

VOCABULARY LEARNING STRATEGIES EMPLOYED BY
FINNISH HIGH SCHOOL EFL STUDENTS

Master's thesis
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Tiivistelmä – Abstract <p>Tämän Pro gradu-tutkielman ensisijainen tarve oli lisätä opettajien ja oppilaiden tietoisuutta sanaston oppimisstrategioiden hyödyistä. Lisäksi koin, että tutkielmani toisi lisää tietoa suomalaisten lukiolaisten strategioiden käyttötottumuksista. Tutkielman toissijainen tarkoitus oli tuottaa lisää tutkimustietoa aikaisempien sanaston oppimisstrategiakyselyiden rinnalle, sillä tämänkaltaisia tutkimuksia on tehty melko vähän. Useimmissa aikaisemmissa kyselytutkimuksissa ei ole niin ikään tarkemmin tutkittu sukupuolen aikaansaamia vaikutuksia sanaston oppimisstrategioiden valintaan ja käyttöön.</p> <p>Tämän tutkielman tarkoituksena oli kuvata ja kartoittaa suomalaisten lukiolaisten englannin kielen sanaston oppimisstrategioita. Yhdeksänkymmentäseitsemän suomalaista englantia vieraana kielenä opiskelevaa lukiolaista vastasi kyselyyn, jossa selvitettiin kuinka usein he käyttivät ja kuinka hyödyllisinä he pitivät heille esitettyjä kolmeakymmentä sanaston oppimisstrategiaa. Opiskelijoiden vastaukset analysoitiin kvantitatiivisesti.</p> <p>Tutkimuskysymyksiä oli neljä: 1) mitä sanaston oppimisstrategioita suomalaiset englantia vieraana kielenä opiskelevat lukiolaiset käyttävät, 2) mitkä strategiat ovat heidän mielestään hyödyllisiä, 3) käyttävätkö opiskelijat hyödylliseksi ilmoittamiaan strategioita todellisuudessa ja 4) miten sukupuoli vaikuttaa sanaston oppimisstrategioiden käyttöön. Kysymykset pyrkivät tarkastelemaan sanaston oppimisstrategioita oppimisen työkaluna monelta kantilta. Kaksi ensimmäistä pääkysymystä pyrkivät kartoittamaan ja kuvaamaan vallitsevaa tilannetta. Kaksi viimeistä kysymystä pyrkivät syventymään siihen, miten opiskelijoiden omat asenteet, toimet ja taustatekijät (sukupuoli) vaikuttavat strategioiden käyttöön.</p> <p>Suomalaisten lukio-opiskelijoiden vastaukset sanastonoppimisstrategiakyselyyn osoittivat, että he pyrkivät yleisesti välttämään syvällisiä oppimisstrategioita (assosiaatio, mielikuvat) ja suosimaan pinnallisia strategioita (sanalistat, toistaminen). Kuitenkaan opiskelijat eivät välttämättä nähneet suosimiaan strategioita kaikkein hyödyllisimpinä, vaan olisivat mielestään hyötynneet enemmän strategioista, joita he eivät usein käyttäneet (syvälliset). Oppilaat tuntuivat myös yleisesti arvostavan perinteisiä strategioita innovatiivisempien sijaan; he pitäytyivät mieluummin tutuissa vanhoissa kuin kokeilivat uusia.</p> <p>Sukupuolten väliset erot jäivät tässä tutkielmassa pieniksi vaikka analyysissä havaittiin muutamia tilastollisesti merkittäviä eroavaisuuksia mm. käytetyimmissä strategioissa, hyödyllisimpinä ja vähiten hyödyllisinä pidetyissä strategioissa. Naisten havaittiin suhtautuvan hieman positiivisemmin ja avoimemmin sanaston oppimisstrategioiden käyttöön ja niiden hyödyllisyyteen. Molempien sukupuolten yleinen tietoisuus sanaston oppimisstrategioista oli yhtä heikko.</p> <p>Tutkimuksessa selvisi että suomalaiset lukiolaiset, sekä miehet ja naiset, tarvitsevat kielenopettajilta ohjausta ja kannustusta sanaston oppimisstrategioiden käytössä ja kokeilussa.</p>	
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1 INTRODUCTION

This study was inspired by a small scale study carried out by the author during teacher training in 2011. The small scale research paper (2011) and the current study focus on the same issue, that is, vocabulary learning strategies employed by Finnish EFL students. During the small scale study in 2011 it was found that many junior high school students, according to their own words, had not received proper training in vocabulary learning strategies. Furthermore, they also knew precious little strategies focused on learning words and actually used even fewer strategies. Moreover, it also seemed that what little strategic knowledge they had was not put into use. Further inspiration for the current study was drawn from three earlier vocabulary learning strategy studies conducted on Japanese, Spanish and Chinese EFL students.

The Japanese students in Schmitt's (1997: 220-221) study preferred repetition strategies, both written and verbal. He reasoned that the Japanese school system endorses traditional techniques and that modern ways have not been introduced to students (1997: 220). Likewise, Catalan's (2003) results were also unfavorable as she focused on the Spanish FL students' vocabulary strategy use and preferences. Furthermore, she found that the range of VLSs used by females was much wider than that of males. In addition, only one third of the strategies offered in her questionnaire were used by the students. Fan's (2003: 228) study also shows equally detrimental results; the Chinese EFL students considered many of the vocabulary strategies offered in the questionnaire useful but they still employed only a few of them or the use of the strategies was infrequent.

I felt that I had to find out how Finland compares to the situation; would Finnish EFL students also be traditional learners with little information about more modern strategies. For this purpose, students from four Finnish high schools (from Middle and Eastern Finland) were asked to take part in the current study. Close to one hundred students answered a vocabulary strategy questionnaire. Thirty claims, which presented the strategies, were formulated. First, the students had to answer if they used the strategies or not, and second, think whether the strategies sounded useful to them. Students were also asked to name strategies that they knew of outside the list of thirty, and if there were any strategies in the list that they had not heard of. The data collected by the means of the questionnaire was then analyzed quantitatively.

The two main research questions aimed to clarify 1) *what vocabulary learning strategies Finnish upper-secondary EFL students used* and 2) *what strategies they found most useful*. Additionally, two sub-questions were posed: 3) *are strategies that students have reported useful actually being used* and 4) *does gender affect the use of vocabulary learning strategies*. The results of the previous studies have revealed that students actually kept using strategies that they did not think useful in solving language learning tasks. Students had also reported that they knew there were more efficient strategies to choose from but in reality they, however, refused to try them out. It was thus reasonable to assume that Finnish EFL students were also doing this. The earlier studies had furthermore suggested that the strategy choices made by male and female learners were indeed affected by gender. These findings suggested that Finnish male and female students might as well differ in their strategy choices.

According to the Finnish National Core Curriculum for Upper-secondary Schools 2003 (5.5 *Foreign languages*), one of the goals in learning foreign languages should be that the learner becomes able to independently improve his/her knowledge in the language based on his/her personal needs. The National Curriculum continues as follows, “the objectives are for students to know how to develop their language skills through strategies that are appropriate to their development needs, study assignments and communication tasks (2003: 102).” Furthermore the students

will be guided to recognise their own strengths and development needs as communicators and language students. They will be guided to use strategies that are appropriate to their own development needs and to each specific study assignment and communication task (2003: 103).

The need for autonomous learning in foreign languages, then, has been recognized by the Finnish Board of Education at a general level. Being able to learn and use English words outside the class is of utmost importance because it would expand the students’ time spent in practicing their vocabulary skills.

According to several experts (Oxford 1990, Nation 1990, O’Malley and Chamot 1990 among others), vocabulary learning strategies should be offered to foreign language students as tools to help them learn independently and to help them become more efficient learners and communicators in the target language. Furthermore, high school

students will need any help they can get, since many of them will be later studying at a university or a polytechnic. If they are to study in English, take part in lectures and write academic essays, they need to be able to cope with acquiring specialized vocabulary. According to Nation's (1990, 2008) and Nation and Waring's (1997) estimate, high school EFL students will have to reach a level of 2500-3000 words by the end of their high school career in order to be able cope with university courses, and furthermore, be able to continue learning academic vocabulary in its hundreds upon hundreds words.

I hope that the present study can offer teachers, as well as EFL students, some insights into how to teach, to learn and to use vocabulary learning strategies efficiently in second language learning. Perhaps the current study can also serve as a reminder of the significance of VLSs and vocabulary learning in general, and furthermore, seen as an encouragement to teachers to intervene and change the prevailing situation for the better.

I will begin the present study by first introducing some definitions for a word (2.1 onwards) before moving on to the types of knowledge a L2 learner needs in order to understand the requirements of learning a word (2.2). I will then briefly discuss the quantity and quality of words a L2 will need in the course of his or her studies (2.3). Moreover, some aspects of vocabulary learning will be discussed (2.4) before continuing with different definitions of language learning strategies (2.5 onwards). After single definitions, I will present some of the most well-known taxonomies or categorizations of learning strategies (2.5.2). The present study is based on Schmitt's taxonomy of vocabulary learning strategies that will be introduced in detail in section 2.6 (on VLSs in general) under sub-section 2.6.1. Section 2.7 includes two sub-sections which summarize the previous studies conducted on VLSs and gender and on VLSs in general. Research design (section 3) contains detailed descriptions of how the present study has been constructed and carried out including the research questions, research methodology, the questionnaire, participants and the analysis process. Section 4 introduces the analysis and the results by each research question. The discussion section (5) begins with the recap of the main results and continues with three comparisons between previous studies and the present study (5.2, 5.3 and 5.4). In the conclusion section (6) I will yet point out a few important facts about the nature of the VLSs and

the taxonomies and discuss the implications of this study for the Finnish high schools and how the teaching of English is organized. Finally, at the very end, I will present the evaluation of the present study and give some suggestions for future studies.

2 THEORETICAL BACKGROUND

Before one can start to discuss vocabulary learning strategies, the target of those strategies needs to be defined, that is the concept of a word. It is of utmost importance to know what exactly is meant and understood by the term 'word'. Linguists and practitioners in the fields of second language acquisition research and lexicology (Carter 1987, Jackson 1991, Jackson and Ze Amvela 2007) seem to agree on one thing: words are ambiguous and very hard to pin down. According to Jackson and Ze Amvela (2007: 57), "the difficulties involved in the definition of the word" need to be taken into account before discussing the characteristics of the word any further. The elusive nature of words will be the guiding thought of the following chapters as we discuss how words can be defined (for details, see Jackson and Ze Amvela 2007: 62).

Section 2.1.1 deals with the orthographic definition of the word. Section 2.1.2 explains how a word can be seen as the minimum meaningful unit of language. Section 2.1.3 describes a word as a minimal free form.

2.1 Definition of a word

What exactly do we mean by a word? The answer to this seemingly simple question is anything but; attempts by several linguists and lexicologists have been made in order to capture the essence of a word. According to Jackson and Ze Amvela (2007: 59), "it is one thing to identify words and another to suggest a definition that will apply to all types of word in English." It should be duly noted that there are various concealed complexities to a word, and it is quite impossible to give an all-encompassing description of it (Carter 1987). However, even though the definitions have their flaws, they serve a purpose in clarifying the complex concept of a word. I will now continue with a short review of different types of definitions of a word. I will start with the most

rudimentary and most common-sense definition - the orthographic definition of a word (Carter 1987: 4). As the review advances, I will also try to cover, although briefly, all the four properties or aspects of a word which are *the orthographic, the phonological, the grammatical and the semantic*.

2.1.1 The orthographic definition of a word

Among its many definitions, a word has been described as just “a string of characters, or a sequence of one or more morphemes, which is bounded at either end by a space or by punctuation (Moon 1997: 40).” This rather broad definition is called the orthographic definition, which has been labeled as “the practical common-sense definition” that most people use when they are asked to explain what a word is (Carter 1987: 4). However, the outward simplicity and practicality of the definition proves deceitful, as Jackson and Ze Amvela (2007: 57) point out that this system of dividing words as simple sequences of letters bounded by spaces often does not correspond to the functional reality of language whether written or spoken. According to the form-focused logic of this particular definition no further thought is given to the most important aspect of a word, which is, of course, the meaning it conveys (Jackson 1991:1-2). This fact is emphasized by both Carter (1987: 5) and Jackson (1991: 2), who state that the orthographical way “is not sensitive to distinctions of meaning or grammatical function” and is “to this extent it is not complete” and that “the orthographic perspective taken by itself, of course, ignores the meaning of the words.”

For instance, according to Jackson’s (1991: 2) example, due to the insensitiveness of the orthographical definition, the two *semantically* different (although similarly written) words *bow* and *bow* are recognized as one and the same word. The word *bow* is, however, a *homograph*, which means that although the spelling is identical, it carries multiple and altogether different meanings and is pronounced differently (1990: 4). For example, depending on how the word *bow* is pronounced, the meaning can change from a noun into a verb (1991: 3). The *phonological* word [bɑʊ] either means a part of a boat (*bow* serves here as a noun) or a person performing an action of lowering his head in respect to someone or something (*bow* serves here as a verb). The phonological word [bəʊ], then again, either refers to a way to tie a string into a knot or a traditional weapon

for shooting arrows (Jackson 1991: 3). In short, even the phonological variations of the orthographical word *bow* carry multiple and separate meanings.

2.1.2 Word as the minimum meaningful unit of language

Defining a word as the minimum meaningful unit of language proves as difficult a task as defining a word orthographically; it is an indefinite definition, which leaves too much lee-way for alternative interpretations (Carter 1987: 5). The sheer existence of such vocabulary items as compounds, multi-word verbs, phrasal verbs and idioms is enough to make the definition of a minimum meaningful unit unsound. According to Carter (1987: 5), “this definition presupposes clear relations between single words and the notion of ‘meaning’”, even though the definition makes possible distinguishing different semantic units, for example, *fair* as *a fair game* or *fair hair*. Then again, for instance, a word *bus conductor* is recognized not as one word with one meaning but two separate words with separate meanings, even though *bus conductor* is clearly one word or unit of meaning (1987: 5), or as Jackson and Ze Amvela (2007: 57) call it “the indivisible unit of thought” that overrides the limits set by the graphological unit.

Further problems arise with types of words that do not carry as broad meanings (being in a sense less *lexical*) as do nouns, verbs and adjectives (Jackson 1991: 15). In other words, they are not semantic units in the same sense as the aforementioned word classes (Carter 1987: 8 and Jackson 1991: 15). These words are called *grammatical* or *functional* words. Grammatical words include word classes such as pronouns, articles, prepositions and conjunctions. They function as organizers of information and bring structure to the flow of language (Jackson 1991: 15).

What lesser lexicality basically means is that grammatical words can be omitted from a phrase or a sentence and still the message conveyed by the sentence remains understandable (Jackson 1991: 15). According to Jackson’s telegram example, the full sentence such as “*I am coming on the train that arrives at 8.30.*” with both lexical and grammatical words included can be reduced to “*Coming on the 8.30.*” without damaging the main content of the message (note, the context has to be known).

A further example of the unsoundness of this definition is the idiom. For instance, the idiom *to spill the beans* consists of four orthographic words but they add to only one meaning. The sequence of the four orthographic words is fixed and has a unitary meaning. According to Jackson (1991: 14), the meaning of an idiom “is not the sum of the meanings of its constituent parts” and that an idiom “is to be interpreted non-literally, as a whole”. If something is taken away or substituted, the meaning will be lost.

2.1.3. A minimal free form

According to Bloomfield (1933/5: 178 as quoted in Jackson and Ze Amvela 2007: 58), a word can be defined as a minimal free form which means that “a word is viewed as a form which can occur in isolation and have meaning but which cannot be analysed into elements which can all occur alone and also have meaning.” This means that a word that is truly a word cannot be subdivided or further reduced in form (Carter 1987: 5). Bloomfield (1933/5: 178 as quoted in Jackson and Ze Amvela 2007: 58) states in his formal definition of a word that “a minimal form is a morpheme and its meaning a sememe.” He continues that “a form which may occur alone is free” and that “a form which may not occur alone is bound”. For instance, *cat* and *tree* are free forms (cannot be analyzed into smaller elements) but *-ing* in *fishing* and *-er* in *writer* are bound. However, also Bloomfield’s definition has a major flaw; it leaves out relational words (e.g. *and*, *by*) and grammatical morphemes (e.g. *-ing*, *-est*, *-s*).

Carter (1987: 5) is skeptical about the functionality of the definition of a minimal free form, although he thinks that it can be used as a working definition like the orthographic definition, and that they have “a certain intuitive validity”. Carter (1987:5) continues that the idea of a minimal free form is founded on “the basic stability of the word”; “a ‘word’ is a word if it can stand on its own as a reply to a question or as a statement or exclamation.” However, Carter (1987: 6) goes on to note that there still remain a plethora of words that we recognize as words but which would not pass the so called ‘the minimal free form test’ that he has described. In other words, a definition of this kind is too restrictive to be used to describe the functional reality of words and how they are used.

To conclude, it has become clear that none of the definitions discussed can give an all-encompassing description that would fit all the words used in the English language; there are always those types which are not included. In reality, a word is essentially an arbitrary unit the essence of which cannot be pinned down theoretically (Moon: 1997: 40). One can only arrive to a working definition that allows one to talk about the phenomenon.

2.2 Knowing a word

The previous sections have shown that words are complex. Knowing words will not be any simpler. According to Milton (2009: 22, emphasis added)

Words can vary in all sorts of ways. They can vary in the sounds and letters that make them up. They also differ in length, how the sounds and the letters are allowed to combine and how similar they are to a learner's native language. They can differ in how they are allowed to change and make derived and inflected forms, such as plurals and past tenses. And they can vary in the range of nuance and meaning they convey and, consequently, in what situations you can use them. Unquestionably, these can influence whether, and *how completely a word is learned*.

Furthermore, as Milton summarizes (2009: 13), "there are many types of knowledge involved in being able to use a word properly and effectively in a foreign language". However, before going into the types of vocabulary knowledge, one must define what knowledge in this case means.

There are two types of knowledge that become convenient when discussing how a language learner understands the meaning of words and their use and how one is able to manipulate this knowledge. The two sets of knowledge are called the *receptive or passive knowledge* and the *productive or active knowledge*. Knowing a word, then, depends on what kind of knowledge is meant and what kind of knowing is considered to be adequate for the learning purpose (Nation 1990: 31).

If word is to be learned only for *receptive use* (i.e. being able to recognize it when met), only a limited amount of information about the features of a word are needed. If a word is to be learned for *productive use* (i.e. being able to recall it and use it when speaking

and writing), one needs deeper knowledge of its features. The language learner will need both kinds of knowledge when learning vocabulary.

According to Nation (1990: 31), the basics of knowing a word in *a receptive sense* consist of “being able to recognize it when it is heard or when it is seen.” This means that one is able to distinguish the word from others when listening to spoken input and when reading. However, it does not necessarily mean that one can use the word him/herself accurately in all situations. This is to say that one does not have a complete grasp of the word; the word is known only partially (e.g. one use/one meaning). Furthermore, receptive knowing of a word includes “being able to distinguish it from words with a similar form and being able to judge if the word form sounds right and looks right (Nation 1990: 31).” Furthermore, it also involves “having an expectation of what grammatical pattern the word will occur in (Nation 1990: 31-32).”

Being able to use a word independently in one’s own speech and writing demands more sophisticated skills. Knowing a word in *a productive sense* includes “knowing how to pronounce the word, how to write and spell it, how to use it in correct grammatical patterns along with the words it usually collocates with” (Nation 1990: 32). Additionally, in order to be able to produce as fluent English as possible, one needs to be able to come up with alternative words (e.g. *excellent/outstanding*) in order to avoid repetition and be able to use words appropriately depending on the situation and context they are used in (i.e. whether words are low-frequency words, whether the register and style are right).

At this point, it is perhaps useful to provide a list of the features of a word that one must know before one can claim to know a word completely (which, it must be reminded, is most often not a goal for a L2 learner). Nation (2001: 27) has compiled the following list.

Table 1. What is involved in knowing a word.

Form	spoken form	R	What does the word sound like?
		P	How is the word pronounced?
	written form	R	What does the word look like?
		P	How is the word written and spelled?
	word parts	R	What parts are recognizable in this word?
		P	What word parts are needed to express the meaning?
Meaning	form and meaning	R	What meaning does this word form signal?
		P	What word form can be used to express this meaning?
	concepts and referents	R	What is included in the concept?
		P	What items can the concept refer to?
	associations	R	What other words does this make us think of?
		P	What other words could we use instead of this one?
Use	grammatical functions	R	In what patterns does the word occur?
		P	In what patterns must we use this word?
	collocations	R	What words or types of words occur with this one?
		P	What words or types of words must we use with this one?
	constraints on use	R	Where, when, and how often would we expect to meet this word?
		P	When, where, and how often can we use this word?

Note: R=receptive knowledge, P=productive knowledge.

Anderson and Freebody (1981: 92-93) have suggested yet another way to describe the word knowledge possessed by the L2 learner. They talk about *breadth and depth of word knowledge*. Breadth of knowledge means the number of words that a learner knows and depth refers to what the learner knows about these words. According to Anderson and Freebody (1981), this allows a distinction to be made between learners who might know a larger number of words but are unable to use them correctly when speaking or writing (receptive/passive) and learners who have also learned the associations and nuances of the words (also see Milton 2009: 13).

