

# Secondary School Students' Understanding of and Strategies for Vocabulary Acquisition: A Phenomenographic Approach to Language Learning

Cathrine Norberg

Luleå University of Technology, Sweden

Anna Vikström

Luleå University of Technology, Sweden

Emma Palola Kirby

Luleå University of Technology, Sweden

**Abstract**—Studies on vocabulary learning have provided valuable knowledge of what it means to know a word and how people learn. Few studies have focused on what students' understanding of word knowledge and vocabulary acquisition can contribute with in a language-learning context. Considering the vital importance of vocabulary in language learning, this study explores students' experiences of word knowledge and vocabulary learning with a point of departure in phenomenographic research. By interviewing a group of Swedish secondary school students about their understanding of word knowledge and what strategies they employ to learn new words in English, categories of description emerged showing that although the majority of the students reported that they perceive word knowledge as contextual, they primarily employ decontextualised strategies when studying vocabulary. This discrepancy seems to be closely connected to how vocabulary is tested and assessed in school.

**Index Terms**—vocabulary acquisition, phenomenography, second language learning, vocabulary learning strategies, student understanding

## I. INTRODUCTION

Although vocabulary has not been prioritised to the same extent as grammar in the history of language learning (Schmitt, 2000), no one can escape the fact that vocabulary is a keystone in successful language learning. It is a fundamental component in communication and in the development of reading, both in the first and a foreign language (e.g. Laufer & Ravenhorst-Kalovski, 2010; Schmitt, 2000). It has been shown that to understand the message of a text of average difficulty, a reading speed of about 200 words per minute is required (Schmitt, 2000). This means that the majority of the words need to be recognised and decoded almost instantly in order not to affect comprehension negatively (Schmitt, 2000). Exactly how words are acquired is not clear, but what researchers can agree on is that it is an incremental process, which requires both hard work and motivation, and which takes time. Research within cognitive linguistics suggests that a word needs to be encountered many times and in a variety of contexts to be remembered and added to the long-time memory (Aitchison, 2012; Nation, 2008; Tyler, 2012).

Word knowledge has commonly been divided into productive (also referred to as active) and receptive (or passive) knowledge. The former implies that a language learner knows what a word means and is able to use it herself/himself when speaking or writing, the latter implies an understanding of what a particular word means when someone else uses it, and is often understood as connected to listening and reading (Schmitt, 2000; Webb, 2008). Nation (2013) argues that to fully know a word, receptively or productively, means knowing the meaning of it, its associations and level of formality, its pronunciation, its written and spoken form, knowledge of its grammatical behaviour, the collocation and frequency of it. Similar definitions have been expressed by other researchers (e.g. Graves, 2006; Miller, 1999; Stahl & Nagy, 2006). Researchers also distinguish between the breadth and depth of word knowledge, where breadth knowledge implies that an individual has knowledge of at least some significant aspects of word meaning, and where the depth of understanding means, much in line with Nation (2013), full "ownership" of the word's various meanings, associations and functions in a variety of contexts (Keiffer and Lesaux, 2012, p. 349; see also Andersson & Freebody, 1981; Hastrup & Henriksen, 2000; Stahl & Nagy, 2006). For other definitions and distinctions see for instance Henriksson (1999) and Keiffer and Keasaux (2012). Each of the above-mentioned studies proposes ways of interpreting vocabulary knowledge, and also how it could be addressed in learning situations.

Like the variety of components involved in word knowledge, there are a number of different strategies of how to study words, each with a different focus on how to learn words effectively, and consolidate them in memory. On a general level, research on vocabulary learning strategies shows that the usage of strategies benefits learning, and should be encouraged and taught in school (Schmitt, 2000). More specifically, it has been shown that to make a particular strategy applicable, the learner needs to be ‘convinced of its significance, and be taught to evaluate its use’ (Vann & Abraham, 1990; see also O’Malley & Chamot, 1990), and that earlier instructions and schooling play a significant role in students’ choice of strategy (Schmitt, 1997; Vann & Abraham, 1990). It has also been shown that the way tests and exams are constructed is connected to what students learn (Marton, 1999; Moir & Nation, 2002; Ramsden, 2000), and what strategies they opt for when studying vocabulary.

