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**THE ROLE AND EFFECTS OF HIGHER ORDER THINKING SKILLS IN
ENGLISH VOCABULARY INSTRUCTION IN NARVA GYMNASIUMS**

Bachelor's thesis

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Tööautori allkiri ja kuupäev

PREFACE

The Estonian National Curriculum for upper secondary schools clearly indicates a need to develop strong critical thinking skills for pupils at the gymnasium level as well as strong communicative skills which require a broad and deep knowledge of vocabulary. However, most English lessons in schools do not highlight critical thinking in vocabulary learning. Many English lessons require mostly lower order thinking skills, which only ask learners to state or recall information. It can be assumed that some teachers do not specifically work to develop pupils' thinking skills in the process of learning. Although incorporating critical thinking skills development into lesson plans is challenging and time-consuming, when teachers do so they meet the learning outcomes in the Estonian National Curriculum and help pupils to get high quality education.

The main purposes of this bachelor's thesis is to understand the role of vocabulary instruction in English language teaching and learning, to gain an understanding of critical thinking skills with an emphasis on higher order thinking skills, and to understand the extent that critical thinking skills are part of English language vocabulary teaching and learning.

The paper consists of the introduction, Chapter I, Chapter II and the conclusion. The introduction is divided into several sub-topics. It explains the importance of vocabulary learning, explores the concept of word learning with word learning strategies, provides a brief overview of the historical background of vocabulary instruction and gives attention to the connection between vocabulary instruction and critical thinking skills.

The first Chapter, which is the theoretical part of the bachelor's thesis, describes the theory of critical thinking skills and offers an explanation of higher order thinking skills, additionally it describes the Estonian National Curriculum for the upper secondary schools and its expectations towards pupils in Estonia in English as a foreign language learning. The second chapter of the thesis formulates research questions relevant to this thesis, involves the results of a questionnaire for teachers in the gymnasium level of English language as a second language. This questionnaire will conclude the theoretical part of the thesis and determine the role and effects of higher order thinking skills in English vocabulary instruction in Narva schools. The conclusion sums up the results of

the research with comments on limitations of the study and possible future research in this area.

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INTRODUCTION

The importance of vocabulary

Vocabulary learning is a vital part of foreign language learning. It is considered as a primary importance to a language learner and also central to language teaching. Vocabulary is defined as the cumulative number of words that are needed to communicate ideas and express the speakers' meaning (Alqahtani, 2015). Kulikova (2015) argues that vocabulary development the most challenging aspect of becoming proficient in a second or a foreign language because of the seriously extent of the task. Lack of vocabulary often prevents pupils from becoming proficient English as a second language readers, writers, and communicators. Many teachers at schools are not confident in practicing vocabulary teaching and sometimes are not informed how to start to form an instructional emphasis on word learning (Alqahtani, 2015).

Vocabulary development is a critical component of communicative language abilities. Thornbury (2002: 13) explains that learning words and expressions has a greater impact on English language learning than a strong focus on learning grammar. "Without establishing a strong base of vocabulary knowledge a student cannot communicate successfully. And without a knowledge of grammar pupils can communicate, although not effectively. But, without a good knowledge of vocabulary it is extremely difficult to communicate and beginning pupils often manage to communicate in English by using the accumulative effect of individual words" (Ferreira, 2007). Additionally, Thornbury (2002: 13) adds that for a large majority of learners the final purpose of studying is to be capable to communicate in a new language. Moreover, Asgari (2010) claims that vocabulary has been recognized as decisive to language use in which insufficient vocabulary knowledge of the learners led to difficulties in second language learning. Alqathani (2015) supports the importance of vocabulary argued that the main problem lies within acquiring vocabulary. Learners perceive vocabulary system as difficulty because unlike phonology and syntax, vocabulary does not have rules for learners to follow to evolve their awareness. In other words, it is not clear in second language vocabulary learning what rules apply or which vocabulary items should be learned first (Alqathani, 2015).