2.3 The amount of words and the types of words a L2 learner needs

There are three wordlists for different purposes that have been compiled in order to help L2 learners to cope with the thousands of words in the English language. First of all, the General Service List (West 1953, see Nation 2008: 163-171) contains the first 2000 most frequent words in English. The second list, the University Word List (Coxhead 2000, see Nation 2008: 173-176), contains 800 most frequent words used in academic texts. The third list, the Academic Word List, has been created to the same purpose as the UWL and it contains 570 most frequent words used in academic texts (Nation and Waring 1997: 13-16).

According to Nation (1990: 5, 119), a L2 learner who wishes to study in a university needs to be able to actively use around 2500-3000 high frequency words in the target language. In addition, the learner needs an even larger reserve of vocabulary that s/he can use passively. This limit of 3000 is the minimum amount needed to understand university lectures and read unsimplified texts, as Nation claims.

To get to the 3000 word level (of high frequency words) a student needs to first learn the 2000 English words included in the GSL. According to Nation and Waring (1997: 11), any student of English needs to know the words in the GSL because they are the words most commonly used in everyday English (emphasis on the spoken language). The words in the GSL are in fact so important that they will have to be learned by the

end of junior high and before moving on to high school (Nation 1990:16). Nation (1990: 14) furthermore emphasizes the significance of the GSL by saying that “any time spent learning them will be well repaid because they cover a lot of text”, around 87 percent to be exact.

By the time of finishing high school, EFL students must know the next important list of words, the University Word List. According to Nation (1990: 15-16), knowing the words on the University Word List is a prerequisite if one wishes to continue studying in a university or a polytechnic. The UWL contains around 800 head words that are frequent in academic texts, and have been claimed to give 95% coverage of such texts.

The third word list, called the Academic Word List, is similar to the UWL and is used for the same purposes. The AWL contains 570 words of academic vocabulary (Nation 2008: 125). According to Nation, the GSL and the AWL cover roughly 90% of words in academic texts (2008: 128). Most of the words on this list, as well as the UWL, are derived from Latin, Greek and French and can be described as technical words or specialized vocabulary (1990: 18).

2.4 Vocabulary learning

Learning vocabulary is essential for all language learners, both L1 and L2 learners. Vocabulary is needed to undertake reading, writing, speaking and deciphering messages heard. Unlike L1 learners, L2 learners’ need classroom instruction in order to learn the language. However, after a sufficient amount of the structures, uses and vocabulary in the target language have been learnt in class, also an L2 needs opportunities to practice and learn independently. Vocabulary learning is especially inclined for teacher independent learning (Nation 2008: 5). Learning independently outside the classroom is a key to acquiring new words.

According to Nation (2008: 1-3) words can be taught and learned deliberately and not just by chance. In class, learners need to practice with texts that contain familiar words - texts that have been tailored to their needs. In class and at home, learners should review and go back to the words that they have recently learnt and practice using them in different types of language learning tasks (Moir and Nation 2008: 166-167).

Furthermore, when learners have developed a passive reserve of vocabulary through listening and reading, they should move on to producing themselves, again both in class and at home.

Learners have to deliberately learn new words, both in class and at home, and study more about words that they know in order to find about the many possible meanings, register and style (Moir and Nation 2008: 164). At this point, vocabulary learning strategies become immensely valuable. Strategies are needed to further ensure that the learning process continues after language lessons, as Nation (2008: 6-7) emphasizes that learners' jobs are far more important than the teachers' in learning vocabulary

The fact that learners have a greater responsibility in learning words at home and by themselves can be understood when one considers the amount of time that teachers can expend in class for learning and practicing new words. The time that the teacher can spend on words is actually very limited (Nation 2008: 4, 5). For instance, in Finland students will find more opportunities to learn and use English vocabulary, both receptively and productively, outside the classroom than inside it. According to Nation (2008: 6), learners should try and "make the most of opportunities to use the language, to deliberately learn vocabulary" and "to eventually take on responsibility for their own vocabulary learning."

However, Nation (2008:7) notes that becoming an independent learner is not easy for everyone. There needs to be a strong motivation to actively search for opportunities to practice words. Independent students must also be able to judge what to learn and what not to spend their time on (Moir and Nation 2008: 159). And furthermore, they must possess metacognitive skills to be able to reflect on one's development and control one's affect (2008: 173).

This is why teachers have to instruct students in learning strategies and support them in becoming more efficient and independent learners. Language learning strategies should become the tool kit for independent learning. Learners need strategic resources of their own so that they can cope with the plethora of words they must learn whether at home or in class (Nation 1990: 1-3, 159).

2.5 Language learning strategies

The next two sections, 2.5.1 and 2.5.2, will focus on the definitions of learning strategies and will introduce two well-known taxonomies of learning strategies, those of O'Malley and Chamot (1990) and Oxford (1990). The vocabulary learning strategy taxonomy used in the current study has been compiled by Schmitt (1993/1997) and is based on the well-recognized taxonomy by Oxford (1990). Schmitt's taxonomy will be introduced in section 2.6.1 in more detail.

2.5.1 Definition of a language learning strategy

At a very general level, language learning strategies can be described as facilitators of the language learning process (Oxford 1990: 5, Griffiths 2008: 86). They support the different stages of learning. The efficient or inefficient use of language learning strategies may on their part determine how much is learned, what is learned and how the material learnt will be organized, and furthermore, how long the acquired information reserved in the memory will stay in the memory (O'Malley and Chamot 1990: 18). Such matters are very important for efficient learning and long-term learning goals.

Even though researchers do seem to agree that the purpose of language learning strategies is to enhance learning (and use) of an L2 (Cohen 2007: 38), there is, however, no single definition to date what a language learning strategy specifically entails (for details, see Griffiths 2008: 85-87, Brown et al. 1983: 85).

According to Oxford (1990: 1),

Learning strategies are steps taken by the students to enhance their own learning. Strategies are especially important for language learning because they are tools for active, self-directed involvement, which is essential for developing communicative competence. Appropriate language learning strategies result in improved proficiency and greater self-confidence.

Oxford's (1990) definition is broader than her and Nyikos's earlier definition of "acquisition, storage, retrieval and use of information" (see Oxford and Nyikos 1989: 291) and Wenden's definition of "storing, manipulating and remembering information

as well as solving problems, reasoning and using language” (1987: 5). Oxford says that language learning strategies are “specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferrable to new situations” (1990: 8). Oxford (1990: 10) adds that language learning strategies also encourage learners to become more independent especially outside the classroom. According to her (1990: 10), learners that are self-directed do also “gradually gain greater confidence, involvement and proficiency.”

Furthermore, Oxford (1990: 9) has compiled a list of the features that she believes language learning strategies have. This list serves as a kind of a check list in identifying language learning strategies from other phenomena that might be involved in learning a language.

Table 2. Features of language learning strategies.

Language learning strategies...

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 learner.
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.
12. Are influenced by a variety of factors.

Adapted from Oxford, R. (1990: 9).

According to O'Malley and Chamot (1990: 1) learning strategies are "special thoughts or behaviors that individuals use to help them comprehend, learn, or retain new information". Previously O'Malley et al. (1985: 557) have related that "learning strategies are operations or steps used by a learner to facilitate the acquisition, storage, or retrieval of information." Furthermore, the primary purpose of language learning strategies is to support the acquisition process of a second. Language learning strategies facilitate, for instance, how the incoming information is to be processed; how information is stored in memory and how new information is first acquired.

The secondary purpose of the language learning strategies "is to make explicit what otherwise may occur without the learner's awareness or may occur inefficiently during early stages of learning" (O'Malley and Chamot 1990: 18). Especially metacognitive strategies make learners aware of their learning process and help them organize their course of study (1990: 8). In fact, O'Malley and Chamot (1990: 8) believe that learners without metacognitive skills are learners with no direction.

According to Gu (2003: 2),

A learning strategy is a series of actions a learner takes to facilitate the completion of a learning task. A strategy starts when the learner analyses the task, the situation, and what is available in his/her own repertoire. The learner then goes on to select, deploy, monitor and evaluate the effectiveness of this action, and decides if s/he needs to revise the plan and action.

Moreover, Oxford (1990: 8) states that a learning strategy includes "a plan, step, or conscious action toward achievement of an objective." Also Griffiths (2008: 87) agrees that learning strategies are by definitions conscious: that they are "activities consciously chosen by learners for the purpose of regulating their own language learning." However, Cohen (2007: 31) claims that strategies that are conscious can become unconscious when they "developed into routines at high levels of competence", in other words, they become automatic. Yet, earlier, also Cohen (1998: 4) has emphasized that language learning strategies are chosen consciously by the learner, as he says that

a language learning and language use strategies can be defined as those processes which are consciously selected by learners and which may result in action taken to enhance the learning or use of a second or foreign language, through the storage, retention, recall, and application of information about that language.

However, he notes that some learner-initiated actions can involve only partial awareness instead of full attention. It seems, however, that there are many (Wenden 1987: 3, Chamot 1987: 71, Anderson 2005: 757) who do not agree with Cohen's latest remark. They believe that strategies that have turned from conscious to unconscious (or automatic) are still nonetheless true strategies.

Many experts back the claim that in order to a strategy to be a fully-fledged one, it needs to be not only conscious but also intentional and controlled; a learner needs to be aware of using it. Cohen (1998: 4) claims that consciousness which affects the choice of a strategy is "what distinguishes strategies from those processes that are not strategic." In other words, there needs to be

a metacognitive component whereby the learner consciously and intentionally attends selectively to a learning task, analyzes the situation and task, plans for a course of action, monitors the execution of the plan, and evaluates the effectiveness of the whole process (Cohen 2007: 32).

Again, most experts seem to at least agree with the idea that there is always a metacognitive component in employing a language learning strategy. However, the description above might prove to be too ideal and complex to match the reality of many learners. In other words, what learners actually do when they are trying to solve a task can only be guessed at (Cohen 2007: 32-34, Chamot 2008: 267).

2.5.2 Language learning strategy types

There are different types of strategies for different types of tasks and skill areas of language (Cohen 2007: 38). In fact, it has been claimed that some of the less efficient language learners tend to use strategies that do not fit the particular tasks and thus fail completing them (Vann and Abraham 1990, Gu 2003, O'Malley and Chamot 1990, Chamot 2008). When these types of mistakes happen often enough, they will cause the

learner to fail and not reach his/her goal of learning. Or at least s/he does not become a better learner until s/he learns to make better fits of strategies and tasks.

O'Malley and Chamot (1990: 8, 44, 45) divide the bulk of language learning strategies into three types:

- 1) metacognitive strategies that include planning, monitoring, evaluating
- 2) cognitive strategies that include manipulation of incoming information, rehearsal, organization and elaboration,
and
- 3) social or affective strategies that include 'interaction with other people and ideational control over affect' (e.g. ways of reducing anxiety etc.).

O'Malley (1987: 133) states that

the classification differentiates strategies that involve planning for, monitoring, or evaluating a learning activity (metacognitive strategies); strategies that entail direct manipulation or organization of new information (cognitive strategies); and strategies that are mediated by social interaction (social-affective strategies).

According to O'Malley and Chamot (1990: 44) metacognitive strategies are 'higher order' strategies or broad general strategies that govern learning at a general level. Metacognitive strategies aid students in accomplishing task types that involve selective attention, planning and organizing written or spoken output, paying attention to one's production during and after the task and evaluating one's success after a task has been completed. Metacognitive strategies are the ones that often distinguish proficient learners from the less proficient. Metacognitive strategies "allow learners to control their own cognition" (Cohen 1998: 7).

Cognitive strategies entail single rehearsal strategies (such as repetition), organization strategies (such as grouping, classifying words) and elaboration strategies such as inferencing (guessing), summarizing, deduction and imagery strategies (such as visual association (O'Malley and Chamot 1990: 44-45)). Social or affective strategies are also a broad group of strategies which include co-operative action such as group work,

asking others for information and using ‘self-talk’ to mentally control feelings related to learning.

By contrast, Oxford (1990: 8-9, 14, 15) has come up with five categories of language learning strategies, which are the

- 1) metacognitive
- 2) cognitive/memory
- 3) affective
- 4) social and
- 5) compensation strategy groups.

According to Oxford (1990: 8), “metacognitive strategies help learners to regulate their own cognition and to focus, plan, and evaluate their progress as they move toward communicative competence.” The affective strategies “develop the self-confidence and perseverance needed for learners to involve themselves actively in language learning.” Social strategies “provide increased interaction and more empathetic understanding.” Cognitive strategies “are highly useful for understanding and recalling new information (1990: 9).” Compensation strategies “aid learners in overcoming knowledge gaps and continuing to communicate authentically.” The following figure will furthermore illustrate how Oxford has divided her six strategy groups into two main classes, direct and indirect strategies.

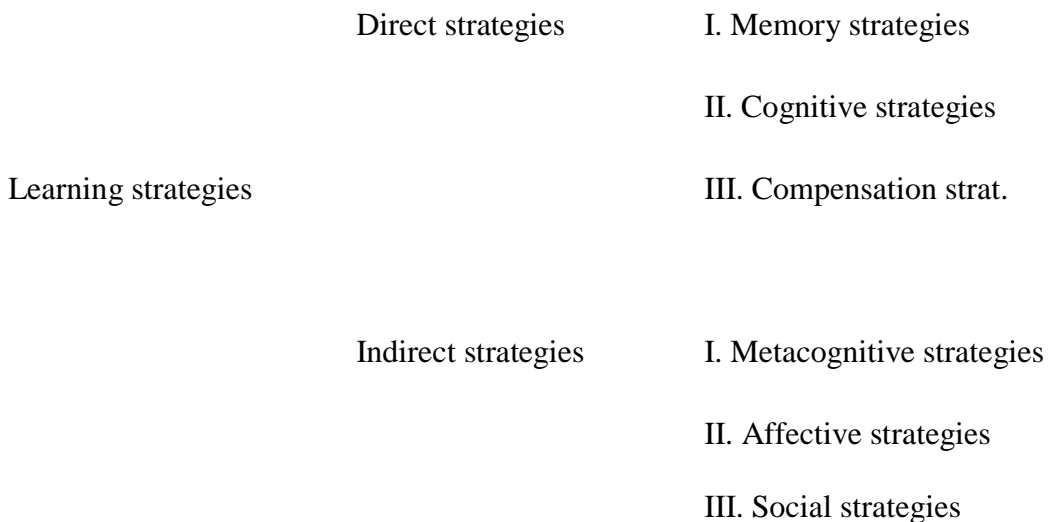


Figure 1. The strategy system by Oxford (adapted from Oxford 1990: 16).

Oxford's (1990: 12, 14) direct strategies consist of memory, cognitive and compensation strategies and the indirect strategies include metacognitive, affective and social strategies. However, Oxford (1990: 17) notes that

there is no complete agreement on exactly what strategies are; how many strategies exist; how they should be defined, demarcated and categorized; and whether it is -or ever will be- possible to create a real, scientifically validated hierarchy of strategies.

It is furthermore worth mentioning that language learning strategies can be conscious actions turned into unconscious actions due to automatization of skills and behaviors when learning strategies are practiced and used often (Oxford (1990: 12). In addition, Oxford also believes that language learning strategies are highly teachable and she encourages strategy training in order to raise awareness. According to her, strategy training would help “learners become more aware of the strategies they are using and to evaluate the utility of those strategies” and moreover become “more adept at employing appropriate strategies (1990: 12).” The learning outcomes (success or failure) depend on the efficient usage of all the strategy types.

2.5.3 Language learning strategies and good language learners

Rubin (1975: 42-44) claims that the ‘good language learners’ have certain advantages over the inefficient language learners. Good language learners use studying techniques or language learning strategies which help them to learn more productively. Furthermore, according to Rubin, there are three great factors at play that affect the language learning outcomes; such factors are 1) aptitude (or proficiency) to learn languages, 2) motivation toward language learning and 3) opportunities to practice the target language. It is believed that good language learners are generally more motivated than inefficient language learners, and more specifically, the motivation type of the good language learners, as Rubin claims (1975: 43), is more often than not *integrative* instead of *instrumental*.

Additionally, Rubin notes that a good language learner “seems to have a high motivation to communicate, no matter where he is (1975: 43).” She asserts that among the three factors aptitude is the one that is quite stable and not susceptible to changes like the other two factors. According to Rubin (1975: 43) we need to “to isolate what the good learner does - what his strategies are - and impart his knowledge to less successful learners.” In short, the unsuccessful students should copy whatever a good language learner does.

However, Vann and Abraham (1990: 177-178) found in their case study that the facts held about what unsuccessful and successful learners do (or do not do) is not so straightforward as earlier studies would suggest. Instead of automatically telling unsuccessful students to imitate their better performing peers, the focus should be on the actual strategies that the unsuccessful learners use and how they use them. For instance, they realized that some of the most successful students used as many strategies as the unsuccessful students did, and that many of the strategies were the same (1990: 182). It cannot be thus claimed that the unsuccessful students were necessarily less active users of language learning strategies than the successful students, and furthermore their repertoires of strategies are as broad, or in fact, as narrow (1990: 183).

Moreover, it is worth noting that the task at hand also affects the choice of the strategy to be used; the result will depend on whether that strategy is chosen correctly. Basically, the learner is as good as his/her judgment of the task in that situation allows. In short, then, blind mimicking of a certain set of strategies believed to be ‘good’ because the so called good language learners use them is actually rather pointless. Yet, Vann and Abraham (1990: 191) admit that there is one factor that really does make a difference between successful and unsuccessful learners, and that is the ability to monitor and reflect on one’s performance.

Rubin does agree with Vann and Abraham that a good language learner monitors his/her own actions and is thus able to draw conclusions of his/her doing that will help spot the mistakes and learn from them. However, Rubin does not agree that the metacognitive skills alone will result in success. Rubin (1975: 43) claims that there are at least three essential general study strategies that good language learners will always employ when they study language:

(1) The good language learner may be a good guesser, that is, he gathers and stores information in an efficient manner so it can be easily retrieved. --He may actively look for clues to meaning-in the topic, setting, or attitudes of the speakers. -- (2) He is often willing to appear foolish in order to communicate and get his message across. (3) He will try out his knowledge by making up new sentences, thus bringing his newly acquired competence into use.

She (1975: 45) claims that a good language learner “is both comfortable with uncertainty (indeed he may enjoy it) and willing to try out his guesses.” Secondly, as Rubin (1975: 46) continues, the good language learner “has a strong drive to communicate, or to learn from a communication.” A good language learner is willing to use communicative compensation strategies to get the message across and does not feel inhibited by gaps in knowledge. Thirdly, the good language learner is not afraid of making mistakes and can cope with ambiguity (i.e. not being able to understand every word). According to Rubin, a good language learner gives attention to the form of the language and is tries to find patterns in the language. A good language learner is “constantly analyzing, categorizing, synthesizing’ new information” (1975: 47).

Moreover, Rubin (1975: 44) also notes that a good language learner is a self-regulating learner with means to learn on his/her own, whereas a poor learner will need more guidance and control from the outside. Furthermore, the good language learner is more motivated, has positive attitudes towards the target language and thus seeks out opportunities to learn the language in every situation s/he can. A good language learner is interested in devoting his/her time to studying outside class. In other words, a good language learner is an active participant in the learning process.

2.6 Vocabulary learning strategies

Nation (1990: 159) stresses the importance of vocabulary learning strategies in studying words in a foreign language; he notes that since the English language consists of many low frequency words that cannot possibly be taught during the limited time of English classes, students need to be prepared to do this independently outside class. Students need to be given tools that they can use outside class; in short, they need to know how to use vocabulary learning strategies independently.

Also Lawson and Hogben (1996: 102) implore vocabulary learning strategies to be taken seriously because of their proven benefits to learning a foreign language. They note that even if many language learners can and will develop certain vocabulary learning strategies independently without instruction, the gauge of those strategies is often rather narrow and the strategies in their simplicity will often be rendered less efficient during the course of the language studies; strategies learnt in childhood will not match the tasks learners face in adulthood (in more advanced studies) (for detail, see Brown et al. 1983). Moreover, the concern with words is often the quality of long-term retention and recall, which many of the simplest and shallowest strategies do not necessarily support (1996: 104). This is why students need to be made aware of as many vocabulary learning strategies as possible.

Nation (1990: 174) agrees with Lawson and Hogben when he continues that “by mastering a few strategies learners can cope with thousands of words. Any time spend on these strategies is well repaid.” In other words, the essence of vocabulary learning strategies is to provide EFL students a way to learn independently, the tool kit. Vocabulary learning strategies increase the autonomy of the learner. Learning independently becomes increasingly important if a student chooses to continue his/her studies in higher education.

With Catalan’s (2003: 56) description of a definition of a vocabulary learning strategy we shall move on to the next topic, an actual taxonomy of vocabulary learning strategies.

[a vocabulary learning strategy is] knowledge about the mechanisms (processes, strategies) used in order to learn vocabulary as well as steps or actions taken by students (a) to find out the meaning of unknown words, (b) to retain them in long-term memory, (c) to recall them at will, and (d) to use them in oral or written mode.

