

# THE USE OF VOCABULARY LEARNING STRATEGIES AMONG FINNISH HIGH SCHOOL STUDENTS

Bachelor's thesis

Leni Mäkinen

University of Jyväskylä

Department of Language and Communication Studies

English

February 2019

## JYVÄSKYLÄN YLIOPISTO

Tiedekunta – Faculty Humanistis-yhteiskuntatieteellinen tiedekunta	Laitos – Department Kieli- ja viestintätieteiden laitos
Tekijä – Author Leni Mäkinen	
Työn nimi – Title The use of vocabulary learning strategies among high school students	
Oppiaine – Subject Englannin kieli	Työn laji – Level Kandidaatin tutkielma
Aika – Month and year Helmikuu 2019	Sivumäärä – Number of pages 33 + liitteet
<p>Tiivistelmä – Abstract</p> <p>Sanaston asema kielten oppimisen ja opetuksen tutkimuksessa on vahvistunut 1980-luvulta lähtien. Sanasto muodostaa ison osan kielitaidosta ja tutkijat ovat sitä mieltä, että sanaston oppimiseen tarvitaan ainakin osittain tietoisia prosesseja. Siksi tarvitaan lisää tietoa siitä, kuinka sanastoa olisi tehokkainta opiskella. Tämä tutkimus käsittelee sanaston oppimisstrategioita. Tutkin, mitä sanaston oppimisstrategioita lukiolaiset ovat käyttäneet englannin kielessä lukion aikana ja kuinka usein. Lisäksi tutkin, mitkä strategiat he kokevat hyödyllisimmiksi. Suomalaisen lukiolaisten sanaston oppimisstrategioiden käyttöä ei ole aiemmin juurikaan tutkittu opinnäytetöitä lukuun ottamatta. Monet kansainväliset tutkimukset ovat lähinnä selvittäneet, käyttävätkö tutkimukseen osallistuneet ihmiset kyseisiä strategioita, mutta eivät kuinka usein he niitä käyttävät.</p> <p>Aineisto kerättiin paperisella kyselyllä keskisuomalaisessa lukiossa vuoden 2018 alkusyksyllä. Vastajat, joita oli yhteensä 68, koostuivat lukion 1. ja 2. vuoden opiskelijoista. Kysely pohjautui hyvin vahvasti Norbert Schmittin (1997) sanaston oppimisstrategioiden taksonomiaan. Taksonomiassa strategiat jaetaan kahtia: niihin, joilla pyritään selvittämään uuden sanan merkitys (<i>discovery strategies</i>) ja niihin, joiden avulla yritetään painaa sana ja sen merkitys mieleen (<i>consolidation strategies</i>). Ensimmäisestä ryhmästä eniten käytetyiksi strategioiksi nousivat sanan arvaaminen kontekstista, sanakirjan käyttö sekä kysyminen luokkatovereilta tai muilta kavereilta. Hyödyllisimmiksi tästä ryhmästä koettiin sanakirjan käyttö, oppikirjojen sanalistat, käännöksen tai vihjeen kysyminen opettajalta, kysyminen luokkatovereilta tai muilta kavereilta sekä arvaaminen kontekstista. Jälkimmäisestä ryhmästä käytetyimmät strategiat olivat puolestaan sanalistojen avulla harjoittelu, sanojen verbaalinen toisto sekä sanan kirjoitusasun tarkastelu. Hyödyllisimmiksi koettiin edellä mainittujen käytetyimpien strategioiden lisäksi myös sanan kirjallinen toisto, sanojen kysely, sanastotestit sekä tietoinen opiskelu englanninkielisen median kautta. Suomalaiset lukio-opiskelijat tuntuvat siis käyttävän niitä strategioita, jotka ovat jo todenneet toimiviksi. Nämä ovat monesti kognitiivisia strategioita, jotka ovat toistoon nojautuvia ja mekaanisia tapoja opiskella sanastoa. Avoimista kysymyksistä nousi esiin etenkin Quizlet-nimisen opiskeluvälineen runsas käyttö vastaajien keskuudessa. Tulokset olivat jokseenkin yhteneväisiä aiempien tutkimuksien kanssa, mutta erojakin ilmeni.</p>	
<p>Asiasanat – Keywords Vocabulary learning strategies, Vocabulary, Learning Strategies, VLS</p>	
<p>Säilytyspaikka – Depository JYX</p>	
<p>Muita tietoja – Additional information</p>	

## TABLE OF CONTENTS

<b>1 INTRODUCTION</b> .....	4
<b>2 VOCABULARY LEARNING</b> .....	6
<b>2.1 Defining ‘word’</b> .....	6
<b>2.2 What it means to know a word</b> .....	7
<b>2.3 Definition and taxonomy of vocabulary learning strategies</b> .....	9
<b>2.4 Vocabulary learning strategies in previous studies</b> .....	10
<b>3 THE PRESENT STUDY</b> .....	12
<b>3.1 Aims and research questions</b> .....	12
<b>3.2 Data collection</b> .....	13
<b>3.3 Methods of analysis</b> .....	14
<b>4 RESULTS</b> .....	15
<b>4.1 The most used vocabulary learning strategies</b> .....	15
<b>4.1.1. The most used discovery strategies</b> .....	15
<b>4.1.2. The most used consolidation strategies</b> .....	16
<b>4.2. The most useful vocabulary learning strategies</b> .....	17
<b>4.2.1 The most useful discovery strategies</b> .....	17
<b>4.2.2. The most useful consolidation strategies</b> .....	18
<b>4.2. Other findings</b> .....	19
<b>5 DISCUSSION</b> .....	21
<b>5.1 The most used strategies</b> .....	21
<b>5.2 The most useful strategies</b> .....	23
<b>5.3 General findings</b> .....	27
<b>6 CONCLUSION</b> .....	29
<b>BIBLIOGRAPHY</b> .....	32
<b>Appendices</b> .....	34

## 1 INTRODUCTION

Vocabulary used to be “a neglected aspect of language learning” (Meara 1980, cited in Channell 1988: 83) until the 1980s, and grammatical elements were favored in instruction (Chacón-Beltrán, Abello-Contesse and Torreblanca-López 2010: 1). It was thought that grammar rules should be taught and learners would ‘acquire’ the vocabulary necessary for specific communicative situations through their exposure to the target language (Chacón-Beltrán et al. 2010: 1). However, Vermeer (1992, cited in Chacón-Beltrán et al. 2010: 2) noted that if one wants to acquire a high level of proficiency in the target language, vocabulary should be the main concern. Consistently, Laufer (1998: 2) points out that the main difference between language learners and native speakers is in fact their vocabulary skills.

Fortunately, interest in vocabulary teaching and learning increased during the 1980s (Chacón-Beltrán et al. 2010: 1) and vocabulary has since become a field of growing research (Channell 1988: 84). However, very little is known about the neurobiological processes through which humans acquire or retrieve L2 vocabulary (Chacón-Beltrán et al. 2010: 2; Channell 1988: 83). Schmitt (2000, cited in Chacón-Beltrán et al. 2010: 4) believes that both conscious and unconscious processes are needed in order to learn a word. Furthermore, Channell (1988: 84) distinguishes between acquisition and learning. She considers an L2 word to have been acquired when its meaning can be recognized and understood both in and out context and the word can be used naturally and appropriately. She defines learning as the conscious strategies that lead to this acquisition.

Therefore, due to the important role of vocabulary in language learning and the seemingly general belief that learning a word requires at least to some extent conscious efforts, it is important to know what kinds of vocabulary learning strategies (VLS) there are and which ones provide the most effective ways to learn words. The present study will research what VLS Finnish high school students use while studying English and their opinions on the effectiveness of each strategy. There are quite a few studies about learners’ VLS use already and the present study aims to complement the information gained from the previous studies with its results, especially in Finnish context. While the previous studies on the topic have researched whether a certain strategy is used or how useful it is regarded as, the present study aims to be more

explicit and takes into account *how often* the strategies are used and *how useful* they are considered to be. Thus, the results should be more accurate in this regard.

At a more profound level, the present study also aims to inform L2 learners about what vocabulary learning strategies seem to work the best so that they could apply these strategies to their own language learning. The study might also reveal VLS that are underused but have been found useful by those who employ them. For example, language teachers can benefit from this information when planning their lessons.

## 2 VOCABULARY LEARNING

First, it is important to give the present study a context by defining the concepts used and show how the topic has been studied before. The first section of the chapter (2.1) presents different definitions of ‘word’, whereas the second section (2.2) investigates what it means to know a word. The third and last section of the chapter (2.3) defines and categorizes learning strategies and vocabulary learning strategies.

### 2.1 Defining ‘word’

Since the present study deals with vocabulary, it is crucial to specify what we mean by the term ‘word’. However, defining ‘word’ is not as unproblematic as it may first seem. For instance, are compound words or phrasal verbs one word or two words? Are *look* and *looking* two different words or forms of the same word? Is *play* as a verb different word than *play* as a noun?

There are several definitions for a word. **The orthographic definition** states that a word is “any sequence of letters (and a limited number of other characteristics such as hyphen and apostrophe) bounded on either side by a space or punctuation mark” (Carter 1998: 4). For example, Carroll et al. (1971, cited in Nation 1990: 29) distinguish words based on their precise form, which means that even otherwise similar words can be distinguished by a capital letter. Thus, *Society* and *societies* are counted as separate words. However, the orthographic definition has been criticized for being limited to the written language and for not taking into account semantics of the word, including polysemy and homonymy (Pavičić Takač 2008: 5). It also neglects languages whose writing system differs from the Roman or the Cyrillic alphabet (Singleton 1999: 12). According to this definition, *play* as a noun and as a verb count as the same word, whereas, for example, phrasal verbs consist of two different words.

The definition of a word as the **minimum meaningful unit** in a language takes into account the meaning of the word (Carter 1998: 5). Therefore, according to this definition, *play* (noun) and *play* (verb) would be different words. On the other hand, as Carter (1998: 5) points out, this definition links ‘meaning’ with single words, which neglects words that have one meaning but consist of two or more words (e.g. *bus conductor* and idioms). Neither does it explain if function words, such as *the*, *if*, *by*, *because* and auxiliary verbs, contain enough meaning to be counted as words (Carter 1998: 5). As Pavičić Takač (2008: 5) points out, there is no satisfactory definition for ‘meaning’, either.

The definition of a word as a **minimal free form** deriving from Bloomfield (1933, cited in Carter 1998: 5) argues that a ‘word’ is a word if it can stand on its own either as a reply to a question, as a statement or as an exclamation (Carter 1998: 5). According to Bloomfield (1933, cited in Jackson and Ze Amvela 2007: 58), “a word is viewed as a form which can occur in isolation and have meaning but which cannot be analyzed into elements which can all occur alone and also have meaning.” Therefore, this definition brings certain stability to a word by not allowing further reduction in form or subdivision (Carter 1998: 5-6). Considering the abovementioned criteria, the definition excludes compound words and idioms as well as “words” that we usually think of as words, such as *my* and *because* since they cannot occur alone.