Words in language learning are utterly important because they perform many functions, such as the ability to exchange and share information. Additionally, words

play different roles in sentences, and these roles are explained by word-classes. These classes are nouns, pronouns, verbs, adjectives, adverbs, prepositions, conjunctions and determiner. In terms of meaning, there are two main groups which are called grammatical words and content words. Grammatical words are necessary for correct sentence formation, while content words carry lexical meaning (Thornbury, 2002: 3).

Beyond the grammatical and content distinctions, vocabulary is also divided into receptive vocabulary and productive vocabulary. According to Alqahtani (2015), receptive vocabulary includes words that learners can identify and understand when these words are used in context, but learners are not necessarily able to produce them. With this type of vocabulary, learners recognize when they see or meet a word in reading text, while they do not fluently use them in speaking and writing. Productive vocabulary refers to the words that the learners can understand, pronounce correctly, and write and speak constructively. Productive vocabulary includes what learners need for receptive vocabulary, in addition to having the capacity to speak or write at the suitable time (Alqahtani, 2015). Ferreira (2007) further explains that learners acquire receptive vocabulary first and then productive vocabulary. This is explained by the fact that during the process of vocabulary acquisition, pupils first become aware of the concept of a word, and then only later they are able to use it in context in appropriate situations in a natural way.

To understand a word means to know a great deal about this word. Kurjakovic (n.d.) claims that requiring pupils to look up words in dictionaries is not an effective learning technique because they cannot understand the words used in the definitions. This statement is proven by Thornbury (2002: 15), who said that to know a word means to know a word's *form* and *meaning*; learners need to know both how to form a word in specific context as well as the lexical meaning of the word. Ferreira (2007) confirms that vocabulary knowledge requires the *use* of the words in the corresponding context. Zhang (2016) explains that form consists of phonological and morphological information, while meaning includes semantic and syntactic information. However, Kulikova (2015) adds that to know a word means to know its sound, spelling, meaning, role, use and history. Word knowledge is highly needed to be developed skill.

Historical teaching approaches

When language teachers focus on effective vocabulary instruction, they in effect help pupils develop their communication skills. However, the focus of English language teaching has not always been on vocabulary development, as teaching approaches have changed during the past century. The following six teaching approaches have had the most significant impact on modern English language teaching and learning. These are grammatical translation approach, reform approach, direct method, reading approach, audiolingualism, communicative language teaching (Zimmerman, 2013: 290). All these approaches have unique goals and focus on different skills. For example, the grammatical-translation approach was developed to help pupils to be prepared for the standardized exams. When learning through this approach, the main focus and practice was on translating from the target language into the mother tongue. Another approach that was significant in the history of English language teaching was the reading approach. Through a lot of reading, pupils increased their reading comprehension, vocabulary and reading score. The changes in approaches to teaching words were related to word learning process that prepared pupils for the vocabulary instruction. (Zimmerman, 2013: 290). These three approaches mainly focused on receptive vocabulary skills development.

Different than the grammatical translation approach and reading approach, the reform approach, the direct method, audiolingualism and communicative language teaching focused mostly on developing oral communication skills. In spite of this similarity, there were some differences between these approaches. The reform approach's goal was phonetic. The focus was on whole sentences, rather than single words. These words were simple, practical and dull to not distract learners from the main goal of this method. The emphasis of the direct method was speaking only the foreign language. This method primary consisted of using words about everyday items. The main focus of audiolingualism method was based on syntax and language structure. This method was based on habit formation, drills, feedback and memorizing (Zimmerman, 2013: 290). All these approaches are useful for teachers to help pupils to develop oral communication skills and abilities.

Vocabulary teaching strategies

One obvious vocabulary teaching strategy is memorization. Teachers employ a number of different strategies in order to help students to develop vocabulary skills. Kallayausute (2011) suggested the definition of vocabulary learning strategies, these are techniques that teachers can suggest to learners to use to assist to guess and comprehend the meaning of words proficiently.