Prior studies on vocabulary knowledge and learning have provided valuable knowledge of what it means to know a word and how people learn. One component often paid less attention to in the teaching situation, although extremely important in improving learning, is how students understand what is to be learned, and what the implications of their understanding have on the learning outcome (Lo, 2012). Students entering a classroom have their own beliefs and conceptions about what is to be learned, and these concepts and experience may not be compatible with what the teachers intend to teach, as shown in research on how students understand science concepts (Gardner, 1991). If teachers wish to help students see an object in a particular way, they need to uncover the students’ view of understanding, and see whether it differs from their own view, and if so how, as argued by Lo (2012).

Although the number of studies focusing on the learner perspective in language teaching has increased over the last two decades (Schmitt, 2000; Wesely, 2012), few studies so far have had an explicit focus on learner beliefs in the context of vocabulary learning. A focus on younger learners is particularly wanting. Our intention is to fill this gap by studying the student perspective of vocabulary acquisition among Swedish high school students. Our study is based on interviews with students about how they understand vocabulary knowledge and what strategies they use when studying words. The study uses a phenomenographic research approach, a technique that has been successfully used to explore students’ perceptions of both the object of and way of learning in a number of educationally related fields (e.g. Collier-Reed, 2009; Lucas, 2000; Marton & Pong, 2005; Reid & Petocz, 2002), and has shown particularly influential in higher education (Marton & Booth, 1997; Prosser & Trigwell, 1999; Ramsden, 2003). So far it has been sparsely used in second language learning. Our study is likely to show the value of using phenomenography in language studies, and in doing so advance our knowledge of vocabulary learning both in general, and in a Swedish context in particular.

## II. PREVIOUS STUDIES ON LEARNER BELIEFS AND LANGUAGE LEARNING

Learners’ beliefs, perceptions and conceptions of language learning have been researched from a number of different perspectives (Wesely, 2012). The research has shown that learners enter the language learning context with ideas, assumptions and expectations that are shaped by factors such as previous experience, age, gender, culture and current learning situation (Horwitz, 2008). Thus, the beliefs that learners hold influence their approaches to learning and may help or hinder this process (Horwitz, 2008), but they are also modifiable and may change over time (Mercer, 2011). Language learner beliefs have until quite recently been mainly researched through questionnaires (see e.g. Horwitz’s The Beliefs about Language Learning Inventory (BALLI)). Questionnaires are, however, as commented by Horwitz, inflexible as a research instrument as learners may want to express beliefs and perceptions other than those presented. More qualitative approaches have therefore been pointed out as wanting (Horwitz, 2008).

Although the number of qualitative studies on learner beliefs and language learning are still rather small, they are on the increase. One such qualitative study that needs to be mentioned in this context is Moir and Nation’s (2002) investigation of the vocabulary-learning strategies of adult language learners in an intensive EFL course. By interviewing ten informants about their beliefs about vocabulary knowledge and what strategies they used when studying vocabulary, it was shown that the learners demonstrated little awareness “of their own vocabulary knowledge and what is involved in knowing a word” (Moir & Nation 2002, p. 30). They showed an extreme preoccupation with meaning, and many of them demonstrated that they believe that a first language translation of a word is enough to enable effective use of it. The learners reported that they had been taught several vocabulary learning strategies during the course, but the majority of them did not apply them to any greater extent. Their most used vocabulary consolidation strategy was the reading and writing of vocabulary lists with the short-term goal of remembering them for a weekly vocabulary test. It was also made evident that previous experience of vocabulary learning had a significant impact on their choice of learning strategy. The insufficiency of the students’ understanding of learning was demonstrated in a test at the end of the course where most of the students had forgotten the words studied during the course, or showed that they were unable to use many of the words. Only one learner deviated from this pattern and showed a more qualitative understanding of word knowledge. This student showed an awareness of different aspects of word knowledge and applied contextual learning strategies in order to consolidate vocabulary. He also had a considerably higher score compared to his fellow students in the above-mentioned test. This study points to the existence of both quantitative and qualitative understandings of vocabulary learning among students and served as a source of inspiration for the present study and as a starting point for further investigations of its kind.

Other qualitative studies exploring learner beliefs in the context of second language learning, although not with a particular focus on vocabulary learning, are, for instance, Zaykovskaya, Rawal and De Costa’s (2017) case study of the

relationship between learner beliefs and study abroad experience, and Akiyama's (2017) study of the correlation between learner beliefs and corrective feedback in telecollaboration for language learning. See also Aro's (2016) longitudinal studies of the development of learner beliefs on foreign language learning. On a general level, these studies all show that foreign language learning is complex, and that learners' beliefs and previous experiences have an impact on learning.

