experimental and the control groups (Week 17)</b>
Day one (Wednesday) and Day two (Friday) - in the morning and in the afternoon Time allocated for each interviewee was approximately 10 minutes at minimum and 20 minutes at maximum. L1 was used during the interviewing process. <ul style="list-style-type: none"><li>• We firstly mentioned the objectives of the interview and naturally made a friendly or an informal conversation.</li><li>• We asked the questions and encouraged each interviewee to answer the questions freely and to share his, her ideas or comments.</li><li>• We recorded every interviewee's answers in her office.</li><li>• We thanked each interviewee for their participation.</li><li>• We translated interviewees' answers from Thai into English later.</li></ul>

### 3.2.4 Data analysis

Data obtained from the three instruments were analysed so as to answer the research questions as stated in Chapter One (see 1.4)

Regarding quantitative data, the results obtained from the pre-post tests of the control group, who received no VLS training, and the experimental group, who did receive the five VLS training sessions, were statistically compared to find how much of the introduced vocabulary subjects from both groups had learnt. Moreover, the results obtained from the experimental group were later analysed to see whether differences in the results before and after receiving VLST would indicate that training affected the subjects' word retention.

We used the Statistical Package for the Social Sciences (SPSS) to analyse the test scores. In order to examine if VLST had any effect on word retention of learners in the experimental group, ANOVA was used to test whether the difference between the mean scores in the pre-test and post-test was significantly greater for the experimental group than for the control group.

Qualitative data obtained from learners' think-aloud protocols from both groups before pre-post tests were translated from Thai into English. Following this, the protocols were analysed for evidence of any VLS which the learners employed. The VLS revealed by the first and second protocols were categorised in order to compare and count the VLS used by learners before and after intervention. We particularly looked at the significant difference in VLS use by the experimental group before and after the VLST in the classroom. In this study, we arranged our VLS coding system according to Schmitt's (1997, pp. 207-208) VLS taxonomy, which was based on Oxford's (1990) learning strategies.

Furthermore, the qualitative responses from both sets of semi-structured interviews, i.e. ideas and comments, were translated from Thai into English and later descriptively analysed by grouping the similarities and differences of the interviewees' responses. 'Yes/No answers' were expressed as percentages of 'positive' and 'negative' views. Then the results were used to confirm the data obtained from the other two instruments.

Finally, we took the results obtained from all instruments into account and bring in the statistical evidence to confirm the reliability of the findings.

### **3.3 Summary**

This chapter has detailed the methodology and procedures of the research. This fell into three parts briefly described as follows:

#### **3.3.1 Preliminary study**

The study was conducted at Kasetsart University (KU), located in Bangkok, Thailand. The participants were 30 mixed ability university students from various fields of study. They enrolled on an elective course - English Reading for Mass Communications (RMC-Eng.355223) organised by the Faculty of Humanities, Department of Foreign Languages. The instruments used to elicit general information about how the students learnt English were questionnaires and semi-structured interviews. After the semi-structured interview session with twenty participants, all thirty students in the group were asked to supply the information required in the questionnaires provided. The findings revealed that the students had some problems in dealing with the English language, particularly in memorising vocabulary. In addition, they showed an interest in and a need for training in utilising certain vocabulary learning strategies to help them memorise L2 words effectively. We used SPSS to analyse the preliminary data.

#### **3.3.2 The Main study**

The main study was conducted in the real classroom situation, located in the Department of Foreign Languages, Faculty of Humanities, Kasetsart University (KU), Bangkok, Thailand. The final number of the heterogeneous students who participated in the main study was sixty-nine. The students attended the elective course – The English Reading for Mass Communications (RMC–Eng. 355223). The researcher conducted the experiment and taught both the control and the experimental groups during sixteen weeks of one academic term.

Before conducting the main research study, a pilot study was carried out to try out the procedural steps of VLST and pre-post tests. It involved an informal talk with three highly proficient Thai subjects studying for a PhD in the U.K. After the pilot trial, we improved the VLST materials by making them more suitable for the prospective subjects, i.e. making the instructions clearer, adding news articles for learners to read and marking unknown words in the news articles.

The main study entailed preparation and plans which first described preparing teaching materials, i.e. lesson plans (the RMC course-book) for both the control and the experimental groups. Secondly, materials for six discussion sessions and lesson plans for the control group had to be prepared. Thirdly, for the experimental group, the intervention materials had to be prepared and planned, i.e. VLS training session demonstration materials and reinforcement tasks. For data collection, extra news articles (sets I and II) were presented in the classroom to elicit learners' unknown vocabulary, then to form vocabulary set I (pre-test) and vocabulary set II (post-test). In order to elicit the learners' VLS use, we trained both the control group and the experimental group how to verbalise and record their verbal report while they were memorising the vocabulary tasks independently outside classroom. After the post-test we employed two differently designed sets of semi-structured interview questions for each of the groups.

### **3.3.3 The Intervention phases**

The intervention phases are presented as three sections as follows:

#### **Pre-intervention phase:**

- Training in the think-aloud method to both the control and the experimental groups
- Presenting the extra news article (set I) and teaching the vocabulary items claimed by the students to be unknown
- Learners were asked to verbalise their thoughts independently on tapes provided while they were memorising vocabulary set I.
- Administering the pre-test seven days after teaching the unknown vocabulary items set I

#### **Intervention phase:**

- Arranging six discussion sessions for the control group and six VLST sessions for the experimental group

#### **Post intervention phase:**

- Presenting extra news articles (set II) and teaching the vocabulary items claimed by the students to be unknown
- The students in both groups were asked to verbalise their thoughts independently (on the same tapes) while they were memorising the vocabulary set II.
- Administering the post-test seven days after teaching the unknown vocabulary items in set II

- Collecting the cassette tapes containing the students' verbal reports from both groups
- Administering the semi-structured interviews set I for the experimental group and set II for the control group

We continued our regular teaching activities for both groups according to the second academic term timetable and conducted the research during the same term. Extra teaching hours were given when necessary to make up for those lost to official holidays (e.g. King's Birthday, KU Agricultural Fairs, etc.). The processes of the research methodology presented in this chapter are given in Appendix 3.2. The research instruments used in the main study consisted of pre-post tests, students' think-aloud protocols, and semi-structured interviews. We use SPSS to analyse both the quantitative and qualitative data obtained from the instruments stated in 3.2.4. The quantitative and qualitative results will be presented in Chapter Four and Five respectively.



## **Chapter 4: Quantitative Data Analysis, Results, and Discussion**

This chapter presents the quantitative data analysis, with its interpretations, and discussion. We utilise the Statistical Package for the Social Sciences (SPSS) to assist in analysing the data. The first part elaborates the data analysis in relation to the background subject variables of the experimental and control groups. The second part describes the data analysis obtained from the dependent variables (DV), i.e. the percentage scores in the pre-post tests (LG), and the third part does the same for the data in the log probability ratio scores. The fourth part analyses the crucial effect of treatment on the groups, between pre-post-tests, and the interaction effect of group and time. The fifth part performs a regression analysis on log probability ratio scores of pre-post tests (LGPRES, LGPOS) and the difference in the scores (LGDIF) attained in the two tests (LGPRES and LGPOS). The sixth part presents the interpretations and discussion relating to the research questions set out earlier in Chapter One, section 1.4, concerning quantitative aspects. The last part consists of a summary of the chapter.

### **4.1 Background: explanatory variables**

In our main study learners' background explanatory variables (EVs) or independent variables consist of 'previous English Foundation III scores' (EF3), 'fields of study' at Kasetsart University (KU), 'gender', 'years of study' at KU, and 'learners' age'. We present the learners' background EVs in detail in the following section.

#### **4.1.1 Previous Foundation English III score, field of study, gender, year of study at KU, age**

This part details the EV background of both groups (Table 4.1). Regarding the first variable, the previous score in Foundation English III (FE3) indicates subjects' English ability in reading, writing, listening, grammar, and vocabulary. As we stated earlier in Chapter Three (see 3.1.5) under the section 'subjects' ability in English'; the FE3 achievement test was designed by the Department of Foreign Languages, Faculty of Humanities, KU. In this study the learners were classified, according to their FE 3 scores, into five grades: a, b, c, d, and f which mean respectively: excellent, good, fair, less moderate and 'fail'. This last refers to scores under fifty

percent. The grades were set and authorised by the Foundation English Courses committee, the Department of Foreign Languages.

Thus, learners were classified into five groups according to their different grades, i.e. ‘a’ excellent or highly achieving learners (high achievers); ‘b’ good achieving learners; ‘c’ fair learners, ‘d’ less efficient learners (poor achievers), and ‘f’ very poor achieving learners. We can see that the percentage of the higher achievers, i.e. ‘a’ and ‘b’ FE3 scores, is greater in the control group.

**Table 4.1 Background: Profile of the experimental and the control groups**

		Groups	
		Experimental	Control
Previous scores Foundation Eng.3 (FE3)	a	5 13.9%	11 33.3%
	b	11 30.6%	13 39.4%
	c	14 38.9%	6 18.2%
	d	6 16.7%	3 9.1%
Fields of Study	Natural Science	27 75.0%	11 33.3%
	Social Science	9 25.0%	22 66.7%
Genders	females	12 33.3%	30 90.9%
	males	24 66.7%	3 9.1%
Year of studying at KU	2	15 41.7%	5 15.2%
	3	8 22.2%	23 69.7%
	4	13 36.1%	5 15.2%
Age	19	13 36.1%	5 15.2%
	20	8 22.2%	21 63.6%
	21	7 19.4%	5 15.2%
	22	7 19.4%	2 6.1%
	23	1 2.8%	0 .0%

Exp. gp.: n = 36  
Con. gp.: n = 33

### **Subjects' field of study**

Learners in both groups were from various fields of study, which were categorised into two types for reason of practicality when analysing the data: 'Natural Science' and 'Social Science'. The former involved learners whose fields were Engineering, General Science, Fisheries, Forestry, and Agriculture Industry, whilst the latter included those from Business, Economics, Humanities, Education, Physical Education, Social Science, and Home Economics. Clearly, the percentage differs in the two groups.

### **Gender**

The third variable in this part is 'gender'. The data reveals that each group had unequal numbers of male and female students. The control group had more females (90.9%) than males (9.1%). In contrast, the experimental group had more males (66.7%) than females (33.3%).

### **Year of study at KU**

The fourth variable is 'subject's year of study' at KU. As stated earlier in Chapter Three (3.2.1), subjects were from different years, i.e. 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> years. Clearly, both groups had a range of subjects who were in different years of study. The control group had the highest number of third-year students: 23 or 69.7%, and the experimental group had the highest number of second year students, 15 or 41.7%.

### **Learners' age**

The fifth variable is subjects' age. The age range of all the subjects was nineteen to twenty-three. The groups had a different age profile. The control group had the highest number of 20 years old: 21 learners (63.6%); the experimental group had the highest number of 19 years old: 13 learners (36.1%).

Since of necessity we used natural or normal classrooms, these background variables were beyond the control of the researcher, as those learners had been allocated to their classes by the University course registration process. Hence, we were aware of possible interfering effects of the background EVs in a number of ways that it was impossible to control.

Table 4.2 presents the inferential statistical results obtained from the T-tests and the Chi-square Tests. It confirms that the groups differ significantly in terms of their members' previous FE3,  $p = 0.018$ .

However, the analysis reveals that subjects' years of study at KU and their age (both groups) are not significantly different (i.e.  $p = .756$ , and  $p = .452$  respectively).

**Table 4.2 T-tests and the Chi-square Tests of three exploratory variables of two groups**

Variables	Groups	Mean	SD*	t	p
FE.3 * scores	Experimental group	2.42	.94	-2.431	.018
	Control group	2.97	.95		
Years *	Experimental group	2.94	.89	-.313	.756
	Control group	3.00	.56		
Age	Experimental group	20.31	1.24	.758	.452
	Control group	20.12	.74		

Next, as can be seen from Table 4.1 and also Table 4.3, the experimental group has a significantly higher proportion of males and fewer females than the control group ( $p < .001$ ); Pearson Chi-Square Tests show the value = 22.017 and the asymptotic significance (2-sided) = .000 ( $p < .001$ ).

**Table 4.3 Contingency table for groups and gender and Chi-Square Tests**

		Groups		Total
		experimental	control	
Learners' genders	female	13 36.1%	30 90.9%	43 62.3%
	male	23 63.9%	3 9.1%	26 37.7%
Total		36 100.0%	33 100.0%	69 100.0%

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	22.017	1	.000		
Continuity Correction	19.745	1	.000		
Likelihood Ratio	24.225	1	.000	.000	.000
Fisher's Exact Test					
Linear-by-Linear Association	21.698	1	.000		
N of Valid Cases	69				

In addition, as can be seen from Table 4.4, it has significantly more Natural Science students, having a greater numbers of Engineering students ( $p < .001$ ); Pearson Chi-Square Tests show the value: 12.081 and the asymptotic significance (2-sided) = .001.

**Table 4.4 Contingency table for field of study and groups and Chi-Square Tests**

<b>Crosstab</b>				
		Groups		Total
		experimental	control	
Fields of Study	Natural Science and Engineering	27 75.0%	11 33.3%	38 55.1%
	Social Science, Economics and Humanities	9 25.0%	22 66.7%	31 44.9%
Total		36 100.0%	33 100.0%	69 100.0%

<b>Chi-Square Tests</b>					
	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	12.081	1	.001		
Continuity Correction	10.456	1	.001		
Likelihood Ratio	12.445	1	.000		
Fisher's Exact Test				.001	.001
Linear-by-Linear Association	11.906	1	.001		
N of Valid Cases	69				

In short, the analysis of the data on the background variables reveal that there is a significant difference between the two groups in terms of previous FE3 score, gender, and field of study at KU.

Since the background EVs of the control and the experimental groups are significantly different, it is expected that the differences in the nature of the EVs background might affect the study. Clearly, it seems to be likely that the group that had the higher proportion of students with FE3 'a' scores, the control group, would be better at learning or memorising L2 words than the experimental group or the treatment group which had a lower proportion of the students with FE3 'a' scores.

We are therefore totally aware of the natural differences of the normal classrooms. In an attempt to probe the effect of VLST in the experimental group, we strictly follow the steps of administering pre-post tests and the other research instruments in order to obtain genuine quantitative and qualitative results. We will later on discuss further the analysis concerning the EVs, especially previous FE 3 scores, gender, and years of study at KU (see 4.6.4.1 and 4.6.5).

## **4.2 Quantitative data (pre-post tests) obtained from the control group and the experimental group – percent scores**

### **4.2.1 Pre-post test scores on in percent of the control and the experimental groups**

In fact, in the pre-test and post-test, the cued - recall vocabulary retention tests (DV) of the two groups were scored out of a different total, as the subjects of both groups did not mark the same number of words as unknown. So, they had uneven amounts of vocabulary items for each test. Thus, the initial scores had to be re-expressed as percentages in order to be comparable.

However, the percent scores were not appropriate to the type of statistical analysis we need to do, particularly analysis of variance (ANOVA), as the distribution shapes of the four sets of scores of each group on the pre- post-tests were not normal, normality being a prerequisite for the use of ANOVA. This may also be apparent from looking at the four histograms shown in Figure 4.1, 4.2, 4.3, and 4.4 for the percent scores, which are all negatively skewed.

**Figures 4.1-4.4 – Histograms: Percent scores of pre-test and post-test – the control and the experimental groups**

Figure 4.1 Pre-test (percent score)

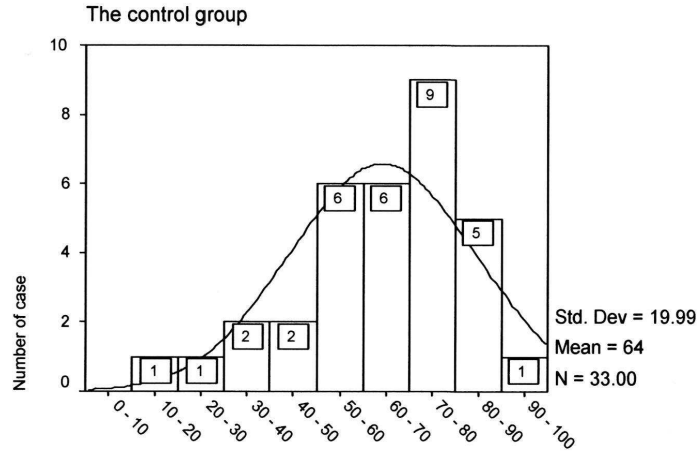


Figure 4.2 Post-test (percent score)

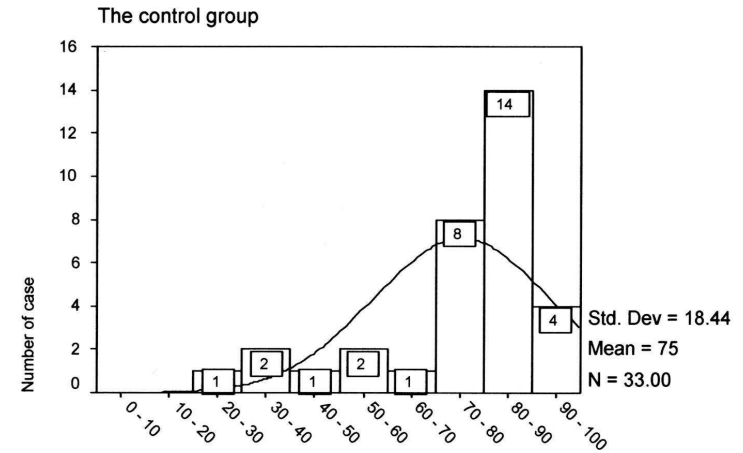


Figure 4.3 Pre-test (percent score)

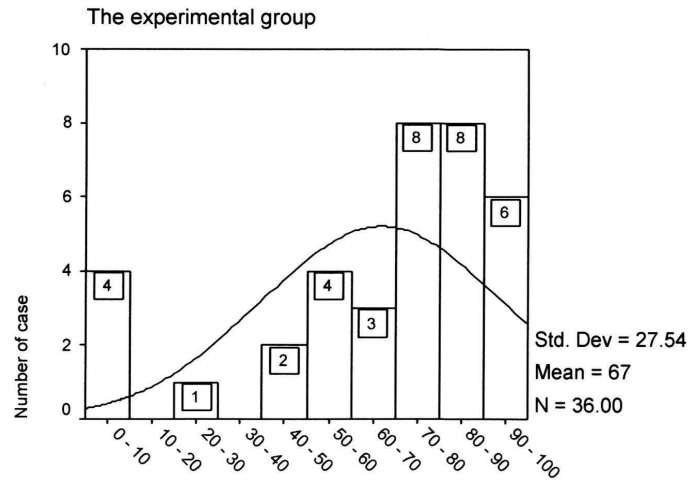
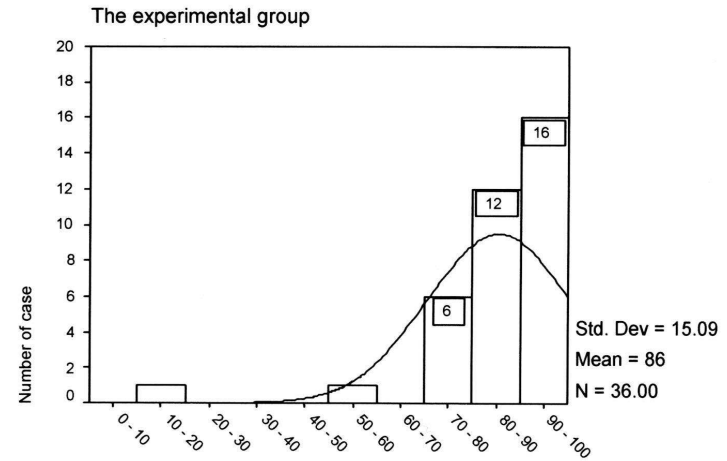


Figure 4.4 Post-test (percent score)



### 4.3 Quantitative data (pre-post tests) obtained from the control group and the experimental group transformed into log probability ratio scores

#### 4.3.1 Reason for not using the percent scores

In order to test the normality of distribution, we performed the one-sample Kolmogorov-Smirnov Tests shown in Table 4.5 for pre-post percent scores and log probability ratio scores. Moreover, Table 4.5 shows that the K-S tests of the transformed data are all significant, showing that the distributions approximate the normal distribution more closely.

**Table 4.5 One-Sample Kolmogorov-Smirnov Tests**

Groups		Percent of pretest	Percent of posttest	LGPRE	LGPO
experimental	N	36	36	36	36
	Kolmogorov-Smirnov Z	1.379	1.206	1.099	1.335
	Asymp. Sig. (2-tailed)	.045	.109	.178	.057
control	N	33	33	33	33
	Kolmogorov-Smirnov Z	.927	1.480	.698	1.061
	Asymp. Sig. (2-tailed)	.357	.025	.714	.210

Since two out of the four distributions are significantly non-normal, we decided to transform the scores using the log probability ratio transformation (LG) also called ‘logit’. Rietveld and van Hout (1993, p.318) defined as: “*A technique used to analyse the relationship between a response variable and a set of independent variables.*” This is a recognised procedure, which has the effect of placing all scores on a scale with the ends of the scale ‘stretched’ so as to reduce the skew. The new scale runs from around  $-3$  to  $+3$ . The distributions of the transformed scores all pass the normality test (Scholfield, 1995, pp. 173,183). Figures 4.5, 4.6, 4.7, and 4.8 show the histograms apparently less skewed. In effect, the transformation treats small differences between scores as of more importance when the scores are near the limit of the scale (i.e. near 100%) than when they are near the middle of the scale, and exaggerates them a bit.

The histogram graphs Figures 4.5, 4.6, 4.7, and 4.8 illustrate the pre-post test scores better resembling the normal distribution by employing the log probability ratio transformation. We therefore used the LG scores for the ANOVA.



Figures 4.5-4.8 – Histograms: Log probability ratio scores – pre-test and post-test of the control and the experimental groups

Figure 4.5 LGPRE score

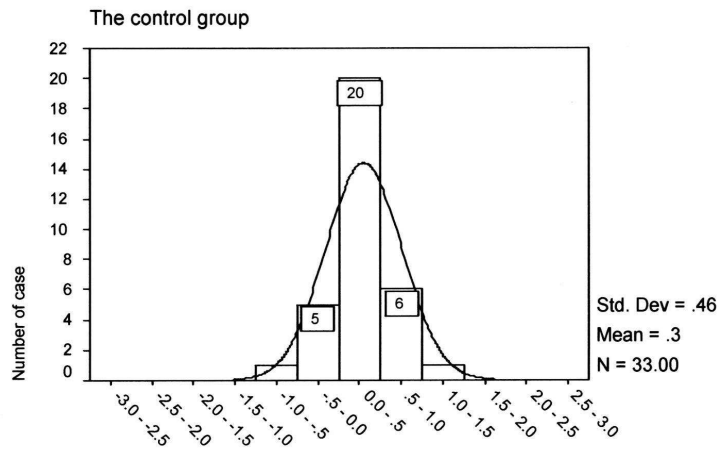


Figure 4.6 LGPO score

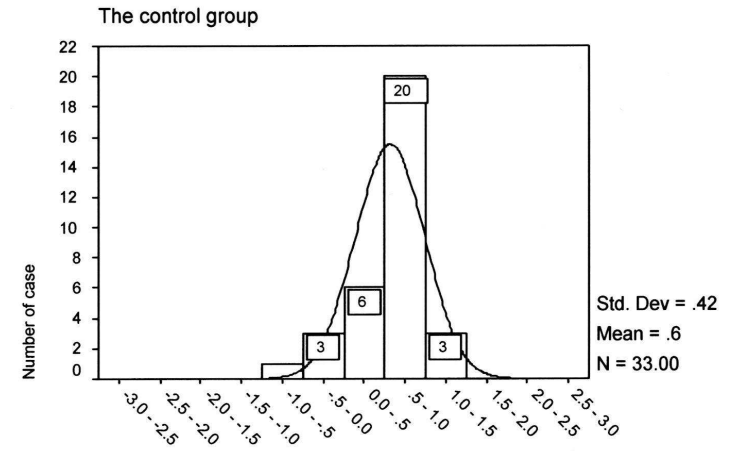


Figure 4.7 LGPRE score

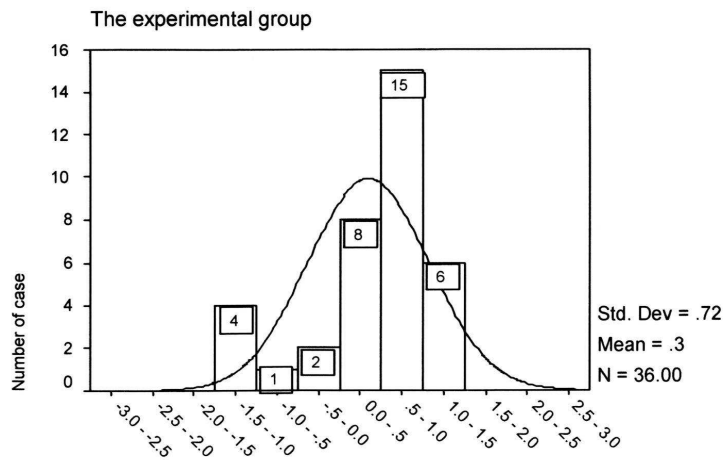
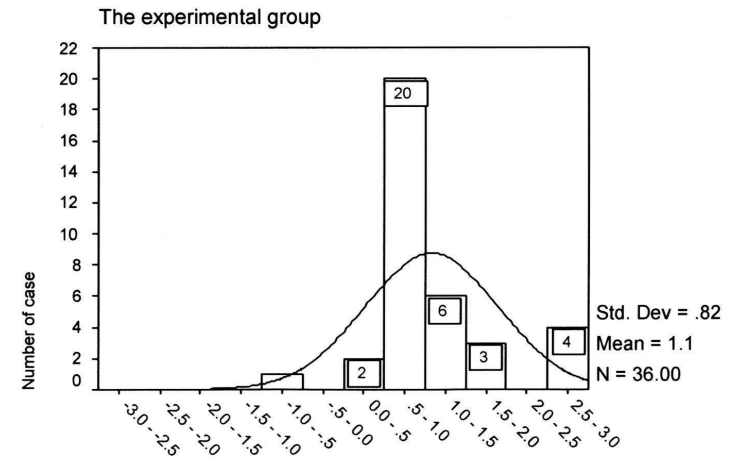


Figure 4.8 LGPO score



#### 4.4 Effects: Difference between groups, pre-post-tests, and interaction of group and time

In the main analysis we performed an ANOVA focussed on the effects on DV scores of groups and pre-post differences (with just gender and field of study and previous FE3 scores entered as covariates, so their effect was eliminated, since the groups differed significantly in their composition only on those background variables). Log probability ratio scores were used as the DV. On the basis of the figures shown in Table 4.6, we can see that the analysis (e.g. Error bar and GLMs) yielded no significant difference overall between pre and post-test scores, when the subjects were considered as one group,  $p = .071$ .

Regarding the pre-test and post-test taken together, there were significant differences both between groups and genders ( $F = 10.99$ ,  $p = .002$ ) and FE3 groups ( $F = 14.2$ ,  $p < .001$ ), (see Appendix 4.2). The analysis revealed that in general females did better than males, and the experimental group did better than the control group and those subjects with an ‘a’ for previous FE3 did better than those with other grades; Social Science did better than Natural Science, but not significant ( $F = .224$ ,  $p = .637$ ). However, the crucial result is that there is a significant difference between the experimental group and the control groups ( $p < .001$ ); and the interaction of group and pre-post tests change is significant ( $p = .008$ ), as illustrated in Table 4.6 with the gender, FE3 scores and subject specialisation effects eliminated.

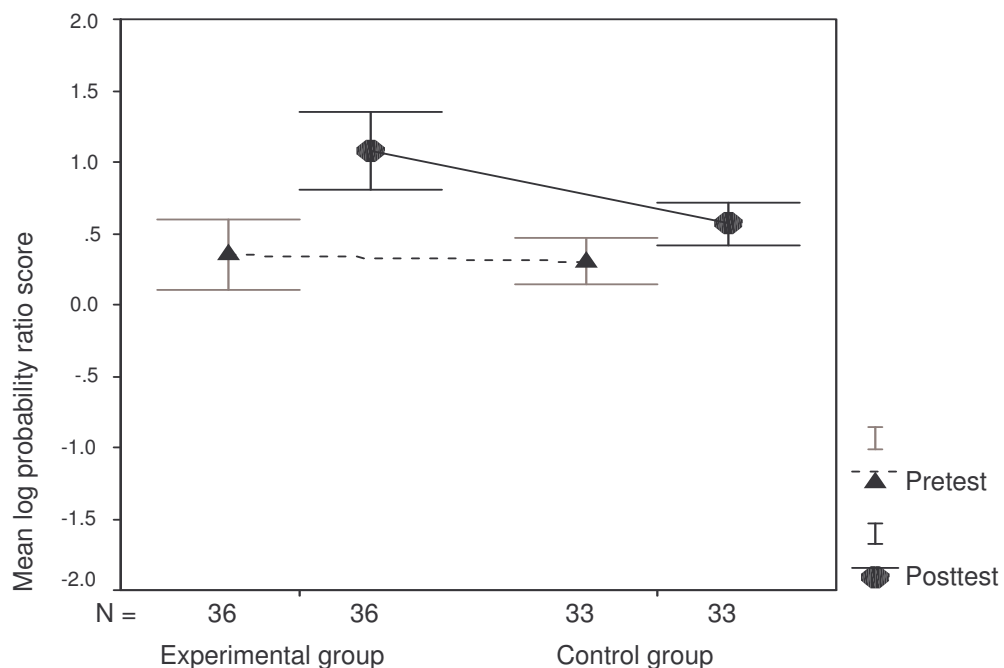
**Table 4.6 Difference between groups, pre-post-tests, and interaction of group and time**

Effect	EV and DV	Mean	Std. Error	df	F	P
Difference between experimental group and control group	Experimental group	.905	.083	1	25.49	<. 001
	Control group	.226	.088			
Difference between pre-post tests	Pre-test	.318	.066	1	3.372	.071
	Post-test	.813	.071			
Interaction of group and time	Experimental Pre-test	.509	.103	1	7.573	.008
	Control - Pre-test	.126	.109			
	Experimental Post-test	1.301	.111			
	Control - Post-test	.326	.117			

The data analysed confirms that the control group actually had general background advantages, as it contained more females, Social Science students, and a higher number of subjects with FE3 grades ‘a’ and ‘b’. But crucially the interaction result ( $p = .008$ ) and graph shown in Figure 4.9 illustrate that the improvement between pre-test and post-test is significantly greater for the experimental group than the control group. This consequently makes the experimental group better overall.

Moreover, to confirm the result we also performed an ANOVA with all five background variables entered as covariates, and we again found the only significant interaction was with group. Only group generates a significant difference in improvement, though other variables have an effect on overall performance. In addition to ‘gender and group and FE3 scores’, ‘age and fields of study’ all had overall differences effects to elaborate – for example on the tests taken together, Social Science students did better than Natural Science students, older performed better than younger.

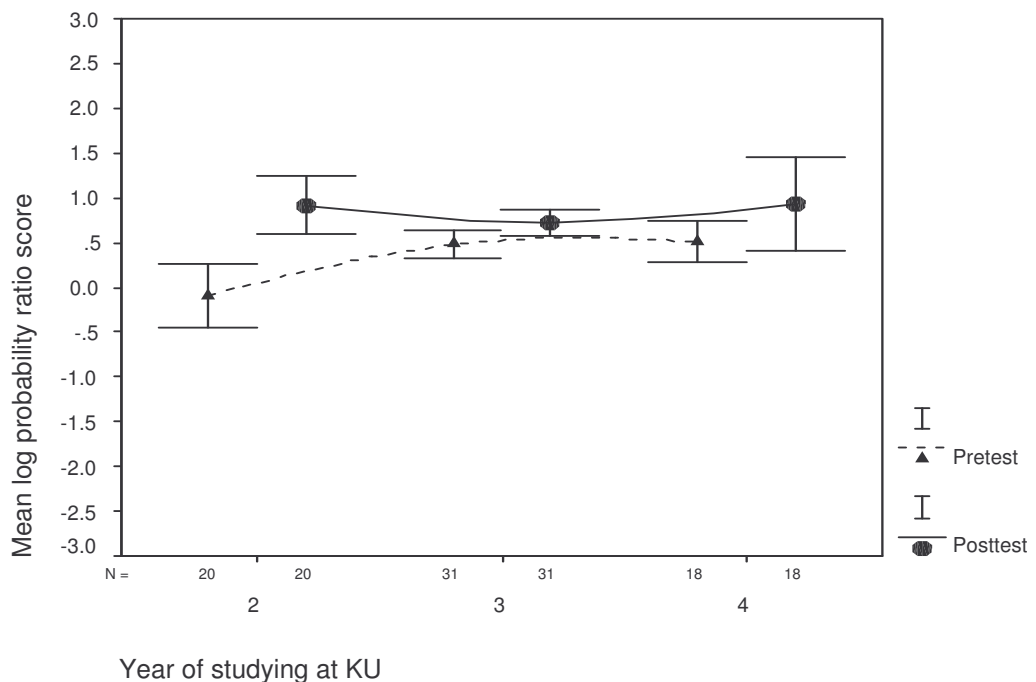
**Figure 4.9 The effect of treatment group on pre-test and post-test**



The core result for us concerns the interaction between groups and pre-post tests change because this shows that our instruction/VLST led to a greater improvement in the experimental group L2 word retention. For instance, as we see on the graph (Figure 4.9) the post-test scores for the experimental group rise significantly more

than those for the control group. So, that fits the hypothesis that subjects' ability to learn vocabulary will improve more with vocabulary learning strategies training (VLST) than without. No other variable has that effect, though year gets close, ( $F = 3.5$ ,  $p = .066$ ), (see Appendix 4.1). Moreover, the lowest year, the second year learners, improves most. As we can see from the error bar shown in Figure 4.10, the lowest year (e.g. the second year subjects) did worse than the others in the pre-test. However, they drastically improved in the post-test. Hence, the data analysis suggests that the students from all three different years were similar in performance on the post-test. This point will be later elaborated in the discussion section (see 4.6.4.1).