The following section will introduce the vocabulary learning taxonomy used in the current study as the very basis of the vocabulary learning questionnaire.

2.6.1 Schmitt's taxonomy of VLSs

Schmitt (1997: 199) comments that the reason for compiling his taxonomy was the lack of a comprehensive list or taxonomy of distinct vocabulary learning strategies. The original version of Schmitt's taxonomy that was compiled in 1993 includes 33-36 distinct items and was initially tested on 600 Japanese EFL students. The present 1997 VLS taxonomy by Schmitt (that was used as the basis of the current study) is larger containing altogether 52-58 items.

The earlier VLS taxonomy, boiled down to 33 strategies, originated from strategies picked by Schmitt from vocabulary reference books and textbooks and student and teacher interviews. The strategy items from the books and the strategy items gained from the Japanese reports were then added together. However, Schmitt (1997: 204) notes that the present taxonomy of 52 VLSs "should not be viewed as exhaustive, but rather as a dynamic inventory which suggest the major strategies."

In Schmitt's taxonomy the vocabulary learning strategies are divided into two major areas by their function in the learning process of L2 words: 1) initial learning of a new word's meaning (discovery) and 2) studying and remembering the word's meaning once it is known (consolidation). These two main categories are further divided into five subcategories:

- (1) Determination (belong into Discovery category)
- (2) Social (belong into both Discovery and Consolidation category)
- (3) Memory (belong into Consolidation category)
- (4) Cognitive (belong into Consolidation category), and
- (5) Metacognitive strategies (belong into Consolidation category).

According to Schmitt (1997: 208-210), determination strategies "facilitate gaining knowledge". When learners first encounter a new word they need to try and use their previous knowledge of the target language or other languages to guess its meaning. They can also guess from context or consult reference materials such as dictionaries, for example. There are a total of nine determination strategies (see Appendix 2 for

Schmitt's complete taxonomy). Determination strategies in the current study are VLS15, VLS18, VLS4 and VLS20 (see Appendix 1 for the questionnaire).

According to Schmitt (1997: 205), social strategies are used in "interaction with other people to improve language learning." Social strategies include discovering meaning by asking someone who knows, whether it is a teacher or friend (1997: 210). Later on, social strategies can be used in practicing the words with a group or in pairs in class or with native or non-native target language speakers outside class. There are all in all eight social strategies (see Appendix 2 for more). Social strategies in the current study are VLS9, VLS10, VLS11, VLS12 and VLS13.

The memory strategies are the most abundant strategies in the taxonomy; there are overall 28. Memory strategies or mnemonics "involve relating the word to be retained with some previously learned knowledge, using some form of imagery, or grouping" (Schmitt 1997: 211). There are also other memory strategies that do not specifically involve imagery or grouping. Memory strategies also entail elaboration, manipulation and integration of incoming knowledge that will help students to storage and retrieve information later (1997: 211). These include strategies that belong to the area deep processing in learning. Such strategies in the questionnaire are VLS5, VLS6, VLS14, VLS17, VLS19, VLS21, VLS22, VLS23, VLS24, VLS25 and VLS26.

Cognitive strategies are much alike mnemonics because they also help students work with the incoming knowledge. However, cognitive strategies are shallower than mnemonics because they do not involve mental manipulation. Cognitive strategies include the most basic language learning strategy types such as written and verbal repetition and other mechanical means (Schmitt 1997: 215). Cognitive strategies in the questionnaire involve VLS6, VLS7, VLS3, VLS29, VLS16 and VLS27.

Metacognitive strategies orchestrate the use of other strategies and help students regulate their learning (1997: 216). Using metacognitive strategies aims to make learning more efficient. Metacognitive strategies help students in planning ahead for example when, how and what to study, in monitoring one's performance in the target language and in evaluating the learning outcomes of their learning. Metacognitive strategies in the questionnaire include VLS30, VLS28, VLS8, VLS1, VLS2 and VLS9.

Lastly, a few of the strategies in Schmitt's taxonomy, and thus in the taxonomy used in the current study, overlap in some categories, which explains the fluctuations in the total number of strategies included in the taxonomies (i.e. either 33-36 VLSs, see Appendix 2 for Schmitt's complete 1997 taxonomy).

2.7 Personal factors that affect the choice and use of VLSs

Larsen-Freeman (2001: 12, 13) has raised the question why some learners learn more efficiently than others although the learning environment for all seems to be similar. According to her, there are facilitating or hindering factors that each and every learner brings into the learning situation, which alternate the ways how learning is at first approached and finally what is actually being learnt - the outcomes of learning. What she and other researchers have found and confirmed is that the individual differences in learners must be the explanation for different learning outcomes.

According to Cohen (2007: 37) and Gu (2003: 1), the effectiveness of strategies in use depend very much on the learner him/herself. The learner always brings his/her own attributes, features and background factors into the learning process. The choice and use of learning strategies are affected, for instance, by the proficiency level, age, gender, personality, attitudes and motivation of the learner. Vocabulary learning strategies are no exception.

According to Gu (2003: 9), learning vocabulary and using learning strategies to obtain new words is a dynamic and complex process that involves many factors, including the context where the learning takes place, the type and nature of the language learning task at hand and the learner background factors (e.g. cultural and demographic background like nationality, sex, social status etc.) that affect the learning outcomes more or less indirectly. Gu (2003: 9) relates that the use of vocabulary learning strategies is highly person-dependent. He continues that

the very notion of strategies being learner-initiated actions connotes the inherent relationship between strategies and individual difference factors such as motivation, self-efficacy, gender, learning background, and learning styles.

Also Oxford (1990: 11) agrees on this by saying that the actions learners take while learning “are naturally influenced by the learners’ more general characteristics or traits”, that is, background factors such as gender, age and so on. Furthermore, Oxford (1990: 13) continues that “there is a great deal of individuality in the way learners choose, combine, and sequence strategies.” Such factors are

degree of awareness, stage of learning, task requirements, teacher expectations, age, sex, nationality/ethnicity, general learning style, personality traits, motivation level, and purpose of learning the language (Oxford 1990: 13).

In this particular study the focus is on gender and the cultural background of the foreign language learners. This means that the results will be analyzed and categorized by gender so that the results of both genders can be compared to tease out differences in patterns of use and choice of the VLSs (sections 4.1 and 4.2). And, furthermore, the effects of different cultural background are pondered upon in detail in sections 5.2, 5.3 and 5.4 that include the comparisons of three different international VLS questionnaire studies from Japan, China and Spain. In the following chapters (2.7.1 and 2.7.2) I will discuss the gender factor in more detail and introduce VLS studies from China, Japan, Spain and Australia.

2.7.1 Research on gender and language learning strategies

In the following section, five studies on gender and (vocabulary) learning strategies will be reviewed. The results of these studies were surprisingly similar; gender does make a difference and affect both the use and choice of language learning strategies. Furthermore, the results show that females seemed to outperform males in both the number and the range of language learning strategies.

Wen and Johnson (1997) studied a sample of 242 Chinese higher education L2 students and the effects six learning variables (including gender) which were directly linked to the students’ language learning achievement in English. Wen and Johnson establish the differences between the modifiable and unmodifiable learner variables. They state the modifiable factors (e.g. beliefs, effort, management and learning strategies) have the most immediate connection with the learning results (1997: 28-29), whereas the

unmodifiable factors' (e.g. sex and aptitude) effects are less severe. However, the six variables that had the greatest direct influence on learning English consisted of both modifiable and unmodifiable variables; sex, L1 proficiency, L2 proficiency (unmod.), vocabulary strategy, tolerating-ambiguity strategies and mother-tongue-avoidance strategies.

One of the greatest unmodifiable factors that affected learning results directly was gender; the difference in language proficiency test scores between males and females was statistically significant and females outperformed males. Females, in general, did perform better in their language studies than men and perhaps this was due to their prowess in beliefs management, tolerating ambiguity and being more form-focused (1997: 34). The single greatest modifiable learner factor was using vocabulary strategies (1997: 35). According to Wen and Johnson (1997: 35), VLSs explained 23% of the positive learning results and the claim that training students in VLSs is a key to language learning success in foreign language studies. However, they also note that the preference or avoidance of using vocabulary learning strategies or learning strategies in general depend on the students' attitudes and beliefs about language learning (1997: 40). They continue that training programs should take into account the students' pre-existing attitudes and beliefs and discuss them before the issue of teaching VLSs can be tackled.

Catalan (2003) conducted a vocabulary learning strategy questionnaire with 450 Spanish students who were learning English as L2. She set out to find if females and males who were studying English behaved differently when learning vocabulary. She focused on the differences in the number and range of VLSs used by female and male students. The results revealed at first only minor differences. The number of VLSs that females and males used was almost the same. Also the range of strategies in use was approximately the same (2003: 61, 62). However, a closer inspection showed that females had higher percentages of use in several strategies offered in the questionnaire. The use of both discovery and consolidation strategies by females was far greater than that of the males. Females and males also preferred different types of strategies. Whereas females liked to use formal rule strategies, input elicitation strategies, rehearsal strategies and planning strategies, male students' use of different imagery strategies was greater.

Oxford and Nyikos's (1989) findings are similar to Catalan's. As they conducted a SILL questionnaire with 1200 American university undergraduates, they found that gender had a significant effect on the choice of learning strategies by the students (1989: 294-296). Females preferred using certain types of strategies more than males. Such types were *formal rule-related practice strategies* such as analyzing words and finding similarities between languages, *general study strategies* such as controlling affect organizing how to spend time and studying hard and *conversational input elicitation strategies* such as asking clarification or slower speech. Males preferred *resourceful independent strategies* such as using mnemonics and self-testing, and *functional practice strategies* such as seeking situations in which one can use the target language and finding sources for authentic language (for details, see Oxford and Nyikos 1989: 293-294).

Differences in frequency of use between females and males were the greatest in the conversational strategy category (1989: 296), where females outperformed males. In addition to differing strategy use preferences, females, in general, surpassed males in the frequency of use (1989: 295). Furthermore, Oxford and Nyikos found that gender and motivation correlated in learning a second language. They concluded that the gender of a learner could in fact predispose the learner to be more (or less) motivated towards learning an L2. Since women tended to be more active in using language learning strategies, they could also be said to be more motivated towards learning an L2.

Also Gu (2002) has considered the relationship of learning strategies and gender, and furthermore, how gender affects the learning outcomes and the strategy choices of EFL students. A large-scale VLS questionnaire survey was conducted with 645 Chinese EFL university students. His results are in agreement with those of Catalan's and Oxford and Nyikos's results. Gu (2002: 35, 40) found that gender was a major affecting factor in L2 learning. The results of his study show that females outperform males as language learners in all areas. Furthermore, females' vocabulary size was greater (according to the vocabulary size test) and they were generally more proficient in English than their male counterparts (according to the College English Test) (Gu 2002: 40, 35, 51). Additionally, women tended to be more flexible users of VLSs than men and they seemed to have a broader range of strategies in use (2002: 44, 51).

Moreover, strategies that are considered especially beneficial for efficient and good language learning were employed by females (2002: 44). Males preferred rather mechanical ways of practicing vocabulary; they had a higher rate of using rote memorization techniques. Females, on the other hand, favored metacognitive strategies such as planning, selective attention and self-initiation. (2002: 43). Furthermore, they seemed to be more open to trying out different types of strategies and tried to seize more opportunities in learning new words than males (2002: 44). It also happens that women spent more time practicing vocabulary after class than men, which might mean that women tended to be more motivated learners of English than men. The results also revealed that female students did more extracurricular work on English words than the males. Females seemed to be hard-working and did not believe in easy fix strategies. However, Gu reminds (1996: 44) as he quotes Cohen (1998) that the number of strategies used and the frequency they are used are most often not the only reason for success; students need to be able to combine strategies and use them flexibly according to different task types.

Green and Oxford (1995) conducted a SILL questionnaire with 374 Puerto Rican university students and they found that gender was a significant factor that affected the use of language learning strategies. Females had generally a higher rate of use in language learning strategies than males. This was particularly visible in four strategy categories that were the memory, metacognitive, affective, and social strategies (1995: 273). Fifteen of the 50 strategies suggested in the questionnaire were used differently by males and females. Females used 14 strategies significantly more often than males, whereas males used only one strategy more often than females. Half of the 14 strategies used more often by females were metacognitive, affective and social strategies (1995: 282). These strategies reflected females' efforts of trying to contain negative emotions and fostering positive ones towards learning the target language. They also often thought about how they were progressing in the course of learning the target language. Females' use of conversational showed that they also sought opportunities to talk to native speakers (1995: 282). Moreover, Oxford and Green (1995: 289) argue that females are global learners whereas men would be more specific.

2.7.2 Research on vocabulary learning strategies

Lawson and Hogben (1996) investigated a small number of advanced foreign language students in Australia and their deliberate efforts in trying to learn 12 new words in Italian. During the think-aloud procedure, it became clear that the students (all female) preferred using the shallow VLSs instead of the more complex ones including mnemonics such as association and imagery strategies. The single most frequently used group of VLSs was simple repetition, which meant that students just read the words and their meanings through or wrote them once or twice on paper (1996: 113). The students had not received any prior instruction in using VLSs, so they employed strategies which they were accustomed to and became to them naturally.

Lawson and Hogben (1996: 121) also found out that the students who recalled most of the 12 words employed many different VLSs, whereas those who recalled the least words did only use a few strategies. Furthermore, the students who scored highest in the experiment were more flexible in their use of strategies; they had a wider range of VLSs in their use. However, since both groups, the high-achievers and the low-achievers, used some of the same strategies, Lawson and Hogben (1996: 123, 126) concluded that there must be yet another reason why the learning results were so different. In fact, it seemed that the low-achievers were less consistent with the way they applied a strategy in each task. Lawson and Hogben (1996: 127) thus suggested that the most important issue in learning vocabulary with the help of VLSs is to be able coordinate the use of the strategies and being able to reflect on one's actions. In short, the metacognitive skills proved to be most essential in using VLSs effectively and reaching good learning results.

Fan (2003) conducted a questionnaire with 1067 Chinese EFL university students to find what VLSs they used, how often they used them and which of those strategies that were used were perceived to be useful when studying L2 words. Furthermore, among other goals, Fan wanted to find out if there were any discrepancies "among the frequency of use, the perceived usefulness and the actual usefulness of VLSs" that the students reported on and if there were certain strategies that were preferred by the most proficient learners of English (Fan 2003: 222). The VLS questionnaire consisted of 60 items. The categories for the items were: management (metacognitive strategies),

sources (for new words), guessing (strategies), dictionary (strategies), repetition, association, grouping, analysis (memorization strategies) and known words.

Fan (2003: 228) found that the students considered many of the VLSs offered in the questionnaire useful but they still employed only a few of them or the use was rather infrequent. Single strategies that were reported to be used most often and perceived as most useful were: revision of words, paying particular attention to new words when reading, increasing vocabulary by reading (media texts), guessing meaning from context when reading, using dictionary while reading, using dictionary to find grammatical information and analyzing words by sound segments in order to remember them later. Single strategies that were used least often and perceived least useful included the keyword technique, studying wordlists and linking words from Chinese to English based on similar sounds (2003: 229).

The main strategy categories that the students perceived the most useful included known words (prior knowledge), dictionary, sources (media texts), guessing (from context) and analysis (suffixes, affixes, spelling). The least useful strategy groups included management, repetition, grouping and association (2003: 230, 233). Furthermore, it seemed that the Chinese EFL students shunned VLSs that included repetition (accompanied with the aim of learning by heart) and association (for instance, making mental images). In fact, the least frequently used strategy was increasing vocabulary by studying wordlists at the back of course books (2003: 229, 233). Fan was also surprised by the fact that the university students did only seldom use the management strategies (or the metacognitive skills) (Fan 2003: 229).

In agreement with Lawson and Hogben's (1996) study, Fan found that there were differences in the repertoire of VLSs between high-achievers and low-achievers. The high-achieving group did not use repetition, grouping or association strategies at all; instead they used more management, sources, guessing, dictionary, known words and analysis strategies. The high-achieving group was more prepared to plan their vocabulary learning and they did pay attention to new words whenever they came across them inside and outside class. Furthermore, they made educated guesses based on their broad knowledge on grammar (inflection, part of speech, places in a clause) and morphology (word formation). The high-achievers were also more efficient dictionary

users than the low-achieving students (Fan 2003: 231). Students who were less proficient L2 learners tended to rely on mechanical repetition strategies and association (Fan 2003: 232, for details, see Fan 2003: 237-239).

Gu and Johnson (1996: 643) “aimed to establish the vocabulary learning strategies used by Chinese university learners of English and the relationships between their strategies and outcomes in learning English.” They carried out a 91-item VLS questionnaire with 850 university students in Beijing. The results of the questionnaire were correlated with the College English Test (that measured general proficiency) and a vocabulary size test in an attempt to determine the proficient learners from the less proficient and furthermore, discover how these two groups chose and used VLSs.

They found that those who spent ample time outside class studying English words were the most successful language students. Proficient students also made efficient use of VLSs in learning tasks. However, they also noted that the number of VLSs per se was perhaps not the only indicator of success; successful students were also self-initiative and flexible in their strategy use (1996: 664). Furthermore, Gu and Johnson noted that proficient students tended to generally be hard-working, highly motivated and willing to try out different strategies thus resulting in a wider range of studying techniques. Whereas the active strategy users thrived, passive strategy users did not do very well. They tended to trust in rote learning and visual memorization from lists. It became apparent that these students had not tried new strategies and tried to cope with ones that they had acquired in primary school. Their learning skills were in other words highly undeveloped (1996: 666). Gu and Johnson emphasize, however, the fact that these students did poorly not because of using ‘wrong’ strategies but because they lacked the motivation to learn the language.

In general, Gu and Johnson (1996: 652-654) found that the Chinese language learners believed that vocabulary should be “carefully studied and put to use” and not just memorized. Gu and Johnson (1996: 654) mark that the Chinese students “generally responded negatively to rote memorization strategies.” Instead, the students preferred guessing strategies and used dictionary strategies. Note-taking was also popular among the Chinese students and so was oral repetition, as an exception to the trend of avoiding rote learning. They did not prefer using vocabulary lists, neither were the imagery and

activation strategies popular. Gu and Johnson note that the last two types of strategies were probably shunned because they took too much time and effort to complete. Furthermore, also mnemonics were shunned for probably the same reason.

The results further showed that metacognitive strategies seemed to correlate with good proficiency scores (1996: 643). Learning vocabulary from lists seemed to correlate positively with vocabulary size but not general proficiency (1996: 656). Visual repetition, imagery mnemonics and belief in memorization of words did not seem to increase general proficiency (1996: 659).

Gu and Johnson (1996: 659) furthermore mark that

learners' vocabulary sizes seem very much related to --- their willingness to spend extracurricular time to practice newly learned items, and their remembering words in semantically meaningful groups. Learners should not, on the other hand, depend on visual repetition and fanciful imagery techniques to remember the words they might thus spend so much time on.

They go on to note that the differences in learning outcomes depend on the combinations of strategies used by a student, and that these combinations are what either lead to success or failure. No single strategy can result in success or failure (1996: 660).

Mizumoto and Takeuchi (2009) set out to examine the effectiveness of explicit VLSs instruction. They wanted to find out whether explicit strategy instruction given during regular university English classes would improve the subjects' knowledge and use of VLSs in studying English vocabulary. After a 10-week instruction period, the students (all female), who had practiced VLSs had become more competent users of VLSs. They had expanded their range of strategies compared to their initial repertoire and had become more aware which strategies suited them personally and which did not. Especially three strategy groups stood out; the use of input-seeking, oral rehearsal and association strategies increased significantly (2009: 435). A number of participants felt that they had become more motivated students in English after the instruction they had received. They felt that they now had the tools to survive the massive feat of learning English vocabulary.

Mizumoto and Takeuchi note that the instruction period proved most useful for students who were infrequent users of VLSs and were below the average proficiency level (2009: 437, 440, 443). These students soon realized the benefits of choice in using many strategies instead of just the few they had tried to solve tasks with before. Moreover, the realization of the actual benefits of different VLSs seemed to increase motivation towards language learning in general among the passive students (2009: 441).

However, students who were already active strategy users did not show improvement in expanding their range of strategies. According to Mizumoto and Takeuchi, this was due to the fact that these students had found the strategies that they personally preferred and were thus not ready to change them (2009: 442). What is more, some of the strategy types proved too difficult and time-consuming as the students reported that they did not like using imagery strategies (2009: 441). This was true of both groups; the active and the passive alike. Furthermore, and yet again, it seemed that the active strategy users employed metacognitive strategies more often than the passive or average users and were thus generally more efficient strategy users than the other students (2009: 432). They also seemed to be the most motivated learner group.

Schmitt (1993: 7-8, 1997: 207, 208, 219) found that the Japanese EFL students (600 from junior high, high school, university and adult courses) generally found either written or verbal repetition of words most helpful in learning words. In the later study, the dictionary strategies rose higher in the ranking than repetition. Among other helpful strategies there were: periodical revision of words, studying the spelling, taking notes in class, studying synonyms and antonyms and using the new word in sentences. The least helpful strategies among others, according to the students' reports, were using cognates, association strategies, mental imagery, using a physical action, using prefixes or suffixes to guess and studying in groups. It is quite obvious that many of the most helpful strategies belong into the shallow category of learning strategies and that the least helpful strategies, in general, are deep learning strategies (for detail, see Schmitt 1997: 201).