There are also other definitions of a word, one of which is that a true word can have no more than one stressed syllable (Carter 1998: 6). However, all these definitions seem somewhat problematic. Carter (1998: 6-7) lists the main problems when it comes to defining a word: 1) There are several words that do not fit orthographic, free-form or stress-based definitions. 2) The definition of words having a clear-cut ‘meaning’ is vague and causes multiple exceptions. 3) Words can have different forms which do not necessarily count as different words. 4) Words can have the same form but different and unrelated meanings. 5) Idioms seem to complicate the definition of a word.

Researchers have tried to resolve these problems by introducing the notion of **lexeme**, which is an abstract unit underlying several variants (Carter 1998: 7). For instance, BRING is the lexeme that underlies grammatical variants, such as ‘bring’, ‘brought’ and ‘bringing’, which can be called word-forms. Thus, entries in a dictionary are lexemes rather than words, variants very often occurring as sub-entries. Lexemes can also consist of more than one word, since lexical items encompass multi-word verbs, phrasal verbs and idioms besides single-words. This also helps to represent the possible different meanings of a word, since the same word-form can have several different lexeme meanings. (Carter 1998: 7.) The present study takes this approach to vocabulary: vocabulary consists of lexical items and therefore everything from single words to idioms is taken into consideration in the study.

## **2.2 What it means to know a word**

For conducting the study and for it to be reliable, it is important to define what it means to know a word. In the present study we rely on Nation’s (1990) theory, which seems to be widely

accepted. Nation distinguishes between receptive and productive knowledge. In short, **receptive knowledge** means that one is able to recognize and understand the meaning of the word when they hear it or see it, whereas **productive knowledge** includes receptive knowledge but it also involves knowing how to pronounce, write and spell the word and how to use it in correct grammatical patterns along with the words it usually occurs with (Nation 1990: 31-32). Table 1 shows all the questions that we should be able to answer if we “know” a word.

**Table 1.** Knowing a word (Nation 1990: 31)

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?
Position		
Grammatical patterns	R	In what patterns does the word occur?
	P	In what patterns must we use the word?
Collocations	R	What words or types of words can be expected before or after the word?
	P	What words or types of words must we use with this word?
Function		
Frequency	R	How common is the word?
	P	How often should the word be used?
Appropriateness	R	Where would we expect to meet this word?
	P	Where can this word be used?
Meaning		
Concept	R	What does the word mean?
	P	What word should be used to express this meaning?
Associations	R	What other words does this word make us think of?
	P	What other words could we use instead of this one?
R= Receptive knowledge P= Productive knowledge		



Receptive vocabulary is generally larger than productive vocabulary (Kamill and Hiebert 2005, cited in Marttinen 2008: 12). Nation (1990: 32) points out that even a native speaker probably knows only a small proportion of his or her vocabulary to this extent. Therefore, all this knowledge is not necessarily required for ‘knowing’ a word in the context of the present study. Instead, *spoken and written forms, grammatical patterns* and *concept* are emphasized.

### 2.3 Definition and taxonomy of vocabulary learning strategies

Vocabulary learning strategies (VLS) belong to language learning strategies (LLS), which again are a part of general learning strategies (Pavičić Takač 2008: 52). Since high school ESL learners seem to use language learning strategies for vocabulary learning more than other aspects of language (Chamot 1987, cited in Schmitt 1997), defining language learning strategies should be sufficient for understanding what VLS means. There are several definitions for LLS but in the present study we rely on Oxford’s (1990) definition. According to her, LLS are “steps taken by students to enhance their own learning” (Oxford 1990: 7). Learning strategies are generally intentional and conscious actions employed by the learner for taking control of their own learning, but some strategies can become automatic and unconscious over time when used frequently (Oxford 1990: 12).

The present study relies on Schmitt’s (1997) taxonomy of VLS. According to his taxonomy (Schmitt 1997: 206), there are two vocabulary learning strategy groups: **discovery strategies** and **consolidation strategies**. When we first encounter a foreign word, we use discovery strategies to learn the meaning of the word. Consolidation strategies, on the other hand, are used in order to remember the new word. (Schmitt 1997: 206.)

Discovery strategies can again be divided into two groups: determination strategies and social strategies (Schmitt 1997: 206). According to the taxonomy, we can either use our structural knowledge of the language, deduce the meaning from contextual clues or from an L1 cognate, or consult a dictionary or other reference materials. These discovery strategies are called determination strategies. Moreover, we can also ask from someone who knows or discover the meaning through group work activities. These discovery strategies belong to social strategies. (Schmitt 1997: 206-211.) Although there is other information about a word besides its meaning,

understanding the meaning in the particular context is likely to be the most fundamental task when first introduced to a new word (Schmitt 1997: 206).

Consolidation strategies can be social strategies, memory strategies, cognitive strategies or metacognitive strategies (Schmitt 1997: 206). In this case, social strategies include group work and cooperative group learning, students asking teachers to check their work for accuracy, and even interaction with native speakers. Memory strategies, often referred to as mnemonics, normally involve linking the new word to some previously learned knowledge, usually through some form of imagery or grouping. (Schmitt 1997: 211.) According to the taxonomy (Schmitt 1997: 215), cognitive strategies are similar to memory strategies but are not as focused on manipulative mental processing. Instead, they are more mechanical and repetitive. Metacognitive strategies are used to control and evaluate one's own learning. They include testing oneself, the decision to continue studying the word over time, and consciously benefitting from English-language media or interaction with native-speakers in order to improve one's vocabulary. (Schmitt 1997: 216-217.) For more information on the advantages and disadvantages of different strategies, see Schmitt 1997: 208-217. Despite this categorization, many strategies can be used for both discovering the meaning and in the process of memorizing it, but only the most obvious ones are listed in the discovery strategies as well as in the consolidation strategies in the taxonomy (Schmitt 1997: 206). For Schmitt's full taxonomy of vocabulary learning strategies, see Appendix 1.

## **2.4 Vocabulary learning strategies in previous studies**

As mentioned before, vocabulary has become a widely researched field in linguistics (Channell 1988: 84) and interest in vocabulary teaching and learning started to grow during the 1980s (Chacón-Beltrán et al. 2010: 1). However, as Schmitt (1997: 199) points out, although learner strategies have received plenty of attention, vocabulary learning strategies are still an insufficiently researched area. The research done on VLS has tended to focus on one or a few strategies, and studies that deal with the whole group of VLS are rare (Schmitt 1997: 199).

Schmitt himself studied what vocabulary learning strategies Japanese EFL learners used the most and what strategies they considered to be the most useful (Schmitt 1997: 218). In his study, the most used discovery strategies were “Bilingual dictionary”, “Guess from textual context”

and “Ask classmates for meaning”, whereas the most used consolidation strategies were “Verbal repetition”, “Written repetition”, “Study the spelling”, “Say new word aloud”, “Take notes in class” and “Word lists” (Schmitt 1997: 219). The discovery strategies that were regarded as the most helpful were “Bilingual dictionary”, “Ask teacher for paraphrase/synonyms” and “Analyze pictures/gestures”, whereas the most helpful consolidation strategies were “Say new word aloud”, “Written repetition”, “Connect word with synonyms/antonyms”, “Continue studying the word over time”, “Study spelling”, “Take notes in class” and “Verbal repetition” (Schmitt 1997: 221). Schmitt (1997: 224) concluded that younger participants tended to use mechanical and repetitive strategies more and the amount of strategies that require “deeper processing” increased with age.

Moreover, the topic has been researched to some extent in Finnish context, as well. In fact, there are several theses dealing with high school students’ VLS (Kovanen 2014; Marttinen 2008; Warjus 2010). However, excluding theses, there seems to be a lack of studies on VLS in Finnish context. Kovanen’s (2014) thesis will be discussed in more detail since her study and methods were the most similar to the present study. In her study, the most frequently used discovery strategies were “Wordlists”, “Guessing while reading” and “Consulting a dictionary”, whereas the most used consolidation strategies were “English media”, “Use cognates in study” and “Oral (=verbal) repetition” (Kovanen 2014: 49). The discovery strategies considered to be the most useful were “Wordlists”, “Dictionary” and “Guessing from context”, whereas the most useful consolidation strategies were “English media”, “Learning from people who speak English”, “Periodic review”, “Testing oneself” and “Oral (=verbal) repetition” (Kovanen 2014: 105-106).

### 3 THE PRESENT STUDY

#### 3.1 Aims and research questions

Vocabulary learning strategies and their usefulness has been studied before and the goal of the present study is to complement the information gained from previous studies by showing similarities and differences in the results. The results of the present study will be compared with two previous studies. However, there seems to be a lack of studies on VLS in Finnish context and therefore all theses on the topic play an important role.

The study aims to answer to the following research questions:

1. What vocabulary learning strategies do high school students use the most when learning English?
2. What vocabulary learning strategies do they consider the most useful?

The aim of the present study is to discover what VLS Finnish high school students use the most in English and what strategies they consider to be the most useful. This study is needed because previous studies have researched whether a certain strategy is used by the participants and if they consider a strategy to be useful, but the present study takes into account *how* often the strategies are used and *how* useful they are considered, which leads to more accurate and inclusive results. Moreover, as mentioned before, the research done on VLS has usually focused on one or a few strategies and studies dealing with the whole group of VLS are not rare (Schmitt 1997: 199). Since the present study includes a total of 45 vocabulary learning strategies, the results are likely to provide comprehensive and valuable information.

All language learners can benefit from this information but it is particularly useful for Finnish high school students, who need to learn a lot of words in a relatively short time for vocabulary quizzes, exams and, most importantly, for the Matriculation Examination. Studies on VLS can provide them with information about which VLS work the best. Moreover, teachers can benefit from these results, as well. They can teach the most useful strategies to their students to make their vocabulary learning more efficient.

### 3.2 Data collection

The data was collected via a paper-version questionnaire (see Appendix 1 and Appendix 2) that included mainly closed-ended questions. The questionnaire was answered to by 68 high school students so that the results would be as generalizable as possible. Forty-six of the respondents were females, 21 males and one respondent did not want to tell his or her gender. The participants' high school grade level varied. The study was conducted in a small high school in Central Finland at the beginning of an English lesson. All the respondents participated voluntarily and they were informed of where and how the data would be used.

The questionnaire listed 45 vocabulary learning strategies, and the respondents were asked to mark on Likert scales how often they have used each strategy during high school and how useful they consider them. The VLS chosen were based on Schmitt's (1997) taxonomy (see Appendix 3). However, the strategies were rephrased to make them more understandable for the participants. Moreover, a couple of strategies were omitted due to their obscurity and some were added to make the questionnaire more contemporary. At the end of the questionnaire the respondents had an opportunity to mention any VLS that were not included in the closed-ended questions and rate their usefulness, and write other thoughts on the topic.