**Figure 4.10 Pre – post tests and year of study at KU**



#### 4.5 Regression: Pre-test, Post-test and improvement

To confirm the above analysis we performed stepwise multiple regression analyses. This determines, out of several EVs, which one or more have an independent predictive effect on the DV. For instance, we can probably predict a LGPRE, LGPO, and LGDIF (DVs) from explanatory variables such as ‘age’, ‘years of study’ at KU, ‘previous FE3 scores’, ‘fields of study’, and ‘gender’. The purpose of doing regression is to confirm what is happening with a slightly different kind of

analysis. The effects of the five background variables, the experimental versus the control group on tests scores and improvement in test scores over the period were examined by means of three stepwise multiple regressions.

This allows us to see, when all six variables are thrown in, which have a real independent effect separately on pre-test scores (LGPRE), post-test scores (LGPO), and improvement over the period (the difference in scores) (LGDIF). The differences in which EVs come out as having a marked effect on each score are also interesting.

#### 4.5.1 DV: Log probability ratio scores of pre-test (LGPRE)

This part looks at what the possible effects on subjects' LGPRE (DV) are. According to the analysis shown in Table 4.7, we find that the EVs affecting pre-test scores are just previous FE3 score, age and FE3 score in that order: ( $p < .001$ ;  $p < .001$ ).

**Table 4.7 Exploratory variables effecting DV: LGPRE**

Step	Predictor variables	Adjusted R <sup>2</sup>	F	P
Step 1	FE 3	.150	12.971	< .001
Step 2	Age, FE3	.345	18.922	< .001

Once these EVs are included, no others have any separate effect. As would be expected, there is no experimental and control groups effect, since the subjects had not at that point received the different treatments, and this being before the intervention of VLST.

This shows that before the intervention, the best predictor of vocabulary learning was previous FE3 score. Presumably, subjects with 'a' scores did best in memorising L2 words. Also older learners did better than the younger. We will further elaborate the plausible reasons of the effects in the discussion part (see 4.6.4).

#### 4.5.2 DV: Log probability ratio scores of post-test (LGPO)

This part looks at multiple regressions with six predictors and log probability ratio scores of post-test as DV.

From the analysis shown in Table 4.8, the EVs affecting post-test scores are groups, gender, and FE3. It shows in the three steps that the experimental group did better than the control group, females did better than males; those who had received high previous FE3 scores did better than those with low grades in that order: ( $p = .002$ ,  $p < .001$ , and  $p < .001$ ).

**Table 4.8 Exploratory variables effecting DV: LGPO**

Step	Predictor variables	Adjusted R <sup>2</sup>	F	P
Step 1	Groups	.121	10.397	.002
Step 2	Groups, Learner's gender	.248	12.187	<. 001
Step 3	Groups, Gender, FE 3	.313	11.327	<. 001

This suggests that training in VLS not only boosts the outcome, but also gender and FE3 score. We look at the three EVs in detail in the discussion section (see 4.6.3.1 and 4.6.5).

#### 4.5.3 DV: Log probability ratio scores: LGDIF

We now turn to multiple regressions with six EV predictors and LGPRE scores minus LGPO scores which give the pre-post improvement (LGDIF scores) as the dependent variable. The analysis shown in Table 4.9 reveals the EVs that had the most effect on improvement.

**Table 4.9 Dependent variable: LGDIF**

Step	Predictor variables	Adjusted R <sup>2</sup>	F	P
Step 1	Groups	.088	7.549	.008
Step 2	Year of study at KU	.164	7.662	< .001

The first EV which affected improvement scores, i.e. pre-test – post-test ones, is group: the experimental group did better than the control group, and the second one is year of study at KU: the lower year (the second year) improved better than higher years. This also agrees with the aforementioned ANOVA, where all variables were entered. Clearly, the experimental as opposed to the control group has the strongest effect from the VLST.

It again suggests that VLS training certainly has the strongest effect on improvement between pre and post-tests. After that, the subjects in a lower year showed great improvement in the post-test. Remarkably, ‘gender’ and ‘previous FE 3 scores’ did not have any special effect on the exploitation of the VLS training, and on post-test improvement. According to the analysis, it can be said that the VLS training leads to the improvement regardless of ‘gender’ and prior competence, particularly learners’ ability in general English. We will later raise plausible points concerning both EVs effects on subjects’ improvement of post-test in the discussion section (see 4.6.3, 4.6.4, and 4.6.5).

#### **4.6 Interpretations and discussion**

From the preceding analyses we can now answer the research questions concerning the effect of our study treatment. In addition, other interesting relevant results will be detailed and discussed in association with the research questions.

#### 4.6.1 Research question one

Research question one focuses on the comparison of the control and the experimental groups in terms of improvement in the subjects' vocabulary retention.

RQ1: How much improvement do learners show in their retention of vocabulary taught in class after VLST (compared with subjects in the control group who do not receive VLST in class.)?

H<sub>0</sub>: Learners in the experimental group do not show any improvement in their retention of taught vocabulary after introducing VLST in class (i.e. between pre- and post tests)

\*H<sub>1</sub>: Learners in the experimental group show an improvement in their retention of taught vocabulary after introducing VLST in class.

Since pre-post tests were administered in order to see how learners memorised L2 words and definitions that had been taught in class, we look at the log probability ratio scores of both groups in comparison. According to the error bar graph shown in Figure 4.9, the LGPO scores of the experimental group significantly increased more than those of the control group. The result suggests that the treatment or VLST in class for the experimental group positively affected the learners' ability to memorise the vocabulary task or L2 words taught in class more effectively when compared with the learners in the control group who did not receive VLST.

The result, therefore, answers the RQ1; there is improvement of learners (the experimental group) in retaining L2 words compared with those in the control group,  $p = .008$  (see Table 4.6). The result rejects the null the hypothesis and accepts the alternative one. The result which fits the alternative hypothesis suggests that after receiving VLST in class learners in the experimental group showed improvement or were better in retaining L2 words and definitions than before receiving VLST.

Besides, the data analysis shown in Figure 4.9 illustrates that learners in the experimental group had different LGPRE and LGPO scores. The graph shows that the learners received lower LGPRE scores (before intervention) than LGPO scores (after intervention). It can be said that the LGPO scores of the learners in the experimental group were significantly higher than their LGPRE scores. Thus, there was clearly an improvement in the retention of L2 words by the learners in the experimental group, in particular after receiving VLST. Due to the result, there is an



improvement in learners' retention scores between pre-test and post-test for the experimental group.

Regarding the size of improvement between the two groups, Figures 4.1– 4.4, the control group improved by 11%, based on the mean ( $\bar{x}$ ) percent scores of 64 in the pre-test and 75 in the post-test is. The control group had to memorise twenty-nine unknown items in vocabulary task I (pre-test), and twenty-seven unknown words in vocabulary task II (post-test). The experimental group improved by 19%. The mean ( $\bar{x}$ ) percent scores in the pre-test is 67 and in the post-test is 86. The experimental group had to memorise twenty-two unknown words in vocabulary task I, and twenty-six words in vocabulary task II. We present pre-post tests percent scores of the experimental and the control groups in Appendix 4.4. The bar graph shows ten representative subjects' pre-post percent scores. The ten subjects' qualitative data, i.e. TAPs I & II and their answers to semi-structured interview, reappear also in Chapter Five.

As we can see, the post-test scores of the control group improved despite the fact that the learners did not have the VLST in class. Perhaps it can be said that, due to the nature of the learners' attitude to learning, every learner intends to improve and develop his/her learning. Clearly, the control group did better in the post-test. However, the result shows that the post-test score of the control group was lower than that of the experimental group. Presumably, if the control group had received the VLST in class, they could have achieved higher scores in the post-test. Perhaps the control group (with a better EVs background) may achieve more of an improvement in L2 word retention than the experimental group had achieved in the post-test.

To confirm the validity of the quantitative result that learners in the experimental group did better in L2 word retention after VLST, we need to add other results obtained from qualitative data, i.e. think-aloud protocols and semi-structured interview. This will hopefully confirm that the improvement in vocabulary retention is indeed due to their use of the vocabulary learning strategies they were taught in the classroom. We will further elaborate this point in the part relating to qualitative results and discussion. Our result for RQ1 is consistent with other previous studies, as stated in (2.3.2.3.1). Kinoshita (2003, p. 2) cited Cohen and Aphek's (1980) study concerning teaching learners of Hebrew in memory strategies using mnemonic associations (e.g. keyword technique) in order to improve L2 word retention. They

found: *“better performance in recall tasks occurred when learners formed associations than when associations were not formed”*

Similarly, the result concerning VLST from an investigation conducted by Avila and Sadoski (1996, p. 379) reveals the positive finding that the experimental group who were taught a single VLS, i.e. the ‘Keyword method’, outperformed the control group in the recall L2 words and in comprehension.

Clearly, other studies mentioned in (2.3.2.3.1) which related to VLST in the classroom show positive findings and benefit to the L2 learners. However, in fact we rarely find the studies involving the training of students in mixed or multiple VLS in the normal classroom.

In addition, we have seen more consensus results confirming a positive effect of LLST on language learners, for example in previous studies related to LLST conducted by Bialystok (1983), Gagne (1985) Sono (1999), Johnson (1999), Dadour (1996), and Wenden (1987). The findings suggest: *“Language learning strategies are teachable and training language learners to use selected learning strategies can have positive effects on task performance and the language learning process.”* (Kinoshita, op. cit.)

Though the general benefit of LLST has been shown previously, it was hard to find studies or research concerning training in mixed vocabulary learning strategies in the L2 normal classroom and with a control group. However, the result gained from our study confirms the positive effect of VLST. Since evidence from previous LLST studies reveals a promising result in helping learners get through the process of language learning and eventually achieve their goal, it is consistent that VLST should give a similar result, as it shares the same basis as LLST. The precise impact of VLST will be further elaborated in relation to the qualitative data presented in the next chapter.

#### **4.6.2 Research question two**

RQ2 focuses on the comparison of the learners' ability in L2 word retention between male and female learners' of the control and the experimental groups.

RQ 2: In general how do female learners in both groups deal with remembering words taught in comparison with male learners in both groups?
*H <sub>0</sub> : Female learners from both groups do remember words taught as well as male students in both groups do.
H <sub>1</sub> : Female learners from both groups do remember words taught better than male students in both groups do.

On the basis of the ANOVA concerning pre-post test scores taken together, there are significant differences between groups, genders, and previous FE3 scores. Concerning gender (see 4.5.2 and Table 4.8), in general female learners did better in L2 words retention than male learners. The overall significance was ( $F = 10.99$ ,  $p = .002$ ) in the basic ANOVA (see Appendix 4.2: Tests of between-subjects effects). Also, the following figure 4.11 illustrates the differences between female and male learners in memorising L2 words.

**Figure 4.11 Female and male learners - the control and experimental groups**

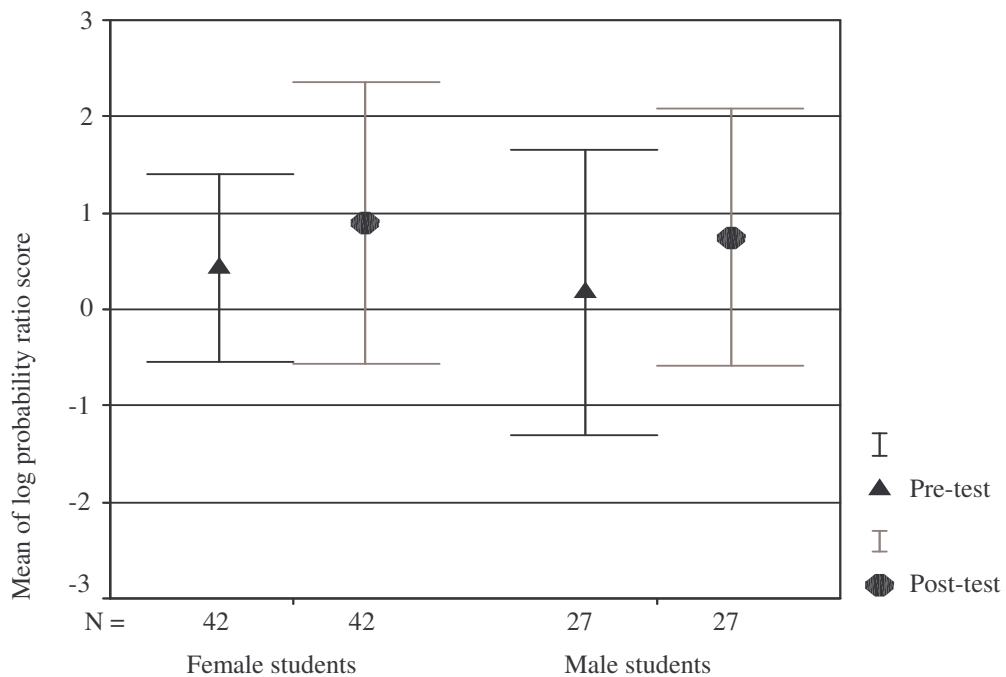


Figure 4.11 shows that in general female learners in both groups had better ability in retaining L2 words than male learners.

Therefore, to answer the RQ2, in general the female learners of both groups remember words taught better than the male learners in both groups. So, the result does not support the null hypothesis; it accepts the alternative hypothesis. It suggests that female learners from both groups had better ability in L2 word retention than male learners.

### 4.6.3 Research question three

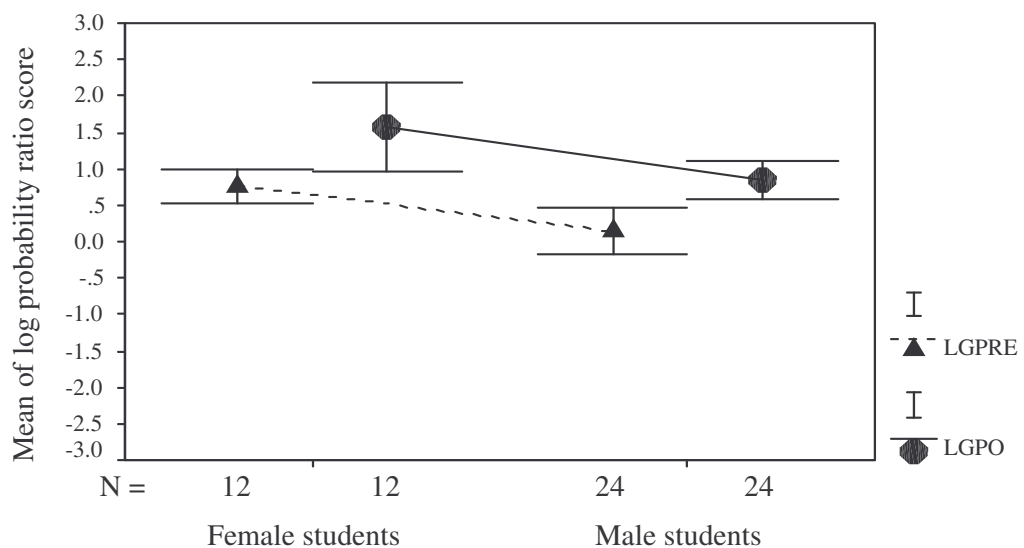
RQ 3: Are there any differential effects of VLST on the word retention scores of the male and female learners in the experimental group?

\*H<sub>0</sub>: There are no differential effects of VLST on word retention scores of the male and the female learners in the experimental group.

H<sub>1</sub>: There are differential effects of VLST on the word retention scores of the male and the female learners in the experimental group.

One of the results from the ANOVA of pre-post test scores reveals that after intervention (VLST), learners in the experimental group achieved better scores in the post-test when comparing with pre-test scores (before intervention).

**Figure 4.12 Female and male learners - the experimental group**



With regard to the graph in Figure 4.12, the learners gained higher scores in the post-test. Remarkably, females consistently did better in memorising L2 words than males for both tests, but their pre-post improvement was the same as males.

When we look at the experimental group after the learners were trained to use the five VLS in the classroom, the graph shows that females outperformed males in L2 word retention. However, male students also improved their L2 word retention, as they did better retention in the post-test. Thus, the data suggests that both female and male students benefited equally from the VLST.

The result can be used to answer RQ 3 in that there is an effect of VLST on the L2 word retention scores of both males and females in the experimental group. Thus, the result rejects the null hypothesis and accepts the alternative hypothesis. It suggests that the word retention scores of male and female learners in the experimental group were affected, particularly after the intervention of VLST. In short, males and females benefited equally from the VLST.

#### **4.6.3.1 Why are female learners better overall?**

According to the result of our study, the answer to RQ 3 reveals that female learners in both experimental and control groups did better in L2 word retention than the male learners. This finding is congruent with other studies relating to the predictions based on sociolinguistics theory in that female learners generally outperform male learners in L2 learning. However, some other studies report the inconclusive results that male learners performed better than female learners (Ellis, 1994).

Moreover, the findings related to an exploitation of language learning strategies obtained from the studies of Oxford (1986), and Oxford and Ehrman (1987) reveal: *“Females reported using learning strategies significantly more often than males and used a wider range of strategies.”* O’Malley and Chamot (1990, p. 106) also cited the result from the studies by Oxford, Nyikos, and Crookall (1987) which replicated the finding regarding gender: *“...females showed more frequent strategy use than males.”*

In the light of gender differences, we find that studies conducted by Burstall (1975), Boyle (1987), Nyikos (1990) similarly reveal that females were superior to males in L2 learning. For instance, Burstall (1975) found that out of a population of six thousand (e.g. children learning L2 French, beginner level) in English primary schools, girls outperformed boys, and had significantly higher scores in all L2 (French language) achievement tests. Boyle (1987) found that among 490 Chinese

students learning general L2 English in Hong Kong, i.e. 233 females and 257 males, female students received higher overall means in ten tests. Nyikos (1990) found that female learners outperformed male learners in a German vocabulary memorisation task (Ellis, 1994).

However, Boyle (1987) also states in his study that males did better in two tests of listening vocabulary. Bacon (1992) did not find any differences between males and females in two authentic listening tasks, Ellis (op. cit.). Nyikos (1990, p. 285) added in her study: *“In short, the finding that women score higher with colour as a mediator and that men’s ability to recall is significantly improved with visual-spatial stimuli (colour-plus-picture) may stem from a gender-related tendency to utilise types of learning strategies.”*

In terms of strategies use among male and female learners, Phillips’s (1990) *SILL* study yields no differences in strategies use by Asian ESL learners, both genders; reported by Young (1996, p. 89). Similarly Bascur’s (1994) *SILL* study reveals: *“... insignificant gender effect on strategy use”* (Young, op. cit.).

In Nyikos’s (1990, pp. 283-284) study, women did not score higher than men in every study condition (e.g. a) colour condition, b) pictorial/visual image condition, c) colour and pictorial condition, and d) rote memorisation condition). In particular, men scored significantly higher than women in recalling an L2 word with colour-plus-picture, the second condition.

Furthermore, another study concerning female and male differences in L2 language learning strategies, particularly ‘consolidation strategies’ reveals that female learners used more ‘consolidation strategies’ than male learners did (Catalan, 2003). Regarding the use of ‘consolidation strategies’ in our study, we will further elaborate and discuss the findings drawn from the qualitative data in the next chapter.

In order to find out more about gender differences, the gender findings obtained from our study clearly yield the result that the subjects, i.e. Thai female students, outperformed Thai male students, particularly in L2 word retention. This gives the similar a result to the previous studies: females were superior to males in L2 learning, especially L2 word retention. Nonetheless, Ellis (1994, p. 204) states: *“Sex (or gender) is, of course, likely to interact with other variables in determining L2 proficiency. It will not always be the case, therefore, that females outperform males.”* Furthermore, Ellis (op. cit.) adds: *“Sex interacts with such factors as age, ethnicity, and in particular, social class.”*

In terms of the other variables affecting gender, we, in fact, take a similar view to the above statement of Ellis. Also, we agree with Young's (1996, p. 89) argument about the differences between male and female learners' strategy use: "*Strategy use might be associated with the learning style of the male and female students.*" (Oxford & Ehrman, 1995).

In sum, there is not much research evidence concerning sex differences in L2 vocabulary retention to clearly confirm that either male or female L2 learners are superior in memorising L2 words. It is, thus, inconclusive to generalise that females do better in memorising L2 vocabulary than males and there is room for further empirical study to investigate in this area.

#### 4.6.4 Research question four

A significant interaction between year and pre-post- test change is also of incidental interest.

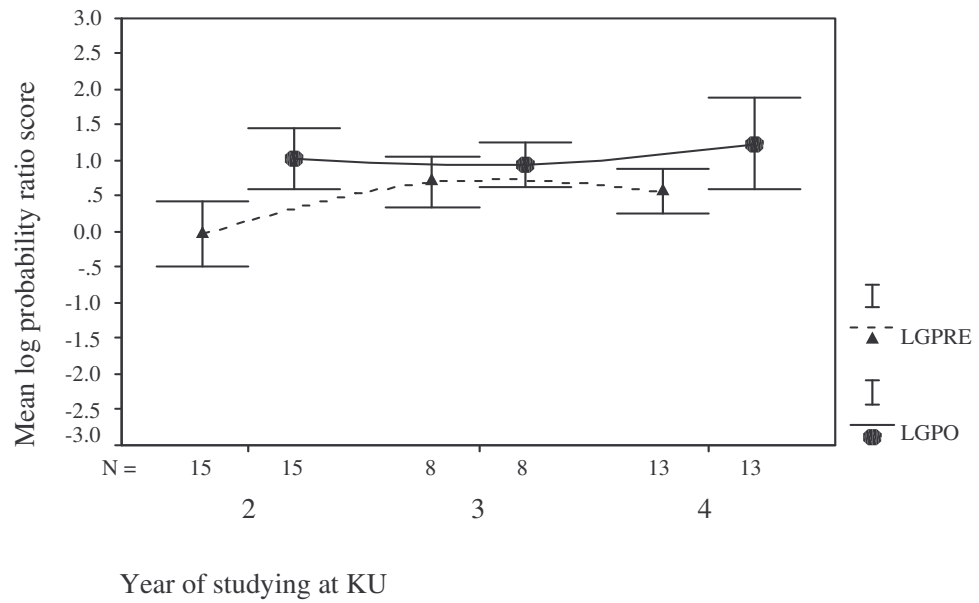
RQ 4: Does the year of learning English in the university influence the learners (in both groups) when remembering the words taught?

\*H<sub>0</sub>: The year of learning English in the university does not influence the learners (in both groups) when remembering the words taught.

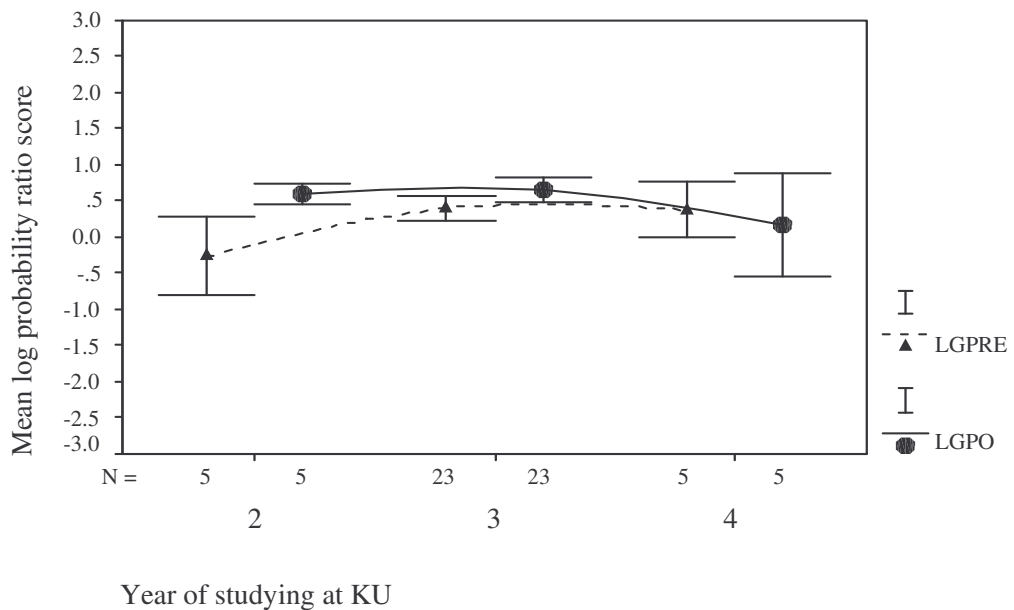
H<sub>1</sub>: The year of learning English in the university influences the learners (in both groups) when remembering the words taught.

Regarding the analysis shown in Table 4.9, the regression suggests that subjects in the lower years show a distinct improvement in the post-test, where interestingly, as can be seen from the graphs in Figures 4.13 and 4.14, learners from both groups who were in the lower year (the second year) did worse in the pre-test than other learners who were in the third and fourth year. However, the second year learners of both groups drastically improved, as indicated by their post-test scores.

**Figure 4.13 Year of study at KU – the experimental group**



**Figure 4.14 Year of study at KU – the control group**



Among the students from three different university years, learners from the lowest year clearly displayed a similarity in performance in L2 word retention in the post-test.

To answer RQ 4: the students' year of study does not influence (in either group) their ability to remember new vocabulary taught. Thus, the result accepts the null hypothesis and rejects the alternative hypothesis and suggests that learners in lower years probably have the same performance as the higher year learners in memorising L2 words once they had the same chance to receive VLST in class.



#### 4.6.4.1 Why did the lowest year learners drastically improve in the post-test?

The learner's year of study is in fact an EV, which has not gained much interest from SLA research, except in so far as it coincides with proficiency level. In this part, our discussion is based purely on the data analysis obtained from our main study.

Regarding the aforementioned results (RQ 4), presumably there are five plausible points which might take account of the lowest year learners outstanding improvement in the post-test:

- It may be said that the lowest year learners had strong determination to improve their vocabulary learning, as they needed to achieve a better score in order to compete with the higher year learners.
- In terms of self-development, the lowest year learners were obviously less able (at memorising L2 words) to start with and then they perhaps had more room to reflect and improve their learning; they also put more effort into developing L2 vocabulary later on.
- In the experimental group, the lowest year learners were perhaps more diligent in learning the strategies taught and in using them. Presumably, they understood the objectives of VLST and realised the benefit of it. Also, the lowest year learners may have wanted to compete with the higher year students, so they tried harder to increase their scores in the post-test.
- Moreover, the improvement of the lowest year in the post-test may be the effect of motivational factors in relation to learners' attitudes towards LLST/VLST. The motivational factors of learning strategies mentioned in the studies of (Cajkler and Thornton, 1999; Rost and Ross, 1991; Oxford and Nyikos, 1989) reveal that: *"Motivational factors seem to be related with the active use of strategies."*
- The reason the third and the fourth year students did not improve as much in the post-test may be that they did not give adequate time to fully focusing on vocabulary memorising. Since higher year students normally have to pay much more attention to their major subjects and other extra projects concerning their major fields of study, they may be unable to manage enough time to fulfil the vocabulary memory tasks.

Clearly we are not in a position to claim that the outstanding improvement of the lower year learners is because of any effect of the aforementioned points. In order to

make it more conclusive, we shall look at this finding in triangulation with other qualitative results in the next chapter.

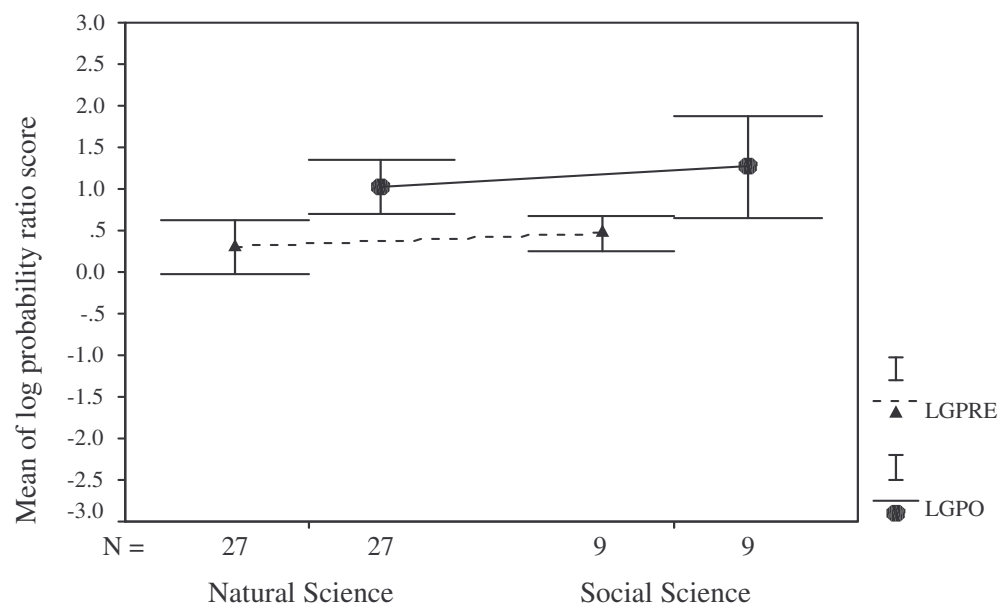
#### 4.6.5 Results related to the other EVs

This part involves exploratory variables: learners' field of study, previous scores of foundation English III (EF3 scores), and learners' age.

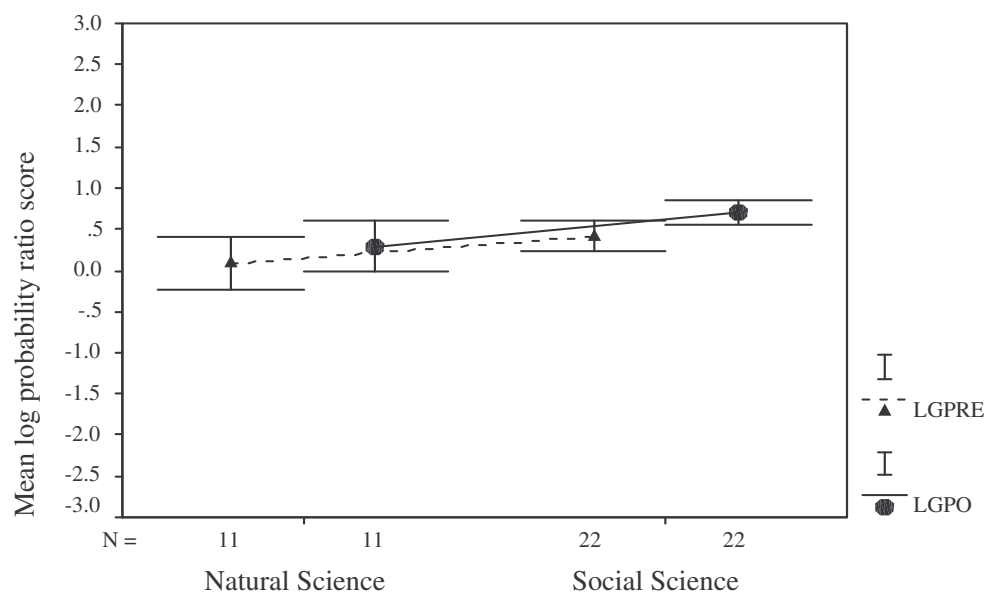
##### 4.6.5.1 Field of study

Though the field of study did not have any a significant effect in any of our analyses of effects on test scores, there is descriptively a slightly better performance overall by social science than natural science students, as illustrated below in Figures 4.15 and 4.16.

**Figure 4.15 Fields of study- the experimental group**



**Figure 4.16 Fields of study – the control group**



#### 4.6.5.1.1 Why was Social Science better than Natural Science in L2 retention?

Clearly, the control group had more learners whose field of study was in the Social Science than the experimental group. Moreover, the female learners studied in the fields relating to Social Science. Perhaps because the Social Science has more female learners and who did better in L2 word retention, therefore the gender ratio affected the Social Science's scores in the pre-post-tests.

Interestingly, Graham (1997, p.100) refers to remarkable points reported in Weinreich-Haste's (1981) and Hingley's (1983) studies. The former mentions that the female image, especially in Britain, is associated with foreign languages. The latter suggests:

“There exists a myth among school children that foreign languages are easy, or soft, best left to girls, who are good at producing neat written work. Elsewhere it is argued that among British University students sciences tend to be regarded as ‘hard’, ‘relevant’, and ‘useful’ (Thomas, 1990) and thus more worthy of study by males than language-based subjects.”