The most frequently used category, in Schmitt's (1997: 207, 208) later version of the study, included strategies such as guessing from context, using a dictionary, asking classmates, spelling and verbal and written repetition. Among the least frequently used

strategies there were, for instance, such strategies as analyzing affixes and roots, cognates, semantic maps and physical action. Schmitt (1997: 220-221) comments that the reason why Japanese students are so keen on repetitive strategies is because these techniques have been ingrained in the school system over time, and thus the students quite naturally learn to rely on such strategies. However, Schmitt (1997: 223, see more 223-225) also notes that as the students advance in their studies they tend to shift from traditional repetition and mechanical strategies into more sophisticated ones.

3 RESEARCH DESIGN

In this section I will first clarify the aims and the research questions. Secondly, I will introduce the methodology and the data collection process. Thirdly, the vocabulary learning strategy questionnaire will be discussed in detail, and lastly the participants and their demographics are made known.

3.1 Research questions and the motivation for the study

The aim of the current study is to describe how Finnish upper-secondary EFL students use VLSs and what they think about them in the terms of usefulness. Furthermore, based on Catalan's (2003) findings about gender differences in VLS use, I wanted to find out if Finnish female and male EFL students chose strategies differently due to their gender. The present study was further motivated by the lack studies that focus particularly on gender and its effect on vocabulary strategy use. I also wanted to raise awareness of the importance of learning VLSs and the language teacher's role in the instruction of the students.

In order to investigate the VLS use of the Finnish 16-19 year-olds, I focused on answering these four questions:

- 1) What VLSs do Finnish upper-secondary EFL students use?
- 2) What strategies do they find most useful?
- 3) Are strategies that are reported useful actually being used?

4) How does gender affect the use of VLSs?

The first research questions will help me to narrow the 30 strategies offered in the VLS questionnaire down to two lists: *the most frequently used* and *the least frequently used*. The second question will also filter the 30 strategies into two lists: *the most useful* and *the least useful strategies*. Comparing the lists will enable me to determine whether students are actually using strategies that they think are useful (the ideal scenario) or if they are in fact using strategies that they do not believe will benefit them (the worst case scenario). The fourth question will clarify whether the gender variable has an effect on the Finnish EFL students' strategy use; that is, whether males and females choose different strategies in vocabulary learning. Furthermore, the fourth question will also be able to point out if either of the sexes has a disadvantage when it comes to learning English words. This information can be used when planning the type of instruction the students need.

The answers gleaned from the students' reports will be analyzed and depicted in lists, tables and figures, which will hopefully be able to flesh out the preferences of Finnish high school EFL students in choosing and using the VLSs. The distinct types of vocabulary learning strategies, the individual strategy items and the rankings these types and items form will be demonstrated in detail. However, the main aim is to be able to depict the bigger picture of the Finnish EFL students and compare their preferences with their international counterparts with the help of similar studies from Schmitt (1993/1997), Fan (2003) and Catalan (2003).

3.2 Methodology and data collection

The present study is quantitative in nature. However, compared to the previous studies conducted by Schmitt (1993/1997), Catalan (2003) and Fan (2003) the sample is quite small, only a hundred participants.

The data collection procedure was conducted by means of a highly structured VLS questionnaire (see Appendix 1) that included one opportunity for students to suggest strategies of their own that were not mentioned in the list of thirty. The questionnaire was administered by an English teacher after instructions given by the researcher.

Copies of the questionnaire were sent to schools by mail. The survey was carried out during English classes. A pilot study was supposed to be carried out before the main data collection in Mikkelin lukio in September 2012. Due to health issues, the pilot study was not conducted as planned. However, the test format was tried out by three high school students between ages 16-19 who rated the format of the questionnaire as easily understandable. However, some issues might have still remained.

I decided on a survey, because it fits well for measuring attitudes and opinions of groups of people. However, I could also have applied introspective methods, such as learning journals or the students could have also gone through a post-survey interview to ask them further questions why they thought as they did. This would have provided deeper insights, for instance, into why they choose one strategy over another. However, I doubted if any students would want to use their free-time in filling out a learning journal. Furthermore, not many students would have volunteered for interviews for the same reason. I also had to consider the amount of time I could use on the study; conducting and transcribing a hundred interviews would have been too time-consuming. Furthermore, interviews would have provided too much data for such a small-scale study.

In addition, the decision to settle on a questionnaire as a research method felt safe because it is the most commonly used and probably the most efficient descriptive method in educational research (in this case identifying the VLSs of high school students) (Chamot 2008: 268). Moreover, according to Nunan (1992: 140), it is flexible enough to be used on a large scale and small scale studies such as the present study. According to Wenden (1983 as quoted in O'Malley and Chamot 1990: 93), a questionnaire lends itself better to quantitative analysis than open-ended self-reports. Moreover, she continues that "one of the major sources of difficulty is in classifying strategies accurately from open-ended responses (1990: 93)."

Furthermore, as I anticipated that the students might not know what VLSs are and thus might not recognize their own study techniques as VLSs, it was for the best to make a list of suggestions that the students could look at and then reflect on what strategies they might have used. Furthermore, as O'Malley and Chamot (1990: 87) note, language learning strategies can often be covert behavior and thus they cannot be recognized

from the outside. Due to the special nature of LLSs it was thus easiest to ask the students than try to observe their use of VLSs during an English lesson, for example.

Yet using a questionnaire to ask students what strategies they have been employing can distort the accuracy of the answers because they might not simply remember all the instances when they have used a particular strategy. In this case, I asked the students to reflect on the strategies they have used during the past 18 months. A year and a half is a long time to think backwards and it may well be that the students did not remember.

3.3 Questionnaire

The questionnaire was designed after Schmitt's original 1993 taxonomy of second language vocabulary learning strategies. This taxonomy seemed particularly fitting as the basis of the present study since it also focused on high school students. Another reason for choosing Schmitt's taxonomy was the fact that it is based on Oxford's (1990) well-known taxonomy of language learning strategies. Moreover, Schmitt's taxonomy was mentioned in several other research articles and theoretical articles as a laudable attempt at an inventory of second language vocabulary learning strategies.

The questionnaire of the present study is based on the 1993 inventory by Schmitt. When compiling the questionnaire also the latest and up-dated 1997 version of the same inventory was taken into account. The items/claims in the original taxonomy by Schmitt were formed into full-clause claims and were then translated from English into Finnish so that every participant could understand what was being asked.

Instead of Schmitt's 36 strategies that he included in his 1993 survey, 30 were used in the present study. Strategy items that were very closely related were combined into one single strategy, for example, *bilingual dictionary* and *monolingual dictionary* was changed simply into *using a dictionary* (VLS4) that also encompassed e-dictionaries. This procedure made the original inventory a little more stream-lined, and furthermore the questionnaire seemed shorter.

Strategies (both from the 1993 and 1997 version) that did not make it in the questionnaire at all or as such were: *look at pictures or gestures to understand meaning*,

flash cards, ask teacher for a paraphrase or synonym, ask for a sentence including the new word, learn meaning during group work, associate the word with its coordinates, use scales for gradable adjectives, use the configuration technique, Peg, Keyword and Loci as such, study the spelling of a word, study the sound of a word, learn the words and idiom together and listen to a tape of wordlists. The first two were decidedly left out because they seemed like the type of strategies young adults would not use.

The VLS questionnaire of the present study (see Appendix 1) consists of part A which covers 30 claims about VLSs and four further questions about using VLSs. One of the four questions (C) offers students a chance to add to the list of strategies presented earlier on. Part B includes the students' background information which contains the language learner variables that will function as (and give reason to) the basis of a deeper analysis of learning strategy choice. Students were given 15 to 20 minutes to complete the questionnaire.

Unfortunately, the quality and the rate of the answers given to questions A and B were such that they were not included in the final analysis. Many students either did not answer the questions at all or had given inadequate answers. Perhaps the problem with some students was that they could not name the five most and five least frequently used strategies since they did not use as many strategies altogether. In the end, questions A and B did not make a difference in forming the big picture; the general frequency of use was deducted from the 30 claims. Questions C and D collected any extra information the students were able to give concerning the use of VLSs.

The main part of the questionnaire was the 30 strategy items/claims/questions. Students had to first tick the number before each claim if they had used the strategy, and then rate its usefulness on a Likert scale. If the students had not used the strategy, they did not make a mark before the item number. If the students had not used a particular strategy, they were still asked to rate the usefulness of that particular strategy based on whether they thought it sounded useful.

3.4 Participants

The participants for the VLS questionnaire were randomly chosen from four Finnish high schools in East and Middle Finland. Most of the participants were studying their second year in the high school. High school students were chosen instead of younger students because I anticipated that they would have the stamina to answer over 30 questions. Furthermore, as young adults, these students would also be more able to think back on their learning, about how they learn and what they do when they learn words. This is something that teenagers and smaller children are perhaps not able to do.

The quantitative nature of the study required at least a hundred high school EFL students to answer the questionnaire. For richer and more versatile data the questionnaire was conducted in schools of different sizes ranging from a school of nearly one thousand students to a school under one hundred students. Two of the schools were in a city and the other two resided in the country side. The largest school, Mikkelin lukio in Southern Savo, had 800 students studying there at the time. The smallest school, Joutsan lukio had less than a hundred students studying there at the time. Tikkakosken lukio was the second smallest and it had only about 140 students. The medium-sized school chosen was Normaalikoulun lukio in the city of Jyväskylä, which had 300-500 students studying there at the time.

The ideal number of one hundred volunteers was nearly reached; in total 97 students took part in the vocabulary learning strategy survey. The groups of students were chosen randomly. English teachers from Mikkelin lukio, Joutsan lukio and Tikkakosken lukio chose one group of students who were to take part in the survey. An English teacher from Jyväskylän Normaalikoulu chose two groups that participated in the survey. The students' ages ranged from 16 to 19. The gender ratio in total was 40/60% for the benefit of female students.

Table 3. Participants by school and gender.

	School				Total
	JL	ML	NL	TL	
Sex Female	11	16	28	2	57
Male	8	10	7	15	40
Total	19	26	35	17	97

From Mikkelin lukio (ML) one class of second year students took part in the survey. Twenty-nine of the students were able to answer the questionnaire out of which 26 students completed the survey according to the instructions. Three answer sheets were thus excluded from the analyzable data. Out of the 26 participants 10 were male and 16 female. The average mark of the previous English course among the males was 7.8. The average mark among the females was 7.2. So, on average the males seemed to be slightly more proficient learners of English than the females.

From Tikkakosken lukio (TL) 20 second-year students took part in the survey. However, only 17 students managed to complete the survey according to the instructions. Two of the 17 participants were female and 15 were male. The average course mark among females was 9 and among the males 7.7.

From Joutsan lukio (JL) 19 third-year students took part in the survey. Out of the 19 students 11 students were female and the remaining 8 male. The average mark of the female students was 8.8, whereas as for the male students it was 7.6.

From Jyväskylän Normaalikoulun lukio (NL) 40 second-year students took part in the study. Three of the answer sheets were discarded due to inadequate answers. Seven out of 35 students were male, the rest of them female. The average mark for the males was 8.9 and for the females it was 8.7.

3.5 Data Processing

Before going into the results, the reader may find descriptive statistics of the main vocabulary learning strategy category groups useful. Table 4 below shows how many individual items belong into each category (determination, social, memory, cognitive and metacognitive, see section 2.6.1 for details). The memory strategy category is the largest with 11 individual strategy items, whereas the determination category is the smallest with 4 individual items. The possible range means the possible answer options for the multiple selection questions (30 individual strategies) in the VLS questionnaire.

The average score (M) describes the students' (N=97) answers on how useful they thought each individual strategy item seemed to them. According to the answers given, the SPSS software calculated that the Finnish EFL students considered the social vocabulary learning strategies the most useful (rounded 2.8 – 'quite useful'). Second came determination strategies at 2.74 (rounded 2.7 – 'quite useful') and metacognitive strategies at 2.72 (rounded 2.7 – 'quite useful'). Two strategy groups were a little less useful according to the calculations of the SPSS software. Memory strategies and cognitive strategies (arguably the single most important strategy groups in learning new vocabulary) were closer to 2 ('somewhat useful') at 2.35 (rounded 2.4) and 2.41 (rounded 2.4).

On average the respondents did not think any of the five strategy groups were close to 4 ('useful'). Yet, they did not think that any of the categories was totally useless. On the range of the Likert-scale from 1-4 the answers were mid-range (2 to 3). However, the standard deviation figures show that there was quite a lot of disagreement between individual respondents' answers. The larger the SD is, the more disagreement there was between the individual students. Determination, memory and cognitive categories show that the spectrum of answers was rather vast; there were many low answers (1-2) and also many high answers (3-4). The SD of the social and metacognitive categories was low; students' answers were less dispersed.

The SPSS software calculated also the Cronbach's Alphas for each strategy group. The lower the Alpha-value is the less internally coherent the battery of questions is (determination, social, memory, cognitive and metacognitive). It looks that the metacognitive strategy category is least coherent battery, since its Alpha-value is below

the desired 0.5. This would point out to the battery's flawed validity (*). All other groups' Alphas are above 0.5 up to almost 0.8, which would make them internally coherent and vouches for their validity.

Table 4. Main strategy groups.

Number of items	Possible range	M	SD	α	
DET	4	1-4	2.74	.60701	.638
SOC	5	1-4	2.79	.48084	.585
MEM	11	1-4	2.35	.50222	.796
COG	6	1-4	2.41	.52102	.688
MET	6	1-4	2.72	.40727	.412*

There is, furthermore, one more illustration that will help the reader to interpret and understand the terms used in the results section. Figure 2 below presents *a continuum of learning* adapted from Schmitt and Schmitt (1993: 7) which is basically a simplified visual realization of Craik and Tulving's (1975) original *theory of deep learning*, more precisely the Levels of Processing Model. Accordingly, the quality of learning depends directly upon the involvement of mental manipulation of the new information (how deep or shallow the process is). Schmitt (1993: 7) has crystalized Craik and Tulving's idea in the following words:

If new material is given to the learner and it is only superficially processed, even for a considerable length of time, it is unlikely to become embedded in the mind and may be easily forgotten. Conversely, if the new material has to be analyzed, synthesized, reworked, or associated with other already-known information, the processing will be more involved (deeper), giving the new material a better chance to become integrated with existing knowledge in the learner's mind.

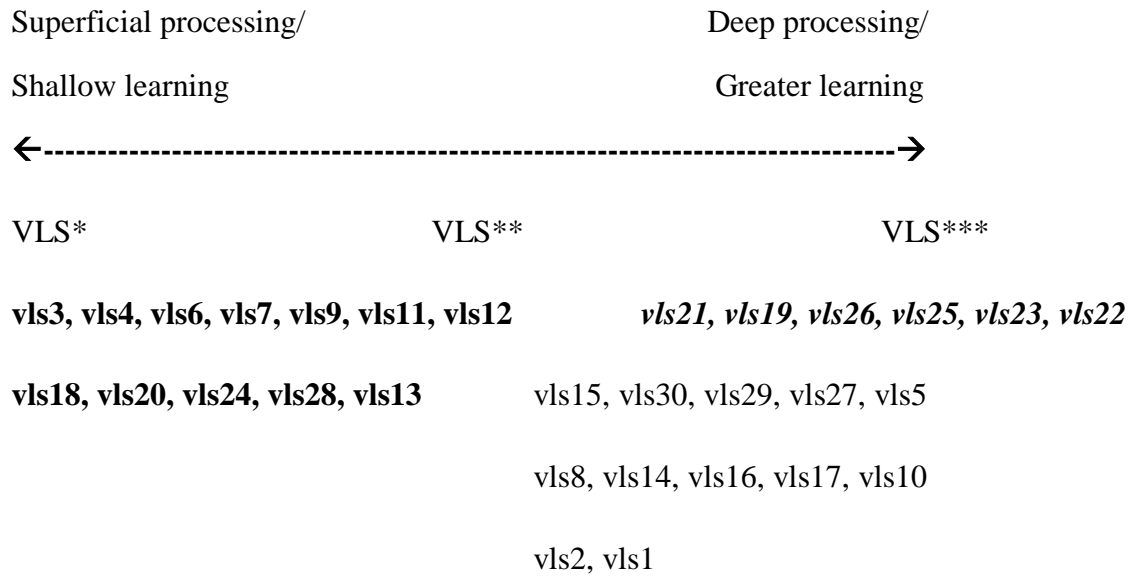


Figure 2. The individual VLSs are arranged according to the Levels of Processing model (modified for the purpose of this study). Explanations: *=shallow learning, **=neither shallow nor deep learning, ***=deep learning.

The continuum of learning (or processing) has two ends, on the left there is shallow learning and on the right deeper learning. The 30 items in the VLS questionnaire are positioned on the continuum roughly nearest to the end they have been traditionally located by experts in the field of vocabulary learning strategy research. At the shallow end, there are strategies that are called superficial meaning that they do not require much association or deeper analysis of new vocabulary items. At the deep end, there are strategies that are to do with lengthier processing and are more sophisticated than those at the shallow end. At the shallow end the strategies are mostly to do with repetitive modes of study, guessing, avoidance or are determination or social strategies. The mid-range group consists of strategies that cannot be classified as shallow or deep, it is a miscellaneous group of social, cognitive, metacognitive, determination and memory strategies. The deep end consists of memory strategies that have been considered to leave a greater memory trace in the learner's mind than the other strategies.

4 ANALYSIS AND RESULTS

In the following chapter the respondents' answers to the vocabulary learning strategy questionnaire will be reported according to the research questions. The first research question deals with Finnish EFL students' use of vocabulary learning strategies (a list of 30 offered in the questionnaire). The answers the students gave have been divided into two categories, the most frequently used VLSs and the least frequently used VLSs. The second research question deals with the usefulness of the VLSs. The students were asked to rate the items on a Likert scale from 1 to 4 according to how useful they personally thought them to be. Again, the respondents' answers were divided into two different categories: the most useful and the least useful VLSs. The third research question looks into some discrepancies between strategies that were reported most frequently used and strategies reported most useful, and strategies reported least frequently used and least useful. Two sets of lists, most frequently used/most useful and least frequently used/least useful, are being cross-referenced and scrutinized for incongruities between students' beliefs and actions. The fourth and final research question deals with gender and its effects on the use and choice of VLSs. For the sake of clarity, the pertaining gender differences are being discussed after each main section.

4.1 What VLSs do Finnish upper-secondary EFL students use?

Students were asked to answer 'yes' or 'no' whether they used the VLS in question (VLS items 1-30). After each strategy item there are marks that indicate whether they belong to the low-, middle- or high end of the Levels Processing continuum (see section 3.5). In the next two sub-sections I will present the results of the whole group of students (N=97), both males' and females'. The third and fourth sub-sections focus on the gender differences.

Most frequently used VLSs

In this section I will discuss the ten most frequently used VLSs in closer detail. I will also bring up some of the repercussions that the use of such strategies can have on

students' learning. Table 5 below presents the ten most used strategy items, items that got most positive answers.

Table 5. Most frequently used vocabulary learning strategies.

Rank	VLS	Main cat/Sub cat	Resp.alt.	N	Yes %
1.	VLS3*	D/COG	YES/NO	91	93.8
2.	VLS30**	C/MET		85	87.6
3.	VLS18*	D/DET		79	81.4
4.	VLS24*	C/MEM		72	74.2
5.	VLS4*	D/DET		64	66.0
6.	VLS6*	C/MEM or COG		64	66.0
7.	VLS9*	C/SOC or MET		63	64.9
8.	VLS28 *	C/MET		63	64.9
9.	VLS10**	C/SOC		59	60.8
10.	VLS12 *	D/SOC		50	51.5

Explanations: D/discovery strategy, C/consolidation strategy. The number of asterisks mark whether strategy is shallow (*), mid-range (**) or deep (***) .

The rate of use of the top ten most frequently used VLS list goes from over 50% up to over 90%. Over half or more of the respondents reported using these ten vocabulary learning strategies. The first four strategies *using wordlists* (VLS3), *using English media* (VLS30), *guessing while reading* (VLS18) and *guessing based on other known languages* (VLS24) were extremely popular among the 97 participants; over 70 % or more used these strategies when they studied English words. Strategies that came 5th and 6th on the list were also quite popular; two thirds of the students reported *using a dictionary to find a meaning* (VLS4) or *repeating words out loud* (VLS6).

Of the most frequently used strategies on this list 40% belong into the discovery category (a new word is introduced) and 60% belong to the consolidation category (practicing). All five strategy subcategories are included in the top ten list. However, no single subcategory rules the list, although social and metacognitive strategies do seem to be slightly more popular than cognitive, memory and determination strategies.

These most popular VLSs can be described as rather light techniques which would be placed at the shallow end on the processing continuum according to the Levels of Processing model (see Figure 1.). In fact, the top ten most frequently used list does not contain any of the heavier, more sophisticated strategies that would be placed at the deeper end of the processing continuum.