Questionnaire was chosen for the method mainly because it is efficient and allows the researcher to gather a large amount of data quite easily (Alanen 2011: 160) and in relatively short time (Dörnyei and Taguchi 2009: 6). Both open-ended and closed-ended questions were chosen so that the research questions would be answered efficiently but leaving room for the participants' own thoughts and words. The questionnaire was conducted in Finnish to reduce misunderstandings. For the same reason, the researcher was present when the participants filled out the questionnaire to answer any possible questions. Furthermore, her presence might have reduced the common problems related to questionnaires, such as dishonest answers, unanswered questions or unreturning (Alanen 2011: 160; Dörnyei and Taguchi 2009: 7). The fact that the questionnaire was filled during a lesson could have increased the respondents' motivation to answer more comprehensively, as well. The data was collected in early September 2018. A pilot study was conducted weeks earlier with five second year high school students who were four females and one male. Some slight changes and improvements were made based on their comments.

### **3.3 Methods of analysis**

Since the questionnaire included closed-ended and open-ended questions, both qualitative and quantitative methods were used in the analysis. First of all, closed-ended questions were more relied on in the present study. Likert scales were used for both marking how often the strategy was used and how useful it was regarded. The former was marked on a scale from 1 to 5 (1=never, 2=rarely, 3=occasionally, 4=fairly often, 5=often) and the latter on a scale from 1 to 4 (1=useless, 2=fairly useless, 3=fairly useful, 4=useful). The numbers were entered in Excel and the mean for the amount of use and the usefulness of each strategy was counted. Therefore, the two research questions were answered based on the mean of the answers. However, if the person had not used the strategy during high school, he or she were asked not to rate its usefulness so that the frequency of use would not affect the mean of the usefulness.

Open-ended questions were fields where the respondents could mention strategies they use or consider useful that were not named in the questionnaire or elaborate on the topic otherwise. These ideas were analyzed qualitatively and brought forth in the results below if they were reoccurring in the filled questionnaires or were remarkable in other ways.

## 4 RESULTS

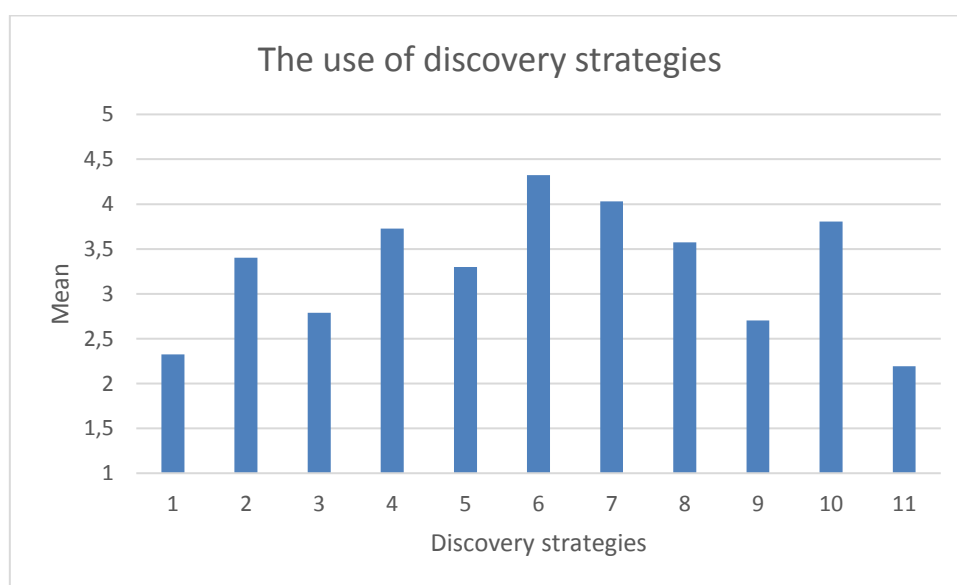
The following chapter will answer to the two research questions introduced in the previous chapter.

### 4.1 The most used vocabulary learning strategies

The respondents had to mark on Likert scales how often they have used each of the 45 vocabulary learning strategies listed in the questionnaire when learning English vocabulary during high school. The popularity of each strategy was analyzed based on the mean of the answers. The mean shows the average answer on a Likert scale (1=never, 2=rarely, 3=occasionally, 4=fairly often, 5=often). The first 11 of the listed strategies were discovery strategies (strategies for finding out the meaning of a word) and the remaining 34 strategies were consolidation strategies (strategies used for memorizing a word).

#### 4.1.1. The most used discovery strategies

The figure below shows how often the respondents reported using each of the listed discovery strategies (Figure 1).

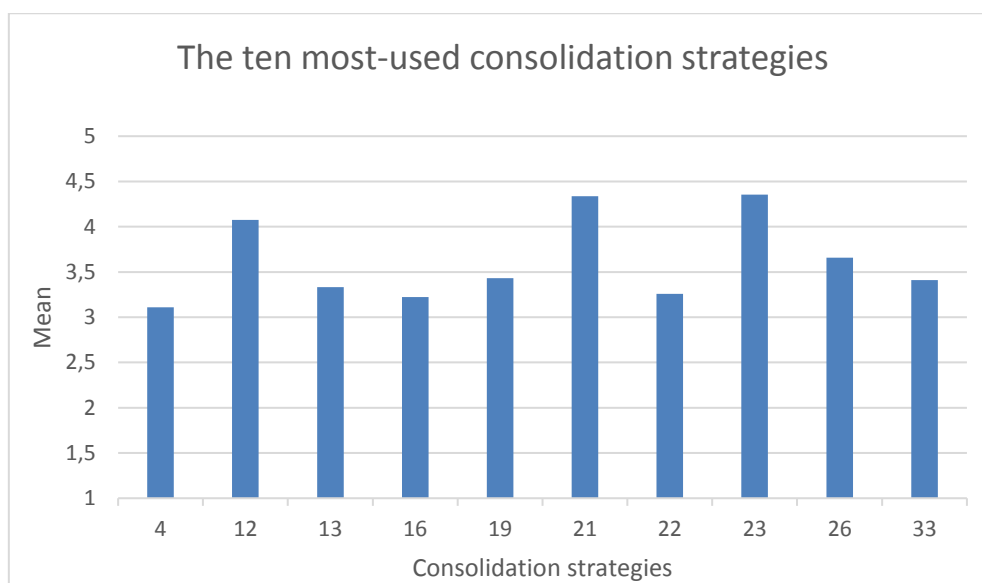


**Figure 1. The use of discovery strategies.** (1=Analyze part of speech to discover the meaning, 2=Analyze affixes and root, 3=Analyze the structure of compound words and abbreviations, 4=Guess from L1/other languages' cognates, 5=Analyze any available pictures or gestures, 6= Guess from textual context, 7=Consult a dictionary, 8=Consult wordlists in textbooks, 9=Ask teacher for a translation or a hint, 10=Ask classmates or other friends for meaning, 11=Waiting until discovering the meaning through group or whole class work activity)

The discovery strategy that got the highest mean (4.3) was “Guess from textual context”. Over 51% of the respondents reported using this strategy often and over 32% fairly often, whereas none of the respondents reported never using the strategy and less than three percent (two out of sixty-eight people) said that they use it rarely. The second most-used discovery strategy was “Consult a dictionary” with a mean of 4. Almost 48% of the respondents use it often and nearly 33% reported using it fairly often. However, 7.5% (five out of sixty-seven people) responded with “never”. The third most-used discovery strategy was “Ask classmates or other friends for meaning” with a mean of 3.8. None of the respondents reported never using this strategy but in contrast to the two most used strategies, the most common answer was “fairly often” instead of “often”.

#### 4.1.2. The most used consolidation strategies

The figure below shows the ten most used consolidation strategies of the 34 consolidation strategies (Figure 2).



**Figure 2. The ten most-used consolidation strategies.** (4=Image word’s meaning, 12=Study the spelling of a word, 13=Study the sound of a word, 16=Study the affixes and roots, 19=Use cognates in study, 21=Verbal repetition, 22=Written repetition, 23=Wordlists, 26=Use the vocabulary section in your textbook [e.g. exercises], 33=Skip or pass new word)

Here we will concentrate only on the three most-used consolidation strategies since, as Figure 2 indicates, they were clearly more popular than the rest. “Wordlists”, which was elaborated in the questionnaire as “Studying new words with word lists (e.g. by covering the other column and trying to remember the word)” received the highest mean (4.4). 62% of the respondents



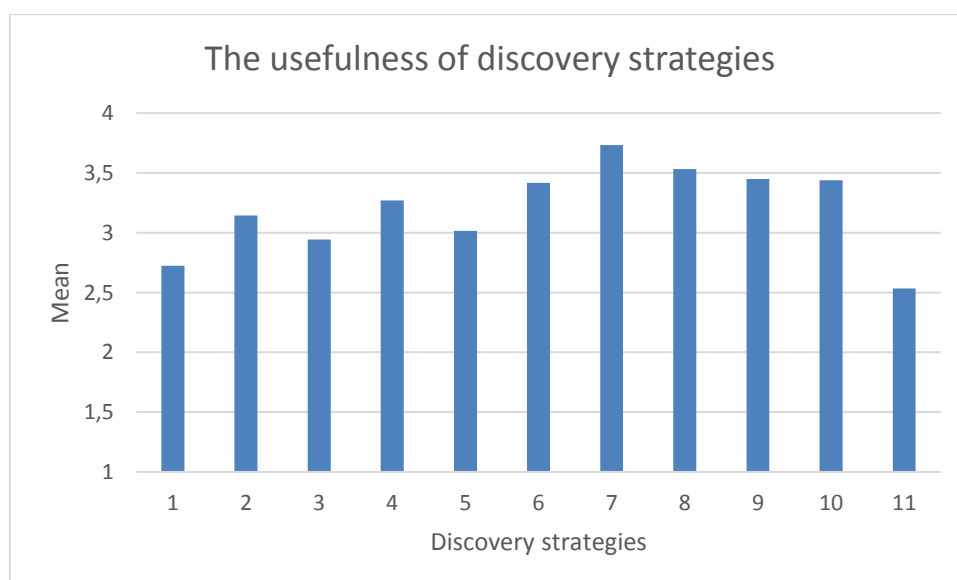
reported using this strategy often and almost 18% said that they use this strategy fairly often. Only two out of 68 people reported never using this strategy, and the same number of people wrote that they use this strategy rarely. The second most-used consolidation strategy was “Verbal repetition” with a mean of 4.3. Fifty-six percent of the respondents use this strategy often, over 29% fairly often and only one person out of 68 stated never using this strategy. “Study the spelling of a word” came in third with a mean of 4.1. Over 45% of the respondents reported using it often and 27% fairly often, whereas only one person out of 66 reported never using it.