According to the researcher's first hand experience in L2 learning and teaching in Thailand, there exists a similar view of gender-based judgments about school subjects: male learners' favourite subjects are those grouped in Natural Science, i.e. Engineering, General Science, Mathematics, Physics, Computer Science, Mechanical Science and so forth. On the other hand, female learners tend to choose subjects

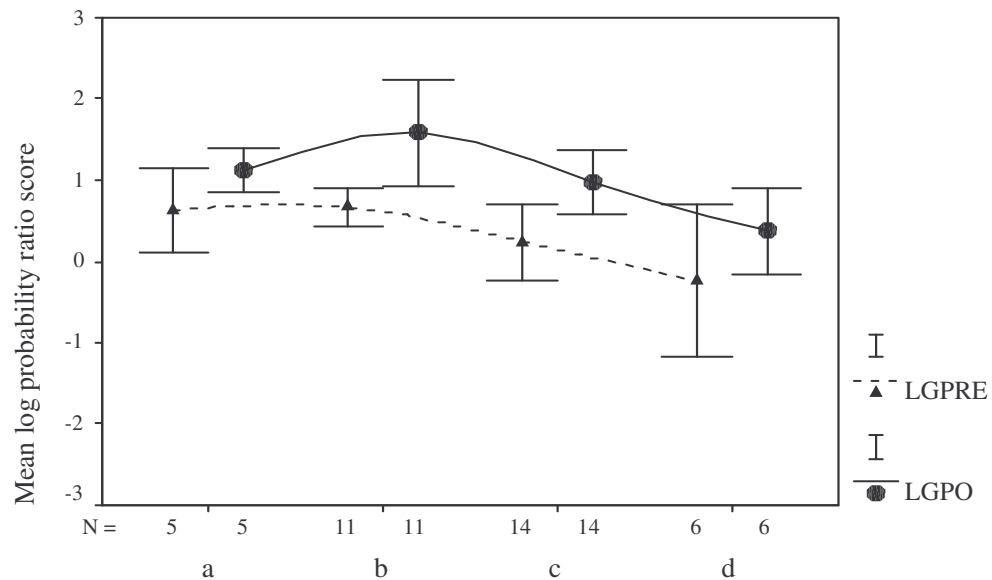
involving Foreign Languages, Education, Home Economics, Literature, Mass Communications, and the like.

At this stage, regarding the result obtained from this study described in items 4.6.2, 4.6.3., and 4.6.3.1 which showed that female learners generally outperformed male learners in language learning. We may presume that Social Science is better than Natural Science in L2 retention because there are more female learners in that field. However, we do not know exactly whether the nature of the field of study partly helps in L2 word retention.

#### 4.6.5.2 Foundation English III previous score

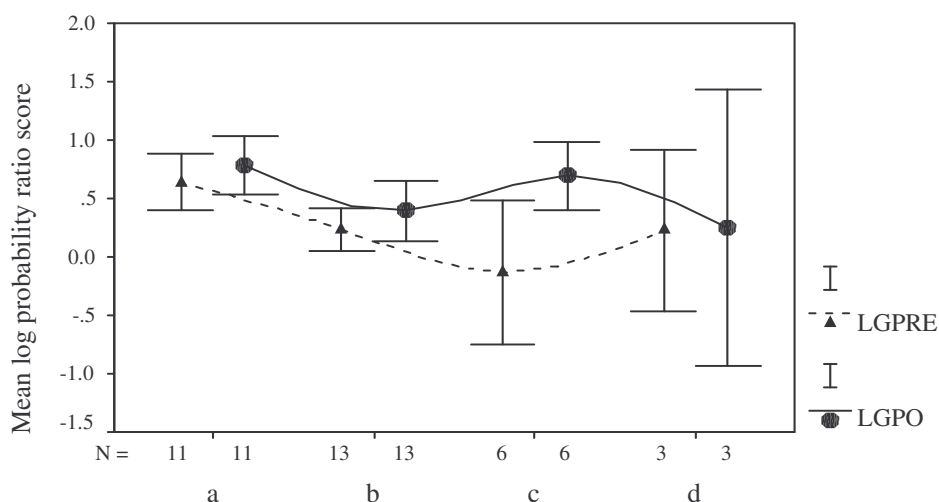
The result clearly reveals that FE3 previous score affected pre-test scores significantly,  $p < .001$ . Also we can see from Figures 4.17 and 4.18 that the learners with FE3 'a' had better scores in the pre-test than the others. Interestingly, as can be seen from the graphs below, the learners with a score of 'b', 'c', and 'd' clearly improved and had better post-test scores.

**Figure 4.17 FE3 previous scores – the experimental group**



Remarkably, in the post-test (the experimental group), all learners had better scores, especially the ones with the lowest FE3 score 'd' improved more than the learners with the lowest FE3 score in the control group.

**Figure 4.18 FE3 previous score – the control group**



Apparently, the learners in the control group, particularly those with FE3 score: ‘a’, ‘b’, and ‘c’ also showed an improvement in the post-test. Obviously, learners with ‘a’ had consistency in their performance. Learners with ‘b’ slightly improved in the post-test, but obviously less than learners with ‘c’ score. Surprisingly, learners with ‘d’ hardly improved at all in the post-test.

In sum, it can be presumed that if the poor achievers, ones with EF3 ‘d’ score, received VLST, they could perhaps improve their ability in L2 retention.

#### 4.6.5.2.1 Learner’s achievement in relation to the previous FE3 score

The FE3 test is an achievement test designed and organised by the English teaching staff of the Department of the Foreign Languages, Faculty of Humanities. It is used to measure how much of the general L2 the learners have learnt as a result of taking the Foundation English language (III), a compulsory course of study. The test is taken each term. The learners with ‘a’ score are considered as excellent L2 learners or good language achievers.

Regarding the aforementioned results, at this stage, perhaps we can sum up as follows:

The good language achievers with ‘a’ score in both groups consistently performed better than others whose scores were ‘b’, ‘c’, and ‘d’. Presumably this might be because they memorised L2 vocabulary more effectively and systematically than the others with lower scores.

Regardless of group or treatment the learners with ‘a’ did best in memorising L2 vocabulary items. However, the learners with ‘a’ score in the experimental group

clearly did better than the learners with 'a' score in the control group. Presumably, if the learners (the control group) with 'a' score received VLST, they perhaps could improve their memorising of L2 vocabulary. Even though it might be a slight improvement, it is better to provide an opportunity for them to expand their perspective of exploiting various VLS in memorising L2 words.

Studies in LLS related to learners' language achievement, conducted by Hosenfeld (1977), O'Malley et al.(1985 a, b), Tyacke and Mendelsohn (1986), Gillette (1987), Padron and Waxman (1988), Abraham and Vann (1987); Chamot and Küpper (1989), Oxford and Nyikos (1989), reported by Young (1996, p. 85) reveal: "*The high achievers had a greater repertoire of strategies and they used them more frequently and effectively than low achievers.*"

From what we found in our study, it may be said that the high achievers with 'a' score presumably select more appropriate VLS and exploit the VLS more effectively than those low achievers. We will further elaborate and discuss in the final chapter the learners' VLS use and how they utilise them (see 6.3.3 and 6.3.3.1).

With regard to the studies of good language learners and their language learning strategies, Oxford (1989, p. 235) reports: "*Good language learners use more and better learning strategies than do poor language learners.*" Moreover, Skehan (1989, p. 76) defines five major strategies that the successful language learners utilise in L2 learning; one of them is, p. "*GLLs develop or exploit an awareness of language as a system.*" In short GLLs systematically deal with L2 language learning. As the learners with 'a' score did best in pre-post-tests, it may be assumed that they perhaps used VLS more effectively and dealt with L2 memory systematically well in a planned way. We will also further discuss this point in the final chapter.

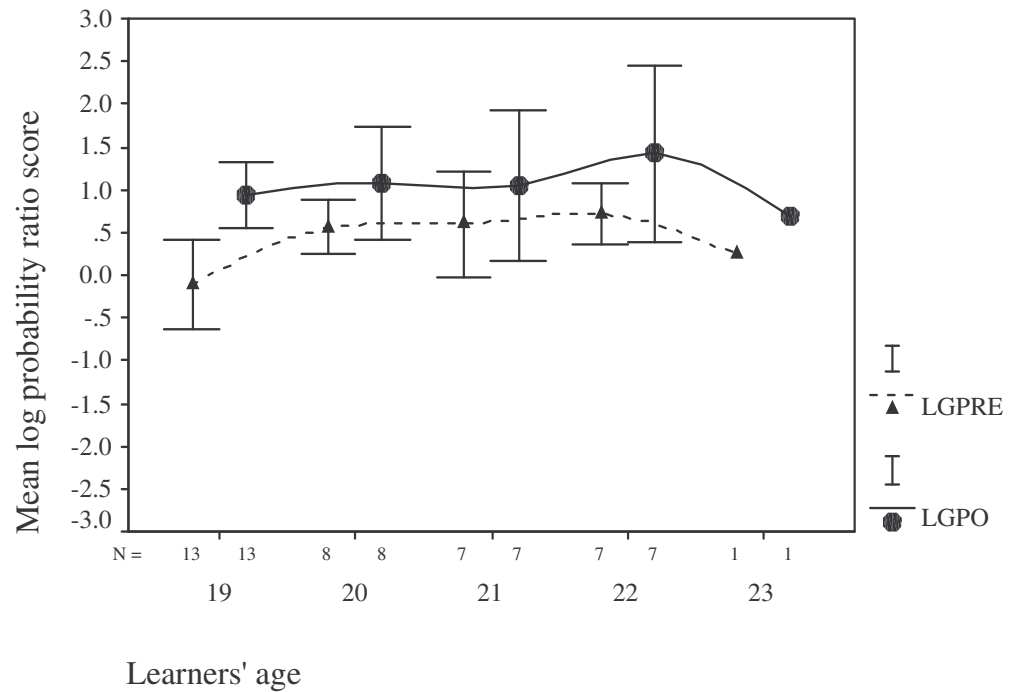
#### **4.6.5.3 Learners' age**

In our study, we purely focus on the ability to memorise new vocabulary among adult learners with ages ranging from 19-23 years old. The ages of the two groups are not significantly different,  $p = .452$  (see Table 4.2).

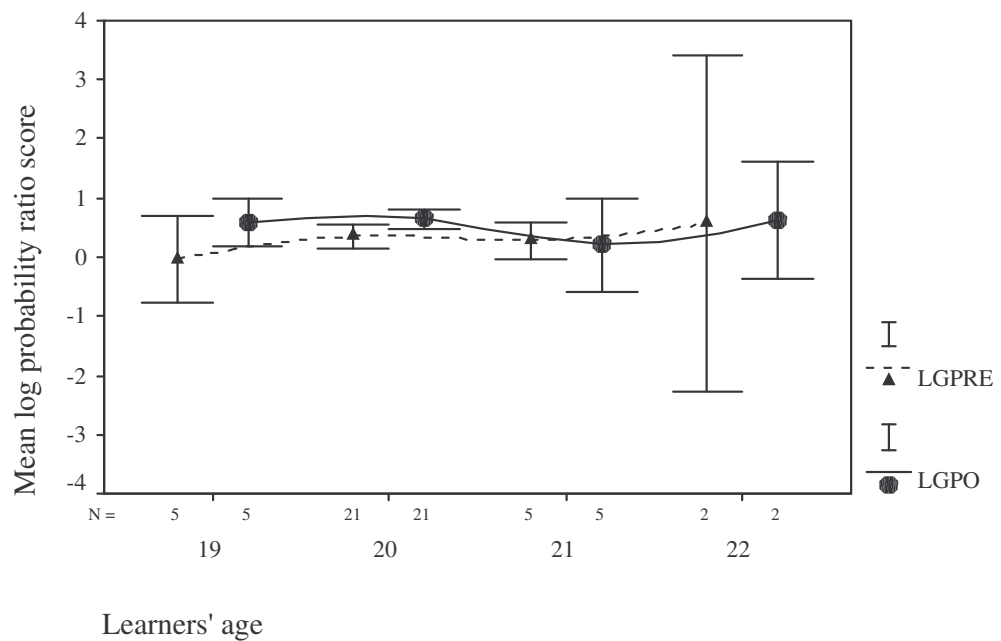
According to the result, the youngest learners (19 years old) in both groups obviously did worst in the pre-test; however, they clearly improved in L2 retention, as they scored better in the post-test. Regarding the graphs shown in Figures 4.19 and 4.20, we can take into account that the youngest learners who were studying in the

lowest year (the second year) had more room for improvement in their vocabulary learning, especially L2 word retention.

**Figure 4.19 Learners' age – the experimental group**



**Figure 4.20 Learners' age – the control group**



#### 4.6.5.3.1 Learners' age and L2 retention ability

When we reviewed the literature, in particular L2 learners' age, we found most of the studies related to the age of young L2 learners, especially before puberty, in comparison with the age of adult L2 learners. Clearly SLA researchers are interested in conducting the studies in order to find an effect of age on language learning by L2 learners. They specifically probe into how well the young learners, as opposed to adult learners, acquire L2. For example, Ellis (1994, p. 484) cited Scovel (1988) and Long (1990a) who conducted studies focusing on the ability to acquire L2 native-like accent, by looking at young learners in comparison with adult L2 learners. In general, the core finding reveals: "*Younger L2 learners generally do better than older learners.*" Similarly, Gass and Selinker (1994, pp. 239-246) state with regard to the common belief in the ability of L2 acquisition between younger learners and adult learners: "*Children are better language learners in the sense that young children typically can gain mastery of a second language, whereas adults cannot.*" They add that the finding is still inconclusive; obviously not all researchers accept the findings, however.

Clearly, we do not find studies concerning adult L2 learners' age and their ability in memorising L2 vocabulary. Since our study specifically focuses on the types of VLS university students use to deal with L2 vocabulary retention, we specifically report our findings in relation to the learners' age and their L2 retention ability. We, therefore, sum up the findings as follows:

Regarding the correlation table (see Appendix 4.3), the subject variables, for example 'age' and 'FE3' did not correlate positively with each other (-.194, .111). Thus, it perhaps suggests that 'age' does not relate to 'FE3' score: the youngest learners are not restricted to having the low FE3 score ('d'). In fact, there are two youngest learners in the experimental group who received 'a'; three of them scored 'b', six scored 'c' and two had 'd'. In the control group, one youngest learner received 'a' score and two of them received 'b', and two had 'c'. The result shows that the youngest learners of both groups did not receive good scores in the pre-test; their ability to memorise L2 words is lowest in comparison to the others. Nonetheless, the youngest learners in both groups clearly improved in the post-test. This perhaps suggests that the learners' improvement in L2 memorising does not definitely depend on their age and the previous FE3. Presumably, the youngest learners improved in the post-test because of the influence of their extrinsic



motivation: to achieve a better score in order to be as good as the other older students; or just purely to achieve a higher score than the first time (pre-test).

For the treatment group, the youngest learners performed better in L2 retention in the post-test, after the VLST. It suggests that the VLS taught in the classroom positively affected their improvement in memorising L2 words. Even though the youngest learners in the control group did improve in the post-test, their post-test scores were lower than those of the youngest learners in the experimental group. Thus, we may say that age within the limited range in this study does not indicate a learner's ability in L2 word retention. It might be the fact that the learner's (regardless of their ages and FE3 score) exploitation of VLS properly and effectively, facilitates the memorisation of L2 words.

We perhaps assume that L2 learners of all ages are equally capable of memorising L2 words. Besides, in order to retain L2 words effectively, the learners may need to employ either multiple or integrated types of VLS appropriately and effectively according to their own preference and style of learning.

#### **4.7 Summary**

The focus of this chapter is the report of the quantitative data including results, interpretation, and discussion of the outcome. Moreover, we describe how we utilise the statistical method, based on SPSS, to analyse the data obtained from the pre and post-tests. From the data analysis we obtain the crucial result, which reveals that there is a significant difference between the experimental group and the control group ( $p < .001$ ). In addition, the interaction of the group and the pre-post tests change is also significant ( $p = .008$ ).

The results drawn from the quantitative data analysis are used to answer the aforementioned four research questions. We will further discuss the core points of the findings from the quantitative results in the final chapter.

At this position, we simply know that the quantitative data analysis clearly confirms the effect of the VLST on the improvement of the subjects' ability to memorise L2 vocabulary. The major answer to RQ1 is summed up as follows:

**Table 4.10 Summary of answer to the research question no. I**

<b>Research instrument</b>	<b>Research question I</b>	<b>Findings - the quantitative data</b>
Pre- post-tests	<p>RQ 1: How much improvement do learners (the experimental group) show in their retention of vocabulary taught in class after vocabulary learning strategies training? (Compared with subjects in the control group who do not receive VLST in class)</p> <p>H<sub>0</sub>: Learners in the experimental group do not show any improvement in their retention of taught vocabulary after introducing VLST in class (i.e. between pre-and post tests)</p> <p>*H<sub>1</sub>: Learners in the experimental group show an improvement in their retention of taught vocabulary after introducing VLST in class.</p>	<p>There is a significant difference between the experimental and control groups (<math>p &lt; .001</math>); and the interaction of group and pre-post tests change is significant (<math>p = .008</math>) as illustrated in Table 4.6 with the gender, FE3 scores and subject specialisation effects eliminated. Thus, the result rejects the null hypothesis and accepts the alternative hypothesis.</p>

In short, the answer to RQ1 suggests that the subjects' ability to memorise L2 vocabulary will improve more with the VLS training than without. We will look at the qualitative data analysis and the results in the next chapter so as to use them to triangulate and support the results obtained from the quantitative data.

## **Chapter 5: Qualitative Data Analysis, Results, and Discussion**

This chapter reports on the qualitative data analysis, interpretation of the results, and discussion. In the first part we present the analysis of the learners' TA protocols in relation to the VLS coding system, and the VLS coding ratings reliability from four judges, including the researcher. The second part elaborates the result of the VLS employed by learners while performing vocabulary task I, before pre-test and vocabulary task II, before post-test. Besides, we present the characteristics of the learners' 'repetition strategy' (RP) of many types. The third part looks at the selected extracts of the learner's think-aloud protocols I and II (TAP I & TAP II). The fourth part focuses on the data gathered from the semi-structured interview. The interviewees' answers from the control and the experimental groups are compared and grouped into percentage of sameness and differences. The fifth part discusses the results in relation to the research questions and hypothesis. Finally, the sixth part presents a summary of the chapter.

### **5.1 Analysis of learners' verbal protocols and reliability rating of VLS coding**

We used the think-aloud method to elicit the learners' verbal reports of the vocabulary learning strategies the subjects employed to memorise L2 vocabulary items in vocabulary tasks I and II. The steps of the translation of the overall protocols first need to be clarified. Secondly, in order to confirm the accuracy and reliability of our VLS coding, we invited three judges to help rate the main samples of VLS obtained from subjects' think-aloud protocols (TAP I and II). The following sections present these two topics in detail.

#### **5.1.1 Analysis of the learner's TAP in relation to VLS coding system**

Part of the research procedure of the main study was to ask the subjects in both groups to record freely their verbal reports twice, while memorising vocabulary tasks I and II or before taking the pre-post tests. Therefore, we have 138 verbal protocols to analyse, the results of which are as follows:

- We first arranged the audiocassettes of each group according to the name lists in order to check if the names written on each cassette matched the subjects' names

in the lists of students, and to ensure that each protocol was ascribed to the right subject.

- Next, we listened to every verbal protocol of one group at a time in order to eliminate inadequate or incomplete protocols, i.e. lacking the specific information required. It was found that most subjects followed the instruction given in TA – training session which means that they verbalised their thought specifically about how or what type(s) of memory strategies they employed, also their views related to vocabulary learning. However, it is, in fact, a time consuming process, as each subject spent a minimum of approximately fifteen minutes. A few learners from each class spent twenty to thirty minutes, i.e. including pausing, listening to music, coughing, and checking the meaning of some words in a dictionary, and so on). When listening to each verbal protocol, we specifically look at the core point of the subjects’ reports on what strategies they used and how to memorise the L2 words, including their feelings or attitudes towards vocabulary learning/teaching, vocabulary learning strategies, and VLST sessions.
- Listening the second time, we listened precisely to the details of each TA protocol. At the same time, we translated the protocols reported in Thai into English. Frequently, we rewound the tape to ensure that we fully understood. Since the purpose of using the think-aloud method is to elicit how/what vocabulary learning strategies the learners utilised, the translation includes only the specific information required.
- We listened to the subjects’ protocols for the third time to check the accuracy of the verbal reports and the translations. The translation was corrected whenever we had misheard a verbal report.
- We read the translations and numbered the reported sentences, which contain the information about how/what strategies the subjects employed. The process of reading was done three times to ensure that the sentences contained the data required.
- Finally we listed all the strategies reported in each sentence of the verbal protocols. The VLS were named and abbreviated in relation to the nature of each strategy, i.e. ‘repetition’ strategy of many types shortened to ‘RP’. Scholfield (2002) suggests a few terms for some new strategies, for example, ‘idiosyncratic decomposition’ (ID), ‘morphemic decomposition’ (MD), and ‘syntagmatic

association' which is one of 'association' of many types (AS). At this stage we found that most subjects verbalised clearly what strategies they had used while they were memorising L2 words. Presumably, there is a bundle of clear-cut strategies which can be clearly used to memorise vocabulary items; or perhaps, the learners normally used the same classical strategies, i.e. repetition of many types, whenever they wanted to memorise L2 words.

- The researcher eventually defined the VLS obtained from TAP I and II. In order to clarify each strategy, the concrete examples were placed with each one (see Appendix 5.1 for the VLS types and definitions).
- In order to confirm the characteristics or the types of VLS utilised by the learners of both groups, three judges were invited to check the reliability of VLS coding named and classified by the researcher.
- Every strategy is classified according to Schmitt's (1997, pp. 207-208) taxonomy of vocabulary learning strategies. Since most of the VLS gathered from the verbal protocols are grouped as 'consolidation strategies', we have to make certain that those strategies were accurately and reliably categorised. Thus we proceed to the step of checking the reliability of VLS coding.

### **5.1.2 Checking on reliability of VLS coding**

Given the importance and the principles of checking reliability, stated by Scholfield (1995, pp. 213-214); McDonough & McDonough (1997, p. 198); Seliger and Shohamy (1989, pp. 185-186), it is sensible to arrange a reliability rating of VLS coding. The purpose of checking on the reliability of VLS coding is to confirm that it is accurate and that the various judges or raters agree with it. Thus the agreement among the raters will ascertain the reliability of the types of VLS coding recorded.

We invited three judges to help rate the reliability of the VLS coding so that their ratings will be used to confirm that reliability. The first expert judge was Mr Phil Scholfield, a senior Lecturer at the Department of Language and Linguistics, University of Essex, the second Ms. Sumitra Pankulbordee, a current Thai Ph.D. student in ELT, Department of Language and Linguistics, University of Essex and The third Ms. Saowaluck Thepsuriwong, who holds Ph.D. in Applied Linguistics from University of Reading. At present she is a Thai lecturer at the Faculty of Liberal Arts, KMUTT, Thailand. The researcher was the fourth judge.

Clearly, various types of VLS were used by the subjects in both groups, some of which were similar. We thus establish the criteria for selecting data from verbal protocols as follows:

- We selected the learners' vocabulary learning strategies reported in TAP I and II, recording the various types of VLS.
- We selected ambiguous or unclear verbal protocols and put them into the reliability rating scales.
- Due to the limitation on the length of this thesis, we did not include learners who reported using the same types of VLS, e.g. 'repetition strategy', 'keeping notes', and so forth.

The characteristics of and the procedures for constructing the reliability scales are as follows:

- The selected extracts of the subjects' verbal reports containing VLS coding were put into the rating reliability scales.
- The instructions for the judges were placed above the scales, so that they could clearly understand how to make a rating properly.
- We also provided definitions of each VLS type, so that the judges would be clear about what each type of VLS was.
- In order to make the scales clear and understandable, we simplified and adjusted some wordings in the rating scales before sending them to the judges.
- After the rating scales were completed and returned by the three judges, we tallied the overall ratings. The format and the method of tallying the reliability rating were from the start based on Schofield's (2003) suggestion.
- The researcher later adjusted the format so as to present a clear result.
- The agreement of all four judges' ratings is counted as 100%, of three judges 75%, two judges 50%, and of one judge 25%.

We summarise the results of every judge's agreement (see Appendix 5.2) for the experimental group and the control group as follows:

**The experimental group** - According to the reliability rating scale of VLS coding, four judges (100%) agreed on thirty out of thirty-one items of VLS coding. Even on the disputed item (item 16) only one judge (25%) disagreed with the other

three (75%). Average agreement overall items is therefore 99.2%, i.e.  $(30 + \frac{3}{4}) \times 100 \div 31$ . The minimum acceptable agreement is over 75%.

The disagreement is item no. 16:

Item 16: {S. 14} *“I open English-English dictionary and look up the English definitions of some words previously presented in class, as I want to compare those definitions with Thai definitions in English-Thai dictionary so that I can really understand the meanings of those English words.”*

It appears that three judges (75%) agreed with the coding: ‘dictionary study’ (D), but one judge (25%) classified it as ‘dictionary work’ (DW).

Regarding the differences between the two strategies, by ‘dictionary study’ (D) we mean the references, i.e. BLD, MLD, the learners freely consult just to check the basic information of L2 words. For instance, the learners may want to check or crosscheck the meaning, spelling, part of speech, and pronunciation. Also, the learners may want to check the English definitions of some words in their MLD. In general, the learners do not often search for additional details in the MLD.

By ‘Dictionary work’ (DW) we mean using of the specific MLD in which we trained the experimental group in class. The learners were specially trained to consult the MLD whenever they wanted to search for depth of detail about L2 words, such as, varieties of meanings, derivatives, extra explanation of grammatical usage of L2 words, samples of English sentences, expressions, also copying the L2 words and definitions or the sample English sentences, and so forth.

The disagreement of one judge on the reliability rating - item 16 could be because of the similarity of the two strategies which both involve making use of ‘dictionaries’.

**The control group** - the reliability rating scale of VLS coding, four judges (100%) agreed with the coding of thirty-two out of thirty-four items. Even on two disputed items (items 24 and 28), one judge disagree with the other three, so agreement was 75% for item 24 and item 28. Average agreement overall items is therefore 98.5%, i.e.  $(32 + \frac{3}{4} + \frac{3}{4}) \times 100 \div 34$ . The minimum acceptable agreement is over 75%.

Therefore, it can be said that the reliability of the VLS coding of both groups is confirmed by the four judges’ ratings.

The disagreements arose from items 24 and 28.

Item 24: {S. 30} *“I use my forefinger to draw the letters of the words in the air many times while I am spelling each letter of the word aloud.”*

Item 28: {S. 24} *“I use my forefinger to draw each letter of the words in the air many times until I can memorise the word, and I normally walk when I want to memorise vocabulary items.”*

The result of the rating for item 24 was that three judges (75%) rated it as a combination of two strategies, i.e. ‘physical action’ (PH) and ‘repetition strategy’ (RP). One judge (25%) rated it as one single strategy: ‘repetition strategy’ (RP).

With regard to item 28, three judges (75%) rated it as a combination of ‘physical action’ (PH) and ‘repetition strategy’ (RP). One judge (25%) rated it as single strategy: ‘affective factor’ (AF).

From the result of the reliability rating conducted by the four judges, we can clearly see that the percentage of possible agreement of both groups is much higher than the percentage of disagreement.

Group	Percentage of possible agreement	Percentage of possible disagreement
The experimental group	99.2% Agreement on 30 VLS coding items out of 31 items	0.8% Disagreement on one item no. 16
The control group	98.5% Agreement on 32 VLS coding items out of 34 items	1.5% Disagreement on two items no. 24 and no. 28

It can be summed up that the percentage of agreement of the experimental group is 99.2% whereas the percentage of disagreement is 0.8 %. The percentage of agreement for the control group is 98.5 %, whereas the percentage of disagreement is 1.5 %. Since the percentage of disagreement is less than 10%, we can rely on the four judges’ opinions as confirmation and use the VLS coding accordingly in this study.

## 5.2 Qualitative data: Think-aloud protocols (TAP)

To analyse TAP I and II as a whole we specifically focused on the strategies which the subjects used to help them memorise vocabulary items. Hence the methods or strategies were first gathered and later categorised in accordance with the vocabulary learning strategies taxonomy devised by Schmitt (1997, pp. 207-208). The sample protocols are selected on the basis of the subjects’ previous FE3 scores,



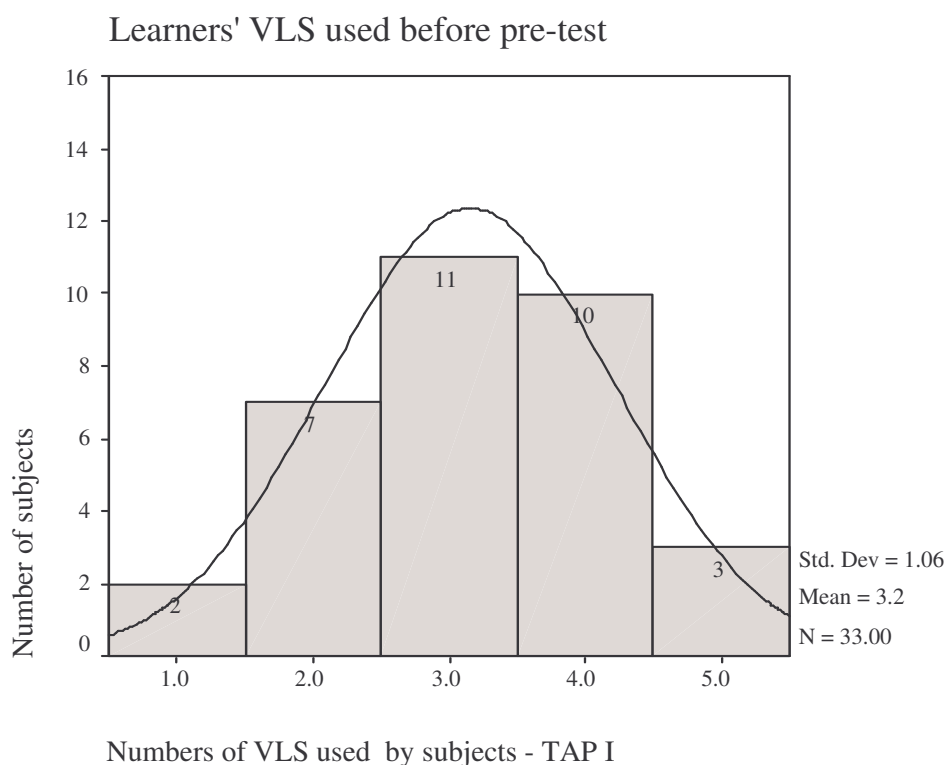
i.e. a, b, c, and d. We also add extra protocols which reported some interesting strategies.

The following sections show the analysis of the subjects' TAP I and II; the numbers of VLS and the related detail is presented as a percentage and illustrated by graphs.

### 5.2.1 Results from TAP I and II – the control group

The results from the TAP I and II similarly reveal that the strategy used by the highest percentage of the thirty-three learners is 'repetition strategy'. In TAP I, we found that twenty-nine (87.9%) of thirty-three subjects utilised 'RP' of various types. We will elaborate on the varieties of repetition strategies later. Moreover, the three strategies the next most used by the subjects are: 'keeping notes' (51.5%), 'dictionary study' (45.5%), and 'self-testing' (42.4%). According to TAP I, the mean of numbers of VLS used in combination by the control group is 3.2 ( $\bar{x}$ ) (see Figure 5.1 and Table 5.3).

**Figure 5.1 VLS from think-aloud protocols I – the control group**



**Table 5.3 Table of frequencies - VLS from TAP I – the control group**

		no	yes
Affective factor (AF)	Count	32	1
	%	97.0%	3.0%
Association of various types (AS)	Count	30	3
	%	90.9%	9.1%
Dictionary study (D)	Count	18	15
	%	54.5%	45.5%
Idiosyncratic decomposition (ID)	Count	33	0
	%	100.0%	.0%
Morphemic decomposition (MD)	Count	30	3
	%	90.9%	9.1%
Keeping notes (N)	Count	16	17
	%	48.5%	51.5%
Keep practising (P)	Count	30	3
	%	90.9%	9.1%
Physical action (PH)	Count	31	2
	%	93.9%	6.1%
Repetition of various types (RP)	Count	4	29
	%	12.1%	87.9%
Reviewing in extra time (RW)	Count	22	11
	%	66.7%	33.3%
Syllabic decomposition (SD)	Count	32	1
	%	97.0%	3.0%
Social interaction (SI)	Count	28	5
	%	84.8%	15.2%
self-testing (ST)	Count	19	14
	%	57.6%	42.4%

The control group n =33

Regarding the most-used strategy for consolidating meaning, we clearly see the ‘Repetition strategy’ was frequently employed by our learners. Our finding agrees with Schmitt’s (1997, p. 219) survey research, conducted in Japan with 600 Japanese learners studying English as a foreign language (EFL). The subjects included students and adult learners from Junior high school, High school, and University. The result from Schmitt’s survey shows that the students’ most-used strategies for consolidating meaning are equal in percentage (76%), i.e. *verbal repetition* and *written repetition* strategies.