It seems Finnish EFL students prefer shallow learning strategies over those which advance deeper learning. Shallow strategies such as *guessing* (VLS18, VLS24), *consulting a friend* (VLS12) or *using verbal/mental repetition* (VLS6) are strategies which are easy and quick to employ. Furthermore, the most popular strategy on the top ten list, *using wordlists at the back of course book* (VLS3), is actually one of the most traditional ones in use when learning new vocabulary. Wordlists at the back of the course books are most likely used for repeating the words out loud when studying for a test. In other words, students aim at learning the words by heart.

Unfortunately, this type of learning often leads to a shallow imprint on the learner's memory: most of the words are soon forgotten after the test has taken place. In order to assimilate the new words with the already learnt one's and to be able to later retrieve information, and furthermore, use those words productively in speaking or writing the learner should try to create stronger and more memorable connections which cannot be created just by learning lists by heart in quick pace (in detail, see Oxford 1990: 60). Furthermore, students will only learn one or two English equivalents to Finnish words, which means that the information on words gained from the wordlists is rather meager. However, it has also been suggested that learning words from lists can actually be quite effective. Students are able to memorize tens of words in a considerably short time (Nation 1990: 126).

Using light strategies to study English vocabulary could indicate that Finnish high school students are not willing to invest large amounts of their time in learning

vocabulary and getting acquainted with more intricate and perhaps heavier studying techniques.

Least frequently used VLS

In this section I will discuss the ten least frequently used VLS in more detail and the reasons why students might not be using them.

Table 6. Least frequently used vocabulary learning strategies.

Rank	VLS	Main cat/Sub cat	Resp.alt	N	Yes%
1.	VLS16**	C/COG	YES/NO	2	2.1
2.	VLS27**	C/COG		3	3.1
3.	VLS26***	C/MEM		5	5.2
4.	VLS23***	C/MEM		7	7.2
5.	VLS29**	C/COG		8	8.2
6.	VLS14 **	C/MEM		9	9.3
7.	VLS8**	C/MET		14	14.4
8.	VLS5**	C/MEM		17	17.5
9.	VLS13*	C/SOC		18	18.6
10.	VLS25***	C/MEM		18	18.6

The ten least frequently used strategies were being employed by 10-19% of the respondents. The first six strategies on the top ten least frequently used strategies list are used by under 10% of the 97 EFL students. All six strategies are either cognitive or memory strategies. Two of these strategies could be described as somewhat unusual or at least fairly unfamiliar to students: *pasting post-its with English names* (VLS16) and

acting a word's meaning, i.e. using physical gestures/bodily movement (VLS23). These strategies are not being used because students may not have heard about them before. However, the other four strategies cannot be considered novelties: *keeping a diary/notebook on new vocabulary items* (VLS27), *making mind maps* (VLS26), *taking notes* (VLS29) or *underlining words in a text* (color-coded or not) (VLS14).

Most of these strategies belong to the consolidation category, the category that consists of strategies for practicing and integrating new knowledge to previous knowledge. Many of these memory and cognitive strategies can be found at the deep end of the processing continuum.

Finnish EFL students seem to actively avoid using cognitive and memory strategies, which often require more time and effort to apply and master than the shallow strategies the students actually prefer and use. Some of these strategies require extracurricular work. Such strategies include, for instance, *keeping a vocabulary notebook for new words* (VLS27), *making full sentences that new words could be used in* (VLS5) or *continuing to review learnt words periodically* (VLS8). The last mentioned strategy is probably the single most important strategy among all VLSs offered in the questionnaire and only a little over 14% of the 97 students reported using it.

This is rather alarming since there is evidence (Nation 1990, for details, see Oxford 1990: 42, 66) that words are best learnt this way reverting to the material on which learners have worked on before in order to strengthen the connections made to memory. Moreover, the students seem to avoid using certain study aids, especially those they could come up themselves (associative strategies, using one's imagination to create new connections to words, for instance, similar sounding words in one's mother tongue (for details, see Oxford 1990: 39-43)). Many of the strategies on this least frequently used list involve making one's own study aids (see Schmitt 1997: 215 on cognitive strategies). For instance, quite a few memory strategies in the list have to do with grouping information, creating associative images and strengthening links between previous knowledge (Schmitt 1997: 211-213).

According to Oxford (1990: 40), students rarely use memory strategies although they have been found highly effective. Oxford (1990: 43) claims that cognitive strategies are typically the most popular strategy group among learners. She continues that cognitive

strategies are most important when practicing the language. Yet, language learners do not seem to realize the importance of practice. However, it seems that Finnish EFL students do realize the effectiveness of such strategies, but have still decided not to use them. Perhaps this is due to the before mentioned costliness in time and actual cognitive effort students would have to make. It can also be that very sophisticated imagery techniques can be difficult to use if one cannot come up with any good associations to link to a new word (Nation 1990: 168).

Most frequently used strategies by gender

In this section I have compared males' and females' answers. The gender differences were not great, however, a closer look revealed some dissimilarities between the two genders. Table 7 below introduces the ten most frequently used VLSs with three statistically significant results

Table 7. 10 most frequently used vocabulary learning strategies by gender.

Name of VLS	Rank of preference		Percentage		
	Gender		N		p
	m	f	m	f	
VLS3 (c/cog)	2	1	87.5 (35)	98.2 (56)	.079
VLS30 (c/met)	1	2	87.5 (35)	87.7 (50)	.248
VLS18 (d/det)	3	3	75.0 (30)	86.0 (49)	.007
VLS24 (c/mem)	6	4	62.5 (25)	82.5 (47)	.002*
VLS9 (c/soc/met)	9	5	42.5 (17)	80.7 (46)	.019
VLS6 (c/mem/cog)	8	6	45.0 (18)	80.7 (46)	.000***
VLS4 (d/det)	5	7	62.5 (25)	68.4 (39)	.037
VLS28 (c/met)	7	8	62.5 (25)	66.7 (38)	.093

VLS12 (d/soc)	10	9	42.5 (17)	57.9 (33)	.105
VLS10 (c/soc)	4	10	65.0 (26)	57.9 (33)	.635

The answers reveal that the males and females from the four high schools use the very same strategies and that the strategies vary only in their order. Strategies that are on the most frequently used list are mostly consolidation strategies (strategies for practicing). Statistically significant differences in use between the males and females can be found in two strategies; *using cognates* (VLS24) and *verbal repetition* (VLS6). In addition, strategy 18, *guessing from context*, comes close to having a statistically significant difference.

Both the males and females seem to equally prefer consulting and practicing from *vocabulary lists at the back of course books* (VLS3), *using English media as sources* for new words and practicing (VLS30) and *guessing from context while reading* (VLS18). However, there is one strategy that the males prefer using more than the females: *learning from and practicing with people who speak English* (VLS10). This finding would disagree with the previous findings (Oxford and Nyikos 1989: 295, 296, Ehrman and Oxford 1989:1, 8) that suggest that males do not prefer social learning strategies. The males have ranked VLS10 fourth, whereas the females have placed it last, 10th. However, there is a social strategy in the list that the women use more than the men: *asking somebody to quiz one on words* (VLS9), which the males have ranked 9th and the females 5th. This again would suggest that females in general prefer social or at least co-operative strategies.

In agreement with the previous studies, the results of the current study reveal that female participants have a higher rate of use in all strategies on the most frequently used list except for VLS10. This finding would agree with the previous findings that women tend to use strategies more frequently and actively than men (Oxford and Nyikos 1989: 295, Ehrman and Oxford 1989: 8). Perhaps this points to females having a more positive outlook on using vocabulary learning strategies.

Least frequently used strategies by gender

Both the males and females avoided using strategies that required doing extra work at home. At this end of the spectrum, there are even fewer statistically significant differences; however, the choice of strategies between the genders is more varied.

Table 8. 11 least frequently used vocabulary learning strategies by gender.

Name of VLS	Rank of preference		Percentage		
	Gender		N		p
	m	f	m	f	
VLS14 (c/mem)	1	6	0 (0)	15.8 (9)	.010
VLS16 (c/cog)	2	1	0 (0)	3.5 (2)	.510
VLS27 (c/cog)	3	2	0 (0)	5.3 (3)	.265
VLS26 (c/mem)	4	3	2.5 (1)	7.0 (4)	.301
VLS23 (c/mem)	5	4	7.5 (3)	7.0 (4)	1.000
VLS29 (c/cog)	6	5	7.5 (3)	8.8 (5)	1.000
VLS7 (c/cog)	7		10.0 (4)	-	.001**
VLS5 (c/mem)	8	9	12.5 (5)	21.1 (12)	.416
VLS8 (c/met)	9	7	12.5 (5)	15.8 (9)	.773
VLS25 (c/mem)	10	10	12.5 (5)	22.8 (13)	.289
VLS13 (c/soc)		8	-	19.3 (11)	1.000

At the other end of the spectrum, the differences in use are also small: all except two strategies are the same. Furthermore, significant differences could be found only in one strategy: *written repetition* (VLS7). The order of the strategies is also different. When looking at the list of least frequently used strategies one will soon notice that there are

three VLSs that the men do not report using; *color coding* (VLS14), *post-its* (VLS16) and *keeping a notebook* (VLS27). The males had a higher use rate in only one of the strategies in the list: *acting out the meaning of a new word* (VLS23).

The top three of the males' least frequently used strategies consist of strategies that are not being used at all; none of the males *report using color coding when underlining words in a text* (VLS14), *using post-its to label things with English names* (VLS16) or *keeping a notebook of words that have recently been learnt* (VLS27). Also the females report using VLS16 and VLS27 only very rarely, but VLS14 they do use at least sometimes (15,8%). All of these strategies take more time and effort and thus motivation to apply than many most frequently used strategies.

The females' top three least frequently used strategies are the same except for VLS26 that entails *making mind maps of words that belong into a certain theme (i.e. cooking, clothing)*. Making mind-maps would also be considered a time-consuming strategy. Furthermore, strategies 16, 27 and 26 cannot be applied during class time and most students will not apply them after class.

Summary

As a whole the students preferred using light and shallow strategies over more time-consuming deep strategies. The most frequently used strategies involved, among other things, guessing and repetition, whereas the least frequently used strategies were mostly about creating mental images and linkages. The gender differences were smaller than expected; males and females correspondingly shared the ten most frequently used strategies differing only in the order. Statistical differences could be found in two strategies between the rate of use of females and males. Females tended to be generally more active users of vocabulary learning strategies than males. The least frequently used strategies were on most part the same, although again the order is varied.

4.2 What strategies do Finnish EFL students find useful?

Students rated the thirty strategies offered in the VLS questionnaire according to a Likert-scale from 1 ('not at all useful') to 4 ('useful'). To be brief, I have summarized the results so that the answers from the top of the scale are represented in the same table (table 9 below). I have done the same with the least useful strategies table (table 10 in the second sub-section). For brevity, the tables present only the top ten of answers. The whole variety of answers (all thirty) can be found in Appendix 1.

Most useful VLSs

In this sub-section ten of the most useful strategies will be discussed in more detail. I will also discuss the impact of such strategies on the students' learning of second language vocabulary. Table 9 below lists the ten most useful strategies based on the students' answers.

Table 9. Strategies that were perceived most useful.

Rank	VLS	Main/Sub cat	At value 4/at value 3 %		Sum %
			N	N	N
1.	VLS30 (C/MET)**		73.2 (71)	20.6 (20)	93.8 (91)
2.	VLS3 (C/COG)*		60.8 (59)	29.9 (29)	89.7 (88)
3.	VLS10 (C/SOC)**		43.3 (42)	40.2 (39)	83.5 (81)
4.	VLS8 (C/MET)**		43.3 (42)	38.1 (37)	81.3 (79)
5.	VLS9 (C/SOC/MET)*		40.2 (39)	40.2 (39)	80.4 (78)
6.	VLS4 (D/DET)*		42.3 (41)	38.1 (37)	80.4 (78)
7.	VLS24 (C/MEM)*		20.6 (20)	49.5 (48)	70.1 (68)
8.	VLS6 (C/MEM/COG)*		33.0 (32)	34.0 (33)	67.0 (65)
9.	VLS12 (D/SOC)*		11.3 (11)	54.6 (53)	65.9 (64)
10.	VLS11 (D/SOC)*		18.6 (18)	45.4 (44)	64.0 (62)

Seven out of 10 most useful strategies are consolidation strategies (strategies for practicing and integrating new items and information). Furthermore, the top ten most useful list looks versatile since all five subcategories (Determination, Memory, Cognitive, Metacognitive and Social) have been included. More than 60% of students think that these ten strategies are either 'useful' (4) or 'quite useful' (3).

The top six of the strategies are considered highly useful. Over 80% of the students seem to think that *using English media* (VLS30), *using word lists at the back of course books* (VLS3), *learning from people who speak English* (VLS10), *revising words periodically* (VLS8), *asking somebody to test them on words* (VLS9) and *consulting a dictionary* (VLS4) are useful and will benefit them when studying English words. The strategies from 7th to 10th include guessing (VLS24), repetition (VLS6) and consulting others (VLS12 and VLS11).

The fact that all strategies in the top ten list are consolidation strategies suggest that Finnish upper-secondary EFL students understand the importance of practicing words after they have first discovered their meaning. Moreover, most of the students think that *revising words every now and then* (VLS8) would be useful. However, a number of the strategies that they use are rather light and superficial (see section 3.5). It can be argued that the use of such strategies might leave a rather poor memory trace onto the learner's mind. According to several experts (Nation 1990, Oxford 1990, Schmitt 1997), L2 learners should not only apply superficial strategies if they wish to truly advance in the language they are learning.

Yet, again it seems that the Finnish EFL students tend to avoid strategies that take too much of their time and effort to master and employ and thus prefer them. What is more, the top ten list includes a number of traditional strategies such as repetition and wordlists. However, even if traditional strategies are still popular among the students, they do also realize that there are less conventional learning opportunities outside the classroom.

Finnish foreign language learners seem to give weight to many different ways of practicing the language. They seek out opportunities to speak and discuss English words. They know how to make use of the media as a resource for language input. They use their previous knowledge of other languages to their advantage as they make

educated guesses on word meanings. Furthermore, they have the motivation to test themselves on words they have recently learnt.

Least useful VLSs

In this sub-section ten of the least useful strategies will be discussed in further detail. As before, I will discuss how the use of such strategies might influence the students' learning of English vocabulary. Table 10 below lists the ten least useful strategies based on the students' answers.

Table 10. Strategies that were perceived least useful.

Rank	VLS	Main/Sub cat	At value (1)/at value (2) %		Sum%
			N	N	
1.	VLS23 (C/MEM)		49.5 (48)	40.2 (39)	89.7 (87)
2.	VLS27 (C/COG)		55.7 (54)	33.0 (32)	88.7 (86)
3.	VLS16 (C/COG)		42.3 (41)	38.1 (37)	80.4 (78)
4.	VLS13 (C/SOC)		26.8 (26)	45.5 (44)	72.3 (70)
5.	VLS14 (C/MEM)		33.0 (32)	38.1 (37)	71.1 (69)
6.	VLS29 (C/COG)		28.9 (28)	40.2 (39)	69.1 (67)
7.	VLS20 (D/MEM)		29.9 (29)	38.1 (37)	68.0 (66)
8.	VLS28 (C/MET)		27.8 (27)	38.1 (37)	65.9 (64)
9.	VLS26 (C/MEM)		30.9 (30)	33.0 (32)	63.9 (62)
10.	VLS25(C/MEM)		22.7 (22)	41.2 (40)	63.9 (62)

From over 60% up to almost 90% of students think that these ten strategies are either 'not at all useful' (1) or just 'somewhat useful' (2). Quite many of these strategies are either cognitive or memory strategies that could be described as creative and or

otherwise time-consuming. For instance, *keeping a diary or a notebook of newly learnt items* (VLS27) requires independent working outside class, whereas *acting out a words' meaning* (VLS23) calls for imagination and furthermore, can appear as a little too unusual for more traditional learners.

However, students do also identify lighter strategies, such as VLS13 and VLS28, rather useless for learning words. For instance, 66% of the students think that *skipping or passing unknown words in a text* (VLS28) does not benefit them. *Focusing on how other students use a specific word in class* (VLS13) they consider even less useful (72%). Likewise, *finding out the part of speech (noun, verb, adjective) a word belongs to* (VLS20) is not something that most students consider useful.

The shallow strategies rejected by the students are quite different from each other; VLS13 is about focusing on how other use the language, in VLS20 the focus is on finding further knowledge on the word (part of speech) and VLS28 requires the learner to skip or pass an unknown word when reading. In the case of VLS28 students have perhaps, and quite logically so, thought that skipping a word without trying to find out its meaning does not in fact increase their knowledge of English vocabulary and thus it is not useful in learning words. Whereas skipping a word rules out the specifics, VLS13 and VLS20 emphasize details in language use. Perhaps paying attention specifically to the ways in which a word is used and can be used is, by contrast, difficult for some students.

All except one of the above mentioned strategies belong to the consolidation category, which consists of strategies for practicing and integrating new knowledge to previous knowledge. Most of these strategies also enhance deep learning. As before, it seems that deep learning strategies are being neglected by the learners. Another explaining factor yet again could be the unfamiliarity of some strategies, strategies that are less traditional. Learners are often reluctant to use strategies they do not know of beforehand. Learning new studying strategies takes time.

Most useful strategies by gender

In this sub-section I have compared males' and females' answers. Again, the gender differences found remained rather small. However, a closer inspection revealed some statistically significant differences between the sexes. Table 11 below presents the seven most useful strategies based on the answers of the students. Table 11 introduces nine strategies that were 'quite useful' according to the students. Five strategies for each gender are introduced.

Table 11. 7 most useful vocabulary learning strategies by gender at value 4 ('useful').

Name of VLS	Rank of preference		At value 4/useful %		
	Gender		N		p
	m	f	m	f	
VLS4 (d/det)	2	7	37.5 (15)	45,6 (26)	.037
VLS10 (c/soc)	3	6	37.5 (15)	47,4 (27)	.635
VLS3 (c/cog)	4	1	37.5 (15)	77.2 (44)	.000***
VLS30 (c/met)	1	2	67.5 (27)	77.2 (44)	.248
VLS18 (d/det)	7	3	22.5 (9)	54.5 (31)	.007
VLS8 (c/met)	5	4	32.5 (13)	50.9 (29)	.051
VLS9 (c/soc/met)	6	5	25,0 (10)	50.9 (29)	.019

The seven most useful strategies were the same for both the males and the females, although the ranking did vary somewhat. Strategies deemed most useful by students were mostly light strategies, such as *guessing from context* (VLS18) and *consulting a dictionary* (VLS4). Students also rated *periodical revising of words* (VLS8) rather high, 4th and 5th place. Thus it would seem that the students do think that returning to items that have already been learnt can be useful when trying to build a long-term English vocabulary.

Clearly, the most useful strategies according the students were either *using English media* (VLS30) or *using wordlists* (VLS3). Almost 70% of the males and almost 80% of the females thought *using English media* useful; men ranked it 1st and women 1st and 2nd. Nearly 40% of the males and nearly 80% of the females thought that *using wordlists* was useful. After the first place, from 2nd to 4th place, the men ranked *consulting a dictionary* (VLS4), *learning from people who speak English* (VLS10) and *using wordlists* (VLS3) as useful (37,5%). The women, on the other hand, thought that *guessing from context* (VLS18), *revising words periodically* (VLS8) and *asking somebody to test one on words* (VLS9) were more useful.

One statistically highly significant difference could be found between the males and females (VLS3, *using wordlists*). This difference reveals that the women (77.2%) do in fact favor wordlists over other strategies far more than the men (37.5%). In addition, another almost significant difference was found in VLS18, *guessing from context*. Again, the females (54.5%) were far more active guessers than the men (22.5%).

Table 12. 10 strategies that were ranked top of the ‘quite useful’ category at value 3.

Name of VLS	Rank of preference		At value 3/quite useful%		
	Gender		N		
	m	f	m	f	P
VLS24 (c/mem)		1	-	59.6 (34)	.002*
VLS12 (d/soc)	1	2	52.5 (21)	56.1 (32)	.105
VLS17 (c/mem)		3	-	52.6 (30)	.058
VLS11 (d/soc)		4	-	49.1 (28)	.449
VLS7 (c/cog)		5	-	47.4 (27)	.001**
VLS10 (c/soc)	2		47.5 (19)	-	.635
VLS9 (c/soc/met)	3		45.0 (18)	-	.019

VLS18 (d/det)	4	45.0 (18)	-	.007
VLS3/ (c/cog)	5/	42.5 (17)	-	.000***
VLS21 (c/mem)	5	42.5 (17)	-	.039

However, there are greater differences between the genders when it comes to the strategies they consider ‘quite useful’. All except one strategy, *asking a friend* (VLS12), are different. Three statistically significant differences and one almost significant difference were found: *using wordlists* (VLS3), *written repetition* (VLS7), *guessing meaning with the help of other known languages* (VLS24) and *guessing from context* (VLS18).