## 4.2. The most useful vocabulary learning strategies

The respondents were asked to mark on Likert scales how useful they consider each of the strategies that they have used when learning English vocabulary during high school. The usefulness of the strategies was analyzed based on the mean of the answers. The mean shows the average answer on a Likert scale (1=useless, 2=fairly useless, 3=fairly useful, 4=useful).

### 4.2.1 The most useful discovery strategies

The figure below presents how useful each discovery strategy was considered by the respondents (Figure 3).



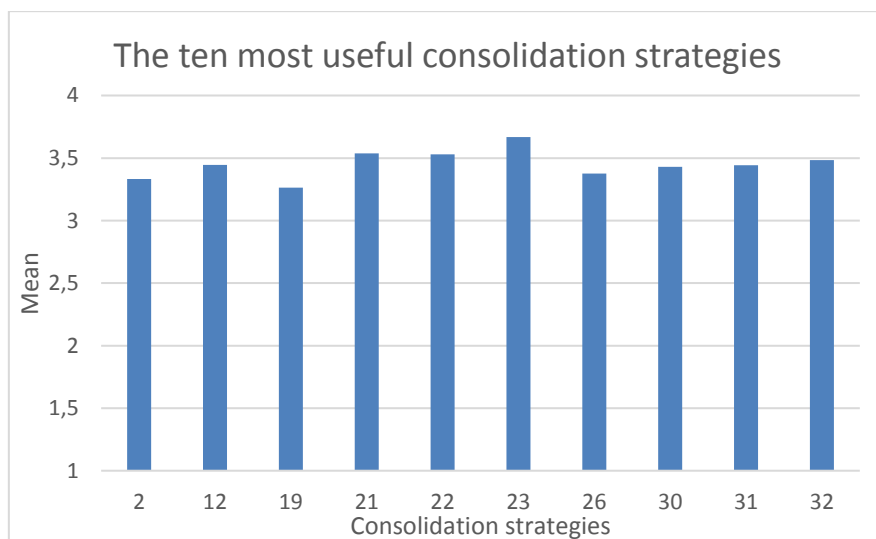
**Figure 3. The usefulness of discovery strategies.** (1=Analyze part of speech to discover the meaning, 2=Analyze affixes and root, 3=Analyze the structure of compound words and abbreviations, 4=Guess from L1/other languages’ cognates, 5=Analyze any available pictures or gestures, 6= Guess from textual context, 7=Consult a dictionary, 8=Consult wordlists in textbooks, 9=Ask teacher for a translation or a hint, 10=Ask

classmates or other friends for meaning, 11=Waiting until discovering the meaning through group or whole class work activity)

“Consult a dictionary” was regarded as the most useful way to find out the meaning of a new word (mean 3.7). Seventy-five percent of the respondents considered the strategy useful, which was the highest percentage for “useful” in all discovery strategies. Over 23% answered “fairly useful” and one person “fairly useless”, whereas none of the respondents considered the strategy to be useless. “Consult wordlists in textbooks” came in second with a mean of 3.5. Sixty-three percent of the respondents regarded it as useful but one respondent thought it to be a useless strategy. All “Ask teacher for a translation or a hint”, “Ask classmates or other friends for meaning” and “Guess from textual context” received a rounded mean of 3.4 and share the third place. None of these strategies were considered useless by any respondents. “Guess from L1 / other languages’ cognates” came in fourth with a mean of 3.3. None of the respondents regarded it as useless. Nevertheless, 16% thought it to be fairly useless.

#### 4.2.2. The most useful consolidation strategies

The figure below presents the ten most useful consolidation strategies (Figure 5).



**Figure 4. The ten most useful consolidation strategies.** (2=Use the word with native English speakers or other people, 12=Study the spelling of a word, 19=Use cognates in study, 21=Verbal repetition, 22=Written repetition, 23=Wordlists, 26=Use the vocabulary section in your textbook [e.g. exercises], 30=Consciously studying vocabulary through English-language media, 31=Vocabulary quizzes, 32=Someone asks the words).

Since the differences between the means are smaller here, they are presented with two decimals. However, only the three most useful strategies will be discussed in more detail due to the lack

of space. The strategy regarded as the most useful of the 34 consolidation strategies was “Wordlists” (e.g. studying by covering the other column and trying to remember the word) with a mean of 3.67. It was also the most used consolidation strategy. Over 71% of the respondents considered the strategy useful and nearly 26% regarded it as fairly useful, whereas “fairly useless” and “useless” both had one answer out of the total 66 answers. “Verbal repetition” (mean 3.54) and “Written repetition” (mean 3.53) were not far behind. The former was the second most used consolidation strategy, as well. The latter was the eighth most used consolidation strategy. None of the respondents regarded these strategies useless. Almost 60% of the respondents reported “Verbal repetition” to be useful and over 34% fairly useful. There were four people (out of 76) who regarded the strategy fairly useless. Over 60% of the 53 respondents regarded “Written repetition” as useful, 32% fairly useful and 7.5% fairly useless. “Someone asks the words” came in fourth with a mean of 3.48. “Study the spelling of a word” (mean 3.45) and “Vocabulary quizzes” (mean 3.44), which was elaborated as “Making vocabulary quizzes for myself or finding them online or in textbooks”, and “Consciously studying vocabulary through English-language media” (mean 3.43) followed right behind.

#### **4.2. Other findings**

On the last page of the questionnaire, the respondents were able to bring forth any VLS that they use but which had not been mentioned in the questionnaire. They were also asked to rate the usefulness of these strategies on a scale from one to four. Unfortunately, some of the respondents neglected to do that.

Quizlet, a mobile and web-based study application, was mentioned in 22 of the 68 questionnaires. The usefulness of the application was rated in 14 questionnaires. As many as 12 respondents regarded it to be useful and the remaining two considered the application fairly useful. Some of the respondents elaborated on how they study words with the application. Four students wrote that they had found the writing section on Quizlet the most effective way to learn words, whereas two respondents reported using the flashcard section often. One student reported using flashcards for competing with a friend and learning words effectively that way. Three respondents wrote that they study with Quizlet Learn, which keeps asking words that the player has not yet remembered correctly. Some of the respondents seem to use Quizlet very systematically. One respondent wrote that she first enters the target words to Quizlet, which

already helps memorizing the words, and then uses Quizlet Learn until getting all of them right. She then moves on to test herself with the writing section, which she will do from English to Finnish and vice versa. After this she sometimes finishes by doing Quizlet Learn one more time.

Another reoccurring answer was the unintentional vocabulary learning from English-language media, which was mentioned by ten respondents. Some of them specified what kinds of media they use. Reading books in English was mentioned by three, watching movies or series in English was mentioned by four, and English-language videos (Youtube) was mentioned by three. Video games were also mentioned by one respondent. Several respondents referred to *media* separately, most likely meaning English-language internet sites. Six people also rated the usefulness of unconscious vocabulary learning through English-language media. Four of them rated it as useful (4), with one respondent answering “4+++”. One respondent regarded it as fairly useful and one reported it to be something between fairly useful and useful (3-4).

Some respondents elaborated on unconscious vocabulary learning. One respondent wrote: “We learn English so much unconsciously that there is not that much need for intentional vocabulary learning”, and another respondent told that she already knows English so well that she rarely studies words actively. One respondent reported that words stick to her mind when they are repeatedly encountered in media and therefore she does not consider intentional vocabulary learning necessary. There were no other major themes found in open-ended questions but “linking words to own interests and hobbies” was mentioned by two.

## 5 DISCUSSION

In this chapter the results of the present study will be discussed in relation to the findings from Schmitt's (1997) and Kovanen's (2014) studies. Possible explanations for the results will be offered when applicable.

### 5.1 The most used strategies

The table below shows the most used discovery strategies in the present study and in Schmitt's (1997) and Kovanen's (2014) studies (Table 2).

**Table 2.** The most used discovery strategies

<b>The present study</b>	<b>Schmitt (1997)</b>	<b>Kovanen (2014)</b>
Guess from textual context	Bilingual dictionary	Wordlists
Consult a dictionary	Guess from textual context	Guessing while reading (equivalent to "Guessing from textual context")
Ask classmates or other friends for meaning	Ask classmates for meaning	Consult a dictionary

The most used discovery strategies among high school students in the present study were "Guess from textual context", "Consult a dictionary" and "Ask classmates or other friends for meaning". The three most used discovery strategies were the same in Schmitt's study (1997: 199-227). However, in his study bilingual dictionary (the present study does not distinguish between monolingual and bilingual dictionaries) was more popular than guessing from context. What is worth mentioning is that Schmitt's participants consisted of junior high school students, high school students, university students and adult learners whose first language was Japanese. More importantly, he studied only whether the strategies were used and not how frequently they were used. Nevertheless, it is still significant that the three most used discovery strategies are the same in both studies. This might suggest that discovery strategies are somewhat universal, and dictionaries and context clues seem to be slightly more popular than social strategies.

Kovanen (2014: 49) studied Finnish high school students' VLS use in her thesis and found out that the most frequently used discovery strategies were "Wordlists", "Guessing while reading" (equivalent to "Guessing from textual context") and "Consulting a dictionary". Although in the present study "Consult wordlists in textbooks" was only the fifth most used discovery strategy, the results of the three studies indicate that dictionaries and context seem to be the most popular strategies universally for finding out the meaning of a word. In Kovanen's study (2014), however, the three most used discovery strategies were all determination strategies, which could mean that Finnish teenagers are more less likely to rely on social discovery strategies in general. Nevertheless, this should be studied further since the present study had one social strategy among the three most used discovery strategies.

The table below presents the three most used consolidation strategies of the three studies (Table 3). Only the three most used strategies will be shown since they were clearly more frequently used than the rest of the consolidation strategies in the present study.

**Table 3.** The most used consolidation strategies

<b>The present study</b>	<b>Schmitt (1997)</b>	<b>Kovanen (2014)</b>
Wordlists	Verbal repetition	English-language media
Verbal repetition	Written repetition	Use cognates in study
Study the spelling of a word	Study the spelling of a word	Oral (=verbal) repetition

The three clearly most used consolidation strategies in the present study were "Wordlists", "Verbal repetition" and "Study the spelling of a word". Again the results are rather consistent with Schmitt's findings (1997: 199-227). "Verbal repetition" was the most used strategy in his study and "Study the spelling of a word" came in third. Both studies indicate that language learners prefer repetitive and mechanical strategies and "Studying the spelling" seems to be the most popular strategy of the ones that involve deeper processing of the word. However, "Wordlists" was the seventh most used consolidation strategy in Schmitt's study and "Written repetition", which came in second in his study, was the eighth most used consolidation strategy in the present study.