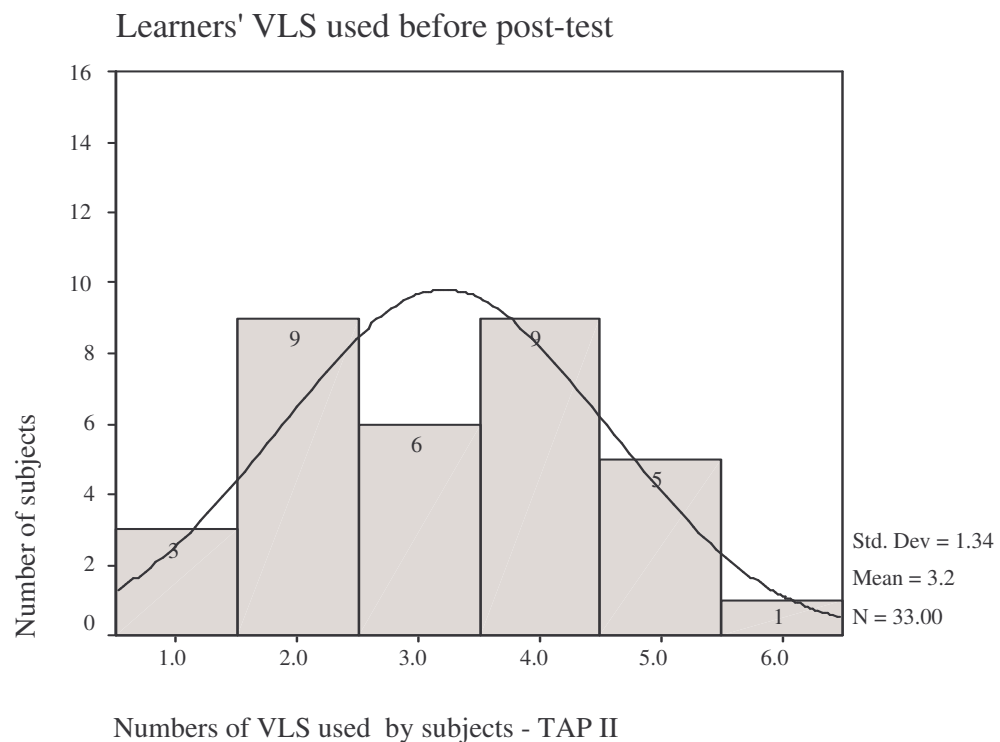
Other studies reveal a similar outcome: “*In language learning strategies research, repetition is found to be a type of strategy most frequently used by L2 learners.*” (O’Malley et al., 1985; Chamot, 1987; and Tinkham, 1989).

In addition, Nation (2001, p. 227) cited Lawson and Hogben’s (1996) study which is concerned with quantifying how well learners learn each word in relation to the correlated strategy the learners used to recall the meaning of words. The study reveals: “*Repetition strategies were the most frequently used strategies*”.

We will elaborate in the discussion part on the plausible reasons for learners using ‘RP’ so frequently to memorise vocabulary items.

Similarly, the result from the TAP II reveals that the strategies employed by the highest percentage of learners in the control group is ‘RP’ of various types, which were used by thirty-two learners (97%). The varieties of ‘RP’ elicited from the protocols will be described later in 5.2.3. Moreover, from TAP II, the strategies employed were slightly different from TAP I. The result shows that sixteen learners (48.5%) used ‘dictionary study’. Fourteen learners (42.4%) employed ‘keeping notes’, thirteen learners (39.4%) utilised ‘self-testing’, and the ‘reviewing’ during extra time was used by ten learners (30.3%) According to TAP II, the mean of numbers of the subjects’ VLS used in combination by the control group is 3.2 ( $\xi$ ). Clearly the mean shown in Figures 5.1 and 5.2 is not different. It therefore suggests that the subjects similarly employed VLS in combination before pre-test and post-test. Particularly, before post-test the subjects’ numbers of VLS used in combination show more distribution. In figure 5.2 we can see that the 4 and 5 integration of VLS used become smaller than in Figure 5.1 (see Figure 5.2 and Table 5.4).

**Figure 5.2 VLS from think-aloud protocols II – the control group**



**Table 5.4 Table of frequencies - VLS from TAP II – the control group**

		no	yes
Affective factor (AF)	Count	31	2
	%	93.9%	6.1%
Association of various types (AS)	Count	30	3
	%	90.9%	9.1%
Dictionary study (D)	Count	17	16
	%	51.5%	48.5%
Idiosyncratic decomposition (ID)	Count	32	1
	%	97.0%	3.0%
Morphemic decomposition (MD)	Count	30	3
	%	90.9%	9.1%
Keeping notes (N)	Count	19	14
	%	57.6%	42.4%
Keep practising (P)	Count	30	3
	%	90.9%	9.1%
Physical action (PH)	Count	31	2
	%	93.9%	6.1%
Repetition of various types (RP)	Count	1	32
	%	3.0%	97.0%
Reviewing in extra time (RW)	Count	22	11
	%	66.7%	33.3%
Syllabic decomposition (SD)	Count	33	0
	%	100.0%	.0%
Social interaction (SI)	Count	27	6
	%	81.8%	18.2%
Self-testing (ST)	Count	20	13
	%	60.6%	39.4%

The control group n = 33

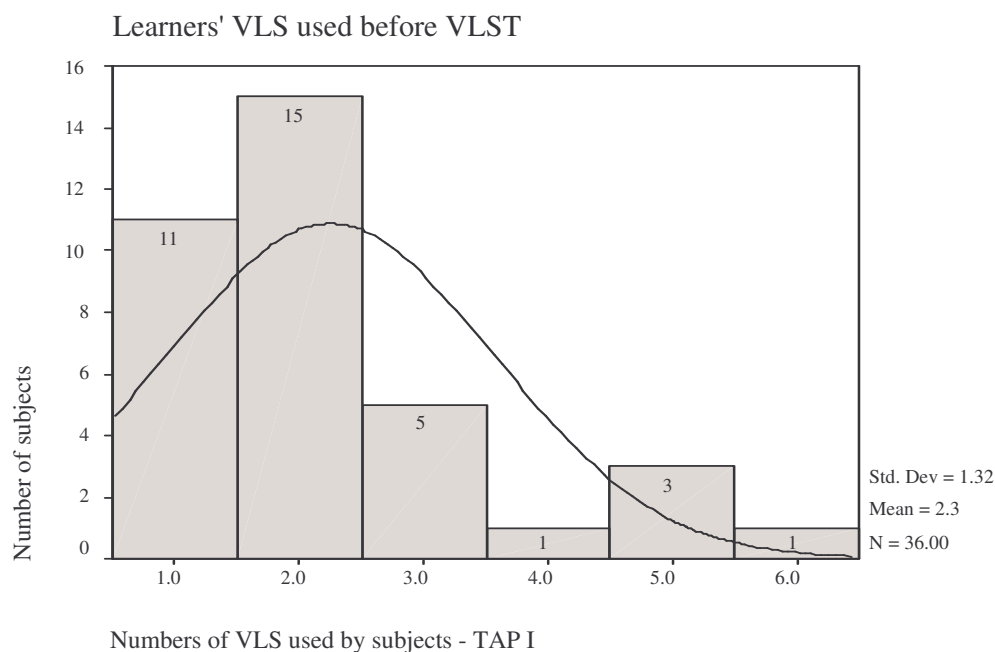
In short, the results from TAP I and II apparently show that the strategy most used by the learners in the control group is ‘RP’ of various types. There are no new or different strategies (e.g. ‘peg method’, ‘keyword method’, ‘semantic mapping’, and so on) reported in the protocols.

### 5.2.2 Results from TAP I and II – the experimental group

The result from TAP I reveals that thirty-three learners (91.7%) frequently employed ‘repetition strategy’ to memorise vocabulary items task I. The second most-used strategy, employed by seventeen learners (47.2%), was ‘associations of many types’ (AS). The most-used third strategy, ‘keeping notes’ was used by eight learners (22.2%). The fourth and the fifth most-used strategies, ‘reviewing’ during extra time and ‘self-testing’ were used by an equal percentage (16.7%). According to TAP I, the mean of numbers of VLS used in combination by the experimental group is 2.3 ( $\xi$ ) which is less than the mean of the control group. According to Figure 5.3, it can be said that before pre-test or before the intervention of VLST the

experimental group used VLS in combination less than the control group (see Figure 5.3 and Table 5.5).

**Figure 5.3 VLS from think-aloud protocols I – the experimental group**



**Table 5.5 Table of frequencies - VLS from TAP I – the experimental group**

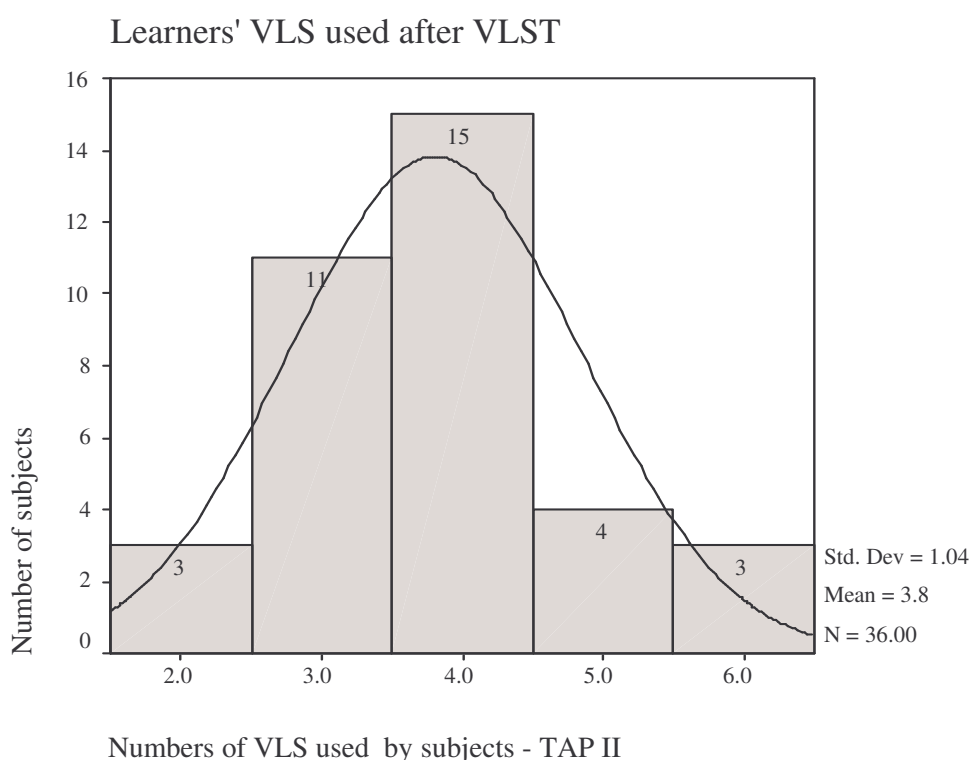
		no	yes
Affective factor (AF)	Count	34	2
	%	94.4%	5.6%
Association of various types (AS)	Count	28	8
	%	77.8%	22.2%
Dictionary study (D)	Count	32	4
	%	88.9%	11.1%
Idiosyncratic decomposition (ID)	Count	34	2
	%	94.4%	5.6%
Morphemic decomposition (MD)	Count	31	5
	%	86.1%	13.9%
Keeping notes (N)	Count	28	8
	%	77.8%	22.2%
Keep practising (P)	Count	34	2
	%	94.4%	5.6%
Physical action (PH)	Count	35	1
	%	97.2%	2.8%
Repetition of various types (RP)	Count	3	33
	%	8.3%	91.7%
Reviewing in an extra time (RW)	Count	30	6
	%	83.3%	16.7%
Syllabic decomposition (SD)	Count	35	1
	%	97.2%	2.8%
Social interaction (SI)	Count	33	3
	%	91.7%	8.3%
Self-testing (ST)	Count	30	6
	%	83.3%	16.7%

Experimental group  
n=36

Clearly, this result from Table 5.5 shows that the experimental group's most-used strategy was 'RP' of various types. It gives the same result as reported in TAPs I and II from the control group in that the learners from both groups relied heavily on 'repetition strategy' to memorise L2 words. This suggests that, without VLST in the classroom, the learners from both groups principally employ shallow strategies, e.g. 'repetition strategies' of various types when memorising L2 words.

On the other hand, the result from Figure 5.4 shows the learners' changing use of VLS. The mean of the number of VLS used in combination becomes increased, ( $\bar{x} = 3.8$ ).

**Figure 5.4 VLS from think-aloud protocols II – the experimental group**



Clearly, according to Table 5.6, we can note a drastic reduction in the use of 'repetition strategy' (30.6%). The most-used strategy was 'association' of various types, employed by twenty-two learners (61.1%). Interestingly, it shows that an increasing number of learners employed different types of the VLS taught in class. For example, twenty learners (55.6%) employed the 'keyword method' (KW) and fourteen (38.9%) used 'grouping' word family (GP). An equal percentage (36.1%) used 'dictionary work' (DW) and 'semantic mapping' (SM). Twelve learners

(33.3%) reported using ‘semantic context’ (SC) and twelve learners (33.3%) used ‘morphemic decomposition’ (MD) (see Figure 5.4 and Table 5.6).

**Table 5.6 – Table of frequencies – VLS from TAP II – the experimental group**

		no	yes
Affective factor (AF)	Count	35	1
	%	97.2%	2.8%
Association of various types (AS)	Count	14	22
	%	38.9%	61.1%
Dictionary study (D)	Count	32	4
	%	88.9%	11.1%
Idiosyncratic decomposition (ID)	Count	33	3
	%	91.7%	8.3%
Morphemic decomposition (MD)	Count	24	12
	%	66.7%	33.3%
Keeping notes (N)	Count	35	1
	%	97.2%	2.8%
Keep practising (P)	Count	32	4
	%	88.9%	11.1%
Physical action (PH)	Count	35	1
	%	97.2%	2.8%
Repetition of various types (RP)	Count	25	11
	%	69.4%	30.6%
Reviewing in an extra time (RW)	Count	33	3
	%	91.7%	8.3%
Syllabic decomposition (SD)	Count	35	1
	%	97.2%	2.8%
Social interaction (SI)	Count	35	1
	%	97.2%	2.8%
Self-testing (ST)	Count	35	1
	%	97.2%	2.8%
Dictionary work (DW)	Count	23	13
	%	63.9%	36.1%
Keyword method (KW)	Count	16	20
	%	44.4%	55.6%
Semantic context (SC)	Count	24	12
	%	66.7%	33.3%
Grouping word families (GP)	Count	22	14
	%	61.1%	38.9%
Semantic mapping (SM)	Count	23	13
	%	63.9%	36.1%

Regarding the result from TAP II, it can be said that after the experimental group had been exposed to VLST in class, the learners/subjects apparently changed from employing shallow strategies to deeper strategies. Clearly the five strategies taught in class had a positive effect on their post-test scores which was significantly better than pre-test scores. It therefore suggests that the learners retain L2 vocabulary better after receiving VLST in class.

However, it also shows that a few strategies, e.g. ‘association’ of various types, ‘morphemic decomposition’, and ‘repetition of various types’ were employed in memorising vocabulary task II. We will discuss this finding further in the discussion part.

### 5.2.3 Repetition strategies of various types

In this study, by ‘repetition’ we mean a learner uses four different skill modes (i.e. reading, listening, writing, and speaking) in repeating either aloud such as spelling aloud, or silently, such as reading a word silently many times including writing, or listening to a word repeatedly.

The result from TAPs I and II reveals that the learners of both the control and the experimental groups used various types of repetition. We therefore categorise the set of repetition elements in different orders and combinations according to Scholfield’s (2001) suggestion.

First we organise the aspects of words into seven groups. With regard to repetition strategies of various types, we will use the abbreviations of the aspects of words as follows:

- fw = word form as a whole (e.g. tutelage, murky, indigenous)
- fl = word form letter by letter (e.g. t-u-t-e-l-a-g-e, m-u-r-k-y)
- fs = word form syllable by syllable (e.g. mur-ky, in-di-ge-nous)
- ps = Word form parts of speech (p.o.s) (e.g. murky [adj.], tutelage [n.])
- mt = meaning as L1 translation (e.g. murky: มีดครีม - meud<sup>M</sup>- kreum<sup>H</sup>)
- me = meaning as L2 definition (e.g. murky: dark or dim because of smoke or fog)
- pr = pronunciation (e.g. saying or writing English pronunciation in Thai or in English)

Moreover, each type of repetition is based on four different skill modes, i.e. reading (R), writing (W), speaking (S), and listening (L). Hence, there are twenty-eight elements (4 times 7). The sequences of different learners’ repetition are presented in the following examples.

Example (a): Extracts of learners’ TAP I – the control group

{S.33}: “I keep spelling aloud each letter of five words at a time and say L1 equivalent to English definitions and write the words and definitions until I can memorise them; then I move on to another five words. **I-n-d-i-g-e-n-o-u-s**, มีอยู่/ เกิดในท้องถิ่นชั้น (mee<sup>M</sup>-yoo<sup>L</sup>, keud<sup>M</sup>-nai<sup>M</sup>-tongtin<sup>M</sup>-nun<sup>H</sup>), I write **indigenous**



and the Thai definition equivalent to the English meaning, i.e. *มีอยู่/เกิดในท้องถิ่น*  
*ฉัน --until I have memorised the word and its meaning.*”

**The ‘RP’ element is flS + mtS + fwW + mtW.**

Example (b): Extract of a learner’s TAP I– the experimental group

{S. 22}: “I say aloud each English word in the set of new vocabulary and say aloud the L1 equivalent of the English definition. I do the repetition three to four times. I say **inebriated** aloud and its meaning in Thai *มีินเมา เจือปนแอลกอฮอล์ ทำให้เมา* (meunmaw<sup>M</sup> jeoupon<sup>M</sup> alcohol tum hai<sup>M</sup> meunmaw<sup>M</sup>).”

**The ‘RP’ element is fwS + mtS.**

Finally we count the different types of ‘RP’ reported by the learners in TAP I and II. The various types of repetition strategies are presented in the following section.

**5.2.3.1 Repetition strategies of various types – the control group**

From the TAPs I and II, we found that the control group used 25 different types of ‘repetition strategies’. Clearly each individual learner had his/her own style of word repetition. As can be seen from the frequency of ‘RP’ types in Table 5.7, five learners (15.2%) employed ‘RP’ type11 (e.g. fwS + mtS).

This means that those learners repeated L2 words by saying them aloud, and they also said the L1 equivalent to the English definitions aloud. We can furthermore see that four learners (12.1%) used repetition type 14 (e.g. fwR +mtR) which means that they silently read the set of L2 words and also silently read the L1 equivalent to of the English definitions in order to memorise them.

Three learners (9.1%) used repetition type 3 (e.g. fwW + mtW), so they wrote an L2 word and also the L1 equivalent to the English definition to memorise L2 words.

There is an equal percentage (6.1%) of learners employing two other types of repetition strategies (i.e. type 4, and type 12). The former shows that the learners had to say aloud an L2 word, then said aloud the L1 equivalent to the English definition, and said aloud the English definition. For the latter, the learners spelled aloud the L2 word aloud letter by letter, wrote the word, L1 equivalent, English definition, pronunciation of the word, and finally the part of speech. The remaining ‘RP’ strategies were used by an individual learner (3%) of the control group.

**Table 5.7 Types of repetition strategy – the control group**

		no	yes
1. fwW+fwS+mtS	Count	32	1
	%	97.0%	3.0%
2. fwS+mtS+mtW	Count	32	1
	%	97.0%	3.0%
3. fwW+mtW	Count	30	3
	%	90.9%	9.1%
4. fwS+mtS+meS	Count	31	2
	%	93.9%	6.1%
5. flS+fwS+mtS+fwW+prW+mtW	Count	32	1
	%	97.0%	3.0%
6. fwS+mtW	Count	32	1
	%	97.0%	3.0%
7. fwS+flS+mtS	Count	32	1
	%	97.0%	3.0%
8. flS+mtW	Count	32	1
	%	97.0%	3.0%
9. fwW+mtW+fwS+mtS	Count	32	1
	%	97.0%	3.0%
10. flS+mtR+flS	Count	32	1
	%	97.0%	3.0%
11. fwS+mtS	Count	28	5
	%	84.8%	15.2%
12. flS+fwW+mtW+meW+prW+psW	Count	31	2
	%	93.9%	6.1%
13. fwS+mtS+flS	Count	32	1
	%	97.0%	3.0%
14. fwR+mtR	Count	29	4
	%	87.9%	12.1%
15. flS+fwS+mtS	Count	32	1
	%	97.0%	3.0%
16. flS+mtS+fwW+mtW	Count	32	1
	%	97.0%	3.0%
17. flS+mtS+flW+mtS	Count	32	1
	%	97.0%	3.0%
18. flS+mtS+meS	Count	32	1
	%	97.0%	3.0%
19. fwW+mtW+flS+mtS	Count	32	1
	%	97.0%	3.0%
20. flS+mtS	Count	32	1
	%	97.0%	3.0%
21. flS+mtR	Count	32	1
	%	97.0%	3.0%
22. fwR+mtR+flS+mtS	Count	32	1
	%	97.0%	3.0%
23. flS+fwW+fwS+mtW+fwW	Count	32	1
	%	97.0%	3.0%
24. fwS+mtW+flS+fwS+mtS	Count	32	1
	%	97.0%	3.0%
25. flS+fwS+mtS+fwW	Count	32	1
	%	97.0%	3.0%

### 5.2.3.2 Repetition of various types – the experimental group

TAPs I and II verbalised by the learners in the experimental group show that they utilised 26 different types of repetition strategy. These types are similar to those of the control group, i.e. flS + mtS, fwR + mtR, and so forth.

Table 5.8 shows the most-used type of repetition which is flS + mtS. Eleven learners (30.6%) reported that they used this type to memorise L2 vocabulary. Interestingly, this type of repetition was used by one learner (3%) in the control group. The second most-used type of repetition is fwS + mtS; six learners (16.7%) used this strategy. Similarly to the control group, this strategy was used by five learners (15.2%). The other two ‘RP’ strategies, i.e. fwW + mtW were used by three learners (8.3%); and fwS + flS + fwS + mtS were used by two (5.6%). The remaining ‘RP’ strategies were used by an individual learner (3%).

### 5.2.3.3 Summary of repetition types used by the subjects of both groups

The data, from Tables 5.7 and 5.8, show that the control group and the experimental group employed various types of the ‘RP’. Six types of ‘RP’ strategy were the same (e.g. flS+mtS, fwS+flS+mtS, fwR +mtR, fwS+mtS, fwS+mtS+meS, and fwW+mtW). Thirty-nine different types of ‘RP’ strategy were reported by the subjects from both groups.

We found that five subjects in the control group with different FE3 scores ‘a’, ‘b’, and ‘c’ used the ‘RP’ with six and five complex sequences, i.e. two (18%) out of eleven subjects with score ‘a’, one (7.6%) out of thirteen subjects with score ‘b’, and two (33%) out of six subjects with score ‘c’. None of the subjects of the control group with score ‘d’ reported using the complex steps of the ‘RP’.

In the experimental group, it appeared that eight subjects with different FE3 scores ‘a’, ‘b’, ‘c’, and ‘d’ employed the ‘RP’ with four sequences of repetition which was less complicated than the control group, i.e. one (20%) out of five subjects with score ‘a’, one out (9.1 %) of eleven subjects with score ‘b’, and three (21%) out of fourteen subjects with score ‘c’, and three (50%) out of six with score ‘d’.

**Table 5.8 Types of repetition strategy – the experimental group**

		no	yes
1. flS+mtS	Count	25	11
	%	69.4%	30.6%
2. fsS+mtS	Count	35	1
	%	97.2%	2.8%
3. fwS+flS+mtS	Count	35	1
	%	97.2%	2.8%
4. fwS+flS+psS+mtS	Count	35	1
	%	97.2%	2.8%
5. fwR+mtR	Count	35	1
	%	97.2%	2.8%
6. fwS+flS+fwS+mtS	Count	34	2
	%	94.4%	5.6%
7. fwS+mtS	Count	30	6
	%	83.3%	16.7%
8. fwS+mtS+meS	Count	35	1
	%	97.2%	2.8%
9. fwW+mtW	Count	33	3
	%	91.7%	8.3%
10. fwS+mtS+fwW+mtW	Count	35	1
	%	97.2%	2.8%
11. fwR+mtR+mtW	Count	35	1
	%	97.2%	2.8%
12. flS+fwW+mtW	Count	35	1
	%	97.2%	2.8%
13. fwS+flS+meS+mtS	Count	35	1
	%	97.2%	2.8%
14. flS+fwW+mtS	Count	35	1
	%	97.2%	2.8%
15. fwR+fwW+mtW	Count	35	1
	%	97.2%	2.8%
16. fwR+prW	Count	35	1
	%	97.2%	2.8%
17. fwS+mtS+fwS	Count	35	1
	%	97.2%	2.8%
18. flS+fwS	Count	35	1
	%	97.2%	2.8%
19. fwS+meS+mtS	Count	35	1
	%	97.2%	2.8%
20. fwS+mtS+psS	Count	35	1
	%	97.2%	2.8%
21. fwS+flS	Count	35	1
	%	97.2%	2.8%
22. fwS+fwW+mtW	Count	35	1
	%	97.2%	2.8%
23. fwS+psS+mtS+meS	Count	35	1
	%	97.2%	2.8%
24. fwS+mtS+flS+mtS	Count	35	1
	%	97.2%	2.8%
25. fwS+flS+meS+mtS	Count	35	1
	%	97.2%	2.8%
26. fwS+mtS+mtW+meS	Count	35	1
	%	97.2%	2.8%

At this position it may be said that a strategy possessing deeper sequences or more complicated steps of the ‘RP’, particularly one with five steps upwards, seem to be less favourite for the subjects of both groups. The result thus agrees with Gu’s (2003) and Wakely’s (2003) remarks in that the simplest and easiest strategies with less complicated steps or ‘shallow strategies’ are naturally chosen to help in memorising new words.

From these findings, it can be assumed that an individual learner of both groups created the ‘RP’ to suit his/her own style and preference. The control group used many repetition steps or deeper sequences of repetition (i.e. repetition types 5, 12, 23, and 24 – six and five sequences), whereas the experimental group used the four sequences of repetition (i.e. repetition types 4, 6, 10, 13, 23, 24, 25, and 26).

### **5.3 Case-by-case TAP I and II translations and extracts of the translations**

Since we are focusing on the specific verbal report concerning the VLS employed during the vocabulary memory tasks, we make the translations concise and concentrate on those strategies used by the subjects. In the translations, we eliminated extraneous utterances such as ‘umm...’, pausing, laughing, coughing, and radio/music.)

In this study, we systemise the translation of the TA protocols of the control and the experimental groups as follows:

- Typefaces: subject’s original words (L1) are translated into English and typed in italics, in quotation marks.
- Some interesting words or sentences reported in L1 are typed in Thai, *in italics*, and translated into English. The L1 pronunciation is transliterated and kept as originally pronounced. Thai words/pronunciation are written according to Thai transliteration. A superscripted capital letter is placed at the end of a syllable/word to indicate one of the 5 Thai tones (e.g. L = low, M = middle, H = high, F = falling, and R = rising). In our study, we base our Thai Transliteration on Slaydon’s (2002) pattern, as it presents concepts clearly, is easy to use and understand (see Appendix 5.4).
- English vocabulary items from the task which were referred to by the subjects are typed in English and in bold type (non-italics).

- In order to make a clear translation, the researcher put some of her own explanation in square brackets [...] non-italic.
- Learners' pronunciation of English words is kept as originally pronounced. Obviously, many words are mispronounced. For example, 'martyr' is originally pronounced /μΑσ-τι|. In order to focus specifically on the VLS types used and to reduce the length of this thesis, we do not present every pronunciation of every English word.

### 5.3.1 The extracts of case-by-case translations – the control group

Since space is limited, we cannot present every protocol completely. The subjects' verbal reports shown in Table 5.9 to 5.13 are extracts of the TAPs I and II. We concentrate on the VLS they employed to memorise vocabulary tasks I and II and do not present each individual strategy, which each subject used to memorise the vocabulary items. In addition, the summary of the case-by-case translation of the five randomly selected protocols is presented in Appendix 5.3, along with the answers from the semi-structured interview

We alphabetically categorised the core types of VLS obtained from the protocols (the control group) into thirteen types, according to the type confirmed for reliability by the agreement of the four judges. We abbreviate the VLS as follows.

#### Vocabulary learning strategies

AF	=	affective factors	RP	=	repetition of various types
AS	=	association of various types	RW	=	review words in extra time
D	=	dictionary study	SD	=	syllabic decomposition
ID	=	idiosyncratic decomposition	SI	=	social interaction
MD	=	morphemic decomposition	ST	=	self-testing
N	=	keeping notes			
P	=	practising			
PH	=	physical action			

In order to see clearly the similarities and differences in the VLS varieties employed by the control group, the five representative extracts of protocols (TAPs I and II) are selected according to the learner's EV, e.g. previous scores of Foundation English 3 (FE3 scores). In the following tables we present extracts of TAPs I and II of four subjects whose FE3 scores are a, b, c and d. We also add one subject's extract which reports using some interesting VLS. In addition, the table have a fourth

column to indicate where the same or similar types of VLS from our study appear in Schmitt's (1997) VLS taxonomy. Strategies which do not match the VLS taxonomy of Schmitt will be discussed in more detail later. In addition, the definitions of VLS, e.g. COG, SOC, MEM, and so forth, used in Schmitt's taxonomy are already shown in Chapter Two, Table 2.2.

We will first look at the first verbal protocol shown in Table 5.9. S.30 is a female, third-year student from Social Science aged 20. Her previous FE3 score is 'a', so her ability in English is classified as 'excellent'. Besides using 'dictionary study', 'repetition', and 'physical action', she reported that she also employed two other strategies: 'reviewing during extra time', and 'keep practising'.

**Table 5.9 Extracts of case no. 30 – the control group**

SS	Think-aloud Protocols I	VLS coding	Schmitt's (1997) Taxonomy
S. 30 Ext.no.1 FE3 (A)	"I look up the definitions of every word in the English-Thai dictionary and the English-English dictionary. I also learn how words are used grammatically from the sample sentences in the English-English dictionary."	D	DET BLD and MLD
S.30 Ext.no.2	"I keep reading the words and L1 equivalent silently again and again. I spell each letter of a word aloud and repeat its L1 equivalent to the English definition aloud as well. For example, s-e-c-e-s-s-i-o-n-i-s-t, แสงแยก จากกลุ่ม (bang-yaeg <sup>M</sup> jahg klum <sup>M</sup> )"	RP	MEM Study the spelling of a word
S.30 Ext.no.3	"I make an English sentence with new words in order to practise using those words and to memorise them very well."	P	MEM Use new words in sentences
SS	Think-aloud Protocols II	VLS coding	Schmitt's (1997) Taxonomy
S.30 Ext.no.1	"I use the same techniques previously mentioned in TAP I to memorise vocabulary set II. I also spell each letter of a word aloud, pronounce the word three times, and write the Thai translation of the English definition. I also spell each letter of a word aloud, pronounce the word three times, and write L1 equivalent to English."	RP	MEM Study the spelling of a word
S.30 Ext.no.2	"While I am doing the spelling of the set of L2 words, I also use my forefinger to draw the letters of the words in the air."	PH RP	MEM Study the spelling of a word MEM Use physical action when learning a word

As we can see from S.30's TAPs I and II, she employed integrated vocabulary learning strategies to help her memorise new L2 words. This perhaps suggests that a good language learner tends to utilise many types of VLS as tools to help with language learning, particularly L2 word retention.

Next, Table 5.10 shows the verbal reports of S.11, who is a male, third-year student from Social Science, aged 20. His previous FE3 score is 'b'; so his ability in English is classified as 'good'. According to the extracts of his verbal protocols I and II, he used 'repetition strategies' similarly to those reported by S.30. However, S. 11 did not use oral repetition; presumably preferring to use written repetition instead. In his complete protocols, he said that he employed other strategies, such as, 'dictionary study', i.e. English-English dictionary (MLD). He said that he just looked up synonym/antonym of L2 words in the MLD. He also used 'association strategy' type 'f', linking a part of the new word with a part of a known L2 words, which have a similar sound.