As mentioned, the present study uses a phenomenographic research approach to study students' beliefs and understanding of vocabulary learning and how students study words. It differs from other methods used to study language learning in the way that understanding of an object of learning is achieved by mapping and analysing the *different* conceptualisations surrounding it (see methodology below). Phenomenography rejects the idea of an objective first-order perspective of reality. Reality or the world is as it is understood by the individuals part of it, and the relationship between the world and them (Anderberg, Svensson, Alvegard & Johansson, 2008). By interviewing individuals on their understanding and experience of an object of inquiry, in this case vocabulary learning, a finite number of categories of understanding are understood as likely to emerge. These categories of description, based on learners' actual understanding and experience of something, are rather elusive, and are not equally likely to emerge with traditional research methods (Polat, 2013). The interest of the researcher is thus to study the *variation* in ways of experiencing a given object or situation, not to seek evidence of an objective truth of it (Marton & Booth, 1997; Åkerlind, 2005), or in the case of language, to map the process of learning, or to find out what students can produce after learning (Polat, 2013).

For some reason, only a limited number of studies employing a phenomenographic approach have been conducted within second language acquisition, although the potential of using it has been observed and pointed out as promising (Polat, 2013). There are, however, some contributions. Benson and Lor's (1999) study of student conceptions of language and language learning is one. Using a phenomenographic approach, they interviewed a group of Hong Kong university students about their approaches to, beliefs and conception of learning English, and reported that the majority of the students expressed a predominantly quantitative understanding of language learning, most likely as a result of how language is taught and examined in the secondary school system. Most of the students also explained that further English studies were seen as a more or less meaningless burden with little return on the effort put in.

Another study is Polat's (2013) analysis of how a group of American university students perceive second language acquisition. Based on interviews with the students, she suggests four categories of understanding, logically related and closely connected to referential and structural aspects of language experience. The structural aspects of experiencing language learning in her study are defined as atomistic or systemic. The atomistic learner perceives language in terms of its parts. Grammatical structures and vocabulary items are learned and memorised in isolation with no reflection of an overall system. The systemic learner, in contrast, understands language learning as a system where grammar, vocabulary etc. are part of language learning as a whole. Referential aspects are described as either extrinsic or intrinsic, where the extrinsic learner sees language as serving a practical purpose, for instance communicating with friends or important for future career movements. The intrinsic learner, on the other hand, perceives language as a real entity in itself, that it is part of a whole, a way of seeing the world.

Considering the relative scarcity of studies focusing on the conceptualisations of language learning from a student perspective, in particular with a focus on younger students, and the hitherto limited number of phenomenographic studies investigating second language learning, this study is likely to yield new perspectives on language learning previously left unattended or not fully explored. Knowledge about students' perceptions of word knowledge and their strategies employed to learn new words is not only likely to enhance our knowledge of second language learning, in this particular case vocabulary acquisition, it should also help teachers adjust their teaching in response to students' understanding of how languages are learned (Lo, 2012, 21; Polat, 2013).

### III. RESEARCH QUESTIONS

This study focuses on Swedish secondary high school students' (13–15 years of age) understanding of learning words in English. It has been conducted in the phenomenographic research tradition, which means that the focus has been on mapping the qualitatively different conceptions these students have of vocabulary learning. The aim was to elicit information about i) the students' understanding of word knowledge, ii) what strategies they use when learning words, and iii) what aspects of vocabulary knowledge are shown in their choice of strategies.

### IV. METHODOLOGY AND RESEARCH DESIGN

#### A. Phenomenography

Phenomenography as a research tool originated in a set of studies in the 1970s exploring a group of university students' reading of academic texts (e.g. Marton & Säljö 1976; Svensson, 1977). By analyzing the students' answers to questions on how they approached various texts and their understanding of them, three insights of learning emerged: 1) There seems to exist a limited number of qualitatively different, but related ways of understanding an object of learning. 2) There are basically two approaches to understanding found along a continuum: a deep approach which involves an overall search for understanding and seeing an object of inquiry from new perspectives, and, at the other end of the