In Kovanen's study (2014: 49) the three most used consolidation strategies were "English-language media", "Use cognates in study" and "Oral (=verbal) repetition". It is significant that "Verbal repetition" was among the three most used consolidation strategies in all three studies.

It indicates that this strategy is well-trusted internationally. In the present study, “English-language media” was not among the ten most used consolidation strategies. This might be due to the fact that in the questionnaire it was elaborated as being *intentional* and *conscious* learning through English-language media, whereas Kovanen did not specify whether she meant intentional or unintentional learning through media. However, “Use cognates in study” came in fifth in the present study and, as mentioned before, “Verbal repetition” was the second most used consolidation strategy. Thus, the present study is somewhat consistent with Kovanen’s study, although in her study metacognitive and memory strategies seem to be more used and cognitive strategies do not dominate.

## 5.2 The most useful strategies

It is significant that all discovery strategies were considered somewhat useful in the present study since none of them received a mean under 2.5. The table below presents the most useful discovery strategies of each study (Table 4).

**Table 4.** The most useful discovery strategies

<b>The present study</b>	<b>Schmitt (1997)</b>	<b>Kovanen (2014)</b>
Consult a dictionary	Bilingual dictionary	Wordlists
Consult wordlists in textbooks	Ask teacher for paraphrase or synonym	Consult a dictionary
Ask teacher for a translation or a hint Ask classmates or other friends for meaning Guess from textual context	Analyze pictures or gestures	Guessing while reading (equivalent to “Guessing from textual context”)
		Asking the teacher
		Asking a friend

“Consult a dictionary” got the highest mean in the present study, followed by “Consult wordlists in textbooks”. “Ask teacher for a translation or a hint”, “Ask classmates or other friends for meaning” and “Guess from textual context” all received the same rounded mean and share the third place. “Guess from textual context”, “Consult a dictionary” and “Ask classmates

or other friends for meaning” were also the most used discovery strategies, which implies that high school students tend to use the discovery strategies that they have found the most useful. However, “Ask teacher for a translation or a hint” was the third least used discovery although students reported it being useful. Therefore, high school students seem to trust that teachers are able to help them with foreign words but rely on guessing from context, dictionaries and asking friends more. There could be several different explanation for this. Perhaps they consider these other strategies faster or do not want to disturb the teacher. Some students can be too shy to ask and sometimes the teacher can be busy with other students, which makes these other strategies a quicker way to discover the meaning of a word.

“Bilingual dictionary” was the most useful discovery strategy in Schmitt’s study (1997: 199-227). “Ask teacher for paraphrase or synonym” was the second useful strategy and “Analyze pictures/gestures” came in third. However, it is hard to compare the results since “Wordlists” was not included in Schmitt’s study and in the present study “Ask teacher for an L1 translation”, “Ask teacher for paraphrase or synonym of new word” and “Ask teacher for a sentence including the new word” were altered and combined in “Ask teacher for a translation or a hint”. Furthermore, Schmitt’s participants did not rate the helpfulness of the strategies on a scale but simply responded whether they considered a strategy helpful or not. Nevertheless, it is significant how dictionaries and asking a teacher seem to be well-trusted strategies among both Finnish and Japanese EFL learners. Moreover, in both studies a strategy involving asking a teacher was among the three most useful strategies but not among the three most used strategies, whereas asking friends was not considered to be as useful strategy but was still used more often. This suggests that this could be a universal pattern among language learners.

In Kovanen’s study, the three discovery strategies regarded as the most useful were “Wordlists”, “Dictionary” and “Guessing from context” (2014: 105), in that order. The fourth most useful strategy was “Asking the teacher”, which was in the shared third place in the present study. In addition, “Asking a friend” came in fifth. Therefore, the five most useful discovery strategies were the same in both studies. Again, “Asking a teacher” was among the most useful strategies but not among the most used strategies, which supports the discussion above.

It is interesting that “Guess from textual context” was either the most used or second most used discovery strategy in all three studies but among the most useful discovery strategies only in the Finnish studies. Instead, the Japanese participants in Schmitt’s study considered other



contextual clues (gestures and pictures) more useful. Moreover, Finnish high school students seem to regard wordlists as a very useful way to discover the meaning of a word. However, “Wordlists” was not included in Schmitt’s study as a discovery strategy so it is impossible to compare whether this is a universal phenomenon.

The table below presents the consolidation strategies that were regarded as the most useful in the studies (Table 5).

**Table 5.** The most useful consolidation strategies

<b>Present study</b>	<b>Schmitt (1997)</b>	<b>Kovanen (2014)</b>
Wordlists	Say new word aloud while studying Written repetition	English-language media
Verbal repetition	Connect words with synonyms/antonyms	Learning from people who speak English
Written repetition	Continue studying the word over time Study the spelling of a word	Periodic review
Someone asks the words	Take notes in class Verbal repetition	Test oneself
Study the spelling of a word	Use new word in sentences	Oral (=verbal) repetition

The five most useful consolidation strategies according to the respondents in the present study were “Wordlists” (e.g. studying by covering the other column and trying to remember the word), “Verbal repetition”, “Written repetition”, “Someone asks the words” and “Study the spelling of a word”. “Word lists”, “Verbal repetition” and “Study the spelling of a word” were also the most used consolidation strategies. “Written repetition” was the seventh most used strategy, but “Someone asks the words” was not among the ten most used consolidation strategies even though respondents thought the strategy to be useful. This could possibly be attributed to the fact that there might not always be a person available to ask the words. The lowest mean was 2.37 (“Skip or pass word”), which means that all consolidation strategies were thought to be above “fairly useless” on average.

In Schmitt’s results, the most useful consolidation strategies were “Say new word aloud while studying” and “Written repetition”, 91% of the participants considering them useful. “Connect word with synonyms/antonyms” came in second and “Continue practicing the word over time”

and “Study the spelling of a word” shared the third place. “Verbal repetition” and “Take notes in class” were the fourth most useful strategies and “Use new word in sentences” came in fifth. The present study did not have “Say new word aloud when studying” as a separate strategy due to its similarity with “Verbal repetition”, whereas “Someone asks the words” was not neither in Schmitt’s taxonomy nor in his study. Therefore, the results are not fully comparable. However, although three of the five most useful strategies (in Schmitt’s study the first, third and fourth places were shared by two strategies) are the same in both studies, there are some striking differences. For example, “Wordlists”, which was the most useful strategy in the present study, was the tenth most useful consolidation strategy in Schmitt’s study (four of the higher places were shared by two strategies). This difference might be attributed to the possible differences between Japanese and Finnish textbooks and their wordlists. One possible explanation is that wordlists in Japanese English textbooks are not fully suitable for studying words. In Japan, wordlists may not be as relied upon as in Finland. Moreover, “Connect word with synonyms/antonyms”, “Continue practicing word over time”, “Take notes in class” and “Use new words in sentences” were not among the ten most useful consolidation strategies in the present study. However, they were not among the ten least useful strategies, either. The first two received a mean of 3.2 and the last two got a mean of 2.9. Thus, all of these strategies were considered to be quite close to “fairly useful” on average.

The five consolidation strategies that were found most useful in Kovanen’s study were “English-language media”, “Learning from people who speak English”, “Periodic review”, “Testing oneself” and “Oral repetition” (2014: 105-106). Therefore, the participants of her study seemed to value metacognitive strategies. The present study shares only one same strategy among the five most useful consolidation strategies with Kovanen’s study (“Oral repetition” is equivalent to “Verbal repetition”) and two with Schmitt’s study (“Periodic review” = “Continue study word over time” and “Oral repetition” = “Verbal repetition”). However, “Testing oneself with self-made or ready vocabulary quizzes” almost made it to the five most useful strategies in the present study. It received a mean of 3.4 in the present study and was the sixth most useful consolidation strategy. “English-language media” was the seventh most useful strategy in the present study and received a mean of 3.4. This slight difference could be explained by the fact that in the present study the learning through English-language media was restricted to conscious learning and this was emphasized in the questionnaire, as well. The strategy was not included in Schmitt’s study. “Learning from people who speak English” is somewhat equivalent to present study’s “Use the new word with native speakers or other people”, which received a

mean of 3.3 but was not among the ten most useful strategies. This strategy was not included in Schmitt's study, either.

To sum it up, the participants of the present study seemed to value repetitive strategies since four of the five most useful strategies were cognitive strategies, assuming that "Someone asks the words" falls into this category. The most useful consolidation strategies in Schmitt's study, on the other hand, included memory, cognitive and metacognitive strategies, while in Kovanen's study metacognitive strategies were dominating. However, verbal repetition was among the most useful strategies in all three studies. Because it was also among the three most used consolidation strategies in each study, "Verbal repetition" seems to be not only a much used strategy but also very useful one. On the other hand, "Continue studying the word over time" and "Periodic review", which are equivalent to each other, were among the most useful consolidation strategies in Kovanen's and Schmitt's studies but not in the present study.

The dissimilarities between the results can be attributed to the differences in the questionnaires and/or in the amount of strategies included in the study. On the other hand, the differences might also simply reflect the fact that language learners are individuals and learn in different ways. "Usefulness" can also be defined very diversely: to some it could mean memorizing words fast for a quiz while for others it can signify learning words so that they can be remembered in the future. However, there were no strategies that would have been among the most useful in one study and among the least useful in another, which indicates that some consolidation strategies are quite universally thought to be better than others.

### **5.3 General findings**

First of all, high school students seem to use strategies that they have already found useful. In both discovery and consolidation strategies, the three most used strategies were also among the four most useful strategies. There was more variation to this in Kovanen's study (2014). The three most used and useful discovery strategies were the same but only one of the three most used consolidation strategies ("English media") was among the five most useful consolidation strategies. The differences were bigger in Schmitt's study (1997). Only one of the most used discovery strategies ("Dictionary") was in the three most useful discovery strategies reported by the Japanese participants. On the other hand, two of the three most used consolidation strategies were also found among the three most useful consolidation strategies (two places

were shared by two strategies). However, the popularity of dictionaries was visible in the results of each study. Dictionaries were among the three most used and most useful discovery strategies in all three studies. None of the studies distinguished between electronic and paper dictionaries. Therefore it is easy to understand why dictionaries have maintained their popularity even among high school students.

Secondly, two of the most-used consolidation strategies were cognitive strategies (“Word lists” and “Verbal repetition”) and one was a memory strategy (“Study the spelling of a word”). Additionally, the three most useful consolidation strategies were all cognitive strategies (“Word lists”, “Verbal repetition” and “Written repetition”). This would suggest that Finnish high school students prefer VLS that are based on repetition and mechanical ways of studying and are quite decontextualized. However, Kovanen’s (2014) did not have this pattern in her results since they had more variation.

Furthermore, what stood out from the open-ended question was the study application called Quizlet that was mentioned in 22 questionnaires. Although Quizlet is not a vocabulary learning strategy itself, its extensive use by high school students tells about how they practice words nowadays. It is not surprising that students rely on study applications since they are easily available and many of them, like Quizlet, are free. Nevertheless, the respondents’ comments revealed how systematically some students use this tool to learn words.