**Table 5.10 Extracts of case no. 11 – the control group**

SS	Think-aloud Protocols I	VLS coding	Schmitt's (1997) Taxonomy
S. 11 Ext.no.1 FE3 (B)	"I simply write an English word and L1 equivalent to English, and I say the word and the definition in Thai many times."	RP	COG Written repetition
S.11 Ext.no.2	"Also I look at a small part of a new word and try to link the part, which has a similar sound to a known word, then create a story to help me memorise the new vocabulary and its definition. For example, ' <u>euphemistic</u> ', the underlined part is ' <u>mistic</u> ', to me; it has a similar sound to a known L2 word: ' <u>lipstick</u> '. The word lipstick makes me think of a woman that is a symbol of beauty, so I associate the meaning of lipstick and women to <b>euphemistic</b> which means a substitution of mild or pleasant expression for an offensive or unpleasant one."	AS	-----
SS	Think-aloud Protocols II	VLS coding	Schmitt's (1997) Taxonomy
S.11 Ext.no.1	"I write a word: ' <b>impunity</b> ', then I write its definition in Thai: สะเว่น ไม่ต้องได้รับการลงโทษ, /la-wen <sup>H</sup> , mai <sup>M</sup> tong dai <sup>M</sup> rub <sup>M</sup> kan <sup>M</sup> long-toad <sup>M</sup> / meaning in English: free from charge or punishment. I write it many times." [This subject said he mostly used written the repetition strategy to memorise L2 words and still employed the same techniques that he had used to memorise vocabulary task I to memorise vocabulary task II.]	RP	COG Written repetition



We note that S.11 also used integrated VLS to help him memorise new L2 words, but, not as many as S.30 did. **Interestingly**, both of them use similar traditional VLS, e.g. ‘RP’. Clearly, both subjects used other techniques which presumably suited each one’s style and preference.

The next subject is S.28 who is a male, fourth-year student from Natural Science field, aged 22. His previous FE3 score was ‘c’. As we can see from the extracts drawn from Taps I and II, the VLS he employed were ‘keeping notes’, ‘social interaction’, ‘affective factors’, and ‘repetition’.

**Table 5.11 Extracts of case no. 28 – the control group**

SS	Think-aloud Protocols I	VLS coding	Schmitt’s (1997) Taxonomy
S. 28 Ext.no.1 FE3 (C)	“I write a set of words on a piece of paper with L1 equivalent to English. I write the pronunciation of the word in Thai, so that I can memorise how a word is pronounced. I stick the piece of paper in my bedroom, so that I can often see the words and memorise them.”	N	COG Take notes
S.28 Ext.no.2	“I ask a friend /brother/sister to check if I can remember the set of words by telling them to ask me the meanings of the words. For instance, my friend asks me to give the meaning in Thai of <b>erratic</b> – I say <i>ประหลาด ไม่เป็นปกติ</i> (pralad <sup>M</sup> , maipen <sup>M</sup> pakati <sup>L</sup> )”	SI	SOC Ask classmates for meanings
S.28 Ext.no.3	“I try to memorise new words in the early morning, as I can remember the words very well.”	AF	-
SS	Think-aloud Protocols II	VLS coding	Schmitt’s (1997) Taxonomy
S.28 Ext.no.1	“I spelled each letter by letter of L2 word aloud and saying L1 equivalent to English definitions many times for memorising vocabulary set II.” For example, <b>p-u-s-i-l-l-a-n-i-m-o-u-s</b> <i>ซึซลาด</i> (kee <sup>M</sup> -klahd <sup>L</sup> ), <i>ซึซลาด</i> (kee <sup>M</sup> -klahd <sup>L</sup> ), <i>ซึซลาด</i> (kee <sup>M</sup> -klahd <sup>L</sup> ),....” [The subject reported that he still used the same techniques as previously stated in memorising vocabulary task one.]	RP	MEM Study spelling of a word

From S.28’s verbal protocols I and II, we notice he used integrated VLS. He also employed the traditional ‘RP’ strategy. He, however, used three different types of VLS, e.g. ‘keeping notes’, ‘social interaction’ and ‘affective factors’. In addition he performed his own variety of ‘keeping notes’, for example, he also recorded the vocabulary items on a cassette and regularly repeatedly listened to the cassette in the

morning on the bus to the University. It can be noticed that he integrated three to four strategies (i.e. ‘N’, ‘SI’, ‘AF’, and ‘RP’) in order to memorise the set of vocabulary.

Interestingly, S.28 reported that he memorised new words in the early morning, as it helped him remember the new words very well. We classified his strategy as ‘affective strategy’. By ‘AF’ we mean any strategies concerned with stimulating a learner’s feelings which can directly affect the learning process. However, ‘AF’ does not appear in Schmitt’s (1997) VLS taxonomy. We presume that ‘AF’ could help some learners strengthen their L2 word retention. Hence, it perhaps could be placed in the category of consolidation strategies under the sub-category of ‘memory strategy’ (MEM).

Next, S.17 was a female, fourth-year student from Natural Science field, aged 21. Her previous FE3 score was ‘d’, classified as a poor achiever. She reported that she utilised the ‘repetition strategy’ to memorise L2 words in TAP I and used the same strategy in TAP II. She also reported using other methods, e.g. keeping notes, and dictionary study (D).

**Table 5.12 Extracts of case no. 17 – the control group**

SS	Think-aloud Protocols I	VLS coding	Schmitt’s (1997) Taxonomy
S. 17 Ext.no.1 FE3 (D)	“I repeatedly spell each letter of a word aloud and saying Thai translation of the English definition of each word for many times. I spell each letter of ‘magnate’ aloud: <b>m-a-g-n-a-t-e</b> , คนใหญ่โต มีอิทธิพล นครธุรกิจ ใหญ่/ <i>kon-yai-to<sup>M</sup> me-ittipon<sup>M</sup> - nukturakit<sup>M</sup> - yai<sup>M</sup>ʃ</i> ” [The subject repeats the spelling and the definition many times.]	RP	COG Verbal repetition
S.17 Ext.no.2	“I also check whether I can memorise the words and definition by covering the Thai translation of the meaning of English words, then I try to think of the meaning of each English word.”	ST	MET Testing oneself with word list
SS	Think-aloud Protocols II	VLS coding	Schmitt’s (1997) Taxonomy
S.17 Ext.no.1	“I spell each letter of an English word: <b>p-r-a-g-m-a-t-i-c</b> many times then say the English definition translated into Thai many times - ในทางปฏิบัติ/ <i>nai-tang-patibud<sup>M</sup>ʃ</i> .” [The subject keeps repeating the set of words according to her method of repetition as she did before.]	RP	COG Verbal repetition
S.17 Ext.no.2	“I again cover the meanings translated into Thai and I try to think of the meaning of each word in order to check if I can remember them.”	ST	MET -Testing oneself with word list

In addition, S.17 reported that she looked up the words and definitions in the BLD in order to help her memorise the words effectively. In memorising the set of words in vocabulary tasks I and II, the subject reported that she also used ‘keeping notes’ strategy. In her notebook, she wrote L2 words with the L1 equivalent to the English definition.

Clearly, according to her FE3 score, S.17 was a poor achiever. She used more than two strategies to help her remember L2 words. However, she could not do better in her post-test. Her post-test score (33.33 %) was lower than her pre-test score (44.83%). Presumably, though she used integrated strategies, she might not have known how to operate them properly or to make use of them effectively.

Next, we look at an extra protocol reported by S.5 who was a female third-year student from Social Science field, aged 20. Her previous FE3 score was ‘b’ which is classified as ‘good’ English ability.

The extracts of TAP I and II reveal that S.5 used a variety of VLS (e.g. ‘RP’, ‘AF’, ‘AS’, and ‘ST’). In fact, she reported in her complete protocols I and II that she also employed other VLS, for example, ‘dictionary study’ (BLD and MLD), and ‘practising’ strategies.

In terms of using ‘association strategies’ shown in extract no. 2, S.5 used the association type ‘g’, relating the similar sound of L2 letter to L1 letter, then the similar meaning of the L1 word is linked with the meaning of the L2 word.

With regard to S.5’s ‘AS’, we noted a deep elaboration of L2 word and its meaning. According to her protocol, she linked the sound of L2 letter ‘m’ to a similar sound of L1 letter ม ม้า (mor<sup>M</sup>- ma<sup>H</sup>) and she associated the sound to the L1 word which had close meaning to the L2 word. Then, in an attempt to memorise ‘murky’ she related the sound of L1 letter to L1 word มีดครีม (meud<sup>M</sup> krum<sup>H</sup>) meaning dark/dim which is close to the definition of the L2 word.

Clearly, S.5’s ‘AS’ is to some extent similar to ‘KW’. It can be perhaps assumed that a learner with ‘good’ English ability could think of a deep strategy when to memorise L2 effectively.

**Table 5.13 Extracts of case no. 5 – the control group**

SS	Think-aloud Protocols I	VLS coding	Schmitt's (1997) Taxonomy
S. 5 Ext. No. 1 FE3 (B)	<p>“I write a set of words with the Thai equivalent of the definition in English many times and I write more definitions in Thai and English, synonyms/antonyms after each word. For example: ‘indigenous’ มีอยู่/เกิดในท้องถิ่น <b>พื้น</b> (<i>mee<sup>M</sup>-yu<sup>L</sup>, keud<sup>M</sup>-nai<sup>M</sup>-tongtin<sup>M</sup>-nun<sup>H</sup></i>) means existing in or belonging to an individual inherently – synonym: <b>native</b>, and so on; <b>antonym: exotic, foreign, alien.</b>”</p>	RP	COG (Written repetition)
S.5 Ext. No. 2	<p>“Another word is ‘<b>murky</b>’; the letter ‘m’ has a similar sound to Thai letter ม <b>มั่ว</b> (<i>mor<sup>M</sup>-ma<sup>H</sup></i>) which is the first letter of a Thai word which has a similar meaning to ‘murky’. I then link it to the Thai word which means dark or dim because of smoke or fog. The word started with (<i>mor<sup>M</sup>-ma<sup>H</sup></i>) มีดครึม (<i>meud<sup>M</sup> krum<sup>H</sup></i>) meaning dark/dim, and is also linked to another word which has related meaning to <b>murky</b>. The word in Thai is หมอก (<i>mok<sup>L</sup></i>) meaning ‘<b>fog</b>’, so I can remember the meaning of the word ‘<b>murky</b>’.”</p>	AS	-----
SS	Think-aloud Protocols II	VLS coding	Schmitt's (1997) Taxonomy
S. 5 Ext. No. 1	<p>“In order to check if I can remember the vocabulary items set II, I do a self-test by writing out the whole set of words with Thai definitions again onto a piece of paper. For example, I write <b>fraudulent</b> saying aloud the word adding L1 equivalent: โกงปลอม (<i>gong<sup>M</sup> plaum<sup>M</sup></i>).” [This subject said that she also used the same techniques for memorising words in Vocabulary set I to memorise twenty-seven words from vocabulary set II.]</p>	ST	MET Testing oneself with word list
S. 5 Ext. No. 2	<p>“I say the words with its definition in Thai aloud many times in the early morning.” [The subject mentioned that she had high concentration, and she could remember vocabulary very fast and effectively in the early morning.]</p>	RP AF	COG Verbal repetition

The extracts of the five cases’ verbal reports obtained from the control group can now be summed up as follows:

- The subjects similarly reported using the similar types of VLS in memorising vocabulary tasks I and II. The most frequently used strategy for memorising L2 words is ‘RP’. Most subjects employed traditional strategies in memorising new words.
- The subjects also used two or three strategies in combination.
- The subjects did not report other varieties of deep VLS (e.g. ‘peg method’, ‘semantic mapping’, ‘keyword method’.)

Comparing the use of VLS between TAP I and II, there was not much change in the use of VLS. The subjects tend to stick with the simple and classical one which is ‘RP’.

Next, we will go through the extracts of the protocols I and II reported by the experimental group, presenting in parallel to the control group’s.

### **5.3.2 The Extracts of case-by-case translations – the experimental group**

As with the control group, we selected four representative protocols (TAP I and II) from the thirty-six verbal reports. We also added extra protocols of a fifth subject who revealed some interesting VLS. The protocols are based on the subjects’ FE3 scores. We use the same translation system as for the control group described earlier in 5.3.

We looked at the subjects’ verbal reports (TAP I and II) to find out which types of VLS the learners employed to memorise vocabulary tasks I and II before and after the training in the five VLS. The summary of the case-by-case translation of the five verbal protocols is presented in Appendix 5.3, along with the answers from the semi-structured interview.

We specifically focus on the VLS used to memorise vocabulary items and will refer to the types using the following abbreviations listed as follows:

#### **Five VLS taught in the classroom**

DW	=	Dictionary work method
KW	=	Keyword method
SC	=	Semantic context method
GP	=	Grouping method
SM	=	Semantic mapping method

As can be seen from the list of VLS in 5.3.1, the same thirteen types of VLS were similarly used by the experimental group. In TAP II, it was found that the experimental group had drastically changed their use of VLS in that they employed more of the five VLS taught in class. The VLS reported are given in detail in the following TA protocols. The extracts of TAPs I and II are presented in the same table format which was used for the control group.

Table 5.14 shows the verbal reports of S.22 who is a male, third year student from Natural Science, aged twenty. His previous FE3 score was ‘a’ which indicates an excellent English ability.

**Table 5.14 Extracts of case no. 22 – the experimental group**

SS	Think-aloud Protocols I	VLS coding	Schmitt's 1997 Taxonomy
S.22 Ext.no.1 FE3 (A)	<p>“I keep saying an English word aloud, saying English letter by letter, say the word aloud again, then I say aloud the L1 equivalent to the English meaning”... “Saying aloud: ‘indigenous’, and say aloud each English letter: <b>i-n-d-i-g-e-n-o-u-s</b>, and say the word aloud in English: /ɪvʊdɪdʒɪnəs/ then I say the L1 equivalent to the English meaning aloud <b>ยฺยู่ทีท้งถินซัน</b> (yu-te<sup>M</sup> tong<sup>H</sup>-tin<sup>M</sup>-nun<sup>H</sup>).”</p>	RP	COG (Verbal repetition)
SS	Think-aloud Protocols II	VLS coding	Schmitt's 1997 Taxonomy
S.22 Ext. no.1	<p>“<b>Adjourn</b> /ad-jern/ I pronounce the word first, then spell each letter of the word aloud, /a-d-j-o-u-r-n/ and saying the Thai definition, /la<sup>M</sup>-cha<sup>H</sup>/ <b>ล่าช้า</b> then I look at the second syllable: <b>jour</b>n; I think of a <b>jour</b>ney which means travelling from one place to another when the prefix: ‘ad’ is added, it makes me think of something added to ‘delay’, ‘drag’, or to make a slow ‘journey’. Thus, I can remember the meaning of adjourn which means: ‘delay, postpone’.”</p>	RP AS MD	MEM Study the spelling of word -- MEM Affixes and roots
S.22 Ext. no.2	<p>“<b>Deterrence</b> /de-te-rence/ (<b>d-e-t-e-r-e-n-c-e</b>); the sound of the third syllable is similar to the Thai word <b>ซ่อนเร้น</b> (son-ren<sup>H</sup>) which means ‘to hide’, thus, there is something hiding. So, I think that if there is something to hide from others, it needs to have an obstruction or trying to hide it from sight or preventing anyone from seeing the hidden things. So, I make use of the keyword method which is suitable for helping me memorise this word.”</p>	KW	MEM Use keyword method
S.22 Ext. no.3	<p>“<b>Plaintiff</b> /pleɪntɪf/ I look at the word and separate it into two parts: <b>plain</b> and <b>tiff</b>. The former looks similar to complaint/complainant meaning (<b>ฟ้องร้อง</b>) (phong-rong<sup>H</sup>) which means someone who makes a formal complaint in a court of law. The latter is similar to <b>if</b>, meaning <b>provided that</b>. Thus, I reverse the syllables to ‘<b>iff</b>plaint’ and make a story that: If there is a complaint, there will be someone who is the make a complainant (e.g. <b>plaintiff</b>). So I link this story to the meaning of the word ‘<b>plaintiff</b>’. Thus, I can remember the word <b>plaintiff</b>, as the meaning of the word <b>complaint/complainant</b> helps me remember the meaning of the new word <b>plaintiff</b>.”</p>	AS	-

S.22's extract no. 1 (TAP I) shows that he employed 'repetition strategy' type six, i.e. fwS + flS + fwS + mtS. In his TAP I, he used only 'RP' for memorising vocabulary task I.

Next, as can be seen from S. 22's TAP II (Ext.no.1), he reported using integrated types of VLS, i.e. 'RP', 'AS', and 'MD'. Also, in Ext.no.2 he initially said the word aloud and also each letter of the word. In the deeper step, he noticed that the third syllable of the word: **deterrence**, reminded him of an L1 word that had a similar sound as the third syllable. This showed that the subject used the VLS 'KW' in which he had been trained to help in helping him memorise the word. From his Ext. No. 3, it can be seen that he used 'association strategy' type 'f', i.e. linking a new L2 word with a part of a known L2 word and making up a story to link the meaning of both words to help him memorise the meaning of the new word.

In his complete protocol (TAP II), he reported that he used other VLS, such as 'association of various types', 'dictionary work', 'morphemic decomposition', and 'semantic mapping. He had a better post-test score (94%) after receiving VLST. His percentage score in the pre-test was 86%. His FE3 score was 'a': excellent general English ability. Both pre and post tests and from the verbal reports suggest that the good achiever probably improves his/her L2 word retention when he/she has received VLST.

Table 5.15 shows the protocols of S.30 who is a female fourth-year student from Natural Science, aged twenty-two. Her previous FE3 score was 'b', classified as 'good' ability in English.

According to her TAP I (Ext.no.1 and 2) the subject employed two strategies: 'RP' strategy type 1, i.e. flS + mtS, and 'association strategy', type 'a', linking a new word that has a similar sound to a known L2 word.



**Table 5.15 Extracts of case no. 30 – the experimental group**

SS	Think aloud Protocols I	VLS coding	Schmitt's (1997) Taxonomy
S.30 Ext.no.1 FE3 (B)	"I spell each letter aloud and say the L1 equivalent to the English definition many times".	RP	MEM Study the spelling of word
S.30 Ext.no.2	"I link a new word with known words, the new words that have a similar sound to known words. For example, <b>Dearth</b> has a similar sound to <b>death</b> ; the meaning is not the same as <b>dead</b> . The meaning is a <b>scarcity or lack of</b> ."	AS	---
SS	Think-aloud Protocols II	VLS coding	Schmitt's (1997) Taxonomy
S.30 Ext.no.1	"I use the keyword method, for example, <b>Martyr</b> has similar sound to แม่/mae <sup>M</sup> / Thai, meaning mother who always makes a great sacrifice, so I can remember the definition of the word: a person who makes a great sacrifice, and will willingly die or is killed for the sake of principle or belief."	KW	MEM Use keyword method
S.30 Ext.no.2	"I make up a Thai story to make me remember the words more effectively. ในการเลือกตั้งในระบอบประชาธิปไตยจะต้องทำ plebiscite คือการลงคะแนนเสียงโดยประชาชนทั้งหมดแต่ปัจจุบันก็คงยังมีการ fraudulent ก็คือการฉ้อโกงซึ่งจะต้องมี accomplice คือผู้สมคบกระทำความผิด ในการทำแบบนี้เป็นการกระทำที่ breaches คือการกระทำที่ผิดกฎหมายแล้วก็จะเกิดการ indict(ed) (indictment) ก็คือการฟ้องร้องคนขึ้น เมื่อมีเรื่องมีราวคนก็จะมี dissident คือการไม่ลงรอยกัน" [Translation of the above story into English: According to the Democratic system we must abide by a <u>plebiscite</u> that is the direct vote of all the members of an electorate on an important public question. However, at present we still see an attempt of such a <u>fraudulent</u> act (by so-called politicians) that is a deceitful or dishonest performance, which is formed by <u>accomplices</u> , a group of persons who together help commit a crime or wrongdoing. Such an act is a <u>breach</u> , an act of breaking the law, an agreement, or code of conduct. It can yield an <u>indicted</u> event (indictment), which is a formal charge or accusation of a serious crime. Finally, the indictment leads to a <u>dissident</u> situation in that the people are set against each other.]	AS	---

In her verbal report (TAP II), Ext.no.1, S.30 referred to a Thai word: แม่/mae<sup>M</sup>/ as a keyword that has a similar sound to the first syllable of the L2 word: **'martyr'**, then she made an imagery linkage by making up a story linking the meaning of L1 to the L2 word. She precisely followed the operational step of the 'KW' method which had been taught in class.



Clearly, her TAP II reveals that she used the VLS she had been taught, i.e. the 'KW' method and the 'AS' type 'c', which is called 'syntagmatic association'. Interestingly, she used the strategies with deeper operational steps. For example, with the 'AS' type 'c', she perhaps had to think of the related meaning of the L2 words which she decided to group together and next she had to think of the story in L1 to fit the meanings of each L2 word. Other strategies which she also reported were 'semantic mapping', 'morphemic decomposition', and 'association strategy'.

It can be assumed that after VLST, she was influenced by the five VLS which involve deeper operational steps. So, she adapted the characteristics of the five VLS to create her own VLS which suited her own style and preference. As can be seen in Ext.no.2, she used 'syntagmatic association', to memorise the set of L2 words. Clearly, performing this type of association involves deeper steps. Presumably, it leads to more effective retention. We will take this point into account and elaborate more on the influence of VLST in the discussion part.

S.3 was a male third-year student from Natural Science, aged twenty. His FE3 score is 'c' which means his general English ability is moderate or fair. He reported in TAP I that he used 'keeping notes' and 'AS' strategies to memorise L2 words. He did not use 'RP'. According to his TAP I, Ext.no.1, he used the 'keeping notes' strategy, recording or writing L2 vocabulary on a piece of paper and sticking it around his house. Since he saw the words often, he could memorise them. He also used the 'association strategy', linking a new word that had similar sound to a known word.

He also reported using other strategies, for example, 'RP' (fwS+fwW+mtW), 'ST' (writing L2 words by looking only at the L1 equivalent to the English meaning), and 'SI' (asking a friend to dictate a set of L2 words to him).

In his complete protocols he said that he used another VLS: 'social interaction' - he sometimes asked a friend to help him. For example, his friend dictates L2 words to him and he writes down the L2 words and their meanings. He reported that this technique helped him to memorise L2 words.

TAP I - {S.3}: *"I also ask a friend to dictate the set of words. My friend normally says each word aloud from the set of vocabulary in English and I write each one with the meaning in Thai."*

**Table 5.16 Extracts of case no. 3 – the experimental group**

SS	Think-aloud Protocols I	VLS coding	Schmitt's (1997) Taxonomy
S.3 Ext.no.1 FE3 (C)	"I stick the words that I have written down on a piece of paper around my house so that I can see them very often and I can remember them later."	N	COG Take notes
S.3 Ext.no.2	"I link a new word with known words which have a similar sound, for example, <b>hefty</b> has similar sound to <b>heavy</b> and as I know the meaning of <b>heavy</b> , I can memorise the meaning of <b>hefty</b> ."	AS	---
SS	Think-aloud Protocols II	VLS coding	Schmitt's (1997) Taxonomy
S.3 Ext.no.1	" <b>'Jeopardise'</b> has similar sound to a Thai informal sentenc. When I hear the word I think of that: (L) met my girlfriend's dad unexpectedly. (ผม)เจอ爸พ่อดี... (/jeo <sup>L</sup> -pa <sup>HR</sup> -pordee <sup>M</sup> )" [The sentence has pro-drop parameters, as the subject (ผม) or (I) was omitted from the sentence.] [Learner explained] "If I saw my girl friend's dad unexpectedly (he is extremely strict), (while I am talking to my girlfriend), perhaps, I might be in great danger. So, it makes me memorise the meaning of the word." [The learner explained that his girlfriend's dad was rather strict, he did not like seeing his daughter talking with any boys.]	KW	MEM Use keyword method
S.3 Ext.no.2	" <b>'Despicable'</b> means (Thai) ร้ายกาจมาก/rai <sup>H</sup> -kad <sup>M</sup> -mak <sup>M</sup> /, loathsome, hateful, extremely unpleasant. I remember this word by drawing a picture of a story I creatively made up. The picture is a spy holding a cable. When I say the word separately:---/de-spi-ca-ble/(spi-spy), I notice the unit 'spi' and 'cable', which are similar to the known words: 'spy' and 'cable'. So, I create a story like: A spy is hanging on a cable; the spy must be very skilful and dangerous at the same time. Anyway, he is not a good person. On the contrary, an extremely unpleasant person, he is. By using this method, I can remember the meaning of the word ' <b>despicable</b> ' very well."	ID AS	---

It can be seen from his TAP II, Ext.no.1 that S.3 employed 'KW' to help him memorise L2 words. Interestingly, he said that he thought of a Thai sentence when he saw the English word **jeopardise**. In fact, it is a characteristic of 'KW' is to make use of an L1 word that has similar sound to an L2 word, i.e. Thai word: ข้าวสาร /khaaw<sup>M</sup> saan<sup>R</sup>/ meaning 'uncooked rice', has a similar sound to the English word: 'council', Nation (1990, p. 166).

Ext. no. 4 reveals that he used integrated VLS, as he firstly separated the word into small readable parts, then looked for meaningful parts that he could link with

known words. After that he managed to make up a story to link the meaning of the known words with the new word.

According to his TAP II, he also used another VLS he had been taught ‘semantic mapping’. He still used the strategies he had reported in TAP I (e.g. ‘RP’, ‘AS’). With association of words, he used the deeper steps of association when to memorising the L2 words in vocabulary task II. We will further discuss the plausible influence of the ‘KW’ upon the deeper steps of the ‘association strategy’ in the next chapter.

Table 5.17 shows the extracts of S.9’s verbal reports. He was a male fourth-year student from Natural Science, aged twenty-one. His previous FE3 score was ‘d’ which means he had a poor general English ability.

**Table 5.17 Extracts of case no. 9 – the experimental group**

SS	Think-aloud Protocols I	VLS coding	Schmitt’s (1997) Taxonomy
S.9 Ext.no.1 FE3 (D)	<p>“I say each word aloud many times with L1 equivalent to the English meaning and write the word with the definition in L1 many times.”</p> <p>... <b>‘indigenous’</b>, /ɪvʊdɪdʒɪz↔v↔σ/เกิดอยู่ที่ท้องถิ่นนั้น /keod<sup>M</sup>-yu<sup>L</sup>-tee<sup>M</sup>-tong<sup>H</sup>-tin<sup>L</sup>-nun<sup>H</sup>/,... [The learner said the word and its definition in Thai about four times, then he wrote the word and the meaning in Thai. ]</p>	RP	COG Verbal repetition
SS	Think-aloud Protocols II	VLS coding	Schmitt’s (1997) Taxonomy
S.9 Ext.no1	<p>“I also add a letter ‘E’ after the letter ‘R’ to make it into a meaningful known word: <b>‘insure’</b>: (in-sure-mountable); then I link the negative meaning: ‘not certain’, ‘not sure’ - for example, not sure to overcome something, or very hard to make it happen), to the meaning of the new word: too difficult to deal with, incapable of being overcome.”</p>	AS	---
S.9 Ext.no2	<p>“<b>moribund</b> /mɔɪpɪβəvɔ̃/– makes me think of a Thai phrase: มอดม้วยขอลัย (moad<sup>L</sup>-mauy<sup>H</sup>-bun-lai<sup>M</sup>), meaning <b>end, dead, or dying</b> and the like. Then, a story is made up to link both words: The manager of a <b>‘moribund’</b> company is getting closer to the end of his business.”</p>	KW	MEM Use keyword method

In his TAP I, Ext.no.1, he reported using only the ‘RP’ strategy (type10: fwS+mtS+fwW+mtW) to memorise L2 words.

According to his TAP II, Ext.no.1, he said he used ‘AS’ type ‘j’ an ‘idiosyncratic modification’. He modified the part of an L2 word by adding a letter ‘e’ or a vowel

into a part of the word, to make it into a meaningful word which looks like a known L2 word. Thus, he linked the meaning of the new word to the known word to help him memorise the new word. In Ext. no.2 he reported that he used the ‘KW’ to help him memorise the L2 word, ‘moribund’. Clearly, as can be seen from the protocols II, the subject raised his level of using VLS after receiving VLST. Perhaps, he paid more attention to the word part in order to use some parts or a part to hook onto known words.

Notably, Ext.no.2, the ‘KW’ method was used with a wider scope. The subject not only thought of linking an L1 word, which has similar sound to an L2 word, but also, he used an L1 phrase, มอดม้วยบงลสย (moad<sup>L</sup>-mauy<sup>H</sup>-bun-lai<sup>M</sup>), meaning ‘end’, ‘dead’, or ‘dying’, and the like, which he thought had similar sound to the L2 word, and he made up a story to link the meaning of L1 phrase to the L2 word.

Presumably, each individual learner has his/her own vision or imagination, which perhaps influences their perception and experience. At this point, we may assume that learners who have more creative thinking and prefer a visual learning style may make better use of the ‘KW’ method than those who have limited creativity and visual learning style, regardless of their English ability.

The following table shows extra protocols of S.14 who was a male second-year student from Natural Science, aged nineteen. His previous FE3 score was ‘c’, so he is classified as having fair to moderate in English ability.

According to his TAP I, Ext.no1 and 2, he used ‘RP’ type 7, i.e. fwS + mtS, and ‘morphemic decomposition’, making use of affixes in order to memorise L2 words. Moreover, in his complete protocols he reported that he employed other strategies, such as ‘AS’ of various types, i.e. linking L2 words with known L2 words that are similar or near synonyms; and linking them together.

In TAP II, (Ext.no.1 and 2), S.14 used the VLS taught in class, e.g. ‘KW’ and ‘SC’. In his complete TAP II, he reported that he also used three other strategies in which he had been trained, i.e. ‘SM’, ‘DW’ and ‘GP’.

**Table 5.18 Extracts of case no. 14 – the experimental group**

SS	Think-aloud Protocols I	VLS coding	Schmitt's (1997) Taxonomy
S. 14 Ext.no.1 FE3 (C)	"I normally say a word with its L1 equivalent to English definition many times (2-3 minimum). For instance,[ a learner said aloud the word 'indigenous'] meaning: <i>อยู่ที่ท้องถิ่นนั้น</i> (yu <sup>L</sup> -tee <sup>M</sup> -tong <sup>H</sup> -tin <sup>L</sup> -nun <sup>H</sup> ), I repeat [saying aloud] - 'indigenous' meaning: <i>อยู่ที่ท้องถิ่นนั้น</i> (yu <sup>L</sup> -tee <sup>M</sup> -tong <sup>H</sup> -tin <sup>L</sup> -nun <sup>H</sup> )." [The learner repeated the same steps three times.]	RP	COG Verbal repetition
S.14 Ext.no.2	"I use prefixes as a clue to help me memorise words (e.g. 'unwittingly'). 'un' is prefix of the word; it generally means 'not', opposite of, or contrary to. It helps me in that the meaning of the word must be something negative. So, I can remember that the word means not knowing, not intended, or unaware"	MD	MEM Affixes and roots
SS	Think-aloud Protocols II	VLS coding	Schmitt's (1997) Taxonomy
S.14 Ext.no.1	" <b>accomplice</b> The underlined part has a similar sound to Thai word: <i>ผิด</i> (phid <sup>L</sup> ). In Thai, it means a wrongdoing, illegal action. So, I linked the underlined part and its Thai meaning to the meaning of <b>accomplices</b> : a person who joins with other people to do an unlawful act."	KW	MEM Use keyword method
S.14 Ext.no.2	"I make an English sentence that can help me memorise the words. For example, ' <b>abdicate</b> ': The king of this country <u>was</u> ' <b>abdicated</b> ' from the throne. [The learner pronounced: torn for throne]. Then, ' <b>debacle</b> ': Some countries <u>has</u> a lot of ' <b>debacle</b> ' earthquake. [The learner said this in an L1 sentence and later said in an English sentence. We can note some problems of grammatical errors as well as putting a new word in an inappropriate context. ]"	SC	MEM Use new word in sentences

Obviously, when we look at the Ext. no.2, we can see that he tried to use the new words in English sentences, constructed by himself, in order that the sentences would be likely to help him memorise the new words. Grammatically, the sentences are not perfectly correct, however, they convey the core meaning of the L2 word. Moreover, it was perhaps a bit hard for him to make his own English sentences with no mistakes for the first time.

In short, the protocols (TAP I and II) of the experimental group clearly show the subjects' use of VLS. Some notable points to take into consideration are summed up as follows:

- The subjects' verbal reports clearly reveal their adoption of the deeper types of VLS and the VLS taught in class to help them memorise vocabulary task II.
- The subjects tended to adapt the characteristics of the 'KW' method to help them memorise L2 words (see Table 5.16, S.3, TAP II, Ext.no.1 and Table 5.17, S.9, TAP II, Ext.no.2).
- Presumably, the subjects were influenced by the VLS taught, as they reported using the deeper steps to memorise L2 words in TAP II.
- It can be assumed that after the VLST, most of the subjects were aware of the importance of vocabulary learning and paid more attention to their method of memorising L2 words and thus became more effective.

We shall later look at the results obtained from the semi-structured interview. Then, the results from TAP I and II, and the semi-structured interview will be taken to confirm the reliability of the quantitative result presented in Chapter Four. The overall result will be discussed in 5.5, the discussion part.

#### **5.4 Semi-structured interview**

The interviewees were randomly selected by drawing lots as described earlier in the research methodology (see 3.2.3.3). The twenty interviewees' answers from each of the two groups are calculated as a percentage of sameness and difference and grouped accordingly.