Thornbury (2002) believes that memorization is an inherent part of vocabulary learning that occurs due to the systems of memory: short-term storage, working memory and long-term memory. The short-term storage is the brain's capacity to hold a limited number of items of information for periods of time up to a few seconds. Short-term memorization is not useful for learners to enrich their vocabulary because learners do not retain the words. Khoii and Sharififar (2013: 201) add that all incoming information is organized and processed in the working memory by interaction with knowledge in the long-term memory. All the systems are interdependent. Material remains in working memory for about twenty seconds. Long term memory can be thought of a kind of filing system. Long-term memory has an enormous capacity and its contents are durable over time (Thornbury, 2002: 23). "Memory strategies involve using traditional mnemonic techniques, to organize or transform the mental information, to make it more memorable, such as making a connection between the new word and previously learnt knowledge to help learners learn faster" (Boroushaki, 2015). Inevitably, vocabulary learning involves memorization as an important component.

In order to utilize memorization, teachers need to employ specific strategies. Boroushaki (2015) claims that most language learning strategies are employed in performing vocabulary learning tasks. Kallayausute (2011) classifies them as determination strategies, social strategies, cognitive strategies and metacognitive strategies. Determination strategies provide an opportunity for learners to guess the meaning from the context. Social strategies may include asking teachers or other students the synonyms or paraphrasing of the word. Cognitive strategies involve repetition to learn a new vocabulary. Finally, metacognitive strategies help learners to evaluate and control their knowledge. Boroushaki (2015) states in addition to repetition, cognitive strategies include translation, imagery, elaboration, inferencing, deduction, and contextualization. Boroushaki (2015) confirms that metacognitive strategies are evaluating the learning process as well as its outcome and adds that these strategies also

entail planning, monitoring of one's performance. Boroushaki (2015) found affective strategies are also effective to use them while learning a language. Affective strategies are used for guiding attitudes and emotions, for example lowering anxiety levels and encourage yourself.

In addition to a variety of teaching strategies, teachers can also make use of intentional and incidental learning opportunities. Intentional learning refers to study of words, while incidental learning happens when learner pick up on words, while attention is on language use (Zimmerman, 2013). Both of these types of learning are necessary and useful for learners because they help learners to memorize vocabulary.

Vocabulary learning and critical thinking

Teachers' and pupils' cognition of vocabulary approaches and techniques leads to using them in the language learning. Different approaches develop different skills, as was mentioned, some of them were based on oral communication skills development, cognitive skills development and, problem-solving skills (Zimmerman, 2013; Thanasoulas, 2002). These approaches imply critical thinking. Using critical thinking in language learning helps learners make decisions and form thoughts regarding the strategies and techniques they want to employ in learning language.

It has been demonstrated that critical thinking and vocabulary instruction are closely connected. Sharafi-Nejad (2016) found that Mirzai (2008) investigated the relationship between critical thinking and lexical inferencing of Iranian English as a foreign language learners. From the obtained results, those pupils who have higher critical thinking ability outperform better than those who have lower critical one in lexical inferencing. According to Sharafi-Nejad (2016), the cognitive approaches are highly effective in language teaching, which indicates a beneficial relationship between thinking and language. The relationship between critical thinking and various areas of language has been explored by a number of researchers. Sharafi-Nejad (2016) conducted a practical study showed these participants who received formal instruction based on the critical thinking strategies retained more vocabulary for longer periods of time.

Other researches also write about the value of critical thinking skills in vocabulary development. Vdovina and Gaibisso (2013) believe that by thinking critically and seeing things from different angles, pupils become more open-

mindful and empathetic, better communicators, more inclined to collaborate with their peers and discuss their ideas. Thinking more about pupils as individuals, it is possible to say that critical thinking helps them develop their creative side by allowing their thinking process to run more freely and explore more possibilities. It will make them better decision-makers, and with practice, also help them save time to make decisions.

This section has defined vocabulary offered a short overview of teaching approaches, and discussed vocabulary, teaching strategies. A connection was made between vocabulary instruction and critical thinking skills. Many researches proved that critical thinking skills are valuable skills to develop for learners.

CHAPTER I

This chapter offers a description of critical thinking arguments for including critical thinking in a learning process, an explanation of Higher Order Thinking Skills (HOTS) and Bloom's Taxonomy, and describes the Estonian National Curriculum for the upper secondary schools and its expectations towards pupils in Estonia in English as a foreign language learning.