The open-ended questions also provide information about high school students’ thoughts and attitudes towards intentional vocabulary learning. Unintentional vocabulary learning through English media was mentioned in ten questionnaires and some respondents seemed to think that intentional vocabulary learning is unnecessary when it comes to English since one is exposed to English through media every day and therefore English words are easily learned unconsciously.

## 6 CONCLUSION

The aim of the present study was to research Finnish high school students VLS use and discover what VLS they use the most and what VLS they regard as the most useful. The study achieved these aims. The three most used discovery strategies were “Guess from textual context”, “Consult a dictionary” and “Ask classmates or other friends for meaning”, whereas “Wordlists”, “Verbal repetition” and “Study the spelling of a word” were the most used consolidation strategies. The discovery strategies regarded as the most useful were “Consult a dictionary”, “Consult wordlists in textbooks”, “Ask teacher for a translation or a hint”, “Ask classmates or other friends for meaning” and “Guess from textual context”, the last three strategies sharing the third place. The consolidation strategies considered to be the most useful, on the other hand, were “Wordlists”, “Verbal repetition”, “Written repetition”, “Someone asks the words” and “Study the spelling of a word”. In addition, open-ended questions revealed that many Finnish high school students use Quizlet for learning English vocabulary, and that they appreciate English-language media as a way to learn words unconsciously.

Another goal was to complement previous studies on the topic and bring forth any similarities or differences between the studies. The findings were somewhat consistent with the two previous studies (Schmitt 1997; Kovanen 2014) that they were compared with, although the participants in Schmitt’s study were Japanese and included EFL learners from different age groups. Therefore, it is somewhat surprising that the results were quite in line with the findings of the present study, although there were some notable differences when it comes to the most useful consolidation strategies. Kovanen’s findings differed from the findings of the present study in the use and usefulness of consolidation strategies while the results concerning discovery strategies were remarkably consistent with the present study.

Some implications could be drawn out of the findings. As mentioned before, the findings suggest that Finnish high school students use VLS that they have already found useful since the three most used discovery and consolidation strategies were also among the four most useful strategies. This could imply that they are able to analyze which strategies work the best for them. On the other hand, this could also mean that they are accustomed to certain VLS and believe them being the most useful and therefore avoid trying new ones. However, this pattern did not exist in Kovanen’s study of Finnish high school students’ VLS use. Moreover, according to the present study, Finnish high school students seem to prefer cognitive VLS, which are

repetitive and mechanical strategies, when memorizing a word. This might implicate that high school students overlook other, more complicated, strategies and rely on to these somewhat traditional ways of learning vocabulary. Again, Kovanen did not find this pattern of cognitive strategies being more popular.

The present study can offer students information about which strategies have been found the most useful and therefore enrich their learning and studying skills. This is particularly beneficial for high school students in Finland, since they have to memorize lots of new words in fast-paced courses and usually acquire vocabulary beyond textbooks for the Matriculation Examination. It also strengthens teachers' knowledge of how high school students learn words most efficiently and provides information about of which VLS they are unaware. Teachers can then take these aspects into account in their teaching by encouraging students to use the VLS found effective and introducing the ones that they have not tried yet.

The study has both strengths and limitations. The data consists of 68 filled questionnaires, which means that some general conclusions can be drawn to a certain extent. In addition, the respondents had a chance to ask for clarifications or help from the person who made the questionnaire when filling it out. Furthermore, the questionnaire explained the strategies in an easily understandable manner and provided examples for the most difficult ones. Previous studies have tended to research if a certain VLS is used or whether the participants consider it useful but the present study provides more specific information on *how* frequently the strategies are used and *how* useful they are considered to be. Furthermore, some strategies were added in addition to the strategies of the taxonomy in order to make the study more comprehensive and contemporary. On the other hand, due to these differences between the present study and the previous research, their comparison is harder. Moreover, the questionnaire was conducted less than one month into the school year and about one third of the participants was just starting the first year in high school, which means that these people probably had not used that many VLS during high school yet. It should also be borne in mind that all of the respondents were from the same high school. Therefore, the study could be broadened to include participants from high schools all around Finland. In a larger-scale study, the differences between high school students' VLS use in different countries could be researched, or to move away from the high school context, the participants could consist of students of varying age as in Schmitt's (1997) study. Gender differences could also be taken into account.

As mentioned before, vocabulary learning strategies in Finnish context have not gained much attention in research besides some theses. Even though the findings of the present study did not show any striking differences in VLS use between Finnish and Japanese EFL learners since the results of the present study were even a bit more in line with Schmitt's study compared to Kovanen's study, more research on Finnish EFL learners' VLS use is needed. After all, vocabulary is a crucial part of a language learning and VLS should have an important role as a tool to make intentional vocabulary learning easier and more efficient.

## BIBLIOGRAPHY

- Alanen, R. (2011). Kysely tutkijan työkaluna in P. Kalaja, R. Alanen and H. Dufva (eds.) *Kieltä tutkimassa*. Finn Lectura, 146-161.
- Carter, R. (1998). *Vocabulary: Applied Linguistics Perspective*. London: Routledge.
- Chacón-Beltrán, R., C. Abello-Contesse and M.d.M. Torreblanca-López 2010. Vocabulary Teaching and Learning: Introduction and Overview in R. Chacón-Beltrán, C. Abello-Contesse and M.d.M Torreblanca-López (eds.) *Insights into non-native vocabulary teaching and learning*. Bristol, Buffalo: Multilingual Matters, 1-12.
- Channell, J. (1988). Psycholinguistics considerations in the study of L2 vocabulary acquisition in R. Carter and M. McCarthy (eds.) *Vocabulary and Language Teaching*. Longman, 83-96.
- Dörnyei, Z. and Taguchi, T. (2009). *Questionnaires in second language research: Construction, administration and processing*. New York ; London: Routledge.
- Jackson, H. and Ze Amvela, E. (2007). *Words, meaning and vocabulary*. London: Continuum.
- Kovanen, M. (2014). *Vocabulary learning strategies employed by Finnish high school EFL students* [online]. University of Jyväskylä, Department of languages. (8 December 2018) <https://jyx.jyu.fi/bitstream/handle/123456789/43319/URN%3aNBN%3afi%3ajyu-201405061622.pdf?sequence=1&isAllowed=y>
- Laufer, B. (1998). The development of passive and active vocabulary in a second language: same or different? *Applied Linguistics* 19 (2), 255-271.
- Marttinen, M. (2008). *Vocabulary learning strategies used by upper secondary school students studying English as a second language* [online]. University of Jyväskylä, Department of Languages. (18 July 2018) [https://jyx.jyu.fi/dspace/bitstream/handle/123456789/18447/URN\\_NBN\\_fi\\_jyu-200803261288.pdf?sequence=1](https://jyx.jyu.fi/dspace/bitstream/handle/123456789/18447/URN_NBN_fi_jyu-200803261288.pdf?sequence=1)
- Nation, I.S.P. (1990). *Teaching and learning vocabulary*. New York: Newbury House.
- Oxford, R. (1990). *Language learning strategies: What every teacher should know*. New York: Newbury House.
- Pavičić Takač, V. (2008). *Vocabulary Learning Strategies and Foreign Language Acquisition*. Clevedon, UK: Multilingual Matters.



Schmitt, N. (1997). Vocabulary learning strategies in N. Schmitt and M. McCarthy (eds.) *Vocabulary: description, acquisition and pedagogy*. Cambridge: Cambridge U.P., 199–227.

Singleton, D. (1999). *Exploring the Second Language Mental Lexicon*. Cambridge: Cambridge University Press.

Warjus, S. (2010). *Strategic vocabulary learning: A study of Finnish upper secondary school students* [online]. University of Tampere, School of Modern Languages and Translation Studies. (13 January 2019)  
<https://tampub.uta.fi/bitstream/handle/10024/81501/gradu04237.pdf?sequence=1>

## Appendix 1

# KYSELY LUKIOLAISTEN KÄYTTÄMISTÄ SANASTONOPPIMISSTRATEGIOISTA ENGLANNIN KIELESSÄ

Teettäjä: Leni Mäkinen, Jyväskylän yliopisto

Seuraavaa kyselyä käytetään aineistona kandidaatin tutkielmassa, jossa pyritään selvittämään lukiolaisten käyttämiä sanaston oppimisstrategioita englannin kielessä sekä heidän mielipiteitään niiden hyödyllisyydestä. Sanaston oppimisstrategiat ovat keinoja, joiden avulla oppija pyrkii joko selvittämään uuden sanan merkityksen tai oppimaan ja muistamaan uuden sanan. Kysely täytetään nimettömästi. Muistakaa vastata jokaiseen kohtaan!

### I. Perustiedot

Sukupuoli: Nainen  Mies  En halua vastata

Olen lukion \_\_\_\_\_ luokalla

Ikä:

Englannin kielen taitoni on huono, melko huono, keskinkertainen, melko hyvä, hyvä, erinomainen

(alleviivaa tai ympyröi parhaiten sopiva vaihtoehto)

Koen englannin kielen sanaston tietoisien opettelu erittäin tärkeäksi, melko tärkeäksi, melko tarpeettomaksi, tarpeettomaksi, en osaa sanoa

(alleviivaa tai ympyröi parhaiten sopiva vaihtoehto)

### II. Kysely

Alla on esitetty erilaisia sanaston oppimisstrategioita. Jokaisen strategian alla lukee ”käyttö” ja ”hyödyllisyys”. Kohtaan ”käyttö” merkitset numeron ympyröimällä, kuinka usein olet käyttänyt kyseistä sanaston oppimisstrategiaa **englannin kielen kohdalla** lukion aikana.