##### **5.4.1 Results from the twenty interviewees – the control group**

We asked each individual interviewee to answer five questions. The summary of the interviewees' responses is tabulated in Table 5.19. Furthermore, the numbers of subjects using each strategy (answers to Q.2) are shown graphically in Figure 5.5 and the frequency use of each strategy (answers to Q.2, Q.4, and Q.5) are shown in Table 5.20.

The summary of interviewees' responses to the five questions is presented in Table 5.19 as follows.

**Table 5.19 Summary of the interviewees’ responses to five questions**

<b>Questions</b> <b>Part one - Vocabulary learning strategy</b>		<b>Summary of the answers into percentage</b>	
Q.1	How do you normally study vocabulary?	Twelve interviewees (60%) out of twenty interviewees answered that they used ‘RP’.	
Q.2	What technique or techniques, if any, do you use to help you deal with vocabulary learning, especially with remembering words?	Especially for memorising L2 words twenty interviewees (100%) used ‘RP’ of many types.	
<b>Part two - Learners’ point of view about their vocabulary learning</b>		<b>Summary of the answers into percentage</b>	
Q.3	In your opinion, what makes words easy or difficult for you to remember? Please discuss.	Twelve interviewees (60%) said that The short words were easy to memorise. See further detail in 5.4.1 (Q.3)	
<b>Part three</b> <b>Learners’ view about vocabulary strategy training</b>		<b>ANSWERS</b> <b>‘YES’ (%)</b>	<b>ANSWERS</b> <b>‘NO’ (%)</b>
Q.4	Do you think you need to attend the VLS training session? Why? or Why not?	Eighteen interviewees (90%)	Two interviewees (10%)
<b>Part four</b> <b>Views on the extra work you did in class</b>		<b>ANSWERS</b> <b>‘YES’ (%)</b>	<b>ANSWERS</b> <b>‘NO’ (%)</b>
Q.5	Do you think the extra practice in the course activities (reading and handling newspaper articles) was useful? In what way? For what?	Twenty interviewees (100%)	-

Question 1 in the semi-structured interview Q.1, ‘How do you normally study vocabulary?’, is not designed to find exactly which VLS the interviewees used to help them memorise L2 words, but to obtain general answers about how they study L2 vocabulary.

The result shows that twelve (60%) out of twenty subjects normally studied vocabulary by using ‘Repetition strategy’ of various types. When we look at the five control subjects mentioned earlier in Tables 5.9 to 5.13, we notice that four of them reported using ‘RP’ together in conjunction with other strategies. One subject (S.28) reported using ‘RP’ in TAP II. We present the five subjects’ interview answers as follows.

{S. 30}: “I studied vocabulary by reading English articles from newspapers; also, I read English advertisements along the roads in order to increase my vocabulary.”



{S.11}: *“I simply repeat aloud spelling each letter of an English word. Then I pronounce the English word followed by saying the Thai translation of the English definition. Also, I write the words with the Thai translation.”*

{S.28}: *“I normally write an English word with its Thai translation of the English definition many times.”*

{S.17}: *“Normally, I spell English vocabulary aloud letter by letter many times, and I say the Thai translation of the English definition many times as well.”*

{S.5}: *“I used integrated strategies; one of them is the ‘repetition strategy’. I also look up English words in the English-Thai and English-English dictionaries. Then I write the English words many times.”*

Moreover, the responses to Q.1 reveal that the twenty interviewees used a variety of techniques to memorise L2 words. Most interviewees’ answers show that they used integrated VLS to memorise L2 words.

The interviewees’ answers are summarised as follows:

- Seven (35%) of the twenty interviewees normally learned vocabulary receptively by ‘practising’, e.g. reading English magazines, newspapers articles, watching English news programmes on television, listening to English songs.
- Seven (35%) normally used ‘dictionary study’, especially the bi-lingual dictionary (BLD) to search for further information about L2 words, i.e. checking the definition and spelling.
- Four (20%) occasionally used ‘dictionary study’: the monolingual dictionary (MLD) to look up synonyms and samples of English sentences.
- Three (15%) normally learned vocabulary by using the ‘association strategy’ of various types, i.e. linking L2 words to synonyms, related words or similar sounds.
- Three other subjects (15%) normally used the strategy of ‘keeping notes’ of various types, e.g. keeping notes on a piece of paper, in a course-book, or in a notebook.
- Three other subjects (15%) normally learned vocabulary by regularly ‘Reviewing L2 words’ in extra time.
- Two (10%) usually used the ‘self-test’ strategy; one learner (5%) used ‘physical action’ in combination with ‘Repetition strategy’ to learn vocabulary, and one learner (5%) usually used the ‘social interaction’ strategy, i.e. asking friend to help by dictating.



Clearly, the result from Q.1 suggests that most of the subjects employed various types of the ‘repetition strategy’ when learning vocabulary, especially in memorising L2 words. In addition, the interviewees generally used integrated VLS to help them retain L2 vocabulary.

Next, Q.2: ‘In case you use a technique or techniques to help you learn vocabulary, especially to memorise words, what is it or what are they?’ Figure 5.5 and Table 5.20 show the specific VLS the interviewees used to retain L2 vocabulary. It clearly shows that the twenty learners employed various types of VLS and notably the strategy used by all twenty learners (100%), was ‘repetition strategy’ of various types.

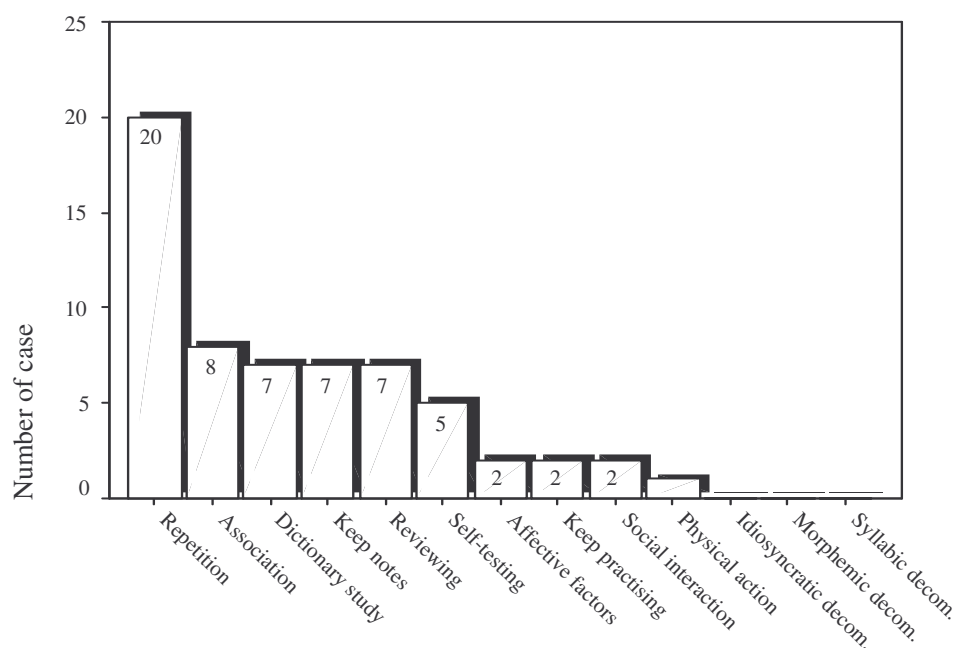
Five subjects, S.5, 11, 17, 28, and 30 all said they used verbal and written repetition strategies. The responses of SS. 17, 28, and 30 are shown as follows:

S.17: *“I repeatedly pronounce an English word aloud, and say the definition translated into Thai. I also review the set of words regularly during my free time. Also, I test myself to see whether I can remember the set of words by covering the meaning of the vocabulary items and I start guessing those meanings.”*

S.28: *“I write an English word and repeat saying it aloud together with the definition translated into Thai. I also link the new word with known words that have similar meanings or are near synonyms. I write the words on a piece of paper and stick it in my room where I can often see the words. Furthermore, I record the set of words on a cassette tape; I listen to the set of words on the bus.”*

S.30: *“I repeat English vocabulary by spelling each letter of the word aloud, saying the part of speech, and the Thai translation of the English definition. I also use my forefinger to write each letter of the English word in the air while I am saying each letter of the new word aloud.”*

**Figure 5.5 Semi-structured interview: Results from Q.2 – the control group**



**Table 5.20 Table of frequencies – Results from questions no. 2, 4, and 5**

		no	yes
Affective factors* (AF)	Count	18	2
	%	90.0%	10.0%
Association of various types* (AS)	Count	12	8
	%	60.0%	40.0%
Dictionary study* (D)	Count	13	7
	%	65.0%	35.0%
Idiosyncratic decomposition* (ID)	Count	20	0
	%	100.0%	.0%
Morphemic decomposition* (MD)	Count	20	0
	%	100.0%	.0%
Keeping notes* (N)	Count	13	7
	%	65.0%	35.0%
Keep practising* (P)	Count	18	2
	%	90.0%	10.0%
Physical action* (PH)	Count	19	1
	%	95.0%	5.0%
Repetition of various types* (RP)	Count	0	20
	%	.0%	100.0%
Reviewing in extra time* (RW)	Count	13	7
	%	65.0%	35.0%
Syllabic decomposition* (SD)	Count	20	0
	%	100.0%	.0%
Self-testing* (ST)	Count	15	5
	%	75.0%	25.0%
Social interaction* (SI)	Count	18	2
	%	90.0%	10.0%
Opinion about VLST- Q.4	Count	2	18
	%	10.0%	90.0%
Opinion about the discussion sessions - Q.5	Count	0	20
	%	.0%	100.0%

\*Answers obtained from semi-structured interview Q. 2  
The control group n = 20

From the answers to Q.2 quoted we see that some learners use integrated strategies, i.e. (S.17) ‘RP’, ‘AS’; (S.28) ‘RP’, ‘AS’, ‘N’ (written), ‘N’ (verbal), to memorise vocabulary items, whereas some learners, such as S.10 and S.12, used only one strategy (e.g. ‘RP’).

At this point we note the differences between individual learners in their choice of a particular VLS.

Perhaps, it may be assumed that each individual follows his/her own style and preferences in choosing strategies to learn vocabulary.

Q.3: ‘In your opinion, what makes words easy or difficult for you to memorise?’ Twelve subjects (60%) answered that short words were easy. For instance, S.17 said: *“Long words are more difficult to memorise than short words.”*

Seven subjects (35%) said that words frequently seen and used were easy to memorise; one subject (5%) said that words which had similar form and meaning to known words were easy to memorise; and one subject (5%) said that words that had simple or easy pronunciation were easy to memorise. For example, S.30 answered: *“Words with difficult pronunciation, e.g. ‘philanthropic’, are difficult to memorise. Short words are easy to memorise.”*

On the other hand, eight subjects (40%) said that words less frequently seen and used were difficult; eight other subjects (40%) answered that long, words, e.g. with complex spelling or affixes, were hard to memorise. Three subjects (15%) said they confused words with a similar meaning and found them hard to memorise. Two subjects (10%) said that words that had difficult pronunciation were difficult to memorise.

Q.4: ‘Do you think you need to attend VLS training sessions? Why? Or Why not?’, Eighteen interviewees (90%) expressed enthusiasm for the VLS sessions, in that they answered that it was useful to know alternative techniques. For example:

S.21 expressed the opinion: *“Yes. I think I want to attend vocabulary learning strategy training sessions. I actually know very little about vocabulary learning strategies. I would like to know other new strategies.”*

Similarly to S.18, said: *“Yes. I want to be trained in vocabulary learning strategies and how to use them effectively because the ‘repetition strategy’ that I currently use does not help me memorise words over a longer period of time.”*

However, two subjects (10%) felt they did not need VLST, expressing their point of view as follows:

S.13: *“No. I do not think I want vocabulary learning strategy training. I think I can guess from the passage the meaning of a word of which I do not know the meaning. So, I do not need to memorise L2 words. In fact, I do not like memorising them, so I do not want to be trained how to memorise English words by repeating the words, spelling each letter of the words, or other kinds of technique.”*

S.31: *“No. I do not want to attend the vocabulary learning strategy. I think I have no problems with memorising English vocabulary. I am good at it, so I do not have to worry about it.”*

We will discuss the subjects’ answers later in 5.5, the discussion part.

Moreover, all twenty learners (100%) gave the same affirmative answers to the last question, Q.5: ‘Do you think the extra practice in course activities, e.g. ‘discussion session’, was useful? In what way?’

Twenty interviewees (100%) thought that the discussion session was useful in that during each session they learned new things, which were related to the main course, the RMC course (ENG. 355223), and they could ask for more explanation about any unclear points in each lesson.

S.5: *“I think that the discussion arranged in class are useful, as I can clear my doubts about any topics which I cannot understand. Moreover, I have an opportunity to exchange ideas with my friends while we are working in groups or in pairs.”*

S. 21: *“I like the discussion sessions. I really want to see more sessions concerning making various types of English sentences, journal writing, and writing a summary.”*

Clearly, the response to Q.5 is positive; it also suggests the learners’ interest, in and need of improving their English language learning.

We collate briefly some of the interesting answers to the five interview questions as follows:

- S.17 thought that when he was lazy and did not review the words regularly, they seemed to be very difficult for him to memorise. He additionally gave his opinion that strong motivation effected better memorising of vocabulary. By strong motivation he meant wanting to know more words, wanting to get higher scores from vocabulary test. These types of motivation led him to review words regularly.
- S.14 and S.33 thought that too many words were difficult to memorise.
- S.28 said that a lack of regular revision could make him easily forget words taught.

- S.31 said that she did not think that words were difficult or easy to memorise. In fact, it depended on how well she could manage her time to review the words frequently. So, she believed in reviewing words regularly.
- S.32 thought that her incorrect pronunciation of L2 words made her unable to memorise them effectively. For example, ‘magnate’ was pronounced incorrectly as ‘ma-nate’; thus, she could not memorise the correct spelling of the word.

Some interesting overall issues arising from the answers in the semi-structured interview will be discussed in conjunction with the TAP I and II results in the discussion part (see the five subjects’ case-by-case summary in Appendix 5.3).

#### 5.4.2 Results from the twenty interviewees – the experimental group

Twenty interviewees were randomly selected by drawing lots from thirty-six learners. We asked each individual eight questions. As with the control group, the answers were expressed as a percentage. First, we present the summary of the eight responses as follows:

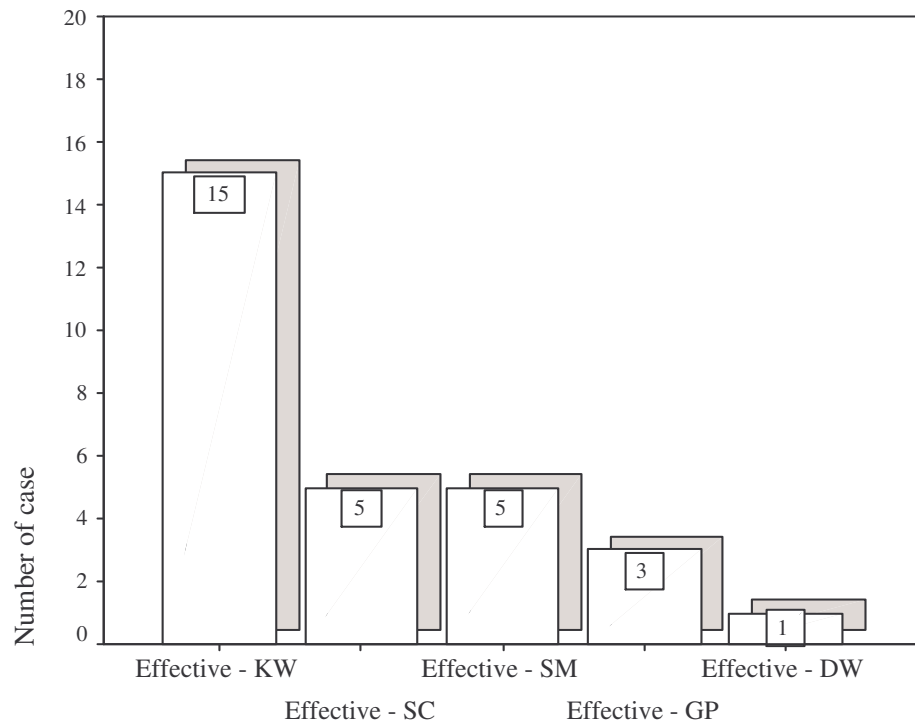
**Table 5.21 Summary of the eight responses**

Question	Follow-up of the VLS training	Answers ‘yes’ (%)	Answers ‘no’ (%)
<b>Part one</b> Q.1	Did you use any of the VLS strategies you were trained in to help you remember the vocabulary taught? If no, why not?	Twenty interviewees (100%)	-
Q.2	Which strategy do you think can help you remember vocabulary and which is less helpful?	See the detail in Figure 5.6 and Table 5.22	
Q.3	Did you use other VLS of your own in combination with the strategies in which you were trained?	Nineteen interviewees (95%)	One interviewee (5%)
<b>Part two</b>	<b>An outcome after VLS training</b>	<b>Answers ‘yes’ (%)</b>	<b>Answers ‘no’ (%)</b>
Q.4	What do you think of your vocabulary retention after the training in VLS?	Twenty interviewees (100%)	-
Q.5	Do you think you will use the strategies you have learnt to help you create your own VLS you to improve your retention in the future?	Twenty interviewees (100%)	-
Q.6	Do you think the training in VLS has made you more aware of vocabulary learning? If yes, in what way? If no, why not?	Twenty interviewees (100%)	-

Part three	Attitude towards VLS and VLS training	Positive Attitude shown in (%)	
Q.7	How do you feel about VLS in general and the VLS training sessions? You are welcome to give any comments or suggestions about VLS training.	Twenty interviewees (100%)	-
Part four	Additional views	Remarks	
Q.8	Do you have any suggestion or comments about vocabulary teaching in general? What kind of vocabulary teaching would you like to see in the future?	The answer to this question is presented in detail in 5.4.2.	

We will next present the results obtained from the seven questions in the semi-structured interview parts 1, 2, and 3 (see Figure 5.6 and Table 5.22) and the result gained from question 8 in part four will be presented in the end.

**Figure 5.6 Semi-structured interview: Results from question no. 2 – the experimental group**



**Table 5.22 Table of frequencies – responses to questions no. 1 to 7**

**Semi-structured interview -questions 1-7**

Questions		no	yes
q1	Count	0	20
	%	.0%	100.0%
q3	Count	1	19
	%	5.0%	95.0%
q4	Count	0	20
	%	.0%	100.0%
q5	Count	0	20
	%	.0%	100.0%
q6	Count	0	20
	%	.0%	100.0%
q7	Count	0	20
	%	.0%	100.0%
Effective - DW*	Count	19	1
	%	95.0%	5.0%
Effective - KW*	Count	5	15
	%	25.0%	75.0%
Effective - SC*	Count	15	5
	%	75.0%	25.0%
Effective - GP*	Count	17	3
	%	85.0%	15.0%
Effective - SM*	Count	15	5
	%	75.0%	25.0%

\*Answers from semi-structured interview Q.2  
The experimental group n = 20

The purpose of the three questions, in part one, is to follow up the effect of the training in five VLS.

The semi-structured interview Q.1: ‘Did you use any of the VLS taught to help you memorise the vocabulary introduced? if no, why not? The result reveals that all twenty interviewees (100%) answered in the affirmative. The answers showed that the subjects selected VLS variously. The results also reveal that the subjects used VLS in combinations - for example, S.22 used the ‘keyword method’ and ‘semantic mapping’ strategies; and S.14 used all five VLS.

However, some subjects selected just one strategy from the five in which they had been trained, for example, S.3 said that he used the ‘keyword method’ in combination with his own VLS, i.e. ‘association strategy’ of various types, ‘morphemic decomposition’, and ‘repetition strategy’.

Next, the interviewees’ responses to seven of the questions are presented in the following graph and table; the graph shows the VLS the interviewees said they used

to memorise L2 words. The sameness and the differences of the answers are collated and expressed as percentages in Table 5.22.

The second question (Q.2): ‘Which strategy do you think can help you to memorise vocabulary and which is less helpful in terms of facilitating your vocabulary retention?’ This actually consists of two questions: to elicit which strategies the subjects thought 1) useful and 2) not useful. The answers reveal that fourteen learners (70%) thought that the ‘KW’ method was helpful in facilitating L2 word retention; twelve (60%) ‘SM’; ten (50%) ‘SC’; eight (40%) ‘GP’; and seven (35%) ‘DW’.

The strategies named in the answers to the element of Q.2, those considered less helpful, are grouped as follows:

Seven subjects (35%) answered that ‘repetition strategy’ is less helpful, as it did not help them retain words over a longer period of time. S.7 commented: *“I do not have to think much when I use the ‘repetition strategy’ to memorise vocabulary items”*.

S.21 expressed a similar opinion about ‘repetition strategy’: *“I think the ‘repetition strategy’ is less effective. Even though I spend a lot of time repeating the vocabulary items, I cannot memorise them over a longer period of time.”*

Five subjects (25%) said that ‘semantic mapping’ is less helpful for them. For example,

S.35 explained: *“I think that the ‘semantic mapping’ strategy is not suitable for me, as I find it difficult to think of related words, and then to memorise many words shown on the map at one time.”*

S.8 commented: *“The ‘semantic mapping’ strategy is less effective in that it is one of the techniques that have too many operational steps. I do not like any techniques consisting of complex steps which are rather confusing.”*

The other three subjects gave similar explanations to those mentioned above.

Four subjects (20%) answered that the ‘grouping method’ was less helpful as they found it hard to memorise additional words having various forms and different parts of speech.

Three other learners S. 8, S.10, and S.25, (15%) commented that they thought the ‘keyword method’ was less helpful as they found that it had a complex steps in operation, and it was hard for them to create a mental link to associate the meaning of the L2 word with that of the L1 word, or vice versa.



Three other subjects (15%) commented that there were no less helpful VLS for them, as they thought that every strategy was helpful in facilitating vocabulary retention.

Q.3: ‘Did you use other VLS in combination with the VLS taught?’ Nineteen subjects (95%) used other VLS in combination with the VLS taught. One subject (S.14) (5%) said he did not use other strategies in combination with the VLS taught. Clearly, most subjects used a few integrated strategies to help him/her in vocabulary retention.

We summarise the strategies used in combination with those taught to the nineteen subjects as follows:

- Twelve subjects (60%) said that they used the ‘association strategy’ of various types, i.e. linking a new word with known words, linking new words that have a related or similar meaning and making up a story.
- Six subjects (30%) used the ‘repetition strategy’ of various types and gave some comments, e.g. to remember short words.
- Five subjects (25%) used the ‘morphemic decomposition’ strategy, i.e. looking at the affixes of a word, making use of prefix/suffix to facilitate memorising L2 words.
- Three subjects (15%) used ‘dictionary study’ together with ‘dictionary work’ to help them check the meaning of L2 words in L1.
- Two subjects (10%) used ‘idiosyncratic strategy’, i.e. separating a part of a word as a small unit, regardless of the syllabic structure.
- One subject (5%) used the ‘affective factor’ strategy, i.e. memorising L2 words in the bathroom.
- One subject (5%) used the ‘practising’ strategy’, in this case, using the L2 words when writing or chatting with friends.

Clearly, the results from Q.3 reveal that the ‘association strategy’ of various types was much used by these subjects.

The answers to semi-structured interview Q.4: ‘What do you think of your vocabulary retention after you have been trained in VLS?, e.g. better or not’.

The answers show that all twenty subjects (100%) thought that after they had received VLST their vocabulary retention better than before.

In answer to semi-structured interview Q.5: ‘Do you think you will use the strategies trained as a stepping stone to create your own VLS to help you deal with word retention in the future?’ Again all twenty subjects (100%) answered ‘yes’. For example, S.10, S.22, and S.34 said that in future they would create their own techniques based on the five VLS taught because the techniques would be more suitable for them and would help them memorise L2 words effectively.

In addition, S.30 answered that she would use the VLS taught to help her memorise L2 words in the future, especially for long words.

To semi-structured interview Q.6: ‘Do you think training VLS make you be more aware of vocabulary learning? If yes, in what way? If no, why not?’ Again all twenty subjects (100%) answered ‘yes’.

Every subject thought that VLST had made them realise the importance of VLS. The overall answers clearly showed the subjects were aware of the importance of vocabulary retention and vocabulary learning. For example,

S.34 said: *“The VLST made me be more aware of vocabulary learning, and it made me think more about choosing alternative ways of memorising L2 words effectively.”*

S.12 explained: *“Vocabulary learning strategy training made me pay more attention to vocabulary learning. Moreover, I can memorise L2 words effectively and have a better understanding of L2 words. Thus, I do better in English reading skill than before.”*

To find learners’ attitudes towards VLST generally, we asked the semi-structured interview Q.7: ‘How do you feel about the VLS training sessions? You are welcome to give any comments or suggestions about VLS training (e.g. good, bad idea?)’

The results show that all twenty subjects (100%) expressed positive or good attitudes towards the VLST, for instance, S.11 answered:

*“I now have more choice of strategies to help me memorise vocabulary items more effectively. Particularly, the techniques taught help me memorise the vocabulary over a longer period of time than before. More importantly, the techniques taught made me think while I am learning or memorising the vocabulary. I am not learning like a parrot anymore when I use the five vocabulary learning strategies taught in class.”*

S.17 explained: *“I think that it is a good idea to teach a variety of vocabulary learning strategies to students in class. The strategies taught make vocabulary learning fun and enjoyable. In the past, I just simply learnt vocabulary items by using the ‘repetition strategy’, which was boring.”*

Regarding learning vocabulary more systemically, S.14 expressed the view:

*“I think training in alternative types of vocabulary learning strategies is a good idea. The strategies make me memorise the vocabulary items more effectively, over a longer period of time. Besides, I learn how to memorise words systematically, as each strategy has a unique system of its own.”*

S. 9: *“It is very good and useful to receive vocabulary learning strategies training. The techniques help me retain the long words better, which are actually hard to memorise. My own technique, ‘verbal and written repetition’ does not help me retain words effectively, as I easily forget them.”*

The reason for all twenty subjects of the experimental group showing positive attitudes towards VLST can perhaps be summed up as follows:

- The subjects realised the benefit they would gain from the VLST.
- The class was clearly informed of the objective of VLST in the first training session, so the subjects understood its purpose and the advantages they would gain.
- The subjects realised the importance of vocabulary retention, and they understood how the VLS were important in helping them memorise L2 words.
- VLST perhaps broadened their perspective by giving them more alternative VLS to help their vocabulary retention.

Finally, we gathered the learners’ additional point of view from interview Q.8: ‘Do you have any suggestions/comments about vocabulary teaching, in general? What would you like to see in vocabulary teaching in the future?’

All twenty subjects (100%) expressed similar ideas/comments about current vocabulary teaching and mentioned how they wanted to see it develop in the future. Five samples of interviewees’ answers about this are presented below and tabulated in two columns in Table 5.23.

**Table 5.23 Sample of interviewees' answers - Question 8**

Subject	Current trends in vocabulary teaching	Future trends in vocabulary teaching
S. 22	<i>“Vocabulary teaching is not interesting at present. Learners are normally asked to memorise new vocabulary by repetition on their own.”</i>	<i>“I would like teachers to add some vocabulary games, such as, hangman, crosswords, and the like, to make the vocabulary learning more fun. It is another way which may enhance memorising vocabulary.”</i>
S. 30	<i>“At present, there is no teaching of or introduction vocabulary learning strategies in class.”</i>	<i>“I would like to know more techniques about vocabulary learning, as it would help me and other learners to cope with vocabulary learning and would provide benefit my English learning in the future as well.”</i>
S. 3	<i>“Teachers do not teach vocabulary in class, they normally give LI translation of the English definition; then the learners have to memorise the words in their own way.”</i>	<i>“We learn a lot of new words every week and it is so easy to forget them. I would like teachers to review the vocabulary taught in class regularly which would probably help learners to memorise the words taught.”</i>
S. 9	<i>“I do not see any teachers introducing vocabulary learning strategies in the classroom.”</i>	<i>“I would like to see more vocabulary learning strategies introduced to learners in classroom.”</i>
S. 14	<i>“At present, vocabulary learning is not enjoyable. There was nothing new in vocabulary teaching and learning. Learners repeat English words on their own.”</i>	<i>“In future, vocabulary teaching should be fun and enjoyable. In addition, learners should have more opportunity to practise the words taught during the class activities, e.g. English conversation. I think I will memorise the words taught better when I have a chance to practise using the words regularly.”</i>

In short, the results from Q.8 show that all twenty subjects (100%) gave four similar answers about the current trends of vocabulary teaching:

- At present vocabulary teaching is rather boring. Learners are normally asked to learn vocabulary by themselves outside class.
- The technique used to memorise vocabulary is ‘repetition strategies’ of various types.
- Teachers do not teach vocabulary. In fact, they only provide Thai translations of the English definition of the words.
- There is no introduction of vocabulary learning strategies in the classroom.

Regarding the subjects' comments and ideas concerning future trend of vocabulary teaching, eight subjects (40%) would like to see more of VLS introduced or taught in class, so that they could have a choice of more strategies. Nine subjects (45%) would like teachers to make vocabulary teaching enjoyable by using cartoons as teaching materials. They would also like teachers to teach vocabulary by using vocabulary games, films, songs, and various vocabulary activities in class. They thought that interesting and enjoyable vocabulary teaching would probably enhance their vocabulary retention.

Three subjects (15%) suggested other ways to help learners to memorise more effectively the words taught. Teachers should provide an opportunity for learners to practise the words taught in class. For example, teachers might design a speaking task for the learners to use or practise the vocabulary previously taught in class. They also suggested that teachers give regular dictation or revision of the words taught.

One subject (5%) suggested teachers should teach vocabulary by using the dictionary work method. For instance, teachers should give more useful explanations of the key vocabulary items, e.g. parts of speech, word families, synonyms, antonyms, various meanings of a word, and so forth. In addition, teachers should give some examples of the words in English sentences, and explain how to use the words properly and grammatically in a sentence (see interviewees' answers in the case-by-case summary of the experimental group, Appendix 5.3).

## **5.5 Results and Discussion**

This part presents a discussion of the aforementioned results obtained from the two research instruments: the subjects' verbal protocols I and II and the semi-structured interview. We look at the five issues related to the research questions 5, 6, 7, 8, and 9 (see Chapter 1, 1.4), and two extra issues concerning a) effective and ineffective VLS as assessed by the learners of both groups; b) the use of the more complex 'association strategy' by the experimental group. We therefore discuss the five issues, presented as follows:

- Learners' attitudes towards VLST
- Genders, particularly with regard to the experimental group, and the types of VLS employed after VLST

- A comparison of VLS use by the control group before the pre-test and before post-test; a comparison of the two groups' VLS use to memorise L2 words before the pre-test; and a comparison of the two groups VLS use before the post-test

#### **Two extra issues**

- The learners' change in their use of VLS and the VLS claimed to be helpful-effective or less helpful-ineffective
- The reasons for many learners using the 'association strategy' of various types (AS) after training in the five VLS

#### **5.5.1 Learners' attitudes towards VLST – the experimental group**

We reported in 5.4.2, the semi-structured interview (Q.7) that all twenty interviewees (100%) showed the positive attitudes towards the VLST.

Hence, to answer research question 5: Does VLST in class affect the attitudes of the learners in the experimental group towards vocabulary learning and VLS?, it can be summed up that the data from the semi-structured interview rejects the null hypothesis and accepts the alternative hypothesis stated in RQ 5. It suggests that VLST did indeed have an effect on the attitudes of the learners in the experimental group.

With regard to the control group, the data also reveals that eighteen interviewees (90%) expressed a positive opinion of VLST in their answers to question no. 4, as presented earlier in 5.4.1. Similarly a majority of learners thought of the VLS training sessions useful and they wanted to attend the VLS training session in class.

Of the two interviewees who answered 'no' to question no. 4, S.13 may not have had a clear concept of exactly what VLST is, as she mentioned she did not want to be trained how to repeat English vocabulary and she further said that she did not like repeating and spelling L2 words. Perhaps she thought that the only VLS was the 'repetition strategy' of various types. She also mentioned that she did not have to worry about memorising L2 words as she could guess unknown words from the context.

S.31 also did not want to attend the VLS training sessions, as she was good at memorising English vocabulary and said she had no worries about memorising English words. Since she felt she had no problem with memorising L2 words, she might not have realised the need to be attend the VLST, nor its potential benefit.

To sum up the above results:

a) The learner S.13 in the control group might not have had a clear idea about what VLS/VLST really is. In fact, this is because the researcher neither gave a clue nor even mentioned VLS/VLST to the control group. It should be noted that, S.13 had received 'b' score in FE3. Since her ability in English in general was classified as 'good', perhaps she was satisfied with her own strategies that seemed to suit her own style and preference.

b) Similarly, S.31 did not think she needed to attend the VLST because she felt had no problem memorising vocabulary. Perhaps she was satisfied with her own VLS which she currently employed, i.e. 'RP', 'N', 'SI', 'D', and 'P'.

In short, we can perhaps assume that the majority of learners from the experimental and the control groups realised the advantages of VLS and VLST, and they were aware of the importance of VLS, and recognised they were beneficial for their vocabulary retention, and perhaps for the improvement of their English in the four skills.