1.1 Teaching critical thinking skills

Critical thinking is a complex cognitive concept, some of the definitions refer to the process of thinking; however, others include more details. Doyle (2019) explains critical thinking as the ability to analyze the information objectively and to make reasonable judgements. The notion of critical thinking is emphasized by philosophers, whereas the notion of critical thinking skills is highlighted by psychologists. Additionally, critical thinking is characterized by Pring (2010: 321) as a way to explain the decision making, conduct, and belief of individuals precisely and logically. This view is supported by Fahim (2012), who defined critical thinking as a cognitive activity that is connected with the use of the mind. This definition offers a close relationship between critical thinking and learning.

Many existing definitions examine the term critical thinking according to the meaning of *critical* and *thinking*; however, they fail to propose what critical thinking is. The adjective *critical* is usually described as reasonable or reflective. The noun *thinking* is related to some kind of process (Kovic, 2016: p.6). The descriptions of critical thinking about solving problems, making judgements and decisions cannot alone serve as a definition. The description of critical thinking skills is explained by the fact that the term tends to be used repeatedly without actually reflecting on its true meaning (Kovic, 2016). To support this idea, Vdovina and Gaibisso (2013) defined critical thinking as "self-guided, self-disciplined thinking which attempts to reason at the highest in a fair-minded way. People who think critically consistently attempt to live rationally, reasonably, emphatically".

The individual who thinks critically:

- *“organizes thoughts and articulates them concisely and coherently;*
- *suspends judgments in the absence of sufficient evidence to support a decision;*

- *attempts to anticipate the probable consequences of alternative actions;*
- *can learn independently and has an abiding interest in doing so; and*
- *applies problem-solving technique” (Vdovina and Gaibisso, 2013).*

Vdovina and Gaibisso (2013) claim that critical thinking development can take place if in the process of learning, teachers include exercises and tasks such as giving reasons and evaluating evidence, recognizing contradictions, and distinguishing relevant from irrelevant facts. Critical thinking requires deliberate teaching and consistent development. One lesson is not sufficient to achieve the complex purpose of developing critical thinking. Lessons, units, and a whole curriculum should include critical thinking objectives on a systematic basis, which creates continuity.

In their discussion of critical thinking, Vdovina and Gaibisso (2013) claim that critical thinking is the most essential characteristic for developing educated citizens.

“The critical habit of thought, if usual in society, will pervade all its mores, because it is a way of taking up the problems of life. [People] can hold things as possible or probable in all degrees, without certainty and without pain. [People] can wait for evidence and weigh evidence, uninfluenced by the emphasis or confidence with which assertions are made on one side or the other. [People] can resist appeals to their dearest prejudices and all kinds of cajolery” (Vdovina, 2013 and Gaibisso, 2013).

Critical thinking is a learned skill, which requires the use of higher- order thinking skills. Husband (2006) provides an example- “define a problem or question, form a hypothesis, collect data, analyze the data, and draw conclusions and interpretations”. Low-order thinking, such as general, common tasks are not instances of critical thinking (Husband, 2006).

Many authors offer suggestions for teaching critical thinking skills. Husband (2006) states that pupils can improve their thinking skills as a result of appropriate instruction. The ideal purpose in education is to teach critical thinking skills in a way that will allow these skills to transfer into a variety of practical situations in the work place. The following techniques can help teacher expand their critical thinking teaching methods. Teachers can provide active group learning opportunities and utilize student-generated and open- ended questions (Husband, 2006). Additionally, teachers can provide an opportunity for pupils to connect acquired skills to the situations and experiences and to evaluate the given information critically and promote decision-making and problem solving (Husband, 2006).

1.2 Higher Order Thinking Skills and Lower Order Thinking Skills

Higher order thinking skills (HOTS) is a process of thinking. Watson (2019) explains that the concept of HOTS is discussed often and is used extensively in the U.S.A. Critical thinking skills are distinguished from low-order learning outcomes, such as those attained by rote memorization. Budsankom (2015) discloses HOTS as "a thinking process that includes complex manipulations and needs to be a foundation on various skills such as analysis, synthesis, comparison, inference, interpretation, assessment, and inductive and deductive reasoning to be employed to solve unfamiliar problems." The other definition of higher order thinking skills according to Budsankom (2015) is the ability and expertise to find answers or achieve target goals through various forms of thinking processes.