(1: en koskaan 2: harvoin 3: silloin tällöin 4: melko usein 5: usein)

Kohtaan ”hyödyllisyys” merkitset numeron ympyröimällä, kuinka hyödyllinen kyseinen strategia on sinun kokemuksiesi perusteella. **Jos et ole koskaan käyttänyt kyseistä strategiaa, älä vastaa tähän kohtaan.**

(1: hyödytön 2: melko hyödytön 3: melko hyödyllinen 4: hyödyllinen)

**A. Kun törmään vieraaseen englanninkieliseen sanaan joko koulussa, kotona tai muualla ja haluan selvittää sen merkityksen**

**1. Yritän päätellä uuden sanan sanaluokan (esim. adjektiivi, verbi), joka saattaa auttaa minua ratkaisemaan sanan merkityksen**

Käyttö: 1 2 3 4 5      Hyödyllisyys: 1 2 3 4

**2. Tutkin sanan etuliitteitä, päätteitä (esim. un-, -ness) sekä vartaloa päätelläkseni sen merkityksen**

Käyttö: 1 2 3 4 5      Hyödyllisyys: 1 2 3 4

**3. Yhdys sanojen ja lyhenteiden kohdalla tutkin sanan rakennetta**

Käyttö: 1 2 3 4 5      Hyödyllisyys: 1 2 3 4

**4. Yritän päätellä vieraan sanan merkityksen oman äidinkieleni (tai toisen opiskelemani kielen) avulla, samankaltaisista sanoista päätellen**

Käyttö: 1 2 3 4 5      Hyödyllisyys: 1 2 3 4

**5. Jos tekstissä on havaintokuvia, käytän niitä hyväkseni ymmärtääkseni sanan merkityksen. Jos vieras sana ilmenee puhetilanteessa, yritän päätellä sanan merkityksen eleistä.**

Käyttö: 1 2 3 4 5      Hyödyllisyys: 1 2 3 4

**6. Yritän arvata sanan tekstin asiansyhteydestä**

Käyttö: 1 2 3 4 5      Hyödyllisyys: 1 2 3 4

**7. Tarkistan sanan merkityksen sanakirjasta**

Käyttö: 1 2 3 4 5      Hyödyllisyys: 1 2 3 4

**8. Tarkistan sanan merkityksen oppikirjan sanalistaista**

Käyttö: 1 2 3 4 5      Hyödyllisyys: 1 2 3 4

**9. Kysyn opettajalta joko käännöstä tai vinkkejä**

Käyttö: 1 2 3 4 5      Hyödyllisyys: 1 2 3 4

**10. Kysyn luokkatovereiltani tai muilta kavereilta**

Käyttö: 1 2 3 4 5      Hyödyllisyys: 1 2 3 4

**11. Odotan, että sanan merkitys avautuisi minulle luokka- tai ryhmätyöskentelyn kautta, kun näen, miten muut käyttävät sanaa**

Käyttö: 1 2 3 4 5      Hyödyllisyys: 1 2 3 4

**B. Kun haluan oppia ja painaa mieleen uuden englanninkielisen sanan****12. Tutkin ja harjoittelen sanan merkitystä ryhmässä**

Käyttö: 1 2 3 4 5      Hyödyllisyys: 1 2 3 4

**13. Pyrin käyttämään uutta sanaa englantia äidinkielenään puhuvien/muiden kanssa**

Käyttö: 1 2 3 4 5      Hyödyllisyys: 1 2 3 4

**14. Opiskelen sanoja käyttäen apunani niiden merkitystä esittäviä kuvia**

Käyttö: 1 2 3 4 5      Hyödyllisyys: 1 2 3 4

**15. Kun opiskelen sanaa, kuvittelen sen merkityksen mielessäni**

Käyttö: 1 2 3 4 5      Hyödyllisyys: 1 2 3 4

**16. Liitän uuden sanan henkilökohtaisiin kokemuksiini (esim. sana *snow* liitettynä muistikuvaan itsestä leikkimässä pienenä lumella)**

Käyttö: 1 2 3 4 5      Hyödyllisyys: 1 2 3 4

**17. Linkitän uuden sanan mielessäni muihin saman aihepiirin sanoihin, jotka jo osaan (esim. hedelmät, eläimet jne.) tai opiskelen sanoja aihepiireittäin**

Käyttö: 1 2 3 4 5      Hyödyllisyys: 1 2 3 4

**18. Linkitän uuden sanan mielessäni sen synonyymeihin ja/tai vastakohtiin tai opiskelen sanoja siten, että selvitän samalla uusien sanojen mahdolliset synonyymit ja vastakohtat**

Käyttö: 1 2 3 4 5      Hyödyllisyys: 1 2 3 4

**19. Teen aihepiirien sanoista tai synonyymeistä ja vastakohtista miellekarttoja tai käytän hyväkseni jo valmiita miellekarttoja oppiakseni sanastoa**

Käyttö: 1 2 3 4 5      Hyödyllisyys: 1 2 3 4

**20. Teen ”asteikkoja” vertailtavista adjektiiveista (esim. *tiny – small - medium-sized -big -huge*) muistaakseni ne paremmin**

Käyttö: 1 2 3 4 5      Hyödyllisyys: 1 2 3 4

**21. Muodostan uusista sanoista lauseita, jotta ne jäisivät paremmin mieleeni**

Käyttö: 1 2 3 4 5      Hyödyllisyys: 1 2 3 4

**22. Muodostan uusista sanoista tarinoita, jotta ne jäisivät paremmin mieleeni**

Käyttö: 1 2 3 4 5      Hyödyllisyys: 1 2 3 4

**23. Tarkastelen sanan kirjoitusasua painaakseni sanan paremmin muistiini**

Käyttö: 1 2 3 4 5      Hyödyllisyys: 1 2 3 4

**24. Tarkastelen sanan äänneasua painaakseni sanan paremmin muistiini**

Käyttö: 1 2 3 4 5      Hyödyllisyys: 1 2 3 4

**25. Käytän sanoja opiskellessani erilaisia värikoodeja (esim. ylivivaan tekstistä verbit jollakin värillä tai ylivivaan sanaluetteloista eri sanaluokat omilla väreillään)**

Käyttö: 1 2 3 4 5      Hyödyllisyys: 1 2 3 4

**26. Keyword Method: Käytän hyväkseni äidinkieleni (tai jonkin muun osaamani kielen) sanaa, joka muistuttaa jollain tavalla opittavaa englanninkielistä sanaa, ja muodostan sanoista mielikuvan, joka nousee mieleeni, kun kuulen jommankumman sanoista. Esimerkiksi sanoista *cat* ja *katos* voitaisiin muodostaa mielikuva katoksen alla värjöttelevästä kissasta, joka toimisi muistisääntönä**

Käyttö: 1 2 3 4 5      Hyödyllisyys: 1 2 3 4

**27. Tarkastelen sanan etu- ja loppupäätteitä sekä vartaloa painaakseni sen mieleeni**

Käyttö: 1 2 3 4 5      Hyödyllisyys: 1 2 3 4

**28. Tarkastelen, mihin sanaluokkaan sana kuuluu, jotta muistaisin sen paremmin**

Käyttö: 1 2 3 4 5      Hyödyllisyys: 1 2 3 4

**29. Yritän opetella sanan tiivistämällä sen merkityksen omin sanoin**

Käyttö: 1 2 3 4 5      Hyödyllisyys: 1 2 3 4

**30. Yritän muistaa uuden sanan sen pohjalta, että se on sama tai samankaltainen kuin äidinkielessäni tai jossain muussa osaamassani kielessä**

Käyttö: 1 2 3 4 5      Hyödyllisyys: 1 2 3 4

**31. Tehostan oppimistani sillä, että näytteen sanan merkityksen (esimerkiksi sanan *cough* kohdalla yskäisen)**

Käyttö: 1 2 3 4 5      Hyödyllisyys: 1 2 3 4

**32. Toistan sanaa ääneen tai mielessäni oppiakseni sen**

Käyttö: 1 2 3 4 5      Hyödyllisyys: 1 2 3 4

**33. Kirjoitan sanan toistuvasti oppiakseni sen**

Käyttö: 1 2 3 4 5      Hyödyllisyys: 1 2 3 4

**34. Harjoittelen uusia sanoja sanalistojen avulla (esim. peittämällä toisen palstan)**

Käyttö: 1 2 3 4 5      Hyödyllisyys: 1 2 3 4

**35. Käytän sanakortteja (kortti, jossa on sanaa esittävä kuva sekä sen nimi englanniksi) oppiakseni uusia sanoja**

Käyttö: 1 2 3 4 5      Hyödyllisyys: 1 2 3 4

**36. Teen englannin tunnilla muistiinpanoja, joiden kautta opiskelen uutta sanastoa**

Käyttö: 1 2 3 4 5      Hyödyllisyys: 1 2 3 4

**37. Käytän hyväkseni oppikirjan sanasto-osiota (esimerkiksi tehden sanastotehtäviä)**

Käyttö: 1 2 3 4 5      Hyödyllisyys: 1 2 3 4

**38. Kuuntelen cd:ltä oppikirjan sanalistoja tai äänitän niitä itse**

Käyttö: 1 2 3 4 5      Hyödyllisyys: 1 2 3 4

**39. Opiskelen uusia sanoja kiinnittämällä esineisiin lapulla niiden englanninkielisen nimen**

Käyttö: 1 2 3 4 5      Hyödyllisyys: 1 2 3 4

**40. Pidän kirjaa uusista oppimistani englannin sanoista (sanastovihko)**

Käyttö: 1 2 3 4 5      Hyödyllisyys: 1 2 3 4

**41. Opiskelen tietoisesti uutta sanastoa englanninkielisen median (esim. elokuvat, musiikki, kirjat, nettisivut jne.) kautta**

Käyttö: 1 2 3 4 5      Hyödyllisyys: 1 2 3 4

**42. Teen itselleni sanastotestejä tai etsin niitä esimerkiksi netistä tai oppikirjoista**

Käyttö: 1 2 3 4 5      Hyödyllisyys: 1 2 3 4

**43. Käsken jonkun kysellä minulta sanoja**

Käyttö: 1 2 3 4 5      Hyödyllisyys: 1 2 3 4

**44. En vaivaudu jäädä selvittämään jokaisen vieraan sanan merkitystä vaan jatkan lukemista/kuuntelua**

Käyttö: 1 2 3 4 5      Hyödyllisyys: 1 2 3 4

**45. Jatkan sanojen kertaamista pitkäjänteisesti myöhemminkin**

Käyttö: 1 2 3 4 5      Hyödyllisyys: 1 2 3 4

**Tuleeko mieleesi muita sanaston oppimisstrategioita, joita käytät tai olet käyttänyt lukion aikana englannin kielessä? Kuinka hyödylliseksi koet ne asteikolla 1-4?**

**Muuta lisättävää:**

**KYSELY PÄÄTTYY TÄHÄN!**

**Kiitos osallistumisesta! 😊**



## Appendix 2

### QUESTIONNAIRE ABOUT HIGH SCHOOL STUDENTS' USE OF VOCABULARY LEARNING STRATEGIES IN ENGLISH

Designed by: Leni Mäkinen, University of Jyväskylä

The following questionnaire will be used as data for a Bachelor Thesis, in which high school students' use of vocabulary learning strategies in English and their opinions about their usefulness will be researched. Vocabulary learning strategies are means that are used for discovering the meaning of a new word or for learning and memorizing a new word. The questionnaire is answered anonymously. Remember to answer each question!

#### I. Background information

Gender: Female  Male  I don't want to answer

High school grade:

Age:

My English skills are bad, fairly bad, average, fairly good, good, excellent  
(underline or circle the option that best describes you skills)

I regard the intentional practicing of English vocabulary as very important, fairly important, quite unnecessary, unnecessary, I don't know  
(underline or circle the option that best describes your opinion)

#### II. Questionnaire

There are different vocabulary learning strategies presented below. It says "use" and "usefulness" under each strategy. On the "Use" scale, mark how often you have used the learning strategy during high school **when learning English** by circling a number.