Both the men and women thought that *asking a friend for meaning* (VLS12) is quite useful. The men rated this social strategy 1st and the women 2nd. Over half of the students thought that this strategy works for them. The 2nd strategy for the men was also a social strategy, *learning from people who speak English* (VLS10). Also the males’ 3rd strategy was a social strategy, *asking somebody to tests them on words* (VLS9). The fact that the males’ top three ‘quite useful’ strategies were all social strategies rebukes the old assumption that men do not like to engage socially when learning a language. The women rated memory strategies VLS24 (*guessing with the help of other known language*) first and VLS17 (*studying words in themes*) third. All except one strategy (VLS21, *coming up with synonyms*) in this list are either shallow (seven, including guessing and repetition) or mid-range strategies (two, VLS10, *learning from people who speak English* and VLS17, *learning in themes*).

Least useful strategies by gender

In table 13 below, ten ‘somewhat useful’ strategies will be introduced (six for each gender). The second table (table 14.) presents seven strategies (five for each gender) that neither males nor females thought to be ‘at all useful’.

Table 13. 10 least useful strategies by gender at value 2 ('somewhat useful').

Name of VLS	Rank of preference		At value 2/somewhat useful%		
	Gender		N		
	m	f	m	f	P
VLS23 (c/mem)		1	-	47.4 (27)	.058
VLS16 (c/cog)		2	-	45.6 (26)	.046
VLS1 (c/met)	4	4	47.5 (19)	42.1 (24)	.934
VLS19 (c/mem)	3	3	47.5 (19)	43.9 (25)	.168
VLS14 (c/mem)		5	-	40.4 (23)	.000***
VLS20 (d/det)		6	-	40.4 (23)	.001**
VLS13 (c/soc)	1		55.0 (22)	-	.237
VLS25 (c/mem)	2		50.0 (22)	-	.011
VLS17 (c/mem)	5		45.0 (18)	-	.058
VLS15 (d/det)	6		45.0 (18)	-	.046

The males and females agreed on two strategies that they thought were at least 'somewhat useful'; *coming up with a story where the new word is somehow involved in* (VLS19) and *planning before-hand how to study words* (VLS1), which were either on 3rd or 4th place. The rest of the strategies they disagreed on. In two cases there were statistically significant differences between the males and females: *color-coding when underlining* (VLS14) and *finding out the part of speech/word class* (VLS20).

Half of the strategies in the 'somewhat useful' list were memory strategies, both deep and mid-range strategies (see section 3.5). Two shallow learning strategies were also in the list. These included *focusing on how other people use the word in class* (VLS13) and *finding out the part of speech* (VLS20). In fact, half of the strategies in the list are

mid-range strategies, which means that they are not deep/ time-consuming strategies nor are they shallow/quickly applied strategies.

The females' top three strategies in this list can be labeled as unfamiliar or novel strategies. *Acting* (VLS23), *using post-its* (VLS16) and *coming up with a story that involves the new word* (VLS19) are a little more imaginative than some of the more traditional strategies that the students recognize and are aware of.

The males' top three is a little different; the 1st and 2nd strategies are rather straightforward; *paying attention to how others use the word in class* (VLS13) and rehearsing words with *opposite pairs* (VLS25) appear rather common and less creative. Instead, the 3rd strategy, VLS19, involves imaginative skills.

Table 14. 7 least useful strategies by gender at value 1 ('not at all useful').

Name of VLS	Rank of preference		At value 1/not at all useful%		
	Gender		N		
	m	f	m	f	p
VLS27 (c/cog)	1	1	62.5 (25)	50.9 (29)	.322
VLS23 (c/mm)	2	2	65.0 (26)	38.6 (22)	.058
VLS16 (c/cog)	3	3	55.0 (22)	33.3 (19)	.046
VLS14 (c/mm)	4		55.0 (22)	-	.000***
VLS20 (d/det)	5		50.0 (20)	-	.001**
VLS13 (c/soc)		4	-	29.8 (17)	.237
VLS29 (c/cog)		5	-	22.8 (13)	.219

The male and female students both agreed that *keeping a notebook on new words* (VLS27), *acting out the meaning* (VLS23) and *labeling things with their English names* (VLS16) were 'not at all useful'. These three strategies were either of the cognitive or

memory variety, one of which is a deep learning strategy (VLS23). Two of these strategies were also in the unknown list (see section 4.4). VLS27 and VLS16 could be labeled as mid-range strategies and as such they do not require as much time and effort to apply. Some of the strategies have probably also been rated as not useful because they are not familiar to many students (e.g. *color-coding* (VLS14), *post-its* (VLS16) and *acting* (VLS23)).

The males did not think that *color-coding* (VLS14) and *focusing on the part of speech* (VLS20) would be useful in learning new words. Color-coding is perhaps an unfamiliar strategy and thus considered useless. However, finding out whether the new word is a noun, verb, adjective or whatnot is something that Finnish EFL students should be able to do. It is possible that advanced students do not need to think about words and their grammatical classes because they are already able to figure them out otherwise. It might also be that they think it is an extra bit of information that they can go without.

The females thought that *focusing on how other people in the classroom use a particular word* (VLS13) or *taking notes in class about a words meaning and usage* (VLS29) are rather redundant; fifth of the female students seemed to think so. As before, it seems that the students do not see much sense in focusing on the small details of a particular word's meaning and use; they are not willing to 'dwell on' the specifics.

There were in total two statistically significant differences between the sexes in strategies VLS14 (*color-coding when underlining*) and VLS20 (*finding out the part of speech*).

Summary

So far I have discussed the usefulness of the VLSs for the whole group of students (N= 97) and separately for the two genders. It seems that both females and males prefer the shallow and easy-to-apply traditional strategies over the deep and more time-consuming ones. Furthermore, the differences between the sexes were rather small, although, closer inspection reveals some statistically significant differences.

4.3 Are strategies that are reported useful actually being used?

In the following section I will take a closer look at the top ten most frequently used and most useful strategies lists and the top ten least frequently used and least useful strategies lists. I will compare the lists together to see if there are any inconsistencies between the answers, for instance, to see whether the most frequently used strategies are also perceived most useful by the students and vice versa, whether the least frequently used strategies are actually seen as least useful by the students. In theory, to make sense, the lists should appear more or less identical; the most used strategies should also be the most useful ones and the least used strategies should be the least useful ones.

The following comparisons of tables 15 and 16 will show that there are indeed some incongruities; the most frequently used strategies are not necessarily always seen the most useful by the students, and conversely, the least frequently used strategies are not always seen as the least useful.

Table 15. Comparing the ten most frequently used and the ten most useful strategy lists.

Most frequently used (%/N)	Most useful (%/N)
1. VLS3 (C/COG) 93.8 (91)	1. VLS30 (C/MET) 93.8 (91)
2. VLS30 (C/MET) 87.6 (85)	2. VLS3 (C/COG) 89.7 (88)
3. VLS18 (D/DET) 81.4 (79)	3. VLS10 (C/SOC) 83.5 (81)
4. VLS24 (C/MEM) 74.2 (72)	4. VLS8 (C/MET) 81.3 (79)
5. VLS4 (D/DET) 66.0 (64)	5. VLS9 (C/SOC/MET) 80.4 (78)
6. VLS6 (C/MEM/COG) 66.0 (64)	6. VLS4 (D/DET) 80.4 (78)
7. VLS9 (C/SOC/MET) 64.9 (63)	7. VLS24 (C/MEM) 70.1 (68)
8. VLS28 (C/MET) 64.9 (63)	8. VLS6 (C/MEM/COG) 67.0 (65)
9. VLS10 (C/SOC) 60.8 (59)	9. VLS12 (D/SOC) 65.9 (64)
10. VLS12 (D/SOC) 51.5 (50)	10. VLS11 (D/SOC) 64.0 (62)

The students seemed to appreciate the usefulness (and the benefit) of the strategies quite high, although the frequency of use (the reported reality) was in most cases lower. This fact perhaps suggests that the students saw many of the VLSs in a positive light, at least in theory. Every other corresponding strategy, except *using wordlists* (VLS3), was rated higher in usefulness than in frequency of use. The rate of use of VLS3 was 4.1% higher than that of the perceived usefulness. The greatest differences between individual strategies in these lists were in VLS10 (*learning words from people who speak English*), VLS9 (*asking others to quiz one on words*) and VLS4 (*using a dictionary*). In all of these cases the rate of usefulness was much higher than the rate of actual use; 22.7% in the case of VLS10, 15.5% in the case of VLS9 and 14.4% in the case of VLS4.

There were only a few differences between the lists of top ten most used strategies and top ten most useful strategies (altogether only four). There were two strategies that were in the most used strategies list but not in the most useful list: *guessing from context* (VLS18) and *skipping unknown words while reading* (VLS28). Vice versa, there were also two strategies that were in the most useful but not in the most used strategies list: *periodical reviewing of already learnt words* (VLS8) and *asking the teacher for an explanation* (VLS11).

One would assume that the most useful strategies would also be the most used; it would make no sense to actually use a strategy often and not think that it is in fact useless for reaching the study goals (unless the learner is totally unaware of his/her actions). However, it seems that even if students know or think that some strategies are useful (or at least sound like they could be useful) such strategies are in fact not being put to use and tried out.

Furthermore, and quite alarmingly, students are thus using strategies that they do not consider useful. This finding could point to the fact that some students might not actually be aware of the strategies they are using but somehow choose strategies out of habit, unthinkingly (see Brown et al. 1983 for detail). For instance, there might be a number of strategies they have acquired in the early years of studying a foreign language and have not after that reflected on the benefits of using such strategies (whether a particular strategy yields the same results as before). Strategies that have

been learnt in childhood may not be adequate in adulthood, and should thus be replenished with new more up-to-date strategies.

According to Oxford (1990: 12), some strategies may have become automatic through use and are “employed instinctively, unthinkingly and uncritically” even though they might be inappropriate for solving the task at hand. This is perhaps why some students report using strategies that they do not think useful. Thus strategy assessment and training is needed to help “learners become more aware of the strategies they are using and to evaluate the utility of those strategies (1990: 12).”

Table 16. Comparing the ten least frequently used and the ten least useful strategies lists.

Least frequently used (N/%)	Least useful (N/%)
1. VLS16 (C/COG) 97.9 (95)	1. VLS23 (C/MEM) 89.7 (87)
2. VLS27 (C/COG) 96.9 (96)	2. VLS27 (C/COG) 88.7 (86)
3. VLS26 (C/MEM) 94.8 (92)	3. VLS16 (C/COG) 80.4 (78)
4. VLS23 (C/MEM) 92.8 (90)	4. VLS13 (C/SOC) 72.3 (70)
5. VLS29 (C/COG) 91.8 (89)	5. VLS14 (C/MEM) 71.1 (69)
6. VLS14 (C/MEM) 90.8 (88)	6. VLS29 (C/COG) 69.1 (67)
7. VLS8 (C/MET) 85.6 (83)	7. VLS20 (D/MEM) 68.0 (66)
8. VLS5 (C/MEM) 82.5 (80)	8. VLS28 (C/MET) 65.9 (64)
9. VLS13 (C/SOC) 81.4 (79)	9. VLS26 (C/MEM) 63.9 (62)
10. VLS25 (C/MEM) 81.4 (79)	10. VLS25 (C/MEM) 63.9 (62)

Note: in order to compare the two lists, the other (least frequently used) had to be changed from affirmative answers into negative ones to match the negative answers of the least frequently used list. For example, in the original positive table (page 63) 2.1 % of the students report using VLS16. This means that in the present negative table 97.9% of the students do not report using it.

Congruently, in this end of the spectrum it seems that students in general tend to consider vocabulary learning strategies more beneficial than their actual use of them would reflect. Even the least preferred strategies are viewed more favorably. Five out of eight corresponding strategies compared showed great differences between the rate use and the rate of reported usefulness; the rate of usefulness was 20 up to 30% higher than the rate of actual use. The five strategies that students thought were far more useful than the rate of use would actually suggest were VLS16 (17.5%), VLS26 (30.9%), VLS29 (27.9%), VLS14 (19.7%) and VLS25 (17.5%). In fact, all of the eight corresponding strategies were rated higher in usefulness than in actual use.

The lists of top ‘least used’ and top ‘least useful strategies’ contained only a few differences; the students seemed to, for most part, agree on what strategies they considered useless and what strategies they would not use. Only four strategies broke the pattern; *periodical revising of words* (VLS8) and *making complete sentences that include the word* (VLS5) were reported the least used but not least useful, and vice versa, *finding out the part of speech* (VLS20) and *skipping or passing a word while reading* (VLS28) were deemed least useful but yet they were not least used.

Periodical revising of words (VLS8) can be found on two contradicting lists; it is at 4th place on ‘the most useful list’ while it can also be found at the 7th place on ‘the least used strategies list’. This is to say that students realize and agree on the importance and usefulness of this strategy in theory; they know that they should use it. However, in reality the strategy is of the least used strategies; they are not actually applying the strategy. According to many experts, this particular strategy is the single most important strategy in learning new words in a foreign language.

Summary

The results in this section show that the most frequently used strategies are not necessarily always seen the most useful by the students. The least frequently used strategies, on the other hand, were not always considered the least useful. Students seemed, in both cases, to appreciate the assumed benefit of using vocabulary learning strategies higher than the reported reality would suggest. This fact may indicate that the students do actually see VLSs in a positive light, at least at a notional level.

5 DISCUSSION

In the following section (5.1) I will briefly discuss the main results of the study. After my results, I will introduce the main results of three other vocabulary learning strategy studies in which a questionnaire was used to collect the data (5.2. onwards). The main results of the current study will be compared with the results of the three similar studies from Schmitt (1997), Fan (2003) and Catalan (2003), the three studies that were the major inspiration for the current study.

5.1 Overview of findings

The answers to the first research question revealed that Finnish EFL students preferred to use strategies that can be described as shallow processing. More sophisticated deep processing strategies, such as mental imagery and making one's own study aids, were often avoided. The most popular strategies involved, among others, *guessing* (from context or based on other known languages), *verbal and written repetition*, *consulting a peer*, *wordlists and using the English media*. The most preferred strategies can be described as traditional. For one, the most popular strategies tended to lack in the mental quality, and further, they were rather easy and quick to apply.

Conversely, the least popular strategies, such as associative strategies (for instance, *mental imagery*), were perhaps shunned because of their costliness in time and effort, and furthermore, because they were perhaps too difficult to manage and use. Furthermore, it seems that students tended to view vocabulary learning as straight-forward mechanical memorizing. This is perhaps best reflected by the before mentioned repetitive strategies and *the use and study of wordlists*. Moreover, the students' everyday study routines seldom included strategies demanding extracurricular work.

Gender in the case of frequency of use did to a certain extent affect the students' choices of strategies. Even if the big picture seemed to be fairly unaffected by gender, a closer look revealed some more detailed differences; males and females agreed mostly on the individual strategies that they were using. However, in general females seemed to be more active users of vocabulary learning strategies than males. Furthermore, females reported using all thirty strategies offered in the questionnaire, whereas men reported

altogether three strategies that they did not use at all. This is to say that females in this sample did have a slightly broader range of strategies in their use than the males.

The answers to the second research question were congruent to the answers received in the first one; the strategies considered most useful were the shallow and the easily employed ones. The top ten ‘most useful strategies’ list contained a total of six shallow strategies (e.g. asking someone, repeating, guessing), four mid-range strategies (using English media among others) and zero deep strategies. Top ten ‘least useful strategies’ list confirms the fact that students do, to some extent, reject deep processing strategies; there were overall three deep strategies, four mid-range strategies and three shallow strategies included. The three deep processing strategies *acting the meaning* (VLS23), *studying words in opposite pairs* (VLS25) and *making themed mind-maps* (VLS26) were all memory strategies that focus on using one’s imagination and mental grouping abilities to produce and enhance connections between previously learned and new information.

In the case of usefulness, males and females agreed on some categories and disagreed in others. The most useful strategies (rated 4) were the same for both sexes, only the rank was varied. Females seemed to have a more positive attitude towards these strategies than men. The strategies deemed ‘quite useful’ showed a little more variance between the genders; all strategies were different except for VLS12 (*asking a friend for a meaning*). Females and males disagreed in the ‘somewhat useful’ category in all strategies except in *planning how to study words* (VLS1) and *coming up with a story in which the new word is involved* (VLS19). Greater accord was once again found in the last category of the ‘least useful strategies’ (those that were ‘not at all useful’); the strategies from 1st place to 3rd place were the same. The three commonly ‘least useful strategies’ (VLS27, VLS23 and VLS16) reflect yet again the females’ more positive attitude towards the usefulness of learning strategies even if there were no statistical significance between the sexes.

Answers by the students to the third research question revealed incongruities between the most frequently used and the most useful strategies and also between the strategies that were reported least frequently used and least useful. The most frequently used strategies were not always deemed most useful and vice versa. Correspondingly, the

least frequently used strategies were not always considered least useful. In both cases, the comparison between the top ten lists showed that students tended to appreciate the supposed benefit of strategies much higher than what the actual use of these strategies would reflect. Students seemed to have a rather positive attitude towards the VLSs, at least in theory. Furthermore, there were only few incongruities in the individual strategies on the top ten lists compared; four in each case which is to say that the lists were generally compatible. In some cases, however, it seemed students were using strategies they did not consider very useful.

Some additional information was drawn from the students after the main questionnaire was completed. When the students were asked to report strategies they had not heard of before, they claimed that nineteen out of the thirty strategies offered in the questionnaire were unknown (by at least one student). If the answers hold true, it means that students were not aware of two thirds of the strategies in the questionnaire! Granted that some of the strategies introduced in the questionnaire can be described as novelties (VLS23 (40% /N39), (VLS16 (19%/N18) and (VLS22 (14%/N14) and are thus most likely unfamiliar to many students, it still does not begin to explain the students' lack of strategic knowledge.

Students were also asked to name extra strategies that they used that were not mentioned in the list. Students from Mikkelin lukio, Normaalikoulun lukio, Joutsan lukio and from Tikkakosken lukio combined reported only four other strategies that they had used. Three female students related that they wrote (unspecified texts) in English, listened to their own recordings of wordlists/phrases in the bus or while jogging and that they came across new words while surfing their favorite sites in the Internet. A male student reported using visual cues to remember new words.

5.2 Comparing results with Schmitt's study

In this section I will compare Schmitt's (1997) results with the results of the present study on the part of the general use of the VLSs.

Do Finnish EFL students prefer the same strategies as the Japanese EFL students?

There were surprisingly many similarities between the Finnish and the Japanese EFL students when it comes to choosing and using vocabulary learning strategies. When the most frequently used top ten lists for both groups were compared with each other five individual strategies were the same; *wordlists* (VLS3), *guessing from context* (VLS18), *consulting a dictionary* (VLS4), *verbal repetition* (VLS6) and *asking peers for a meaning* (VLS12). However, the ranks of the preferred strategies were quite different in order.

Table 17. Comparing similarities of the Finnish and Japanese most frequently used strategies lists.

Strategy	Finnish EFLs (N=97)		Japanese EFLs (N=600)	
	Rank	N/%	Rank	N/%
<i>Wordlists</i>	1.	91/93.8	10.	324/54
<i>Guessing from context</i>	3.	79/81.4	4/5.	444/74
<i>Consulting a dictionary</i>	5.	64/66.0	1.	510/85
<i>Verbal repetition</i>	6.	64/66.0	2/3.	456/76
<i>Ask peers for meaning</i>	10.	50/51.5	6.	438/73

The Finnish single most frequently used VLS was *wordlists* (F/1st), whereas the Japanese top one most used strategy was by far *consulting a dictionary* (J/1st). It seems that Finnish EFL students are dependent on using wordlists (over 90%) and that Japanese EFL students rely heavily on dictionaries (over 80%). The greatest difference in strategy use between the countries is reflected by the use of wordlists; it is the 1st strategy for the Finnish students and the 10th strategy for the Japanese students. Slightly over 50% of the Japanese students report using wordlists while studying English

vocabulary, whereas almost every Finnish student claims using this strategy. The second greatest difference between the two countries lies in the Japanese 6th and the Finnish 10th strategy, *asking peers for meaning*; over 70% of the Japanese students consult their peers, whereas just half of the Finnish students make use of their classmates' knowledge.

When it comes to the least frequently used VLSs fewer similarities were to be found between the Japanese and the Finnish EFL students. In the top five least frequently used strategies lists two individual strategies were the same, *making themed mind-maps* (VLS26) and *using physical action/acting* (VLS23). Finns rated *mind-maps* 3rd with 5.2% or 5 students using the strategy and Japanese rated it 2nd with 9% or 54 students using it. *Acting* was rated 4th by Finns with 7.2% or 7 students using it and 5th by the Japanese with 13% or 78 students using it. The fifth least frequently used strategy for Finns was *taking notes in class* (VLS29); only 8.2% reported using the strategy. On the contrary, for the Japanese this strategy was one of the top most frequently used; over 64% of Japanese students reported using it.

Do Finnish EFL students find the same strategies useful as the Japanese EFLs?

Finnish and Japanese EFL students agreed on four strategies that they thought were useful in studying English vocabulary. These strategies were *continuing to study words over time* (VLS8), *consulting a dictionary* (VLS4), *verbal repetition* (VLS6) and *asking the teacher* (VLS11).