continuum, a surface approach implying a focus on accumulation or reproduction of facts with little or no reflection on overall significance. 3) There is a relationship between approach and learning outcome (Booth, 1997; Marton, Watkins & Tang, 1997). The students who adopted a deep approach to learning in these studies achieved a considerably higher level of understanding of the texts than those focusing on the individual words comprising them (Booth, 1997). These early phenomenographic studies captured two essential aspects of learning: the “what” (the underlying nature of understanding a phenomenon) and the “how” (the actual act of learning). The two perspectives can be further divided into referential and structural aspects of learning, where the former denotes what we understand a particular thing to be, and the latter our structural awareness of the object in question. An object may appear different to different people and also to the same individual depending on which structural elements they focus on: its individual parts, the relationship of the parts to each other or to the whole (Booth, 1997; Marton & Booth, 1997; Polat, 2013).

For the phenomenographer, change of knowledge or learning is believed to occur when people are presented with new aspects surrounding an object previously unknown to them or not paid attention to (Marton & Booth, 1997). Learning is understood as gaining understanding of something not an increase in facts (Dahlin, 1999; Marton et al., 1997). The task of the researcher therefore consists in recording and categorising the different conceptualisations surrounding various objects of inquiry. The different conceptions or categories of descriptions people have of it form the outcome space (Marton & Pong, 2005). The categories are formed on a collective level. They do not describe how certain individuals experience an object, but are to be seen as potential ways of understanding it. This means that the same individual may hold different conceptions at different times, and even express different conceptions at the same time, but the outcomes space remains the same (Benson & Lor, 1999; Marton, 2014).

### *B. Data Collection*

The aim of the study was to investigate how Swedish secondary school students experience vocabulary learning in a school setting. For the purpose of the study a group of students were interviewed about their perceptions of word knowledge and the strategies they use when learning new words in English. The open-ended interview, which constitutes the principal method of enquiry in phenomenographic research, was considered particularly suitable for this kind of study, as it makes it possible for students to explain their experience of acquiring new words more thoroughly, and in doing so facilitate the establishment of alternative ways of understanding vocabulary learning, and structure the outcome space (see Marton, 1986).

A total of nineteen students attending year nine in Swedish compulsory school were interviewed at the beginning of 2015. This particular school year was selected because it is the last year of compulsory school in Sweden, which means that the students have studied English for at least six years. They were therefore considered likely to have reflected on their understanding of vocabulary learning. They were also likely to have been taught by teachers with specialised knowledge of second and foreign language learning and teaching.

Three classes in three different Swedish schools were selected and informed about the study. Eleven boys and eight girls participated. Informed consent in writing was requested from both participants and their parents. The interviews were carried out by one of the three researchers behind this study and were done individually. Each interview lasted half an hour on average and was recorded on a voice recorder. The questions on word knowledge focused on the students' perception on what knowing a word in English meant to them, and the questions on vocabulary strategies on how the students described their consolidation of vocabulary learning.

### *C. Analysis*

The interviews were transcribed in verbatim and the material was read and analysed independently by two of the three authors of this article. The analysis followed a typical phenomenographic approach (see, for instance, Marton & Booth, 1997). It began on a general level where the transcripts were read repeatedly, resulting in a preliminary understanding of the material. This was followed by a systematic identification of themes where statements from the students considered significant in relation to the research questions were identified. The interviews were transformed into subsets of excerpts of the students' conceptions of and approaches to vocabulary acquisition. By comparing and contrasting the excerpts, qualitative differences in the students' understanding of vocabulary learning were identified resulting in categories of descriptions. These categories, described in terms of their most distinctive characteristics formed the outcome space, that is, these students' conceptualisations of vocabulary learning, and by extension conceptualisations a hypothetical student with a similar kind of background may have (Marton & Booth, 1997). To ensure reliability, the categories were formulated independently by the two researchers, who each ascribed them the same defining qualities.

## V. RESULTS

The result section is divided into two parts: the first part presents the categories of word knowledge and the second those of vocabulary consolidation strategies. The names of the categories were decided on basis of the defining criteria of the categories that emerged. The outcome space turned out to be hierarchical implying that the categories encompass one another: interview material containing statements from a more complex category also contains statements from a less complex category (Marton 2014).

### A. Word Knowledge

The interview questions on word knowledge centered on the students' perception on what knowing a word in English means to them, in what way they want to be able to use words that they learn and what they consider to be the most important aspects of knowing a word. Based on their answers three categories emerged defined as: 1) decontextualised knowledge, in which vocabulary is perceived as quantitative, 2) contextual knowledge, in which vocabulary is perceived as qualitative and 3) situational knowledge, in which vocabulary is perceived as qualitative and related to a specific context.