(1: never 2: rarely 3: occasionally 4: fairly often 5: often)

On the "Usefulness" scale, mark how useful you consider the strategy to be by circling a number. **If you have never used the strategy, do not answer this part.**

(1: useless 2: fairly useless 3: fairly useful 4: useful)

**A. When I encounter a foreign English word either at school, at home or elsewhere and I want to find out the meaning of the word**

**1. I try to deduce the part of speech (e.g. adjective, verb), which can help me discover the meaning**

Use: 1 2 3 4 5      Usefulness: 1 2 3 4

**2. I study prefixes (e.g. un-), suffixes (e.g. -ness) and the root in order to discover the meaning**

Use: 1 2 3 4 5      Usefulness: 1 2 3 4

**3. When it comes to compound words and abbreviations, I study the structure of the word**

Use: 1 2 3 4 5      Usefulness: 1 2 3 4

**4. I try to deduce the meaning of a foreign word based on the similar or identical words in my first language (or in any other language I know)**

Use: 1 2 3 4 5      Usefulness: 1 2 3 4

**5. If there are pictures in the text, I use them for understanding the meaning. If the word occurs in speech, I try to deduce the meaning from the speaker's gestures.**

Use: 1 2 3 4 5      Usefulness: 1 2 3 4

**6. I try to guess the meaning from the textual context**

Use: 1 2 3 4 5      Usefulness: 1 2 3 4

**7. I consult a dictionary**

Use: 1 2 3 4 5      Usefulness: 1 2 3 4

**8. I consult the wordlists in textbooks**

Use: 1 2 3 4 5      Usefulness: 1 2 3 4

**9. I ask my teacher for a translation or a hint**

Use: 1 2 3 4 5      Usefulness: 1 2 3 4

**10. I ask my classmates or other friends**

Use: 1 2 3 4 5      Usefulness: 1 2 3 4

**11. I wait until the meaning is revealed through class or group work activity when I see how others use the word**

Use: 1 2 3 4 5      Usefulness: 1 2 3 4

**B. When I want to learn and memorize a new English word****12. I study and practice the meaning in a group**

Use: 1 2 3 4 5      Usefulness: 1 2 3 4

**13. I aim to use the new word with native English speakers or other people**

Use: 1 2 3 4 5      Usefulness: 1 2 3 4

**14. I study the word with a pictorial representation of its meaning**

Use: 1 2 3 4 5      Usefulness: 1 2 3 4

**15. When I study a word, I imagine its meaning**

Use: 1 2 3 4 5      Usefulness: 1 2 3 4

**16. I connect the word to a personal experience (e.g. the word *snow* associated with a memory of myself as a child playing with snow)**

Use: 1 2 3 4 5      Usefulness: 1 2 3 4

**17. I connect the word with other words of the same topic (e.g. fruits, animals etc.) in my mind or study words in themes**

Use: 1 2 3 4 5      Usefulness: 1 2 3 4

**18. I connect the new word with its synonyms and/or antonyms or study words so that I find out their possible synonyms and antonyms at the same time**

Use: 1 2 3 4 5      Usefulness: 1 2 3 4

**19. I make or use ready-made semantic maps of the words that belong to the same theme/topic or of synonyms and antonyms of a word**

Use: 1 2 3 4 5      Usefulness: 1 2 3 4

**20. I make 'scales' for gradable adjectives (e.g. *tiny – small - medium-sized -big -huge*) in order to remember them better**

Use: 1 2 3 4 5      Usefulness: 1 2 3 4

**21. I form sentences using the new words**

Use: 1 2 3 4 5      Usefulness: 1 2 3 4

**22. I form stories using the new words**

Use: 1 2 3 4 5      Usefulness: 1 2 3 4

**23. I study the spelling of a word in order to memorize it**

Use: 1 2 3 4 5      Usefulness: 1 2 3 4

**24. I study the pronunciation of a word in order to memorize it**

Use: 1 2 3 4 5      Usefulness: 1 2 3 4

**25. I use color codes (e.g. highlighting different parts of speech with different colors) when studying new words**

Use: 1 2 3 4 5      Usefulness: 1 2 3 4

**26. Keyword Method: I choose a word from my first language (or any other language that I know) that resembles the English target word and create a mental image combining these two words. This mental image will then come to my mind when I hear one of the words. For example, the words *cat* and *katos* (eng. *pentice*) could be combined to form a mental image of a cat shivering under a pentice.**

Use: 1 2 3 4 5      Usefulness: 1 2 3 4

**27. I study prefixes, suffixes and the root in order to memorize the word better**

Use: 1 2 3 4 5      Usefulness: 1 2 3 4

**28. I study the part of speech in order to memorize the word better**

Use: 1 2 3 4 5      Usefulness: 1 2 3 4

**29. I try learn the word by paraphrasing its meaning**

Use: 1 2 3 4 5      Usefulness: 1 2 3 4

**30. I try to memorize the word based on its similarity or identity with a word from my first language (or any other language I know)**

Use: 1 2 3 4 5      Usefulness: 1 2 3 4

**31. I act the meaning of a word while studying it in order to enhance my learning (e.g. I cough repeatedly while studying the word *cough*)**

Use: 1 2 3 4 5      Usefulness: 1 2 3 4

**32. I say the word aloud or in my mind repeatedly in order to learn it**

Use: 1 2 3 4 5      Usefulness: 1 2 3 4

**33. I write down the word repeatedly in order to learn it**

Use: 1 2 3 4 5      Usefulness: 1 2 3 4

**34. I practice new words with wordlists (e.g. by covering the other column)**

Use: 1 2 3 4 5      Usefulness: 1 2 3 4

**35. I use flash cards (a card that has a picture of the meaning on one side and the word in English on the other side) in order to practice new words**

Use: 1 2 3 4 5      Usefulness: 1 2 3 4

**36. I take notes in English class and study the words with the help of my notes**

Use: 1 2 3 4 5      Usefulness: 1 2 3 4

**37. I use the vocabulary section in my textbook (e.g. by doing vocabulary exercises)**

Use: 1 2 3 4 5      Usefulness: 1 2 3 4

**38. I listen to the tapes of the wordlists of the textbook or record them myself**

Use: 1 2 3 4 5      Usefulness: 1 2 3 4

**39. I study new words by putting English labels on physical objects**

Use: 1 2 3 4 5      Usefulness: 1 2 3 4

**40. I keep a record of the new English words that I encounter/learn (vocabulary notebook)**

Use: 1 2 3 4 5      Usefulness: 1 2 3 4

**41. I consciously study new vocabulary through English-language media (e.g. movies, music, books, webpages)**

Use: 1 2 3 4 5      Usefulness: 1 2 3 4

**42. I make word tests for myself or find them, for example, online or in textbooks**

Use: 1 2 3 4 5      Usefulness: 1 2 3 4

**43. Somebody asks me the words (oral word test)**

Use: 1 2 3 4 5      Usefulness: 1 2 3 4

**44. I will not try to discover the meaning of each foreign word but keep on reading/listening**

Use: 1 2 3 4 5      Usefulness: 1 2 3 4

**45. I will keep revising the word over time**

Use: 1 2 3 4 5      Usefulness: 1 2 3 4

**Are there any other vocabulary learning strategies that you use or have used when studying English during high school? How useful do you consider them on a scale from 1 to 4?**

**Additional information:**

**THE QUESTIONNAIRE ENDS HERE!**

**Thank you for participating! 😊**

### Appendix 3

The table below (Table 6) presents Schmitt's taxonomy of VLS (Schmitt 1997: 207). The USE figure refers to the percentage of the participants of his study who reported using the strategy, and the HELPFUL figure indicates the percentage for those participants who thought the strategy was helpful. (Schmitt 1997: 207). The strategies that are struck will **not** be included in the present study. The ones marked with 'X' will be merged.

**Table 6.** A taxonomy of vocabulary learning strategies (Schmitt 1997: 207)

Strategy Group	Use %	Helpful %
<i>Strategies for the discovery of a new word's meaning</i>		
DET Analyze part of speech	32	75
DET Analyze affixes and roots	15	69
DET Check for L1 cognate	11	40
DET Analyze any available pictures or gestures	47	84
DET Guess from textual context	74	73
DET Bilingual dictionary X	85	95
DET Monolingual dictionary X	35	77
DET Word lists	-	-
<del>DET Flash cards</del>	-	-
SOC Ask teacher for an L1 translation X	45	61
SOC Ask teacher for a paraphrase or a synonym of the new word X	42	86
SOC Ask teacher for a sentence including the new word X	24	78
SOC Ask classmates for meaning	73	65
SOC Discover the new meaning through group work activity	35	65
<i>Strategies for consolidating a word once it has been encountered</i>		
SOC Study and practice the meaning in a group	30	51
<del>SOC Teacher checks students' flash cards or word lists for accuracy</del>	<del>3</del>	<del>39</del>
SOC Interact with native-speakers	-	-
MEM Study the word with a pictorial representation of its meaning	-	-
MEM Image the word's meaning	50	38
MEM Connect the word to a personal experience	37	62
MEM Associate the word with its coordinates	13	54
MEM Connect the word to its synonyms and antonyms	41	88



MEM Use semantic maps	9	47
MEM Use 'scales' for gradable adjectives	16	62
<del>MEM Peg Method</del>	-	-
<del>MEM Loci Method</del>	-	-
<del>MEM Group words together to study them</del>	-	-
<del>MEM Group words together spatially on a page</del>	-	-
MEM Use the new word in sentences	18	82
MEM Group words together within a storyline	-	-
MEM Study the spelling of the word	74	87
MEM Study the sound of the word	60	81
<del>MEM Say the new word aloud when studying</del>	<del>69</del>	<del>91</del>
MEM Image word form	32	22
MEM Underline initial letter of the word	-	-
<del>MEM Configuration</del>	-	-
MEM Use Keyword Method	13	31
MEM Affixes and roots (remembering)	14	61
MEM Part of speech (remembering)	30	73
MEM Paraphrase the word's meaning	40	77
MEM Use cognates in study	10	34
<del>MEM Learn the words of an idiom together</del>	<del>48</del>	<del>77</del>
MEM Use physical action when learning a word	13	49
<del>MEM Use semantic feature grids</del>	-	-
COG Verbal repetition	76	84
COG Written repetition	76	91
COG Word lists	54	67
COG Flash cards	25	65
COG Take notes in class	64	84
COG Use the vocabulary section in your textbook	48	76
COG Listen to a 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	-	-
<del>MET Use spaced word practice</del>	-	-
MET Skip or pass the new word	41	16
MET Continue to study the word over time	45	87

---

--= Strategy was not included on the initial list used in the survey