Table 18. Comparing the similarities of the Finnish and Japanese most useful strategies lists.

Strategy	Finnish EFLs (N=97)		Japanese EFLs (N=600)	
	Rank	N/%	Rank	N/%
Periodical revising	4.	79/81.3	5/6.	522/87
Consulting a dictionary	6.	78/80.4	1.	570/95
Verbal repetition	8.	65/67.0	10.	504/84

Asking the teacher	10.	62/64.0	7.	516/86
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Even though there are fewer similarities in single strategies between the Finnish and the Japanese students in the usefulness category than there were in the use category, the ranking did not vary as much. The two groups seemed to agree on the usefulness of *periodical revising of words*; the Finns rated it 4th and the Japanese 5th or 6th with a difference of fewer than 6%. The greatest difference in rank occurred in *consulting a dictionary*, which the Japanese had rated 1st and by far the most useful strategy of all. Finnish students had rated it rather low, 6th place. In the case of *verbal repetition* (F/8th and J/10th) and *asking the teacher* (F/10th and J/7th) both groups seemed to rather agree on the ranking.

When it comes to the least useful strategies, there was only a single strategy the Finnish and the Japanese agreed on; *skipping or passing an unknown word* (VLS28). The Japanese reported that this strategy was by far the least useful strategy (J/1st). Only 16% or 96 Japanese students thought it would benefit them when studying English vocabulary. Finnish students rated the strategy 8th in their top ten least useful strategies list which meant that 66% or 64 students found *skipping or passing a word* rather useless. Interestingly, there were two strategies that the Japanese thought highly useful that were on the Finnish least useful list; *taking notes in class* (VLS29) and *studying opposite word pairs (antonyms)* (VLS25). Finns reported *taking notes* 6th with 70% of students claiming it rather useless and *studying antonyms* 10th with over 60% of students stating it quite useless. *Antonyms* (J/4th) were considered useful by 88% of the Japanese EFL students and 84% also found *taking notes* helpful.

To conclude, it seems Finnish and Japanese EFL students share quite many study habits when it comes to learning English words. Finnish students were keen on studying words with the support of wordlists and the Japanese students relied heavily on the bilingual dictionary to help them in their studies. Both of these strategies make use of translation pairs that offer the L1 equivalent for the target language word. However, whereas wordlists often offer only one or two contracted meanings for a word, bilingual dictionaries, in most cases, present more detailed information on the form and function of a word (for instance, phrases). Finnish and Japanese students alike also prefer

repetitive strategies which focus on the memorization the word's form and grammatical features (plural forms, conjugated forms).

Furthermore, Finnish and Japanese language learners seemed to be avid guessers. However, whereas Finnish and Japanese students both reported guessing from context useful, only the Finns reported making use of other known languages when trying to guess an English word's meaning (for instance, using cognates in related languages). Most of the Finns also claimed profiting from the English media in its many forms, whereas the Japanese did not mention it. In Finland, there are, however, more opportunities for students to practice their listening skills in English and pick up new words since the media coverage in the target language is much wider. Further differences could be found in the Japanese affinity of going to great lengths to take notes in class and using other written exercises to enhance vocabulary learning. Finns, on the other hand, tended often to avoid strategies that involved much writing.

The last but not least notable similarity with Finnish and Japanese EFL students is their mutual avoidance of deep processing strategies. Both groups shunned association strategies that combined sound or physical cues. Creating mental imagery was also widely ignored. There were also innovative strategies in offer for the students to choose from. Yet the students did seldom report using such strategies. This might reflect the students' affinity to stick to familiar and well-tried traditional strategies.

5.3 Comparing results with Catalan's study

In this section I will compare the results of Catalan's (2003) study with the results of the present study on the part of gender differences in strategy use. It is important to note that Catalans respondents were FL students in English and Basque, whereas the Finnish examined in the current study were all EFL students. Otherwise the data collection procedure was the same.

Did gender affect the Finnish and the Spanish EFL students in the same way?

The most frequently used strategies

The Finnish and the Spanish top ten most frequently used strategies lists were quite different when compared. There were all in all four out of ten strategies that were the same with Spanish and Finnish males. There were five strategies that were the same with Spanish and Finnish females.

Table 19. Comparing the results of the Finnish and the Spanish EFL students by gender.

Strategy	Gender (rank)		Gender (%)	
	m	f	m	f
Wordlists	-/F2	S10/F1	-/F87.5	S61.3/F98.2
English media	S8/F1	S9/F2	S55.9/F87.5	S62.6/F87.7
Guessing from context	S3/F3	S3/F3	S74.9/F75.0	S80.8/F86.0
Dictionary	S1/F5	S1/F7	S83.2/F62.5	S85.8/F68.4
Ask a friend	S5/F10	S4/F9	S69.2/F42.5	S74.8/F57.9

Note: S stands for Spanish, F stands for Finnish.

Finnish and Spanish EFL and FL students agreed on the rank of only one strategy which was *guessing from context* which both groups ranked 3rd. Finnish males rated *using the English media* the single most used strategy (F/1st). For the Spanish males *using English media* was only 8th. Finnish females rated *using wordlists* first, whereas Spanish females rated the same strategy only 10th. Spanish males reported *using a dictionary* most often (S/1st), whereas Finnish males ranked it 5th. Spanish females also listed *using a dictionary* first place. Finnish females listed this strategy only 7th.

It seems that gender affected the Finnish EFL and the Spanish FL students in similar ways; only small differences could be found between the males and the females. Finnish males and females agreed on all ten most frequently used VLSs and Spanish males and females had only one disagreement on their top ten list. Spanish females listed *using vocabulary section (wordlist) in textbook* 10th, whereas Spanish males reported using

mental imagery instead (Sm/10th). The Finnish top ten list included 7 consolidation strategies and 3 discovery strategies, whereas the Spanish top ten list involved 5 consolidation strategies and 5 discovery strategies for both genders. Whereas the Spanish list was well-balanced, the Finnish list clearly favored consolidation over discovery strategies.

When the Finnish ranking was compared with that of the Spanish, it became clear that the Spanish list was much more convergent; Spanish females and males agreed on 4 ranks (*dictionary, taking notes, guessing from context and using cognates*), whereas Finnish females and males agreed on only 1 rank (*guessing from context*). In addition, Spanish females were more active users in all of the shared 9 strategies, whereas Finnish males did use one strategy (*learning from people who speak English*) more often than Finnish females.

The least frequently used strategies

Only three of the ten least frequently used strategies were the same for the Finnish and the Spanish students; three for the males and two for the females. Finnish and Spanish females agreed on one strategy, *labelling with post-its*; they both rated it the least used of all strategies. Spanish and Finnish males quite agreed on their 3rd and 2nd strategy which also was *labelling with post-its*.

Table 20. Comparing the ranking of corresponding VLSs of the Finnish and the Spanish EFL students by gender.

Strategy	Gender (rank)		Gender (%)	
	m	f	m	f
Labelling/Post-its	S3/F2	S1/F1	S8.6/F0.0	S3.6/F3.5
Mind-maps	S9/F4	S-/F3	S13.3/F2.5	S-/F7.0
Acting/Physical	S8/F5	S9/F4	S13.3/F7.5	S9.9/F7.0

Note: S stands for Spanish, F stands for Finnish.

All of the top ten least used strategies for both Finnish and Spanish students consisted of consolidation strategies, i.e. strategies for practicing. Finnish males and females agreed on nine of the least frequently used strategies, whereas Spanish males and females agreed on eight. Finnish females and males agreed only on the rank of one strategy in their least frequently used strategies lists; both genders rated *practicing words in opposite pairs* (VLS25) 10th. The Spanish, on their behalf, agreed on the rank of two strategies; they listed *using the peg method* 4th and *configurating the word* 6th. Neither of these strategies was offered in the Finnish questionnaire.

Table 21. Comparing the Finnish and the Spanish top three least frequently used VLSs.

Fm	Ff	Sm	Sf
1. Color-coding	1. Post-its	1. Underlining i.l.	1. Post-its
2. Post-its	2. Notebook	2. Flashcards	2. Underlining i.l.
3. Notebook	3. Mind-maps	3. Post-its	3. Storyline words

Note: capitals stand for country and small letters for gender.

There seems to be one common nominator in the top three least frequently used lists for both Finnish and Spanish students; Finnish males and females listed *color-coding* either 1st or 2nd and Spanish males and females listed either 1st or 3rd. Furthermore, Finnish males reported three strategies that they did not use at all; these strategies were *color-coding* (VLS14), *labelling with post-its* (VLS16) and *keeping a notebook of words* (VLS27). Spanish males, however, did use all strategies that were offered to them in Catalan's (2003) questionnaire. In other words, Spanish males did use as many strategies as Spanish females did. Furthermore, it looks like Spanish males have slightly larger repertoire of strategies in use than their Finnish counterparts.

Greatest differences in use in the whole range of strategies by gender

Considering all strategies offered in the questionnaire of the current study there were five strategies that showed over 20% difference in use by gender. Compared to the Spanish FL students Finnish males and females had by far greater differences in use

between the genders; the single greatest difference in use between Spanish males and females was only 18.1%. There were in total four strategies that had statistical significance for the Finns; VLS6, VLS7, VLS9 and VLS14, three of which are included in the table below (ranks 1st through 3rd).

Table 22. The Finnish five greatest gender differences in usage of the 30 strategies.

Rank/Name of strategy/Cat.	N	f	m	P
1. Testing oneself (SOC/MET)	97	80.7	42.5	.000
2. Oral repetition (MEM/COG)	97	80.7	45.0	.000
3. Written repetition (COG)	97	40.4	10.0	.001
4. Affixes and suffixes (DET)	97	54.4	32.5	
5. Guessing based on other languages (MEM)	97	82.5	62.5	

All except one strategy were consolidation strategies.

Table 23. The Spanish five greatest gender differences in usage of the 30 strategies.

Rank/Name	N	f	m
1. Test oneself (MET)	450	48.3	30.4
2. Keep a notebook (COG)	450	55.0	45.8
3. Vocab. section (COG)	450	61.3	50.5
4. Wordlists (COG)	450	57.3	45.9
5. Cognates (MEM)	450	69.9	59.8

All were consolidating strategies. Information of statistical significance (P) was not available for Catalan's study.

To conclude, it would seem that the main results gained in the present study and Catalan's study are congruent; VLSs are generally the same for both males and females, even if there are small nuances to be discovered in the types of strategies men and women prefer to use and in the percentages of use. Both studies confirmed that women are more likely to be more active users of strategies than men. The Spanish female FL students were using all except one strategy (*association of the word with its coordinates*, e.g. 'salt' in 'salt and pepper') more frequently than the men. Similarly, Finnish females exceeded men in strategy use in all except one strategy, *learning from people who speak English*.

5.4 Comparing results with Fan's study

Since the questionnaire and the taxonomy used in Fan's (2003) study were very different from those of the present study, the results cannot be directly compared and are thus not quite apt. Furthermore, several of the measuring elements also differed; in the current study the Likert scale was four-stepped and in Fan's study five-stepped. In addition, in the present study students were asked to answer just 'yes' or 'no' whether they used a VLS or not instead of giving their answer on the Likert scale like in Fan's study. However, the basic questions in both studies were the same; EFL students were asked how often they used a strategy and if a strategy sounded useful to them. The table below introduces Fan's taxonomy.

Table 24. Fan's nine categories and how they fall into Schmitt's taxonomy.

Management (<i>MET</i>) (N 5)	for instance in S: VLS1, VLS2, VLS8, VLS28
(D) Sources (for new words) (N 8)	for instance in S: VLS30, VLS10
Known words (N 3)	
(D) Guessing (N 8)	for instance in S: VLS18, VLS24
(D) Dictionary (N 13)	

(C) Repetition	}	<i>Memory</i>	for instance in S: VLS3, VLS5, VLS6, VLS7,
(C) Association			
(C) Grouping			
(C) Analysis			
		<i>strategies</i> (N 19)	VLS15, VLS17, VLS19 etc.

(D) and (C) mark the discovery and consolidation categories in Schmitt's taxonomy. (MET) and Memory strategies mark two strategy groups these strategies would in Schmitt's taxonomy. (N) marks the number of individual strategies in Fan's nine categories.

Do Finnish EFL students prefer the same VLS strategies as the Chinese EFL students?

The strategies Chinese EFL students preferred most were *recalling meaning while reading, using dictionary strategies, revision of learnt words, finding new meanings and patterns of use for a learnt word, reading extensively outside class (English media sources), guessing and then confirming the meaning and analyzing the sound segments in a word*. Chinese EFL students avoided some rote learning strategies like *wordlists* and deep learning strategies involving association (mental imagery) and making study aids like *the Keyword method*. However, Fan (2003: 229) notes that Chinese EFL students did use many strategies that can be deemed as mechanical; repetition strategies such as *repeatedly saying the new word in their mind* and *spelling out the new word in their mind* were used.

Chinese EFL students reported using several VLSs that Finnish students did not use at all and were altogether very different to the Finnish strategies. Chinese EFL students naturally had more similarities with their Asian counterparts, Japanese EFL students, than with their Finnish counterparts. Especially the overwhelming use of dictionary based strategies (altogether 13 for the Chinese) was completely different from the Finnish situation where students just mentioned *using a dictionary to check meaning*. They did not practice with dictionaries per se as the Chinese students seemed to be doing. On the other hand, Chinese students claimed that they did not use *wordlists behind textbooks* or any other wordlists, whereas using wordlists was one of the most used and liked VLSs according to the Finnish EFL students.

However, Chinese students reported that they preferred using guessing strategies and made use of the *English media resources* available to them. Finnish EFL students also seemed to expressly appreciate these types of strategies. In addition, it seems that both Japanese and Chinese students disliked and avoided using association strategies and strategies concerning mental imagery as much as the Finnish students did.

Was there disparity in the Chinese EFL students' actual use and perceived usefulness of VLSs and how did those differences compare with the Finnish EFL students' reports?

Fan (2003: 228) found that there was some disparity between reported strategy use and usefulness of these strategies. Chinese students recounted several strategy groups that sounded more useful to them than their actual use would suggest. Guessing and association groups were quite identical; both deemed almost as used as they were useful. The table adapted from Fan (2003) shows that all other strategy groups had quite different rankings.

Table 25. The most used and most useful strategy groups according to the Chinese EFL students (adapted from Fan 2003: 229-230).

<i>Most used*</i>	M	<i>Most useful**</i>	M	
1. Guessing	3.54	1. Known words	4.07	diff
2. Known words	3.51	2. Dictionary	3.58	diff
3. Analysis	3.25	3. Sources	3.49	diff
4. Dictionary	3.22	4. Guessing	3.46	0.08
5. Sources	3.07	5. Analysis	3.44	diff
6. Repetition	3.04	6. Management	3.36	diff
7. Grouping	2.54	7. Repetition	3.27	diff
8. Association	2.51	8. Grouping	3.22	diff
9. Management	2.51	9. Association	2.61	0.1

*1=never use, 2=seldom use, 3=sometimes use, 4=often use, 5= very often use. **1=not useful, 2=not sure, 3=quite useful, 4=very useful, 5=extremely useful. M stands for the median number.

Chinese EFL students considered most of the strategy groups on the most used list those that they would ‘sometimes use’. There were, however, three strategy groups that they reported only ‘seldom using’. The strategy categories placed 7th to 9th can be described as deep learning. On the most useful list all except one category were considered either ‘very useful’ or ‘quite useful’. On association strategies the students were ‘not sure’ if they were useful or not. Again the association group consists of the deep learning strategies that were generally avoided. The Chinese lists do in fact reflect a similar tendency of some disparity between the functions of use and usefulness as it did with the Finnish lists, that is, most strategies/strategy groups seem to be considered much more useful than their use in reality would suggest.

If the Finnish top ten most frequently used and most useful strategies lists (see section 4.3) are in the main compared with their Chinese counterparts so that the individual strategies of the present study are approximately grouped under the nine categories of Fan’s taxonomy, one finds that the Finns preferred most strategies that belonged to the guessing, the sources and the repetition categories. Finns also used quite often the social strategies (SOC) that do not exist in Fan’s taxonomy. In addition, Finns also used some of the dictionary, the known word and the management strategies rather often.

Table 26. Strategy groups according to usefulness reported by Finnish EFL students.

Strategy group	Usefulness rating mean (median)			
	N	Ns	M	SD
1. Soc	97	5	2,78	.473480
2. Det	97	4	2,70	.563065
3. Met	97	6	2,70	.386000
4. Cog	97	6	2,37	.470805
5. Mem	97	11	2,32	.441320

Strategy ratings: 4=useful, 3=quite useful, 2=somewhat useful, 1=not at all useful.

Finnish students answered to a VLS questionnaire based on Schmitt's taxonomy which includes only five strategy groups. Some of the individual strategies overlap categories and are thus included in one or two different strategy category groups. The table shows that Finnish EFL students' most preferred strategy groups were the social, the determination and the metacognitive. The markedly least preferred strategies groups were the cognitive and the memory. The standard deviation numbers show that the students, both males and females, were rather unanimous about their answers. According to the reports, Finnish EFL students, in general, found all strategy groups at least 'somewhat useful' and at most 'quite useful'.

6 CONCLUSION

Since the main findings of the current study have already been recapped in the previous section (5.1), the main issues of the current study will be discussed in this section in general terms. After this, the repercussions of these findings for Finnish schools will be discussed.

General words on VLSs and taxonomies

During the course of this study the many facts and aspects of the learning strategies have been discussed. As we already know, there are and continue to be several definitions for what constitutes a learning strategy, and none of those definitions is absolutely agreed upon by the experts of the field. The present study has managed to discuss only some of the most renowned definitions for a learning strategy. Correspondingly, one must also keep in mind that there are several (and altogether different) taxonomies compiled by individual experts. Only a couple of these taxonomies have been introduced in greater length in the current study.

However, even if no consensus on the matter of definitions or taxonomies exists, there are a few common aspects that most experts mutually agree on. Such facts are, for instance, that LLSs can be affected by learner factors/variables and that the effectiveness of a LLS depends on the task, that is, whether the LLS is appropriate to solve the specific type of task. Furthermore, LLSs will support independent learning and increase and foster student autonomy. There are also different types of strategies for

different purposes. Most importantly, LLSs are learner initiated whether they are described as ‘actions’, ‘thoughts’ or ‘steps’ et cetera.

On good and poor strategies

The general opinion on language learning strategies is that they improve students’ learning skills and bring about better learning results. Several claims have been made that certain types of (vocabulary) learning strategies might actually be more effective than others. Indeed, experts seem to agree on the superiority of the so called *deep learning strategies* and the fact that they would be more beneficial to EFL students than the so called *shallow strategies*. The archetype of deep strategies in vocabulary learning is often manifested in the mental imagery techniques (complex manipulation of the content). Such techniques as the keyword method require the learner to make his/her own unique connections (in this case an acoustic link) between the target language word and the first language word. The shallow learning strategies in vocabulary learning have often come to mean a repetitive action, for instance, repeating words out loud from wordlists until they have been memorized.

Although several studies have promoted the less traditional deep learning strategies, there are also studies that have questioned their superiority over the more traditional and simpler shallow ones which learners often prefer. For instance, Cohen (1998: 8) states that strategies are not either “inherently good or bad” as such and goes on to explain that the “good, effective and successful” results that students get (or do not get) usually depend on the way they have been used. In other words, the effectiveness of the strategies are more a question of what is appropriate (or indeed inappropriate) to use to solve different language learning tasks (Oxford and Nyikos 1989: 291, Gu 2003).

Furthermore, the overall motivation and positive attitude toward learning a language can amount to more success alone than using and sticking to certain types of strategies; therefore no good or bad strategies exist. Moreover, self-initiation and flexibility are far more accurate predictors of language learning success according to Gu and Johnson (1996: 664). However, it seems that there is one particular group of strategies that could actually be the key in good vocabulary learning: the metacognitive strategies. These strategies allow the student to monitor his/her actions and evaluate their effectiveness in solving language learning tasks. In fact, it has been said that learners without proper

metacognitive skills are learners without a course or purpose; using many different vocabulary learning strategies amount to nothing if they are not well-orchestrated.

Implications for Finnish high school EFL students and English classes

The present study revealed that Finnish EFL students as well as their international counterparts also preferred using the shallow strategies over the deep ones. It also became apparent that the Finnish students overused some strategies and that some strategies were in fact actively avoided. The range of the strategies in use could have been broader and more flexible. Furthermore, when specifically asked, the Finnish high school EFL students reported that they had not heard of many of the thirty strategies offered in the questionnaire. This may well support the fact that there is a true need for strategy instruction, in general, in order to increase awareness. Since it is not perhaps realistic to demand the language teachers to commit to a tight regime of vocabulary learning strategies instruction, that is, dedicate hours and hours on specific instruction, a looser take of integrated information could be introduced where convenient.