#### 1. Decontextualised knowledge

A recurring theme in the interviews with the students about what it means to know a word was related to translation. It was shown that, for them, to know a word means to be able to translate it from English into their mother tongue and vice versa, as illustrated in two student answers probed by the question of what word knowledge implies:

*To be able to spell it, to know how to translate it from Swedish.*

*When I know a word fully, I can translate it from Swedish into English and from English into Swedish and I know how to spell it.*

Their answers suggest that they believe in a one-to-one correspondence between words across languages (cf. the results reported by Moir & Nation, 2002). These two quotes also illustrate the importance of spelling, which a majority of the students mentioned. Another recurring issue brought up by them was that of studying words for weekly vocabulary tests. They explained that with the English textbook as a basis, their teacher often presents a text with a word list, which constitutes their homework. They reported that the tests are used to assess the number of words they have learned during the week, for the most part in writing but occasionally orally, as an alternative. An additional aspect of word knowledge that some students brought up was pronunciation. Their answers showed that they see pronunciation as connected to isolated vocabulary items, something that makes it possible both to say and understand words, as shown in the following two student answers to what it means to know a word:

*Well, that I know how it is said and pronounced. I understand what it means.*

*The most important thing is what it means, then pronunciation and in third place direct translation, maybe.*

Like the EFL students in Moir and Nation's (2002) study, the student answers show that meaning and form are central aspects in their understanding of word knowledge, and that they believe that equivalent words covering the same meaning in a foreign language are likely to be found in their mother tongue. These answers indicate a quantitative understanding of words where vocabulary size rather than depth is important (cf. also Benson & Lor, 1999).

#### 1. Contextual knowledge

As mentioned, categories are descriptions of potential ways of experiencing a particular object. The results of phenomenographic studies are categorised on a collective level. The same individual may thus hold different conceptions, and even conflicting perceptions of the same phenomenon, which means that his or her statements may belong to more than one category (Benson & Lor, 1999; Marton, 2014). This phenomenon was shown in the interview material. Although all the students showed a preoccupation with meaning and that they believe in a one-to-one correspondence of words across languages, leaving out aspects necessary for depth or comprehensive knowledge (Anderson & Freebody, 1981; Nation, 2001), the majority of them also mentioned the importance of context when learning words, as illustrated in the following student's answer:

*It is important to be able to use words in the right sentence in the right situation.*

A similar view was expressed by a boy who said that the most important thing about knowing a word is to be able to integrate it in a sentence. He explained that word knowledge is not only about learning the meaning of words, but about using them. He clarified this by saying that sometimes he knows the meaning of a word, but he cannot use it in a sentence.

Contextual knowledge showed to be closely associated with communicative aspects of language learning among the students. They explained that knowing a word means to be able to communicate, that is, to understand other people and to be understood by them. They showed that they relate communication mainly to the spoken word but also to some extent to the written. The students also expressed that they place more importance on knowing the exact meaning of words in productive activities such as speaking and writing than on knowing the exact meaning when reading and listening, as one boy explained:

*When I read I don't have to understand all the words, because I can understand them through the context, but when I talk, then I have to know every word I say otherwise something may go wrong.*

Many students also mentioned pronunciation in the context of being able to speak fluently. Pronunciation in a contextual sense was regarded as knowledge of how to produce fluent speech similar to a native speaker's competence. This perception is illustrated in the following quotes made by two students:

*I want to know the correct pronunciation of words so that I can use them when I talk to people and sound like a person from England or somewhere there. ... I want to speak as perfectly as possible when I speak English.*

*I want to be able to speak very fluently, so that people understand what I mean and can follow me. I don't want to get stuck when talking. I want my speech to be fluent and very clear and don't want to have a sloppy pronunciation.*

Being able to understand and use a word correctly in a context was thus shown as important among the students. Some of their statements also showed a clear awareness of the difference between decontextualised and contextual knowledge. One boy explained his perception of this difference in the following way:

*When I know the word then I also know when and how to use it, and what it means. It is not only a vocabulary item, which you don't know the meaning of, but you can use it or you can at least understand when you should use it or what it means. That is to say, not only the definition but what it means, what you mean by it.*

A similar conception was expressed by a girl when asked what kind of knowledge she wanted to gain when learning an English word:

*Not only that I can spell it, but that I can use it too.*

These examples clearly show that although the students expressed a great concern about meaning and translation in their answers about word knowledge, they also, unlike the students in Moir and Nation's (2002) study, where only one student showed this awareness, expressed that they are aware of the distinction between breadth and depth knowledge, and that the latter is required for full knowledge of words.