Bloom's Taxonomy is a classification system of the different skills. Bloom's Taxonomy was created in order to promote higher forms of thinking in education, rather than lower order thinking skills. Heick (2018) views Bloom's taxonomy as a hierarchical ordering of cognitive skills that can help teachers teach and pupils learn. Heick (2018) describes that Bloom's taxonomy was published as a kind of classification of learning outcomes and objectives that have been used for everything from framing digital tasks and evaluating apps to writing questions and assessments.

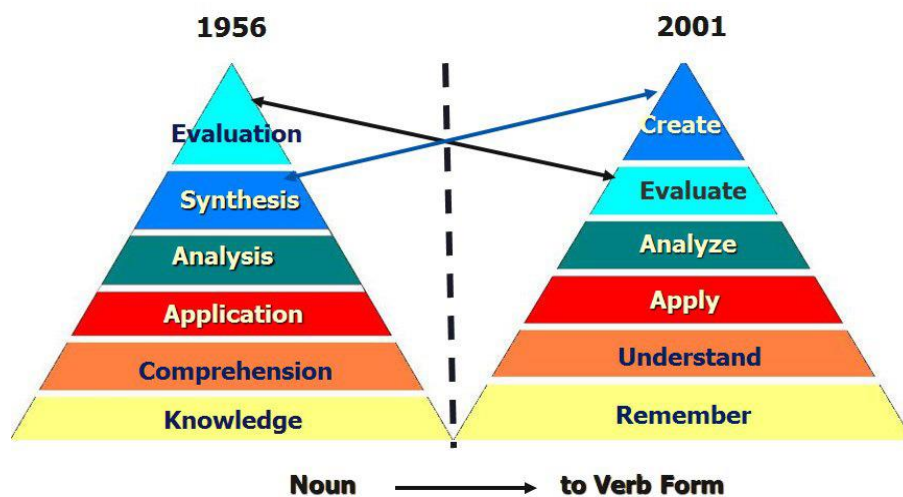


Figure 1. Bloom's Taxonomy, 1956 and Bloom's Taxonomy, 2011

HOTS are classified in Bloom's Taxonomy. Teachers can help pupils develop different skills through practice based on Bloom's Taxonomy. Pupils move from Lower Order Thinking Skills (LOTS) to HOTS (Watson, 2019). The original Bloom's Taxonomy

was created in 1956 and it was recreated in 2011. The original Bloom's taxonomy consists of knowledge, comprehension, application, analysis, synthesis, and evaluation. Heick (2018) compares it with the renewed taxonomy that was created in 2011 by Lorin Anderson and David Krathwohl. The most significant change was the removal of "synthesis" and the addition of "creation" as the highest-level of Bloom's Taxonomy (Heick, 2018).

According to Heick (2018) the first level is to remember. Lasley (n.d.) adds that this level implies the ability to recognize and recall information. Heick (2018) indicates that the second level is to understand. Lasley (n.d.) comments that this level is to arrange and organise information. Lasley (n.d.) finds that the application level begins to use abstractions to describe particular ideas or situations. The fourth level is intended to analyze information. (Heick, 2018). Lasley (n.d.) comments, that at this level begins to examine elements and the relationships between elements or the operating organizational principles undergirding an idea. The next level is synthesis and Lasley (n.d.) thinks that it consists of conceptual elements or parts together in some new plan of operation or development of abstract relationships. The last level is to understand the complexity of ideas to recognize how concepts and facts are either logically consistent or illogically developed (Lasley, n.d.). According to Heick (2018) the primary difference between the 1956 and 2011 versions is that in the renewed taxonomy, the first four levels are the same, but the fifth level is now referred to as to evaluate and to judge some information. The last one is creating that implies to create new ideas on old information (Heick, 2018).