Yet there is evidence that *explicit instruction* can be highly beneficial at least to less competent foreign language learners (Brown et al 1983: 126-135). For instance, the study by Mizumoto and Takeuchi (2009: 437, 440, 441, 443) revealed that especially the passive vocabulary strategy users showed an overall increase in the frequency of use of strategies after they had been taught the strategies and encouraged to use them. These students became more active input seekers and spent more time on oral rehearsal afterwards. And what is more, they were less intimidated by the association strategies than before. Moreover, also their general motivation towards learning English vocabulary seemed to increase. In general, the results showed that not only was there a rise in the frequency of VLS use but also changes in students' repertoires (they tried new strategies and substituted the old with the new) and the flexibility between strategy types.

All the same, whether there is explicit instruction or not, the fact is that EFL students need to keep on learning words also outside the English classroom. This kind of independency needs to be fostered. Teachers should at least promote awareness, if not offer some sort of a toolbox for learning to their students. It seems that thus far not many of the Finnish EFL students (who took part in this study) have been offered such a

toolbox. This fact becomes rather peculiar since learning strategies are mentioned in several chapters of the National Core Curriculum for Upper-secondary Schools 2003 (NCC 2003). The Finnish National Board of Education, who is responsible for the NCC, recommends explicitly that all high school *teachers should instruct and tutor the students in learning strategies and independent learning* even if they do not mention vocabulary learning strategies specifically (only reading, writing and communication strategies are mentioned separately).

For instance, according to section 3.1 of the NCC 2003, *the learning results are directly affected by and dependent on the student's active participation and goal-directed action in the learning situations*. In short, the learner is an independent and self-initiating agent who is highly responsible of his/her own learning, and that the learning results are also dependent on the learning strategies in the learner's use. Furthermore, in section 3.2 it is said that students should be able to set their own learning goals and learn to work independently and that "they must be given opportunities to test and find working methods suitable for their own learning style (2003: 14)." This would yet again point out to the importance of learning metacognitive skills and becoming a competent user of other learning strategies.

What is more, it is later on clearly stated that "they [the students] must be guided to become conscious of, assess and, where necessary, correct their own working methods (2003: 14)". It is "the task of each teacher is to give guidance in studies in the subject that he or she teaches and to help students to develop their learning-to-learn skills and capabilities for learning (2003: 18, section 4.2)." And lastly, in section 5.5 (*Foreign languages*) the NCC (2003: 103) states that

They will be guided to recognise their own strengths and development needs as communicators and language students. They will be guided to use strategies that are appropriate to their own development needs and to each specific study assignment and communication task.

In short, a learner needs to build up a repertoire of learning strategies and tactics of different kinds in order to become independent and autonomous enough to continue learning on his/her own without outside instruction.

Evaluation of the current study

Since the current study is based on the analysis of answers to a vocabulary strategy questionnaire, most of its weaknesses are also naturally related to the way the questionnaire was compiled and carried out.

First of all, the sample of students chosen for this study was not perhaps as versatile as it could have been even though the total of one hundred participants from four high schools was reached. Had the participants been chosen from Northern Finland and Southern Finland instead of the two near lying areas of Middle and Eastern Finland, the complete picture of the Finnish situation would perhaps been more insightful. Secondly, there was the issue of translating the original VLS questionnaire by Schmitt into Finnish. I decided to translate to avoid misunderstanding among the students. Yet, in the translation process I worried if the original idea in the English version was conveyed well enough into Finnish so that the essential information of the claims still remained intact.

The third, and by far, the most regrettable fact about the questionnaire was that it was actually never accurately piloted. Presenting the questionnaire to a few randomly selected high school students and receiving their comments on it did not elicit enough information to make proper adjustments, which I noticed later on. In addition to these high school students, also some university language teacher trainees evaluated the functionality of the questionnaire, but even this was deficient since they were not part of the actual target group. As the first set of data received from the EFL students from Joutsan lukio, it became apparent that the questionnaire could have done with more editing.

Students had commented, according to the reports of their teachers (who conducted the survey instead of the author) that they did not quite grasp all the terminology (*asiayhteyks* or *substansiivi*) used in the questionnaire even if the explanations were offered in Finnish and examples were given on the side. Some of the students had also mistaken how the Likert scale should have been interpreted, although again explanations were written on each page.

Furthermore, questions A and B had to be left out from the analysis since they were so inadequately answered by most of the students. This reflected perhaps the fact that the students did not quite understand what was required of them and that they would have needed more supervising. What is more, the risk was that the teachers, who conducted the study according to the author's written instructions, were still not able to answer all the questions that may have arisen. There was plenty of room for misunderstandings on how the questions should have been answered.

Moreover, the question remains whether a single questionnaire was effective enough to reveal the whole picture of what and how Finnish EFL students in high schools used VLSs. It is obvious that further investigation into the reasons why students choose and avoid certain strategies is needed. The current study cannot give definite answer, only guesses. It would have been interesting to conduct interviews to further explain why students chose strategies and what they thought about using them before and after exemplary tasks were completed. It would have also been useful to find out from the teachers what they had thought about the VLSs and included that in the study.

The strong points of the current study were probably the rather extensive considerations of gender and its effects on the VLSs. There have been only few studies conducted on the gender factor and language learning strategies not to mention that there is even fewer studies on gender and the VLSs. Furthermore, the current study endeavored to shed some light on the cultural differences that can, to some extent, dictate what strategies are used and shunned – what strategies are thought desirable and undesirable. As the comparisons of the three studies in sections 5.2 onwards show, there were noticeable differences between Asian students and the students from the West, and yet the reports of EFL students from Japan and China had many similarities with those of their Finnish counterparts.

Hopefully, the current study has also managed to emphasize the importance of the benefits that learning to use vocabulary learning strategies can amount to. It is, I believe, in any foreign language students' and teachers' interest to educate themselves in these techniques.

Suggestions for future research

Since the current study was merely exploratory and descriptive in nature, there remained many more-in-depth factors that were not touched upon.

As I have already mentioned in the evaluation of this study, students and teachers could have been interviewed to further probe their thoughts about learning how to use VLSs and how they, in actuality, felt about using them as part of their every-day teaching/studying practices. For instance, I could have asked what motivated learners to use VLSs, why did they avoid deep learning strategies, why teachers chose to teach VLSs or why they chose not to. The specific reasons and the attitudes towards particular strategies might have revealed further information of the patterns of use that emerged in the quantitative data. Moreover, it would have been revealing to have students actively comment using particular vocabulary learning strategies in real time while solving different types of language learning tasks. Perhaps students could have also continued commenting the effectiveness of the particular VLSs at home and how they felt about them, in short, kept a diary of their experiences.

In the initial stages of the present study I also contemplated examining whether the aptitude or the proficiency factor might affect the choice of VLSs and the frequency of their use. The students were asked for their previous course marks, which could have been used as indicators of their success in learning English in general up to this point. High-achieving students could have been using different and perhaps more efficient and advanced strategies than low-achieving students. Furthermore, if the initial range and number of VLSs used by different groups of students had been known before-hand, then the changes in the range and number could have been measured afterwards if the students had, for instance, been explicitly taught VLSs. Furthermore, in the study by Oxford and Nyikos (1989: 295) it was claimed that high strategy use leads to high motivation in language learning, which would have also been an interesting thing to investigate.

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APPENDIX 1

:::KYSELY LUKIOLAISTEN KÄYTTÄMISTÄ SANASTONOPPIMISSTRATEGIOISTA ENGLANNIN KIELESSÄ:::

Tämän kyselyn tarkoituksena on kerätä tietoa lukiolaisten käyttämistä **sanastonoppimisstrategioista**. Sanastonoppimisstrategioilla tarkoitetaan kaikkia niitä keinoja joilla vieraankielen oppija pyrkii oppimaan ja muistamaan uusia sanoja vieraassa kielessä. Kyselylomakkeeseen vastaaminen tapahtuu nimettömästi.



A. KYSELY

Muistele millaisia sanastonoppimisstrategioita olet käyttänyt **viimeisen 18 kk aikana**. Katso sitten alla olevaa listaa (seuraava sivu) ja

- **rasti** käytätkö kyseistä strategiaa (järjestysnumeron eteen, kohdat 1.-30.)

jonka jälkeen

- **ympyröi** kunkin strategian kohdalta sen hyödyllisyysaste (1-4).

Lopuksi

- **listaa** 5 strategiaa joita käytät omasta mielestäsi *eniten* ja 5 strategiaa joita käytät *vähiten* (a. ja b.)

ja

- **vastaa** vielä kahteen kysymykseen (c. ja d.).

HUOM! Vaikka et käyttäisikään jotain listassa mainittua strategiaa, arvioi kuitenkin kuinka hyödylliseltä strategia sinusta kuulostaa. Ympyröi siis tällaisenkin strategian hyödyllisyysaste.

1=ei lainkaan hyödyllinen, 2=jokseenkin hyödyllinen, 3=melko hyödyllinen, 4=hyödyllinen

- | | |
|--|----------------|
| 1. Suunnittelen etukäteen miten aion opiskella sanoja. | 1 2 3 4 |
| 2. Ajattelen omaa edistymistäni sanaston opiskelussa. | 1 2 3 4 |
| 3. Hyödynnän oppikirjan sanalistoja. | 1 2 3 4 |
| 4. Käytän sanakirjaa selvittääkseni uuden sanan merkityksen. | 1 2 3 4 |
-
- | | |
|--|----------------|
| 5. Kun olen oppinut uuden sanan merkityksen, yritän keksiä kokonaisia lauseita joissa uutta sanaa voisi käyttää. | 1 2 3 4 |
| 6. Jotta muistaisin oppimani sanan myöhemmin, toistan sitä ääneen. | 1 2 3 4 |
| 7. Jotta muistaisin oppimani sanan myöhemmin, kirjoitan sen useaan kertaan paperille. | 1 2 3 4 |
| 8. Kertaan oppimiani sanoja tasaisin väliajoin. | 1 2 3 4 |
| 9. Pyydän jota kuta kyselemään minulta sanoja. | 1 2 3 4 |
| 10. Opin uusia sanoja englantia puhuvilta ihmisiltä. | 1 2 3 4 |
| 11. Pyydän tunnilla opettajaa selittämään mitä uusi sana tarkoittaa. | 1 2 3 4 |
| 12. Pyydän kaveria selittämään mitä uusi sana tarkoittaa. | 1 2 3 4 |
| 13. Tarkkailen miten muut käyttävät sanaa tunnilla. | 1 2 3 4 |
| 14. Käytän värikoodeja alleviivatessani sanoja. | 1 2 3 4 |
| 15. Käytän sanan etu- ja loppuliitteitä (<i>im-possible, dark-ness</i>) selvittääkseni sanan merkityksen. | 1 2 3 4 |
| 16. Kiinnitän kotona esineiden englanninkielisiä nimiä muistilapuilla (post-it) esineisiin. | 1 2 3 4 |
| 17. Opiskelen sanoja teemoittain (ruokasanat, vaatesanat jne.). | 1 2 3 4 |
| 18. Kun luen, käytän asiayhteyttä apuna yrittäessäni arvata sanan merkityksen. | 1 2 3 4 |
| 19. Muistan uuden sanan merkityksen helpommin jos keksin sille tarinan johon se liittyy. | 1 2 3 4 |

1=ei lainkaan hyödyllinen, 2=jokseenkin hyödyllinen, 3=melko hyödyllinen, 4=hyödyllinen

- | | |
|---|---------|
| 20. Kun kohtaan uuden sanan, selvitän ensimmäisenä mihin sanaluokkaanse kuuluu (verbi, substantiivi, adjektiivi jne.). | 1 2 3 4 |
| 21. Keksin uudelle sanalle synonyymejä (samaa tarkoittavia sanoja). | 1 2 3 4 |
| 22. Muodostan mielessäni tarkan kuvan esineestä/asiasta jota sana merkitsee (esim. engl. 'javelin' suom. 'keihäs', kuvittelen kun Tero Pitkämäki heittää keihästä.) | 1 2 3 4 |
| 23. Näyttelen uuden sanan merkityksen muistaakseni sen myöhemmin (engl. 'toss' suom. 'heittää (pois)', esitän että heitän jotain pois). | 1 2 3 4 |
| 24. Käytän apuna muita osaamiani kieliä arvatakseni tuntemattoman sanan merkityksen. | 1 2 3 4 |
| 25. Opiskelen sanoja vastakohtapareina (mean – kind, day – night). | 1 2 3 4 |
| 26. Teen miellekarttoja, johon ryhmittelen eri aihepiirien sanoja (matkailu, ruoanlaitto jne.). | 1 2 3 4 |
| 27. Pidän kirjaa uusista sanoista joita olen oppinut. | 1 2 3 4 |
| <hr/> | |
| 28. Kun luen en yritä selvittää jokaisen tuntemattoman sanan merkitystä vaan hyppään niiden yli. | 1 2 3 4 |
| 29. Kun tunnilla kerrotaan uuden sanan merkityksestä ja käytöstä, teen niistä muistiinpanoja. | 1 2 3 4 |
| 30. Käytän hyväkseni englanninkielistä mediaa (tv, elokuvat, uutiset, lyriikat, lehdet, netti jne.) uusien sanojen oppimisessa. | 1 2 3 4 |

a. Listaa viisi (5) **eniten** käyttämäsi strategiaa viivalle. Strategian numero riittää.

b. Listaa viisi (5) **vähiten** käyttämäsi strategiaa viivalle. Strategian numero riittää.

c. Jos listasta puuttui yksi tai useampi strategia jota käytät opiskellessasi sanoja, nimeä se (tai ne) tähän.

d. Oliko listassa jokin strategia josta et ollut koskaan kuullut? Strategian numero riittää.

B. TAUSTATIEDOT

1. Olen ____nainen ____mies .
2. Ikäni on ____ .
3. Olen suorittanut lukiossa tähän mennessä ____ englannin kurssia.
4. Viimeisin kurssiarvosanani englannista on ____ .
5. Oppilaitoksen nimi _____.
6. Vuosiluokka _____.

Kun olet täyttänyt kyselyn, varmista vielä että olet vastannut joka kohtaan.

Kiitos vastauksistasi ☺

APPENDIX 2

Schmitt's complete taxonomy (1997: 207-208)

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 and gestures

DET Guess from textual context

DET Bilingual dictionary

*DET Wordlists

*DET Flash cards

SOC Ask teacher for an L1 translation

SOC Ask teacher for paraphrase or synonym of new word

SOC Ask teacher for a 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

SOC Study and practice meaning in a group

SOC Teacher checks students' flash cards or wordlists for accuracy

*SOC Interact with native-speakers

*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

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

COG Verbal repetition

COG Written repetition

COG Wordlists

COG Flash cards

COG Take notes in class

COG Use the vocabulary section in your textbook

*COG Listen to tape of word lists

*COG Put English labels on physical objects

*COG Keep a vocabulary notebook

*MET Use English-language media (songs, movies, newscasts, etc.)

*MET Testing oneself with word tests

*MET Use spaced word practice

MET Skip or pass new word

MET Continue to study word over time

() marks that the strategy was not included in the original 1993 survey*

APPENDIX 3a.

Complete table of results for the whole group– usefulness.

	N	Minimum	Maximum	Mean	Std. D
VLS30 English media	97	1	4	3,66	,627
VLS3 Wordlists	97	1	4	3,51	,694
VLS10 Learning from ppl who speak English	97	1	4	3,25	,778
VLS8 Periodic review	97	1	4	3,23	,797
VLS9 Testing oneself	97	1	4	3,19	,795
VLS4 Dictionary	97	1	4	3,18	,866
VLS18 Guessing from context	97	1	4	3,14	,829
VLS6 Oral repetition	97	1	4	2,93	,938
VLS24 Cognates	97	1	4	2,79	,901
VLS5 Use in complete sentences	97	1	4	2,79	,816
VLS11 Asking the teacher	97	1	4	2,77	,810
VLS12 Asking a friend	97	1	4	2,72	,732
VLS15 Affixes and suffixes	97	1	4	2,60	,943
VLS7 Written repetition	97	1	4	2,60	,920

VLS21 Synonyms	97	1	4	2,54	,902
VLS17 Themes	97	1	4	2,37	,782
(food, clothes)					
VLS19 Making a story	97	1	4	2,37	,939
VLS2 Reflection on	97	1	4	2,36	,892
progress					
VLS1 Planning how to	97	1	4	2,30	,752
study					
VLS22 Mental imagery	97	1	4	2,24	,966
VLS25 Antonyms	97	1	4	2,22	,892
VLS28 Skipping or	97	1	4	2,14	,924
passing a word					
VLS26 Mind maps	97	1	4	2,08	,874
VLS20 Part of speech	97	1	4	2,06	,864
VLS29 Taking notes	97	1	4	2,06	,852
VLS13 Observing how	97	1	4	2,04	,803
word is used by others					
VLS14 Color-coding	97	1	4	2,00	,866
VLS16 Post-its	97	1	4	1,81	,846
VLS23 Acting the word's	97	1	4	1,63	,726
meaning					
VLS27 Keeping a noteb.	97	1	4	1,57	,720

APPENDIX 3b.

Complete table of results for the whole group– frequency of use.

Rank	VLS	Main cat/Sub cat	Resp.alt.	N	Yes %
1.	VLS3*	D/COG	YES/NO	91	93.8
2.	VLS30**	C/MET		85	87.6
3.	VLS18*	D/DET		79	81.4
4.	VLS24*	C/MEM		72	74.2
5.	VLS4*	D/DET		64	66.0
6.	VLS6*	C/MEM or COG		64	66.0
7.	VLS9*	C/SOC or MET		63	64.9
8.	VLS28 *	C/MET		63	64.9
9.	VLS10**	C/SOC		59	60.8
10.	VLS12 *	D/SOC		50	51.5
11.	VLS15**	D/DET		44	45.4
12.	VLS2**	C/MET		43	44.3
13.	VLS21***	C/MEM		40	41.2
14.	VLS19***	C/MEM		31	32.0
15.	VLS11*	D/SOC		29	29.9
16.	VLS6*	C/MEM or COG		27	27.8
17.	VLS22***	C/MEM		27	27.8
18.	VLS17**	C/MEM		26	26.8

19.	VLS1**	C/MET	25	25.8
20.	VLS20*	D/DET	21	21.6
21.	VLS25***	C/MEM	18	18.6
22.	VLS13*	C/SOC	18	18.6
23.	VLS5**	C/MEM	17	17.5
24.	VLS8**	C/MET	14	14.4
25.	VLS14 **	C/MEM	9	9.3
26.	VLS29**	C/COG	8	8.2
27.	VLS23***	C/MEM	7	7.2
28.	VLS26***	C/MEM	5	5.2
29.	VLS27**	C/COG	3	3.1
30.	VLS16**	C/COG	2	2.1

APPENDIX 4

Complete table of results by gender – frequency of use.

Name of VLS	Rank of preference		Percentage		
	Gender		N		p
	m	f	m	f	
VLS3 (c/cog)	2	1	87.5 (35)	98.2 (56)	
VLS30 (c/met)	1	2	87.5 (35)	87.7 (50)	.248
VLS18 (d/det)	3	3	75.0 (30)	86.0 (49)	.007
VLS24 (c/mem)	6	4	62.5 (25)	82.5 (47)	.002*
VLS9 (c/soc/met)	9	5	42.5 (17)	80.7 (46)	.019
VLS6 (c/mem/cog)	8	6	45.0 (18)	80.7 (46)	.000***
VLS4 (d/det)	5	7	62.5 (25)	68.4 (39)	.037
VLS28 (c/met)	7	8	62.5 (25)	66.7 (38)	.093
VLS12 (d/soc)	10	9	42.5 (17)	57.9 (33)	.105
VLS10 (c/soc)	4	10	65.0 (26)	57.9 (33)	.635
VLS2 (c/met)	14	11	30.0 (12)	54.4 (31)	.023
VLS15 (d/det)	13	12	32.5 (13)	54.4 (31)	.040
VLS21 (c/mem)	11	13	35.0 (14)	45.6 (26)	.402
VLS7 (c/cog)	24	14	10.0 (4)	40.4 (23)	.001**
VLS19 (c/mem)	16	15	27.5 (11)	35.1 (20)	.510
VLS1 (c/met)	19	16	17.5 (7)	31.6 (18)	.158
VLS11 (d/soc)	12	17	32.5 (13)	28.1 (16)	.659

VLS22 (c/mem)	17	18	27.5 (11)	28.1 (16)	1.000
VLS20 (d/det)	20	19	15.0 (6)	26.3 (15)	.217
VLS17 (c/mem)	15	20	30.0 (12)	24.6 (14)	.643
VLS25 (c/mem)	21	21	12.5 (5)	22.8 (13)	.289
VLS5 (c/mem)	22	22	12.5 (5)	21.1 (12)	.416
VLS13 (c/soc)	18	23	17.5 (7)	19.3 (11)	1.000
VLS8 (c/met)	23	24	12.5 (5)	15.8 (9)	.773
VLS14 (c/mem)	28	25	0 (0)	15.8 (9)	.010
VLS29 (c/cog)	26	26	7.5 (3)	8.8 (5)	1.000
VLS23 (c/mem)	25	27	7.5 (3)	7.0 (4)	1.000
VLS26 (c/mem)	27	28	2.5 (1)	7.0 (4)	.301
VLS27 (c/cog)	29	29	0 (0)	5.3 (3)	.265
VLS16 (c/cog)	30	30	0 (0)	3.5 (2)	.510