### 1.3 Situational knowledge

Only four of the nineteen students reported that learning English words enables them to communicate in a particular situation or point in time. These perceptions are additional examples of contextual understanding of word knowledge, but unlike the contextual examples, the situational are related to personal interest and possibilities (cf. Polat's (2013) definition of the systemic-intrinsic learner). One of these students, for example, mentioned that knowledge of English words makes it possible for him to communicate with friends on the Internet:

*Well, there are many different ways in which I can use it, for example if I sit at the computer or watch a lot of TV in English, and when I write to people from the US. I know ice hockey players from the US who I play TV-games with.*

Another of them showed that he connects word knowledge with travelling abroad or communicating with foreign people, as illustrated in his answer to the question of what it means to know a word in English:

*It means quite a lot because the more words I know, the better I can speak English when I travel abroad. /.../ Let's say that I meet people in Sweden who do not speak Swedish, and they ask something, then I can be of help and answer in English.*

The other two showed a connection between a good command of English and future career openings in their answers. One of them explained that a good knowledge of English makes it possible for her to talk to sponsors in her future career as a professional skier, whereas the other mentioned that the more words she learns the greater the probability will be for her to get a qualified job in the future:

*I want to have a good command of English because it will be an advantage for me as a person so when I start working I will have a very strong background with a lot of English. I see that as an enormous advantage because there are many companies crying for more people who are unbelievably good at speaking English.*

The limited number of students who connected word knowledge with particular situations where English is needed or long-term goals may be seen as an indication of the students' lack of motivation or failure to see their own learning in a broader perspective, as suggested by Moir and Nation (2002), where similar results are presented. Another possible reason for this phenomenon, also suggested by Moir and Nation, is related to how language items are taught and tested in school (see also Benson & Lor (1999) for a similar explanation).

## B. Vocabulary Consolidation Strategies

There are a number of different strategies to study words. Schmitt lists no fewer than fifty-eight different ways ranging from strategies used for the initial discovery of a word's meaning to those used to remember a word once it has been introduced (Schmitt 2000). Despite this variety, it has been shown that learners generally choose shallower rather than deeper strategies when studying words. This is generally so, even when they are aware that they may be less effective (Schmitt 2000). It has also been shown that age, personal goals, learning culture, tests and previous habits of studying words have an impact on how words are studied (see, e.g. Gu & Johnson 1996; Nation, 2001; Schmitt, 1997). Students' understanding of the object of study is yet another important factor that should have an impact on how words are learned.

To explore the students' habits of studying words the questions in the interviews centered on the strategies the students reported that they use to consolidate vocabulary, and what they consider that they practice when they use a particular strategy. Based on the students' answers, two qualitatively different categories emerged referred to as mechanical and complex learning strategies (Schmitt 2000), where the former generally implies learning out of context, and the latter the opposite.

### 1 Mechanical strategies

As mentioned, most of the students reported that they mainly study words provided by their English textbooks in the form of vocabulary lists. The act of studying vocabulary lists involved reading both the English words and the Swedish translation of them. They described that the next step in the process was to recall the translation mentally by covering either the Swedish list of words or the English one. Many of them also reported that they often write down the words by hand when studying vocabulary items, either the whole vocabulary list or single words that they find especially difficult to learn. The strategy of reading through the list, recalling the words mentally and writing them down, was done separately or in combination. One girl explained:

*I usually write the words on a piece of paper, in a note pad or something, English words on one side and Swedish on the other ... I read them several times and then I cover the Swedish or the English words and then I try to pronounce them aloud in English.*

Some of the students reported that they only read through the list because, as they said, they learn words fast and easily and so they only need to take occasional peeks at the vocabulary list during the week. The students who explained that they write down the words by hand meant that the act of writing helps them remember the words for a longer time. They explained that the physical act of writing makes them get a physical feeling for the words. The movement of the hand when writing was something they claimed “stay” in the body for a longer time. One boy expressed that writing by hand creates a nerve impulse from the hand to the brain. The following student used a similar wording:

*... if I sit for a long time and work with the words I can sit there and close my eyes and write them because they stay in my hand ... two to three weeks later they are still in my hand and they stay for maybe half a year. Then I can close my eyes and still write the words.*

The students also explained that, at home, when they do their homework they study vocabulary items without much consideration of the text it is based on. The text that the vocabulary belongs to is often perceived as a kind of appendage to the vocabulary list, as one student explained:

*Sometimes we get questions on the text but it is not that often that we work with it. We read the text and go through something but we don't work with texts. We seem to focus on the words. We read the text to learn the words in a context. We don't work more than that with the text.*

It was also made evident that many students do not read the text at all when they study the words belonging to it.

Some students mentioned that they use technological devices such as computers and tablets when studying words. The web pages they reported using are designed for vocabulary learning practice and offer different exercises and games which sometimes run on time where the learner can practice translation, word meaning and spelling. The following student described how he connects web exercises and games to learning new words quickly in an entertaining way and compared this to studying a vocabulary list:

Interviewer: *What is it that makes it more enjoyable?*

Respondent: *That the exercises are varied. There are certain games that you can make yourself and such things which are more entertaining. It is more enjoyable when the learning activity is quicker. You don't need to go on for so long.*

A similar viewpoint was expressed by another student who explained that the advantage of web exercises, compared to writing by hand, is that the learning is fast and that the exercises can be repeated quickly over and over. This student mentioned the tediousness of writing down words page after page. Nevertheless, one student pointed out that since the vocabulary tests are written by hand, it might be better to write the words by hand too when practicing. In this way he said that he could remember which letters he had used instead of trying to remember which key on the keyboard he had used. Even so, most students mentioned that they feel that most words are easily forgotten after the test.

To sum up, for the students vocabulary learning is to a large extent perceived as a matter of memorising isolated vocabulary items for the purpose of passing weekly vocabulary tests. Many students mentioned that they use the quickest way of learning words. Although some of them mentioned that writing down the words made them remembering the words for a longer time, their answers demonstrate little concern about learning the words for other purposes than passing tests. It should also be mentioned that most of the students interviewed could not recall that they had been taught learning strategies in relation to vocabulary learning. Some students mentioned that when they started studying English, they had been given a notebook where they could write the words to be learned or a piece of paper where the vocabulary was already listed.

## *2 Complex strategies*

Only three students mentioned explicitly that they try to find out more about the words to be learned than what is required for the weekly test, such as associations, collocations, contextual usage etc. These students reported that the usage of other strategies than those involving basic memorising or rote learning make them remember the words more easily. One of them explained that it is important to work with both the text and the words, and emphasised that the most important part of word knowledge is to be able to use words in a context. This student also mentioned that only knowing the meaning of a word does not necessarily mean that you know how to use it in a sentence. When asked how he practices vocabulary, he explained that he uses a combination of mechanical and more complex strategies, starting with the former:

*First I translate the words into my mother tongue and then I write them, practice spelling and pronunciation. /.../ I also try to use them, put them in a sentence. That is how I learn.*

Another of these students mentioned that he had changed his way of studying when he realised that memorising isolated vocabulary items did not make him remember the words. After having started to incorporate new words to be learned in sentences instead, as suggested by his father, he felt that he was able to remember them for a longer time. In a similar fashion, the third student mentioned that when learning words that are difficult for him, he usually writes them down, says them aloud and tries to include them in sentences.

Unlike the majority of the students interviewed, these three students expressed an awareness of what it means to study words. They used a combination of different strategies and showed a wish to learn words not only to pass weekly tests.

## VI. DISCUSSION AND CONCLUSION

In this study a phenomenographic research approach was used to investigate the conceptions a group of Swedish secondary school students have of word knowledge and vocabulary consolidation strategies. Based on interviews with the students, interrelated categories of description emerged showing that although the students demonstrated a belief in a one-to-one correspondence between words across languages (cf. Moir & Nation, 2002) with meaning and form as the most important component of word knowledge, the majority of them explained that knowing a word requires knowledge of how it is used in a context. The students' somewhat contradictory standpoint about word knowledge was also shown in their choice of strategy for studying words. Despite the fact that most of them mentioned that to really know a word, you need to know how it is used contextually, they nevertheless reported that they primarily employ rather mechanical strategies when studying, implying a focus on memorising isolated language items. It was also made evident that only a few of the students interviewed connected word knowledge with long-term goals/future careers or particular situations where they believed that they would need a good knowledge of English (cf. Moir & Nation, 2002). Considering the importance of English in most social, educational and professional settings today, it was a bit surprising not to hear more of that in their answers.