Nur (2014) found that the lower order thinking questions are more commonly found in test formats or the exercises. This information is explained by the fact that these kind of questions are the most familiar for pupils and teachers, the easiest for the pupils to answer, and the easiest for teachers to write. In contrast, the higher level questions may be rarely found because they often require the teachers to wait a considerable amount of time for the pupils to answer those questions.

Budsaknom (2015) states that the pupils with HOTS are able to create new knowledge and make appropriate and logical decisions. Information and technology advancement greatly influences the current society. They also suggested that the definition of HOTS is the ability and expertly find answers or achieve target goals

through various forms of thinking processes. Budsaknom (2015) claims that there are many factors affecting HOTS, such as classroom environment, family characteristic, psychological characteristic, and intelligence. It is necessary for pupils to learn and practice this ability in order to acquire answers, to make decisions, and to solve problems.

1.3 Estonian National Curriculum for the upper secondary schools

The National Curriculum for the upper secondary school in Estonia is one of the main documents for schools and gymnasiums. The Estonian National Curriculum for upper secondary schools determines the topics, skills, and goals that teachers must teach and meet during their work. This document serves as a planning guide for teachers as they prepare their work, select materials and resources, and strive to achieve outcomes.

The Estonian National Curriculum clearly states a need to strengthen students' critical thinking skills and to expand their vocabulary development. Specifically, the document states that the B2 level, students must be able to use a foreign language independently. Furthermore, the document specifies that the aim of language instruction is to expand students' command of language. B2 level students must be able to compare and contrast foreign culture to the students' home culture, and to learn to avoid prejudices towards unfamiliar people. In order to meet these outcomes and goals, students need highly developed critical thinking skills as well as a significant vocabulary.

The Estonian National Curriculum's aim concerning language policy is to achieve command of at least two foreign languages at the level of independent language user. To achieve this aim, pupils need a large vocabulary and developed critical thinking skills in order to converse and to solve problems.

Foreign language skills support the ability to understand and value the multicultural world and expand opportunities for self-expression through various linguistic and nonlinguistic means. To achieve this goal, pupils can use many opportunities, for example evaluate and analyze cultures respectfully in a developmentally appropriate environment. Vocabulary knowledge leads to more precise and articulate self-expression.

Together with communication competences, students develop the skills to compare the similarities and differences between their own and foreign cultures and to

understand and value the specific features of other cultures and languages, to be tolerant and avoid a prejudiced attitude towards the unfamiliar. Lasley (n.d.: p.12) states that pupils examine elements and the relationships between elements. In order to do this, pupils need ample experience to develop the critical thinking skills in addition to a sophisticated vocabulary. As Vdovina and Gasibo (2013: p.9) mentioned, people who think critically and has had independent reading and listening skills, as the National Curriculum proposes.

The Estonian National Curriculum promotes pupils to be tolerant and avoid prejudiced attitude. In order for our students to develop a sense of tolerate they need to be able to understand complex ideas and to be able to discern facts from fiction (Lasley, n.d.: p. 12).

According to The National Curriculum, pupils must converse spontaneously and fluently with native speakers, explain their viewpoints, to compile and present reviews and reports and to develop an argumentative skills. All these requirments can be achieved only by pupils who think critically.

CHAPTER II

2.1 Description of the survey

The present research aims to answer the following research questions in order to prove the connection between critical thinking and vocabulary learning:

1. Do Narva Gymnasium teachers perceive critical thinking as an important component of English language vocabulary development?
2. To what extent is Bloom's Taxonomy used when teaching vocabulary?
3. Is the current level of vocabulary development sufficient for gymnasium pupils?

The aim of the empirical part of the thesis is to discover Narva gymnasium teachers attitude to the importance of vocabulary learning and it's connection between critical thinking skills. Firstly, it is necessary to find teachers' opinions towards the opportunities for vocabulary developing. Additionally, the aim of this chapter is to discover teacher's preferences in order to teach vocabulary in Narva schools. In order to achieve these aims a survey was conducted.