### **5.5.2 Gender and VLS used after VLST – the experimental group**

With regard to the results from TAP I (before the intervention), we found that female learners used fewer VLS than male learners. Females used eight VLS (61.5%) out of thirteen strategies (100%), whereas males used thirteen VLS (100%). Apparently, the most-used strategy employed by both genders was 'RP'.

The data from TAP II (after the intervention), show the decline in the use of 'RP' strategy by both genders. The female learners still utilised fewer VLS than the male learners, the former using eleven (61%) out of eighteen strategies (100%); the latter seventeen (94%). The most-used strategies were clusters of the five VLS taught in class and three other VLS the learners employed of their own accord, e.g. 'AS', 'MD', and 'RP'.

In sum, the results suggest a similarity of VLS use before and after intervention. Before intervention both genders utilised 'RP' extensively to memorise vocabulary task one. After the intervention, both genders increased their use of other strategies. However, both genders also used their own VLS along with the ones taught. Therefore, we can perhaps say that there is no difference in using VLS before and after the intervention of VLS between female and male learners of the experimental



group. Both female and male learners equally gain benefit from the VLST in the classroom. However, the data show that males utilised more VLS than the female learners.

The data obtained from the semi-structured interview reveal similar results in that both females and males used 'RP' extensively to memorise L2 vocabulary before the VLST. The data also show a decline in the use of 'RP' After the VLST, as the subjects adopted more of the five VLS taught.

Hence, to answer RQ 6 - Are there any differences in the male and the female learners of the experimental group when choosing types of VLS for memorising words after VLST?, it can be summed up that the findings obtained from both instruments accept the null hypothesis and reject the alternative hypothesis in that there are no differences between the male and the female learners of the experimental group when choosing types of VLS for memorising words after VLST. Both females and males tend to reduce the use of 'RP' and increase using the five VLS trained in the classroom. However, the data shows that males employed more varieties of VLS than female learners (see Appendix 5.5).

### **5.5.3 Learners' use of VLS**

This section covers the three research questions, no. 7, 8, and 9. On the basis of the qualitative data, we can see the similarities and differences in the VLS use between the control group and the experimental group.

Clearly, the results from TAP I (Figure 5.1 and Table 5.3, Figure 5.3 and Table 5.5) show that learners in both the control group (87.9%) and the experimental group (91.7%) employed extensively the same VLS, i.e. 'Repetition strategy' of various types to memorise vocabulary task I.

Next, the results drawn from TAP II indicate a difference in the change of the VLS use between the two groups. Receiving no VLST in class, the control group (97%), still mainly employed the same VLS as before, i.e. 'RP', to memorise vocabulary task II. On the other hand, the experimental group (30.6%) drastically reduced their use of 'RP'. The experimental group turned to using the five VLS taught, i.e. 'KW' (55.6%), 'GP' (38.9%), 'DW' (36.1%), 'SM' (36.1%), and 'SC' (33.3%). They also generated the deeper steps of 'AS' of various types.



In addition, the results from semi-structured interview (Q.2) reveal that twenty interviewees (100%) of the control group used 'RP' to memorise L2 vocabulary. Twenty interviewees (100%) from the experimental group said in answer to Q.1 that they used a combination of the five VLS taught. Moreover, the responses of the experimental group to Q.2 reveal what the interviewees thought of the five VLS in terms of their helpfulness or effectiveness in facilitating vocabulary retention. The highest response for any one VLS considered effective or helpful was from fourteen interviewees (70%).

It can be seen from the qualitative data that the subjects of the control group mainly employed one strategy, i.e. 'RP', when memorising the vocabulary before pre-post tests. Hence, we can answer the three research questions as follows.

Research question 7: Are there any differences in VLS used by the learners of the control group in remembering the vocabulary taught before the pre-test and before the post-test?

Answer: The above mentioned data accept the null hypothesis and reject the alternative hypothesis in that there are no differences in the use of VLS by the learners of the control group to remember the vocabulary taught before pre-test and before post-test.

The results drawn from the qualitative data clearly show the differences in the degree of change in VLS use between the control and the experimental groups when memorising vocabulary tasks I and II. Thus, the answers to the two remaining research questions are presented as follows.

Research question 8: Are there any differences in the use of the types of VLS between the learners in the control group and the experimental group when asked to memorise vocabulary task I?

Answer: The above mentioned results accept the null hypothesis and reject the alternative hypothesis in that there are no differences in the use of the types of VLS between the learners in the control group and the experimental group when asked to memorise vocabulary task I. Most subjects of both groups mainly employed 'RP' to help them memorise L2 vocabulary.

Research question 9: Are there any differences in VLS used by the learners of the experimental group in remembering the vocabulary taught before and after VLST in class as compared with the control group?

Answer: The above mentioned results reject the null hypothesis and accept the alternative hypothesis in that there are differences in the VLS used by the learners in the experimental group to remember the vocabulary taught before and after VLST.

#### **5.5.4 The five VLS used and VLS assessed by the learners as effective or less effective – the experimental group**

According to the results from the experimental group (TAP II) shown in Figure 5.4 and Table 5.6, we clearly see a change in the use of VLS. Particularly, when we compare the result between TAP I and TAP II, we notice that the percentage of the learners using ‘RP’ declines drastically after the training in the five VLS. Obviously, before the intervention, ‘RP’ is the strategy most utilised.

The results from TAP II show that the learners tended to use the five techniques taught in class to memorise L2 words. The strategy used by most of the twenty learners (55.6%) was the ‘KW’ method. This result is supported by the learners’ answers in the semi-structured interview, shown in Figure 5.6 and Table 5.22. All twenty interviewees (100%) said in answer to Q.1 that they employed the five VLS taught. Q.2 asks which type(s) of strategy is or are effective or helpful. The responses show that the most effective strategy, as assessed by the 15 interviewees (75%) was the ‘KW’ method.

With regard to the interviewees’ responses about which type of strategy they thought less effective in memorising vocabulary, six learners (30%) mentioned the ‘RP’ strategy (see Appendix 5.6). Other strategies, such as, ‘GP’, and ‘SM’, were commented on being less effective by some interviewees. For example, S.34 explained:

*“Personally I think the ‘grouping method’ is less effective because I have to memorise the main word and other words which belong to its family. At the same time I have to memorise the part of speech of each word in order to comprehend the meaning. However, I think that if I can make use of the ‘grouping method’, I will memorise the vocabulary over a longer period of time, as I come to understand the part of speech of the main word and its family.”*

S.35: *“The strategy that I think is least effective is ‘semantic mapping’ because there are too many related words on the map. It is rather difficult for me to memorise so many words effectively at one time.”*

Additionally, there are some comments about the weak points of ‘KW’, as follows:

- The ‘keyword method’ has many operational steps, e.g. thinking of L1 and L2 acoustic similarity and creating an imagery linkage.
- Two many steps are too confusing to use.
- It is difficult to draw a picture of a word that is an abstract noun.

Even though some strategies were commented as less effective, the learners utilised them to memorise some words. For instance, S.10 said in answer to interview Q.2:

S. 10: *“I use the ‘keyword method’ to help me memorise some English vocabulary because I think it can help me memorise English words effectively. For example, ‘martyr’ I linked it with the Thai phrase: แม่คุณเธอ (mae-khun<sup>M</sup> – teur<sup>M</sup>), meaning a mother who has a great sacrifice and responsibility for her family. Then I associate it with the meaning of the English word: a person who makes a great sacrifice for his/her belief, especially religious. Anyway, I think the ‘Keyword method’ is effective and helpful. Anyway, personally I think it is not suitable for me because I am not good at drawing pictures and creating an imagery linkage.”*

‘DW’ is commented as a less effective strategy by one interviewee: S.17 whose FE3 score was ‘d’. He expressed the opinion that *“‘dictionary work’, especially using a monolingual dictionary, was rather hard for me because I think that the English explanation of the definitions was rather difficult for me to comprehend.”*

Lastly, three interviewees (15%) expressed the opinion that there were no less effective or ineffective VLS. They said that every VLS is useful and to some extent each one can help them memorise L2 vocabulary.

#### **5.5.5 Why do learners extensively use ‘AS’ after training in the five VLS?**

From the results gained from TAP II (Figure 5.4 and Table 5.6) we note that 60.1% of the learners in the experimental group also frequently employed ‘AS’ after the intervention of VLS. The plausible views for this increase are summed up as follows.

We note that the learners used ‘AS’ with more or deeper operational steps after the intervention of the five VLS in class. For example, S.3 and S.33 reported in their TAP I and II their use of ‘association strategy’ as shown in Table 5.24.

**Table 5.24 Samples of the learners' TAPs I and II about association strategy**

TAP I	TAP II
<p>S. 3 “I link a new English word with known words that have a similar meaning or are near synonyms, e.g. murky, dim, dull, and foggy. Also, I link a new word with known words, which have a similar sound and related meanings, e.g. <b>hefty and heavy.</b>”</p>	<p>S.3 “I link parts of a new English vocabulary with a known English word, then I create a story from the meanings of the new word and the known word in order to make me memorise the meaning of the new word. For example, a new word is ‘<b>despicable</b>’ meaning disgusting, shameful, loathsome and so on; I link the underlined part (<b>spi and cable</b>) of the new word to the known words: ‘spy’ and ‘cable’. Then I create a story from the meaning of the new word and the known words to make me memorise the new word and its meaning. <i>สปายที่น่ารังเกียจ แลอันตราย กำลังโหนตวยู่ที่สายเคเบิล</i> [A spy who is disgusting and dangerous is hanging on the cable.]</p>
<p>S.33 “I link new English vocabulary with a known word that has a similar meaning, such as <b>sublime and sumptuous.</b>”</p>	<p>S.33 “I link a known word to a part of a new word. For example, the underlined part of a new word: ‘<b>canonise</b>’ has the same sound and meaning as the known word: ‘<b>can</b>’, which means able to do; so, I link the meaning of ‘<b>can</b>’ to the new word: <i>คนที่สามารถทำสิ่งที่ดีเมื่อเสียชีวิตก็จะได้รับการยกย่องสรรเสริญจากบุคคลทั่วไป</i> [A person who can do things/ good things will be respected and praised (after his/her death) by others.] So, I can memorise the meaning of ‘<b>canonise</b>’ which means (a dead person) officially declared to be a saint.”</p>

As can be seen from the subjects' TAPs I and II that there is a change in the way they make word associations. TAP I shows a simple association, especially the linking of a new word with known words which have similar sounds or meanings or are near synonyms. We can say that there is one main step in that the learners have to think of the known words that have a similar meaning or are near synonym to the new word, so that they can link the new word to the known words.

On the other hand, TAP II shows the learners' deeper and more complex steps of thought. For instance, the learners might order the association as follows.

- Firstly, analyse the component of the new word in order to find a meaningful part of the new word;
- Secondly, think of the known words that have similar or the same forms;
- Thirdly, make or create a story to link the meaning of the known words to the new word.

From the use of 'AS' after the intervention of the five VLS, it can be presumed that the learners to some extent were influenced by the 'KW' method taught in the classroom.

Hence, it may be said that the 'deeper association', clearly sharing a characteristic of the 'KW' method probably helps the L2 memory of those learners who made use of the strategy. "*The more the words are analysed and are enriched by associations or images, the longer they will stay in the memory.*" (Craik & Lockhart, 1972).

Another plausible view for the learners using the 'deeper association' is that an acoustic and imagery linkages (association) of the 'KW' method might not be easy for the learners to make. Besides, the learners may find it difficult to think of L1 words which have similar sounds to the L2 words. Thus, the learners might find it easier to make the 'deeper association' by adapting the complete characteristic of the 'KW' method.

## **5.6 Summary**

This chapter focuses on presenting the qualitative results obtained from two research instruments namely think-aloud protocols I and II, and the semi-structured interview. We also interpret and discuss the results in relation to the main research questions - How much improvement do learners show in their retention of vocabulary taught in class after VLST? (To be compared with the subjects in the control group who do not receive VLST in class.), and Does VLST in class affect the attitudes of the learners in the Experimental group towards vocabulary learning and VLS?

Therefore, we specifically look at the results, which can be used to answer the main research questions. Most importantly, the qualitative results will later on be used to triangulate with the quantitative result drawn from pre-test and post-test earlier presented in Chapter Four. Finally, the overall results will be used to support the reliability of the main research findings. We will present this point in conjunction with other related issues in the next chapter.

Next, we make a summary of the qualitative results and present them in Table 5.25 shown as follows:

**Table 5.25 Summary of the results drawn from the qualitative data**

<b>Research instruments</b>	<b>Findings – The Qualitative data</b>
Think-aloud protocols TAP I and II	Data from TAP I reveals that the control and the experimental groups highly employed ‘RP’ strategy in order to memorise the vocabulary task one.
	Data from TAP II shows the difference in utilising VLS of the control and the experimental groups. The former highly used the same VLS as they reported in TAP I, e.g. ‘RP’ strategy. The latter changed to use the five VLS trained in class to memorise the vocabulary task two. (Figure 5.4 and Table 5.6)
Semi-structured interview	The twenty interviewees (100%) of the experimental group answered ‘yes’ to Q.1: Did you use any of the VLS strategies trained to help you store/memorise vocabulary taught?
	The experimental group, twenty interviewees (100%) showed positive attitudes toward the VLST in class Moreover, the control group (90%) showed the need of attending VLST in class.
	The experimental group, fifteen interviewees (75%) answered that the effective VLS is ‘KW’. Six interviewees (30%) answered that ‘RP’ is less effective VLS. Three interviewees (15%) said that every type of VLS was helpful or effective.

In the next chapter, we will specifically discuss some interesting data gained from each research instrument and we will draw conclusions related to the research questions and the hypotheses.

## Chapter 6: Discussion and Conclusion

In this chapter we first present the summary of the main study. Next, the findings are briefly reported concerning the research questions and hypotheses (see 1.4). Then, we will discuss the major findings in relation to the studies of vocabulary learning strategies training reviewed in Chapter Two. Following this, we include the pedagogical implications, in conjunction with L2 vocabulary teaching and vocabulary learning strategies training. Next, we account for some limitations of the study. Finally, we conclude with suggestions for future research into vocabulary learning and vocabulary learning strategies.

### 6.1 Summary of the main study

The main study basically builds on the findings obtained from the preliminary study which reveal that the learners encountered the problem concerning vocabulary learning, particularly L2 word retention. Moreover, they expressed a strong interest in having vocabulary learning strategies training in the classroom to facilitate their L2 vocabulary retention. We therefore specifically focus our main study on vocabulary learning strategies training (VLST).

Regarding our VLST, we emphasise the philosophy of LSI framework stated by Chamot and Rubin (1994), Cohen (1998), Chamot, and Barnhardt, El-Dinary and Robbins (1996): “*SI is like a ‘scaffold’.*” In the early stages of instruction teachers are responsible for demonstrating and explaining the strategies. Students gradually increase their responsibility until they can independently utilise the strategies being taught. We also adapted the principle of the CALLA framework for LSI (see Figure 2.1).

For training in the five VLS we emphasise two crucial points:

- The three training steps: a) presenting and explaining the objectives of the VLS, b) demonstrating how to operate each VLS, and c) providing an opportunity for the learners to practice the VLS taught.
- Knowing how to learn: the learners were introduced to VLS in the classroom as a tool to help them to facilitate L2 vocabulary retention. They were explicitly trained how to learn L2 vocabulary systematically by employing the VLS appropriately and effectively when memorising L2 words. This idea

is based on Stevick's (1980, 1982); Ellis & Sinclair's (1989) concepts of learning how to learn.

The main study focuses on two main research questions, attempting to investigate: 'How much improvement do learners show in their retention of vocabulary taught in class after VLST?' (Compared with subjects in the control group and the experimental group), and 'Does VLST in the normal classroom affect learners' (the experimental group) attitudes towards vocabulary learning and VLS?'

We conducted the main study at the Department of Foreign Languages, Faculty of Humanities, Kasetsart University (KU), officially supported by The Ministry of University Affairs, Thai Government. The sixty-nine subjects, who participated in the study, were Thai University students from different years, and different fields of study (see 3.2.1). In comparison to the experimental group, the control group has a general advantage, having more students with a better FE3 score, more females, and more Applied Science students (see Table 4.1). The venue of our main research is in one of the Southeast Asian Countries. Clearly, our subjects are Asian university students embedded with Thai culture.

The researcher herself taught and conducted the research experiment during the second academic term, sixteen weeks, including two weeks for the mid-term and the final examinations. The subjects in the control group and the experimental group attended the English Elective Course: English Reading for Mass Communications (RMC - ENG. 355223).

Three research instruments were employed to collect the quantitative and qualitative data. The pre-post tests were used to measure the subjects' ability of the experimental group in memorising L2 words before and after the vocabulary learning strategies training. Also, the pre-post test scores of the control and the experimental group were compared in order to see the difference in the subjects' ability in memorising L2 words. Think-aloud protocols (TAPs I and II) independently verbally reported by the subjects of both groups were used to elicit how, and which, types of VLS the subjects employed while freely learning L2 vocabulary tasks. The subjects' verbal protocols were translated and summarised from Thai into English. The VLS drawn from the overall verbal reports were later categorised according to Schmitt's (1997) vocabulary learning strategies taxonomy. The reliability of our VLS coding was confirmed by the four judges' rating agreement.



The semi-structured interview was administered after the post-test so as to gather the interviewees' attitudes towards VLS and VLST, including opinions, and comments relating to vocabulary learning, teaching, and other relevant topics.

The major findings obtained from the statistical analysis generated by SPSS (e.g. T-test, ANOVA, Chi-square tests, and 3 stepwise multiple regressions) reveal that the improvement between the pre-post-tests is significantly greater for the experimental group than the control group. This suggests that the VLST has a positive effect on subjects' ability in L2 vocabulary retention. Moreover, the results from the subjects' TA verbal reports and semi-structured interview show that the experimental group employed the VLS taught in the actual classroom to help memorise the L2 vocabulary task two (see Figure 5.4 and Table 5.6). Also, the twenty interviewees of the experimental group (100%) showed positive attitudes towards the VLST in the classroom (see question 7 in Figure 5.6 and Table 5.20). In addition, eighteen interviewees (90%) in the control group also gave positive responses in wishing to attend the VLST in class (see Table 5.19).

## **6.2 Summary of the major findings**

The findings are summarised as follows:

- After the training in the five vocabulary learning strategies, the treatment group showed better improvement (having better post-test scores) in retaining L2 words than the control group. The finding accepts the alternative hypothesis and rejects the null hypothesis. It suggests that the VLST has an effect on the learners' ability to retain L2 vocabulary.
- In the experimental group, there was an improvement in the learners' retention scores between pre-test and post-test. The post-test scores were higher than the pre-test scores. The finding accepts the alternative hypothesis and rejects the null hypothesis. It suggests that the learners' ability to memorise L2 words was better after they had been introduced to VLST in the classroom.
- It appears that in general female students in both groups were better than male students at memorising L2 words (see 4.6.2). The finding does not support the null hypothesis but accepts the alternative hypothesis. It suggests that in terms of individual differences; gender has an effect on L2 word retention.

- After the intervention, both female and male subjects in the experimental group had better scores in the post-test. The finding does not support the null hypothesis; however, it accepts the alternative hypothesis. It suggests that both female and male students benefit equally from VLST.
- After receiving the VLST, the experimental group adopted the VLS taught to help them memorise L2 words. Clearly, the use of 'RP' was declining while the use of the five VLS was increasing. The finding does not support the null hypothesis; it accepts the alternative hypothesis. It suggests that the VLST probably influences the learners to change their style of VLS use.
- The control group did not change much in its use of VLS to memorise L2 words. According to the TAP 1 and 2, before the pre-test, the strategy most commonly employed was 'RP'; before the post-test the most-used strategy was still the same. The finding accepts the null hypothesis and does not support the alternative hypothesis. It suggests that the learners without VLST persistently use the simple or shallow method, e.g. 'RP', to memorise L2 vocabulary.
- Regarding the year of study at the University, the learners in the lower year in the experimental group also showed an improvement in their post-test scores. The finding does not support the null hypothesis; it accepts the alternative hypothesis. It suggests that once the learners in the lower year had the same opportunity as the higher year students to receive the VLST, they were able to improve their performance to the same level as the higher year students.
- The VLST affected the learners' attitudes. The twenty interviewees' responses (100%) of the experimental group showed positive attitudes towards the VLST. The finding does not support the null hypothesis; it accepts the alternative hypothesis. It suggests that the positive attitudes arose from the learners experiencing the usefulness and efficacy of the VLST.
- After the VLST, the male students in the experimental group employed more varieties of VLS to memorise L2 words than the female learners did. The male students used seventeen different types out of the eighteen VLS, whereas the female students utilised only eleven. The finding does not support the null hypothesis; it accepts the alternative hypothesis. It suggests

that the male students may tend to use more types of VLS; they are perhaps keen on integrating various types of VLS and exploit them in combination more than the female students do.

- In dealing with L2 vocabulary memory task I, before the pre-test, the control group (87.9%) and the experimental group (91.7%) similarly simply used ‘RP’ to memorise L2 words. The finding accepts the null hypothesis, and it rejects the alternative hypothesis. It suggests that the students in both groups may simply have a similar repertoire of VLS to use in L2 word retention, especially the shallow or simple ones rather than the complex or deep ones.

### **6.3 Discussion of the findings**

In this section we will discuss the major findings of the main study in relation to the VLST studies reviewed in Chapter Two. The scope of the discussion covers four topics, namely a) teachability of VLS; b) the effect of individual differences, particularly culture and gender; c) the learners’ VLS use, e.g. ‘shallow’ and ‘deep’ strategies, single and multiple use of VLS, etc.; and d) the learners’ attitudes towards VLST.

#### **6.3.1 Teachability of VLS**

In the realm of LLSI, Ellis (1994, p. 402) cited Kellerman’s (1991, p. 158) notion: “*Teach the learners more language and let the strategies look after themselves.*” However, the proponents of strategy training, Færch and Kasper, (1983a) felt that: “*Strategy training is desirable.*” In addition, Oxford (1990, p. 201) points out the need of strategy training for both learners and teachers. She emphasises: “*Learners need to learn how to learn, and teachers need to learn how to facilitate the process.*” Moreover, it is asserted by a number of researchers, (e.g. Cohen & Apeh, 1980; Wenden & Rubin, 1987; O’Malley & Chamot, 1987; Oxford, 1990; Cohen, 1990; Avila & Sadoski, 1996; Fraser, 1999; and so forth) that we can and should teach learners language learning strategies.

Evidently, the LLSI/VLST studies reveal the successful results of training students to use language learning strategies. For example, successful training in LLS/VLS in combinations has been reported by many researchers and educators (e.g. Robbins, 1996; Chamot & O’Malley, 1987; Rodríguez & Sadoski, 2000; Alseweed, 2000; and so on).

With regard to the methodological approach of CALLA framework, one of the four important propositions is noted by Chamot and O'Malley (1987, p. 240): *“Strategies can be taught. Students who are taught to use strategies and are provided with sufficient practice in using them will learn more effectively than students who have had no experience with the language learning strategies.”*

However, Nielsen (2003, p. 5) pinpoints that not many studies have been done in relation to training in VLS in normal L2 class. The results reveal both successful and limited success, including learners' resistance to the strategies taught.

We partly agree with Nielsen's remark in that there has only been a limited amount of research conducted into VLS teachability, especially the training in a great number of VLS in normal L2 class.

In terms of training in a single type of VLS, as reported by many educators and researchers, namely (Atkinson and Raugh, 1975; Cohen and Apehek, 1980; Avila and Sadoski, 1996), and so forth, a certain amount of previous studies reveal the success of training in a single VLS, e.g. keyword mnemonics, association strategies, and so on. In addition, Nation (2001, pp. 250-51) remarks that other studies reveal the success of other VLS as a single strategy, guessing from context, were reported by many scholars (e.g. Carnine, Kameenui & Coyle, 1984); Buikema & Graves, 1993; Fukkink & de Gloppe, 1998; Kuhn & Stahl, 1998).

Due to the evidence of the success of LLSI/VLST we can clearly see the promising possibility of success in training learners to know how to use VLS effectively.

Regarding the studies that reported only partial success with SI - for instance, Bialystok's (1983b) study concerning vocabulary acquisition reveals: *“The strategy training proved less effective in promoting either comprehension or vocabulary acquisition.”* Moreover, the study of O'Malley et al. (1985b) does not significantly show the promising result of the effects of 'SI' on vocabulary learning, especially the experimental group of Asian learners. The finding perhaps arises from cultural factors having an effect on the strategies training. Since our study is partly concerned with the effects of cultural background of Southeast Asian students, we are going to discuss this factor in 6.3.2.

Clearly, the findings of our main study suggest the promising teachability of VLS. Our findings, thus, support the study of VLS reported by (e.g. Avila & Sadoski, 1996; Rodriguez & Sadoski, 2000; Cohen & Apehek, 1980; Pressley, Levin,

& Delaney, 1982; Brown & Perry, 1991; Alseweed, 2000; and so forth). Furthermore, our finding supports not only Chamot and O'Malley's (1987) LLSI teachability, but also Kinoshia's (2003) citation:

“The consensus of these investigations and others (Bialystok, 1983; Gagne 1985; Sono 1999; Johnson 1999; Dadour 1996) tell us that language learning strategies are ‘teachable’ and training language learners to use selected learning strategies can have positive effects on task performance and the language learning process.”

In terms of the teachability of VLS, the results of our main study demonstrate the advantages and possibilities of VLST:

a) The VLST had an effect on Thai students' (KU) improvement in L2 word retention (see 4.6.1).

b) The VLS were teachable, applicable and successful in our real L2 classroom environment.

### **6.3.2 The effect on VLS use: cultural background and gender**

Learners' cultural background - Naturally, every learner has a different personality and characteristics. An individual language learner has his/her particular ways of dealing with language learning. Moreover, referring to LLSI/T, McDonough (1995, p. 83) remarks: “*There are constraints on when a strategy works which are to do with individuals, possibly cultural background, type of problem, and proficiency level.*”

Also, Alseweed (2000, p. 67) points out the influence of learners' cultural differences on their language learning. He described two types of learners from different cultures. The learners of the first type were viewed like ‘jugs’ waiting for knowledge to be spoon-fed by the teachers. In contrast, the ones of second type were viewed as ‘candles’ which will provide the light for their own learning themselves. In short, the learners from the first cultural background were familiar with the teacher-centred approach, obviously tending to depend on the teachers, whereas the ones from the second cultural background got used to the learner-centred approach, training them to be independent or self-directed.

Therefore, it suggests that learners' cultural background is probably one of the factors individual learners need to be aware of, as a lack of awareness of it perhaps leads to less successful SI in the L2 classroom.

Additionally, in terms of individual differences Gu (2003, p. 10) further elaborates:

“Vocabulary retention is very much a function of an individual’s skillfulness in memory strategies. It also means that the ability to memorise and the preference for memorisation are dependant upon the cultural background of the learner.”

Clearly, the initial research that reveals the effect of cultural background on the learners’ VLS conducted by (O’Malley et al., 1985b) partly reveals the partial failure of ‘SI’ to Asian learners. O’Malley et al. found that Asian students resisted the strategies taught, e.g. imagery and grouping strategies:

“Asian students in control group applied rote memorisation strategies to the vocabulary task so successfully that they outperformed the experimental groups who had been trained in what we perceived as more sophisticated strategies. On the other hand, Hispanic students appeared to enjoy training of new language learning strategies and performed better on the post test than did Hispanic students in the control group.” (O’Malley & Chamot, 1990, p. 165)

With regard to O’Malley et al.’s findings concerning Asian learners, we broadly know that the students from Asian countries who participated in the study were mostly from Southeast Asian countries. They have not specified the exact countries. In fact, little research into VLST has confirmed the resistance of Asian learners to LLSI/VLST. Perhaps, it can be said that the finding gained from O’Malley et al.’s (1985b) study may not be absolutely generalisable to all Asian learners throughout Southeast Asia. At this stage we think that further study needs to be conducted to establish for more conclusive findings.

Apart from the point of Asian learners’ resistance to LLSI/VLST, interestingly, Zhenhui (2001, pp.2-3) reviewed the studies in conjunction with East Asian students’ learning styles conducted by many researchers, summed up as follows:

- It is because of the traditional EFL teaching, e.g. teacher-centred, book-centred, grammar-translation, and emphasis on rote memory. One of the typical learners’ styles in Asian countries is ‘introvert’ remarked by Liu and Littlewood (1997). It confirms the finding of Sato (1982): “*Asians took significant fewer speaking turns than did their non-Asian classmates.*”
- Many Asian students are obedient, less independent; they are more likely to depend on teachers or authority figures (Sue and Kirk, 1972), and they tend to follow rules (Harshbarger et al., 1986). In addition, they are not keen on expressing their opinion and raising queries. They are reluctant to express an argumentative opinion (Song, 1995).

- Visual learning is the other East Asian students' learning style (Reis, 1987).
- In particular, Chinese and Japanese learners use several strategies: memorisation, planning, analyses, sequenced repetition, structured review, and so forth (Oxford & Burry-Stock, 1995).

In terms of the restriction of the generalisation, we agree with Zhenhui's (2001, p. 3) view of learning styles in East Asian countries in that:

“It is worth noting that the generalisations made above about learning styles in East Asia do not apply to every representative of all East Asian countries; many individual exceptions of course exist.”

The findings of our main study conducted in 2000-2001 in Thailand, one of the Southeast Asian countries, indicate that the experimental group showed improvement in post-test scores (better/higher L2 retention than pre-test scores) after receiving VLST in the normal L2 classroom. According to the TAPII, the students reported using more of the VLS they had been trained (see Figure 5.4). Also, the twenty interviewees (100%) showed positive attitudes towards VLST (see 5.5.1). The students in the experimental group did not show any resistance to the VLST in the classroom.

Clearly, the finding of our study does not support O'Malley et al.'s (1985b) findings about the resistance of Asian learners to LLSI/VLST. With regard to the cultural background, our subjects, Thai students, tended to employ the VLS taught in the classroom to assist them with L2 word retention. Moreover, the majority of the subjects employed combinations of the five VLS. We are going to discuss this point further in 6.3.3.

However, at this point, it is inconclusive to say that all Thai learners do not have any resistance to LLSI/VLST. Likewise, we cannot say that every Thai student really favours and wants LLSI/VLST in the natural classroom environment. We take this point into consideration. As Wenden (1987b) points out with regard to students in the Language programme at the Columbia University showed negative responses to the training component included in their language course. Also, O'Malley and Chamot (1990) remark: “*The very learners that need strategy training are most likely to be the ones that reject it.*” We will further elaborate the possibility of resistance to VLST in the pedagogical implication section.

Gender differences in second language strategies – O'Malley and Chamot (1990, p. 164) refer to four studies involving gender/sex differences in the use of LLS. Four



studies report that females favour the use of strategies wider than men. According to Oxford's and Ehrman's (1987) study conducted at the U.S. Foreign Service Institute, the results obtained from the Strategy Inventory for Language Learning (SILL) with both students and instructors show: "*The females reported using language learning strategies significantly more often than males and used a wider range of strategies.*" (O'Malley & Chamot, 1990, p. 106). Additionally, with regard to 'gender', Oxford, Nyikos, and Crookall (1987) report the findings replicating the study of (Oxford and Ehrman, 1987). It reveals that females frequently used more language learning strategies than males. Also, the similar results obtained from Oxford's SILL questionnaires distributed to 374 students at three different course levels at the University of Puerto Rico show that female students utilised strategies more than male students (Green & Oxford, 1995).

According to our main study, due to the small number of male students (only three) in the control group, we can only speculate about the gender difference, which in this group suggests that females employ a wider range of VLS than males and contradicts the data from the experimental group. This is clearly far too small a number to make any kind of claims about male and female students' comparisons.

The results therefore reveal that the experimental group (with twelve female students and twenty-four male students), the learners' TAP I and II show that the male students employed a wider range of VLS than the female students, both before and after the intervention session. According to TAP I, the females reported using eight types (61.5%) of VLS out of thirteen in order to memorise vocabulary task I, whereas male students reported using thirteen types (100%) of VLS. Similarly, as demonstrated by TAP II, after the VLST, the male students still utilised a wider range of VLS. The report shows that the male students used seventeen VLS (94.4%) out of eighteen types, whereas the females employed only eleven types (61.1%) out of eighteen.

Regarding the control group - with thirty female students and three male students, TAP I shows that the female students employed a wider range of VLS than the male students. The former used eleven VLS (84.6%) out of thirteen types; the latter used seven VLS (53.8%). Similarly, TAP II shows that the female students used a wider range of VLS than male students. The females reported using twelve VLS (92.3%) out of thirteen types, whereas the males used seven VLS (53.8%).