A learner understanding word knowledge as contextual can be presumed to use more complex strategies when studying since the "what," the conceptualisation of a phenomenon, and the "how," the actual act of learning, are shown to be intertwined (Marton & Booth, 1997). This study showed a partly diverging result in this respect. This discrepancy seems to be connected to how vocabulary is tested in school. The students repeatedly mentioned that they are given words to study each week that are most often tested in the form of translating the words, most typically from Swedish into English, as separate language items without much consideration of context. It can thus be assumed that the students' primary choice of strategy is related to the way vocabulary knowledge is assessed and how vocabulary tests are constructed (cf. Benson & Lor, 1997; Marton, 1999; Moir & Nation, 2002; Ramsden, 2000). This was also shown in the students' preoccupation with translation in their answers on word knowledge. Schmitt (2008) argues that vocabulary tests in schools typically measure the number of words students have learned rather than focusing on how well the words are learned. This is of course likely to have an effect on the quality of learning. In their study of vocabulary learning strategies among Chinese students, Gu and Johnson (1996) conclude that strategies for learning words individually and out of context only have significance for vocabulary size and not for language proficiency.

The aim of this study was not to compare and measure the students' strategies for studying words against their learning outcome (see Moir & Nation, 2002 where such an approach is taken). The results however indicate that the students' choice of strategy has an effect on the learning outcome. The students who reported that they use more complex strategies when learning words explained, much in line with early phenomenographic studies (Marton & Säljö 1976; Svensson, 1977), that their method of learning made them remember the words for a longer time. See also Booth (1997) and Marton et al. (1997) for the discussion on surface approaches to learning and its correlation with surface learning outcomes.

The present study has shown the value of using phenomenography in second language learning research. The categories of descriptions emerging as a result of the interviews with the students constitute important knowledge for teachers to have if change of understanding is to occur. It has been shown that the way students approach vocabulary learning is closely connected to how words are tested in school, but also to previous experience of studying vocabulary. A phenomenographic study of learners' understanding of a particular phenomenon, in this case vocabulary learning, enables teachers to see vocabulary from a learner perspective (Lo, 2012) – a prerequisite for the improvement of teaching and students' learning. If teachers, for example, do not know that the majority of the students believe in a one-to-one correspondence between words across languages, as shown in this study, the issue is not likely to be addressed and problematised.

That said, the current research is not without limitations. The population sample of a phenomenographic study is often relatively small and there is a possibility that a larger number of categories could have emerged from a larger population sample, and a sample of students from a larger variety of schools. The categories found in a particular interview material can only be seen as representative and exhaustive in regard to the specific population investigated, and can therefore, in this case, only be seen as a telling indication of how Swedish secondary school students perceive and study vocabulary. The results are nevertheless indicative and reflect the conceptions of the group of students that participated in it, and as an extension the conceptions that hypothetical students with similar kind of background characteristics such as age, schooling and previous experiences, may hold (Marton, 1997).

This paper has focused on the understanding and experience of word knowledge and vocabulary learning from a student perspective. Further research into this area may be directed towards investigating teachers' understanding and experience of word knowledge and vocabulary consolidation strategies in order to see how they correlate with the result from this study. Another point of interest is the English vocabulary learned out of school in students' leisure time. As the usage of the Internet, where English is very much used as a lingua franca, is growing among young people in



particular, a lot of the learning of English is taking place outside school hours (Sundqvist & Olin-Scheller, 2013). It would thus be valuable to explore whether students perceive word knowledge and the learning of vocabulary in school and out of school in the same way.

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**Cathrine Norberg** is Associate professor of English at Luleå University of Technology, Sweden. Her main research interest is corpus linguistics with a focus on gender, and educationally related issues. She is currently involved in a pedagogical research project focusing on the relevance of lexis in textbooks used for young learners of English in Swedish primary schools.

**Anna Vikström** is Associate Professor in Science Education at Luleå University of Technology, Sweden. Her main research interest is teaching and learning science in school, with a special interest in learning studies and variation theory.

**Emma Palola** is lecturer in English and Education at Luleå university of Technology, Sweden. Her main research interest is second language education with a special interest in phenomenography.