In addition, for ‘gender’ and ‘L2 proficiency’, there is a debatable finding concerning ‘gender differences’. Ellis (1994, pp. 202-204) states that many studies concerning language learning strategies (e.g. Burstall, 1975; Boyle, 1987; Nyikos, 1990) report that female learners generally do better than male learners. In contrast, Bacon (1992) shows that men employed more translation strategies than women. Also, another study conducted by Pica et al. (1991) did not give adequate results to support the differences of gender between male and female Japanese learners of L2 English. Ellis, moreover, pointed out an interesting view that ‘gender’ possibly interacts with other variables, e.g. age, ethnicity and so forth. He states: “*It will not always be the case, therefore, that females outperform males.*”

However, in terms of L2 vocabulary retention, our findings show that in general the female students in both groups did better in L2 vocabulary retention than the male students (see 4.6.2). Therefore, with regard to ‘gender differences’ in vocabulary learning strategies use, it is perhaps inconclusive to draw an absolute conclusion that females utilise a wider range of VLS than males. Presumably, it could be the effect of the interaction between ‘gender’ and other different background of EVs, e.g. fields of study, previous FE3 scores, and the different numbers of genders within both groups and so forth. Apart from that, the result from the experimental group suggests that the word retention scores of male and female learners were affected, particularly after the intervention of VLST. It can be said that both females and males benefit equally from the VLST.

### **6.3.3 Learners’ VLS use**

Clearly, in learning a target language, one common hindrance of L2 learners is memorising a great number of new or unknown lexical items. It is also clear that this problem has been highlighted in the past and continues to be highlighted in the present. Kelly (1986, p.1) remarks that *retention* is the major problem in learning foreign language vocabulary. Similarly Gu (2003, p.9) points out about learners generally memorise L2 words:

“One of the first problems a foreign language learner encounters is how to commit a massive amount of foreign words to memory. And the first and easiest strategy people pick up and use naturally is, simply, repeating new words until they can be recognised.”

Clearly, the well-known and easy strategy learners often tend to use to memorise L2 words is ‘Repetition strategies’ (‘RP’) or shallow strategies, sometimes named mechanical strategies (Nielsen, 2003, pp. 3-4).

Moreover, the findings from many studies show that L2 learners normally employed a simple method (e.g. ‘repetition strategies’) to memorise new words. Lawson’s and Hogben’s (1996) think-aloud protocols discover that the strategies their subjects employed very frequently were ‘repetition strategies’.

In addition, Zhanrong (2002, p. 5) remarked about ‘RP’ in relation to Asian students’ use of decontextualised vocabulary learning:

“A general belief about Chinese or even Asian learners in literature is that these learners use more rote learning or memorisation strategies. It has become a mini caricature of the Asian students.”

Similarly, Ellis (1994, p. 557) points out O’Malley et al.’s finding (1985b) that Asian learners preferred rote memorisation in learning vocabulary to the strategies taught, e.g. imagery and grouping. Ellis also states that in terms of planning strategies training we need to consider the learning styles of different cultural groups.

Our findings are consistent with the above findings. We found that before pre-test the learners from both groups widely employed ‘repetition strategies’ of many types, i.e. 25, 26 types, to memorise L2 vocabulary (see Tables 5.7 and 5.8).

With regard to the results from TAPI and II, we found that most of the learners from both groups repeated the words aloud. Not many learners repeated the words silently, i.e. 12.1% of the control group, and 5.5% of the experimental group. Presumably, it can be said that repeating aloud is perhaps more effective than repeating silently.

On this subject of repeating aloud and silently, Gu (2003, p. 26) refers to the studies conducted by Gary and Gary (1982); Gersheman (1970); Hill (1994); Kelly (1992) who all reported similar findings: repeating aloud yielded better results in word retention. It seems supportive to Kelly’s words (p.142): “*The ear does assist the eye in the long-term retention of lexis.*” (Gu, op. cit.)

With regard to deep or complex strategies, it appears that a learner is unlikely to use them in memorising L2 words. Nielsen (2003, p. 4) remarks:

“O’Malley et al. (1983) found that repetition was the most commonly mentioned strategy, with strategies involving deeper and more involved manipulation of information (e.g. imagery, inferencing, keyword method) being much less frequent.”

Despite the fact that deep/complex strategies have been indicated to be more effective than shallow strategies, learners' preference for shallow strategies is higher than the complex ones (Nielsen, 2003, p. 3).

According to our findings, the learners in the control and the experimental groups (before pre-test), tended to employ shallow strategies with few complex steps of operations, especially 'repetition of many types'. The majority of the learners in both groups did not use the VLS that needed deeper or complex steps in operations, such as, the keyword method, semantic mapping, and so on. Though some of them used association strategies, it was a simple link of a new word to known words with similar meanings or near synonyms. The reason the learners did not use the deeper strategies may be that those strategies have more steps which need to be clearly demonstrated and taught in the classroom, so that students could really understand how to use them systematically and effectively.

#### **6.3.3.1 Combination of strategies**

Green's and Oxford's (1995, p. 261) study of learners' use of language learning strategies reveals that the strategies were a combination of what Green and Oxford term: "*bedrock strategies, which were used frequently or moderately frequently by learners at all levels.*"

In addition, [Chamot and Küpper \(1989\)](#) and [Wenden \(1998\)](#) report studies related to the use of single and multiple language learning strategies:

"Research has shown that successful language learners tend to select strategies that work well together in a highly orchestrated way, tailored to the requirements of the language task."

With regard to the use of combinations of strategies Gu (2003, p. 16) remarks that learners integrate several types of strategies to deal with language learning in the real situation. Gu also refers to the supporting study about the promising benefit of combinations of strategies (e.g. [Ahmed, 1989](#); [Gu & Johnson, 1996](#); [Parry, 1997](#); [Sanaoui, 1995](#)).

Regarding poor achievers and high achievers and their use of VSL use - the findings from TAP I show that two learners with FE3 score 'd' (poor achievers) in the experimental group who used single strategies, e.g. 'RP' changed to employing multiple strategies, e.g. three to four VLS in combination, after VLST; the other four poor achievers used a few simple strategies, such as 'RP', P, ST, and changed to

employing more strategies ranging from three to five in memorising L2 words. On the other hand, four out of five (80%) of the high achievers, with FE3 score ‘a’, utilised vocabulary learning strategies in combinations before the VLST. Only one high achiever (20%) used one simple strategy, ‘RP’. After the VLST, all five high achievers (100%) utilised combinations of strategies ranging from four to six VLS.

Our finding reported in 4.5.1 and 4.5.2, shows that the subjects’ post-test scores were better than their pre-test scores and this suggests that the VLST has the effect of changing learners’ use of VLS use. Particularly the poor achievers changed to employ more types of VLS in combinations. Apart from that, they had achieved an improvement in the post-test scores as compared with the pre-test scores. Clearly, both high and poor achievers benefited equally from the VLST. Notably, they successfully employed VLS in combinations to memorise L2 words.

In short, since we trained the learners in the five VLS in the classroom and the findings of our main study show the outcome for the learners of better L2 word retention, it can be said that the learners had more opportunities to select and employ a choice of VLS in combinations, and the VLS training probably assisted them to improve their L2 word retention effectively and successfully.

#### **6.3.4 Learners’ attitudes towards VLST**

O’Malley and Chamot (1990, p. 161) give their view on learners’ attitudes towards strategies: *“Once students begin to experience some success in using strategies, their attitudes about their own abilities may change, thus increasing their motivation.”*

O’Malley and Chamot (op. cit.), citing Jones et al. (1987, p. 56), point out that a core objective of LLSI should be to change students’ attitudes about their own abilities by, *“...teaching them that their failures can be attributed to the lack of effective strategies rather than to the lack of ability or to laziness”*.

In terms of unsuccessful language learners, it appears that the change in learner attitude should be taken into account, as it probably leads to the enhancement of their motivation to deal with their L2 learning successfully.

Our study reveals that after the intervention the treatment group did better in the post-test, having higher scores than in the pre-test. The responses gained from the

semi-structured interview indicate that the twenty interviewees (100%) showed positive attitudes towards the VLST (see 5.4.2).

To put it in a nutshell, learners' positive attitude towards the successful use of the VLS taught possibly increases in learners' motivation. Hence, it probably leads to the successful outcome in their use of vocabulary learning strategies and especially in their L2 vocabulary retention.

## **6.4 Pedagogical implications**

With regard to the VLST in our main study, we present our reflections in relation to four areas: a) VLS training implementation, b) practitioner's or teacher's roles, c) L2 learner's cultural background, and d) the VLS training materials.

### **6.4.1 VLS Training implementation**

The crucial aim of our main study is training in the five VLS in the L2 normal classroom environment to find the effect of the VLS on Thai learners' L2 word retention. We do not aim to examine or compare the efficacy of the five individual vocabulary learning strategy. We focus on the main principle of SI adapted from the CALLA framework. Particularly, we emphasised the '*direct instruction*', i.e. informing the students of the purposes and the benefits of the five VLS, training in their use, and practising of the VLS taught. During the training sessions, we also encouraged the learners to make use of the five strategies and to apply them to other current language learning tasks and another in the future. Moreover, we found that the learners' positive attitudes towards the VLST, motivation or the desire and determination to learn are also important factors that can lead the learners to be more confident and eventually successful in L2 learning.

In terms of providing effective VLST, we agree with Paris's (1988a) remark that it is not enough just to train learners how to use strategies, it is also important to emphasise a motivational training component and to include it in LSI sessions. Paris (op. cit.) indicates four instructional techniques likely lead to the integration of the motivational and cognitive strategy instruction: a) '*modelling*' – showing learners how to use the strategies, including thinking aloud about the goals and mental processes involved; b) '*direct explanation*'; c) '*scaffolding instruction*'- giving temporary support to learners during the trying out of the new strategies; and d)

*'cooperative learning'* – arranging the learners' collaborative learning, i.e. learners working as a team to help complete a task (O'Malley & Chamot,1990).

In our VLS training sessions, besides the CALLA framework, we also partly adapted the four instructional techniques suggested by Paris (op. cit.). For instance, on the matter of a) *'modelling'*, we did not emphasis the think-aloud about the goals and mental processes. In fact, in our main study, we trained the subjects in both groups how to verbalise their thoughts while they were learning the vocabulary tasks outside class. Thus, the subjects' think-aloud protocols were used as one of the research instruments to elicit which VLS were employed by the learners when memorising L2 words.

The treatment group received concrete explanations about the five VLS and also explicit support and encouragement from the researcher or practitioner during the training sessions and afterwards. We considered two issues: a) we should raise the learners' awareness of selecting and employing the five VLS appropriately and effectively; b) the learners should be fully encouraged to apply the five VLS to their vocabulary learning in the future.

Moreover, McDonough (1995, p. 83) raises a thoughtful question: "*Does teaching learning strategies produce better learners?*" We think that teachers who are interested in LLSI/VLST should consider this question and should look further at the view of McDonough (op. cit.), that in spite of the success shown by some LLSI/T research, some arguments against also appeared:

"First, it is not clear that what differentiates good and poor learners is the choice of strategy; it may simply be the range and amount of use of strategies. Second, there are constraints on when a strategy works which are to do with individuals, possibly cultural background, type of problem, and proficiency level. Third the pedagogic decision of some risk has to be taken to devote teaching time to strategy training rather than language learning, and the pay-off is not secure."

With regard to our VLST, we are aware of these three remarks, specially the third one. Apart from the issues concerning the learners: the good and poor learners' different choices of strategies, the range and amount of the strategies use and learners' individual differences, it is necessary for a teacher, who is thinking of teaching language learning strategies in a real classroom setting, to make a careful plan to balance the teaching of subject matter and of language learning strategies.

According to our VLST implementation, we precisely planned the time for the normal teaching timetable according to the academic term. We also, incorporated the

VLST sessions for the experimental group into the teaching timetable. Also we added the ‘discussion sessions’ to the teaching timetable of the control group, so as to maintain the equality of educational benefits for both groups.

In addition, the making up of the class and booking spare classrooms should be prepared in advance. For the real classroom setting, there are some official holidays, mid-term/final examinations or other miscellaneous interferences which may occur. For instance, sometimes it is likely that a teacher cannot manage to complete the subject matter within the allocated teaching time, so she/he needs to complete it during the spare time already prepared as a contingency plan.

In our VLST implementation, we considered the balance of teaching language and teaching the five VLS in response to the third caution raised by McDonough (op. cit.). Thus, **this paid off in** as much that the VLST in our home situation was successful.

However, from the informal talks with our learners, it emerged that they thought they needed to know more about other VLS. It is obvious that we are unlikely to provide them with extra extended training sessions. This highlights the importance of designing future elective English language courses, specifically aimed at embedding VLST into a course syllabus.

As we reflected on our VLST sessions, we can sum up the advantages and some drawbacks as follows:

**Advantages:**

a) Materials – the materials and tasks attracted learners’ attention. The ‘KW’ materials gained the most interest from the learners. They enjoyed finding L1 words which had similar sounds to L2 words and drew a picture to help form an association of the meaning between an L1 with a new L2 word.

b) Materials for wrap-up sessions helped enhance learners’ understanding of the operational steps of each strategy.

c) Learning atmosphere - The learners were interested in working in groups and cooperatively performed each reinforcement task provided in class. The learners felt relaxed and enjoyed participating in presenting their tasks. It made vocabulary learning more enjoyable. The students liked the VLST methods as well as the content. They also like these classes better than the usual RMC sessions.



### **Drawbacks:**

a) Some demonstration steps were too fast and some explanations were not clear to some learners. It took time to improve the steps and simplify those explanations. The researcher therefore needed to be also aware of learners' individual learning pace, i.e. slow and fast learners. She also needed to consider adjusting her teaching pace to match the majority of learners' learning pace.

b) Time constraint – As the time was rather limited, each VLST session was rather rushed. Most learners needed more time to check their understanding. The practitioner could not provide more explanation or examples in class. So, the extra explanation was later given outside class.

c) Some of VLS materials, i.e. 'DW', 'SM', consumed much time in both demonstration and practice steps. 'DW', particularly, 'macro-structure' has plenty of detail to be exemplified. To form 'SM', learners in different groups had different ideas and different levels of L2 known word repertoire; it took time to discuss and to agree how to form a semantic map within each group-work.

#### **6.4.1.1 VLS and their integration in syllabus**

It is anticipated that in the near future VLS will be considered useful to embed in the English vocabulary teaching and learning syllabus. At this position we think it is essential to first start looking at two issues: a) 'institutional context' and b) 'Thai context'.

a) In the context of our institution, the crucial role of VLS training has never been recognised. In my experience, KU lecturers at the Department of Foreign Languages need to be familiarised with techniques for vocabulary learning strategies training. They also need to know the philosophy of VLS in relation to LLS and their importance, particularly for Thai learners' learning processes.

An in-service awareness programme in VLS/LLS instruction is therefore initially needed. It is necessary to consider adapting the model which is practical and applicable. O'Malley and Chamot (1990, pp. 155-156) state a coaching model developed by Joyce and Showers (1987). This model targets teacher's teaching development. The model involves three stages: first, providing teachers "*the rationale for the value of the new information*". The teachers need to know how "*the theory works in practice*". Second, the practice stage is arranged, so that the teachers have an opportunity to practise the new teaching techniques. They also can receive



feedback from trainers. Third, in this stage the teachers have “to *observe each other’s approaches*”. Moreover, they can help plan how to perform effective teaching, exchange their ideas or create new ideas in designing teaching materials, and so forth.

Clearly, the model involves ongoing staff development which certainly takes time. It needs a very effective plan to arrange in-service training and other related pedagogical issues. Above all, the support from the administrative office is the prime factor which will lead to the success of integrating VLS/LLS in English language syllabus.

b) In the context of Thailand – At this stage we focus on Thai learners in relation to autonomous learning. In my teaching experience, when we look at Thai learners learning L2 in class, they are still spoon-fed. In fact Thai culture influences learners’ learning style. Thai learners are cooperative. Most of them depend on their teachers.

Teaching them how to learn or to cope with their learning independently cannot be done in a short period of time. However, presently many educational institutes in Thailand including KU realise the importance of self-direct learning mentioned by many scholars (e.g. Holec, 1981; Houle, 1961; Knowles, 1975; Dickinson, 1992; Ridley, 1997; and so forth). Wenden (1987, p. 9) paraphrases Knowles’s (1975) statement concerning learner’s self-direct learning: “*attention should also be given to helping learners gain an awareness of the need that they will have to continue learning the language on their own once they leave the classroom together with the skills they will need to do so.*”

In response to Knowles’s statement, we as teachers need to believe in the value and benefit of ‘self-direct learning’, ‘autonomous learning’. Then we can have a strong will to gradually build up this belief in our learners. Again, this is not a one-week or one-month project. It is a time consuming process which is like an everlasting process of learning.

In terms of the Thai context, we believe that VLS/LLS training is possible. However, it clearly takes time and strong will of both learners and teachers to help together to achieve the goal.

#### 6.4.1.2 Think-aloud training session

Earlier stated in 3.2.3.2, in our main study we asked our subjects to freely perform self-report, i.e. think-aloud. The subjects were asked to orally report their thought or thinking processes while they were memorising the vocabulary tasks I and II outside class.

The main study reveals that the learners' free think-aloud protocols (TAPs I & II) provide specific and useful data, i.e. vocabulary learning strategies employed, problems while memorising L2 words. Moreover, the learners felt comfortable and relaxed while they were responsible for performing their verbal reports independently. They followed the training procedures slowly, but completely understood the overall procedures. This advantage supports the results obtained from a number of studies in which TA was employed (e.g. Wenden, 1987; Faerch & Kasper, 1987; Cohen, 1984, and so forth). Ellis (1994) states that the data obtained from self report "...proved invaluable in exploring individual differences in learners and identifying the various learning strategies they employ."

However, Ellis (op. cit.) remarks: "Like any other type of data, incomplete." He refers to (McLaughlin, 1990c, p. 629) stating a drawback of TA: "Subject's reports may derive more from what they think they should have been doing than what from what they actually were doing." Similar cautions were raised by other scholars (e.g. Lyons, 1986; Leow, 2002; Seliger, 1983; Stratman & Hamp-Lyons, 1994).

In order to avoid or encounter a small amount of difficulty which may occur from utilising free TA as a research instrument, we would like to suggest some guidelines, based on our experience from the main study.

a) TA training sessions need to be arranged for the learners. The objectives and the operational steps of TA must be clearly explained and demonstrated in the training sessions.

b) Time for a training session needs to be allocated properly. It is necessary that the learners have enough time to practise and thoroughly understand the operational steps of how to perform a verbal report.

c) Materials, including instructions, used in a training session must be clear and concise.

d) To avoid giving any prompts about types of learning strategies to learners, practitioner's/researcher's demonstration material should be different from that for learners to practise their TA verbal reports.

e) Minimum and maximum time for making a free TA must be stated clearly, so that learners will be aware of the length of their verbal reports. This will also help the practitioner/researcher save time in transcribing tapes.

f) Learners' responsibility in performing their own TA verbal reports outside class needs to be emphasised and trusted by researchers/practitioners. The learners can consult their teachers, (i.e. practitioner, researchers) whenever they encounter some difficulty in performing their TA verbal report.

#### 6.4.2 The Practitioner's roles

In our study we played two roles (e.g. teacher and researcher) in the classrooms. Both roles were embodied as one: 'the practitioner'.

Since we were fully responsible for providing effective teaching of the RMC to both groups and also to make the VLST session effective and practical, we adjusted our roles according to Nyikos's (1996) and Cohen's (1998) recommendation. For example, Nyikos (1996) suggested three types of teachers described as follows:

**Table 6.1 Practitioner's roles suggested by Nyikos (1996)**

Teacher types	Description
<ul style="list-style-type: none"> <li>Assimilators</li> </ul>	<ul style="list-style-type: none"> <li>Teachers who are able to effectively adapt their teaching practice to promote strategy instruction</li> </ul>
<ul style="list-style-type: none"> <li>Middle-grounders</li> </ul>	<ul style="list-style-type: none"> <li>Teachers who manage the conceptual shift to a certain extent, but not entirely</li> </ul>
<ul style="list-style-type: none"> <li>Resisters</li> </ul>	<ul style="list-style-type: none"> <li>Teachers who are unable to let go of a transmission model of teaching</li> </ul>

To succeed in LLSI/VLST, we believe a teacher needs to bear in mind to which type he/she best describes his/her and whether he/she should consider shifting. As a result of our experience in VLST, we think that it is necessary for a teacher shift to the first type: *assimilator*. Moreover, the teacher should be a helper or facilitator during the teaching and training process.

In addition, Cohen (1998, p. 97) describes a shift in the teacher's role so as to succeed in LLSI. He suggests a *change agent*: teachers shift their roles from manager, controller and instructor to facilitator or partner in the learning process. The facilitator's role is to assist a learner to become more independent and more responsible for his/her own learning. We suggest teachers really try to be sensitive to

the learners' needs; also the issue of individual differences should be taken into account. In fact, the teacher should try to put herself/himself into the learners' shoes.

Regarding teachers as *change agent*, Cohen (1998, p. 99) exemplifies the variety of sub-roles connected with each other, e.g. diagnostician, learner trainer, coach, co-ordinator, language learner, and researcher.

**Table 6.2 Practitioner's roles suggested by Cohen (1998)**

<p><b>Researcher:</b> this is a general role where the teacher can research her/his performance in all other roles.</p>	<p><b>Diagnostician:</b> this role consists of "identifying the students' current language learning strategies and making the learner more aware of them so as to improve the learners' choice and utilisation of these and other strategies" (Cohen, 1998, p. 98).</p>	
	<p><b>Co-ordinator:</b> the teacher oversees the individual student's study programme.</p>	<p><b>Learner trainer:</b> the learners are trained by the teacher in the use of strategies either implicitly or explicitly.</p>
	<p><b>Coach:</b> the teacher works with the students to develop the language learning strategies, in areas where they have already been trained.</p>	
	<p><b>Language learner:</b> this is an optional role, in order for the teacher to put her/himself in the shoes of the learner. This way the teacher will be able to train the learners more effectively as she/he will be more aware of their needs.</p>	

During the VLS training sessions, we also adapted the four sub-roles suggested by Cohen (1998), e.g. researcher, learner trainer, coach, and language learner. In fact, we wore the facilitator's hat when teaching both groups. We also empowered the learners in both groups. It turned out that the learners were satisfied with the learning atmosphere; they were happy, co-operative, and willingly participated in the class activities. Importantly, it helped in forming a friendly interaction between the learners and the practitioner.

Lessard-Clouston (1997, p. 3) states: "*Helping students understand good language learning strategies and training them to develop and use such good language learning strategies can be considered to be the appreciated characteristics of a good language teacher.*"

In order to achieve the goal of learning strategies training, we, therefore, think it is important and necessary that a teacher consider three issues: a) teacher's characteristics; b) willingness to shift his/her roles, i.e. shifting from teacher to learner's facilitator or learner's partner; and c) teacher's resistance to shifting roles.

### 6.4.3 L2 learner's cultural background

Language learning strategies training can be affected by a number of different characteristics of learners, e.g. motivation, attitude, education and cultural background, (O'Malley & Chamot, 1990, p. 185).

Nielsen (2003, p. 5) stated that the limited research conducted in VLST has indicated: "*Culture is an important determiner regarding the effectiveness with which VLS can be taught and used by learners.*"

Furthermore, Nielsen (2003, p. 6) enters a caution about introducing VLST to an L2 language classroom:

"Research alerts us to the following potential pitfalls: Certain cultural groups are likely to have quite different opinions regarding what VLS they consider useful, which may result in resistance to learning some types of alternative vocabulary learning strategies. In addition, there may be some resistance to VLS involving deeper elaboration, because of the cognitive effort required in memorising words in this manner."

In our VLST, we were aware of the learners' cultural background, which might cause resistance to VLS training. Moreover, we also considered the issue of learners' resistance to change from employing the shallow VLS to deeper VLS.

In short, to reduce the resistance to LLSI/VLST, we recommend that teachers bear in mind the effects of learners' characteristics on LLSI/VLST, in particular the learners' cultural background. Moreover, it will be useful to the teachers who do care about enhancing learners' attitudes towards VLS, as it will probably strengthen the learners' motivation to employ the VLST taught in the classroom to their future language learning. Paris's (1988a) motivation training with LLSI/VLST also needs to be taken into account in order to develop learners' will to learn and skill in learning (O'Malley & Chamot, 1990).

Above all, the learners should be clearly informed of the purpose of language/vocabulary learning strategies training, so that they will in the first place understand the benefit they are going to obtain from it. This will help build up the right attitudes towards the strategies training at the start. We also emphasise another important issue that is teachers should have in mind the 'good will' and belief in their learners' ability to change, to develop, to broaden their perspectives to the new use of the VLS or LLS training.

#### 6.4.4 VLS training materials

The VLS training materials utilised in our main study were divided into three sets:

- The practitioner used the first set during the demonstration phase.
- The second set was for the learners. In fact, the materials were used as reinforcement tasks to check learners' understanding about the operational steps of the VLS taught and to provide the learners with extra practice for each VLS;
- The third set was the VLS materials for the wrap-up session. This set was used to re-emphasise the operational steps of each VLS taught and to ensure the learners understood how to use the VLS and to encourage them to try the new VLS and to apply the VLS use in the future.

Our VLS materials had features in common with Ellis and Sinclair's (1989) instructional materials, which solely emphasised strategy instruction. Likewise, we focused on direct training in VLS use, and raising learners' awareness of the importance and benefit of VLS, as stated by Ellis and Sinclair's: "*These materials also provided direct training of strategies use, as students are made aware throughout of the value and purpose of strategy training.*" (O'Malley & Chamot, 1990, p. 207).

According to our experience in implementing VLS training materials in the normal classroom, we would like to recommend that teachers also consider the following:

- Providing clear objectives of VLST and its advantages
- Providing concise and clear rubrics
- Making clear and concrete explanation, demonstration, and examples of VLS
- Arranging a proper variety of classroom activity, e.g. group-work, pair-work, and so on.
- Encouraging interaction between learner and learner, and between learner and teacher interaction
- Providing enough time for some learners' presentations and teacher's feedback
- Expecting to 'need to improvise', i.e. giving immediate concrete examples, adding more exemplification, changing or eliminating some verbose explanations

- Facilitating learners and being sensitive to learners' reactions and welcoming learners' queries
- Always encouraging the use of the VLS taught and the application of the VLS use
- Allocating enough time for each VLST session and for learners to deal with the reinforcement tasks
- Being aware of the possibility of some learners' resistance to using the new VLS

In addition, it is necessary the VLST materials be piloted in order to be able to make appropriate improvements or adjustments. Thus, a teacher will be assured to implement them effectively and successfully in the main study.

In sum, we believe that the VLS materials encompassed the implicit aim, of helping the learners become more effective, confident, independent, and responsible language learners. Thus, it can pave the way to learners' autonomous learning in the future.

## 6.5 Limitations of the main study

We now look at some limitations of the main study.

- The main study was conducted in a real L2 classroom environment at Kasetsart University (KU), in Thailand, located in the Southeast Asian region. Sixty-nine heterogeneous Thai university students participated in the study. It is thus unlikely to be generalisable to other studies which differ in terms of research methodology namely, subjects' EVs backgrounds, venues, context of the target language (e.g. EFL, ESL, EAP, ESP, and so forth) including other factors involving with research procedures.

- We focused solely on the training in some of the *direct strategies* (Oxford, 1990) in relation to the *determination strategy* (DET) and *consolidation strategies* (Schmitt, 1997). The five vocabulary learning strategies taught in our main study were recommended by a number of educators/researchers (e.g. Sökmen, 1997, pp. 245-50; Nation, 1990, p. 167; Oxford, 1990, pp. 64-65; Schmitt, 1997, pp. 213-214; MaDaniel & Pressley, 1987, pp. 87-89; Cohen & Apeh, 1980, pp. 221-235; Avila & Sadoski, 1996, pp. 379-395; Rodríguez & Sadoski, 2000, pp. 384-412), and so on. We did not explicitly include any *indirect strategies*, especially metacognitive



strategies (MET). The learners, therefore, did not have an opportunity to learn how to organise, plan, and evaluate their vocabulary learning. Since we did not explicitly promote learners' independent learning, one could argue that teachers should involve MET, so that learners can see how to become more confident, responsible, and autonomous learners in the future. As noted by O'Malley, Chamot, Stewner-Mazanares, Russo, and Küpper (1985, p. 561): "*Students without metacognitive approaches are essentially learners without direction or opportunity to review their progress, accomplishment, and future directions.*" Additionally, other researchers such as Brown et al. (1986); Palincsar and Brown (1986) also had a consensus in having a metacognitive component added to SI: "*The addition of this metacognitive component has been helpful in maintaining strategy use over time and transferring strategies to new tasks.*" (O'Malley & Chamot, 1990, p. 153).

- Due to time constraints, it was unlikely that we arranged an interview session for the learners in the experimental group after the final examination. So, we did not know whether they made further use of any of the VLS to memorise the vocabulary from the RMC course. We also did not know exactly that the learners continued to apply the VLS taught to memorise the L2 words which reappeared in the final examination papers. However, the results from the semi-structured interview (Q. 5) show that twenty interviewees (100%) answered 'yes' to the future application of VLS taught in the future (see 5.4.2).

- We did not aim to examine the efficacy of each VLS taught, so it is unlikely that we know exactly which of the five strategies aids learners most in L2 word retention. We only know from the experimental group, twenty interviewees' answers to Q.2 about the strategies they assessed as effective and less-effective strategies.

- It remains inconclusive whether 'DW' can be placed under 'consolidation strategy'. We trained 'DW' (MLD) which basically is called 'determination strategy' (DET) claiming as one of the strategies for the discovery of a new word's meaning, Schmitt (1997). However, one of our subjects' responses drawn from semi-structured interview: "*I remembered/memorised L2 words better when I looked up the words in the monolingual dictionary many times.*" In addition Laufer and Hill (2000:72) remark concerning dictionary use: "*The number of times the word is looked up during a learning session bears almost no relation to its retention. We postulated, albeit cautiously, that what matters is greater attention during the lookup rather than the number of lookups.*" According to Laufer and Hill's (op. cit.) supposition, we



think it is necessary to know how learners looked up the words in their dictionaries. It would be interesting to know if a learner greatly concentrates on his/her lookups, with a number of times, and keeps on copying the information, i.e. L2 word and its definitions, etc. from the MLD, he/she can perhaps get better L2 word retention. With regard to the findings of (Kachroo, 1962; Salling, 1959; Crothers & Suppes, 1967; Saragi et al., 1978), ones could argue that the more repetitions, the higher possibility of better retention (Nation, 1990). It appears that some studies of MLD use suggest the interesting result of an association between looking up L2 words and the better retention of the words. In short, with such inconclusive findings about the dictionary strategy, at this position we suggest that ‘dictionary strategy’ (DET) possibly be also classified under the memory strategies (MET). However, we may need to look at individual learning style and language proficiency in that some learners may find that MLD helpful in L2 retention; others may find it difficult to use and less helpful in vocabulary retention.

- Since we conducted the main research only at KU, obviously we cannot extrapolate our findings of positive responses to the VLST to Southeast Asian students in general.

- Perhaps it can be said that in reality we cannot strongly confirm that every learner really realises the value of VLST. Some of the learners may prefer to accept everything suggested by their teacher so long as they know it benefits their language learning. In the end an individual student’s perspective and uptake most probably depends on the input provided in the classroom. As an English proverb says: “*You can lead a horse to water but you cannot make him drink,*” which is similar to the Thai proverb: “*One cannot force a cow to eat the grass.*”

## **6.6 Suggestions for future research**

Clearly there has been very little research on the VLST in the real classroom environment. In order to confirm the findings of this study and other previous research findings, future research in this area is needed to investigate the effect of VLST on learners’ retention of L2 lexical items, lexical chunks (e.g. phrases, collocation, and the like) in relation to L2 learners’ individual differences, especially cultural background.

On the basis of the depth of processing theory stated by Craik and Tulving (1975), it is perhaps interesting to discover the effect of ‘DW’ strategy on learners’

retention of L2 words. As stated in the Kernerman's (2002, p. 2) Dictionary Research Grant: "*Studies are needed not simply of how the dictionary helps the learners understand new meanings and uses, but also of how it facilitates their retention in the long-term memory. How can dictionaries assist users in remembering what they read?*"

Furthermore, the dominant characteristic of all types of references, especially the MLD, is elaborating target language information. Therefore, it perhaps enhances L2 learners' greater attention during their lookups. Besides, the visual information and English examples in the dictionaries seem to effectively help individual learners to memorise the L2 word and its information. With regard to the elaboration of information leading to better retention, Laufer and Hill (2000, p. 72) state: "*Multiplicity of lexical information tends to be associated with better retention.*"

The concept of the MLD facilitating individual learners to retain L2 words better seems to be a promising area. However, more empirical evidence in this domain is required.

Since our study only aims at the effect of VLST on learners' receptive skill, particularly reading, it is interesting that further studies shift to another realm of investigation: looking at the learners' productive skills. It may aim at the investigation of how the VLST affects L2 learners' productive skill (e.g. either writing or speaking skill), and how the learners can activate the knowledge of L2 words after the intervention of VLS, e.g. dictionary work 'DW', especially the monolingual dictionary.

Lastly, we would like to suggest that future research should consider the investigation of the effect on learners' learning of L2 vocabulary of the VLS training in the mixed or multiple types of VLS in the real classroom setting. Also, it will be worth examining whether training in VLS would help poor or less efficient students to become more efficient and successful in L2 vocabulary learning, or whether it would improve their L2 vocabulary retention.

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