2.2 Methodology and Sample

The methodology chosen for this study was a sample of convenience. This methodology allowed me to distribute a survey to Narva Gymnasium teachers. The survey was in the form of a questionnaire (Appendix 1) which was created by using Google Forms. The electronic form allows one to collect data via the Internet from different locations. The questionnaire consisted of introductory information, six main statements, where respondents indicated whether they agreed or not, and two open-ended questions. The teachers were asked to evaluate their attitude to the statements from one to five by Likert scale, where 5 is strongly agree; 4 is agree; 3 is undecided; 2 is disagree; and 1 is strongly disagree.

The sample of this study was teachers at the gymnasium stage in Narva schools. The participants were selected based on the age of the pupils and the subjects they teach. These are Narva Kreenholmi Gymnasium, Narva Vanalinna State School and Narva Pähklimäe Gymnasium. The schools were chosen for the survey for several reasons. Firstly, at the Gymnasium level, students are required to achieve B2 level by the end of the 12th grade and presumably there is great deal of focus on English language instruction. Secondly, English is intended for study as a foreign language for

every pupil. Thirdly, every Gymnasium has different strategies and approaches in order to teach pupils. In total twelve teachers received a questionnaire, but only nine answers were collected online.

I contacted the teachers by email via the head teachers. In my correspondence, I explained that I am a Narva college student studying for my bachelor's degree and that I am required to write a research-based thesis. I guaranteed anonymity and confidentiality of personal data of teachers, saying that no names would appear in the paper.

2.3 Results

As was already discovered, vocabulary learning is an essential part of language learning and critical thinking skills can be used in order to learn vocabulary. This survey was intended to confirm or deny if teachers in Narva Gymnasiums teach pupils to use critical thinking skills in vocabulary development.

The first question of the survey is connected with vocabulary learning development at the Gymnasium level. To calculate the results teachers evaluated vocabulary development differently. Most of the teachers (44,4 %) consider vocabulary development to four points (agree). Two teachers (22,2 %) evaluated vocabulary as very developed component in Narva gymnasiums (to five points). Other three teachers gave 11.1% to each of the remained evaluations (1,2,3).

Evaluation	Numbers of teachers	Percentage
1- strongly disagree	1	11.1%
2- disagree	1	11.1%
3- undecided	1	11.1%
4- agree	4	44.4%
5- strongly agree	2	22.2%

Table 1. vocabulary learning development at the Gymnasium level

The second question was related to the sufficiency of the current level of vocabulary development. The most popular answer (44.4%) had an average result of three. 33.3% of teachers agreed with the statement, while one strongly agreed. One teacher also strongly disagreed with the statement.

Evaluation	Numbers of teachers	Percentage
1- strongly disagree	1	11.1%
2- disagree	0	0%
3- undecided	4	44.4%
4- agree	3	33.3%
5- strongly agree	1	11.1%

Table 2. The sufficiency of the current level of vocabulary development

The third statement was intended to understand teachers' attitude to the opportunities of developing vocabulary in the gymnasium offered by the Estonian National Curriculum. Six teachers agreed that the National Curriculum offers guidance for development gymnasium level pupils' vocabulary. Only one teacher was undecided and two more teachers are disagreed with this statement.

Evaluation	Numbers of teachers	Percentage
1- strongly disagree	0	0%
2- disagree	2	22.2%
3- undecided	1	11.1%
4- agree	6	66.6%
5- strongly agree	0	0%

Table 3. The National Curriculum offers guidance for development gymnasium level pupils' vocabulary

The next statements were asked in order to find out teachers' personal preferences in vocabulary learning. The fourth statement inquired about teachers' experience in creating opportunities to use critical thinking while learning vocabulary. Teachers' answers were absolutely different. The majority of teachers strongly agreed with the statement (44.4%) and one teacher agreed. One teacher was undecided and three teachers absolutely disagreed.

Evaluation	Numbers of teachers	Percentage
1- strongly disagree	3	33.3%

2- disagree	0	0%
3- undecided	1	11.1%
4- agree	1	11.1%
5- stongly agree	4	44.4%

Table 4. Teachers' experience in creating opportunities to use critical thinking, while learning vocabulary

The fifth statement of the questionnaire was open-ended, it requires teachers' explanations about answering on a previous question. How teachers create opportunities for pupils to develop their critical thinking skills in vocabulary learning.

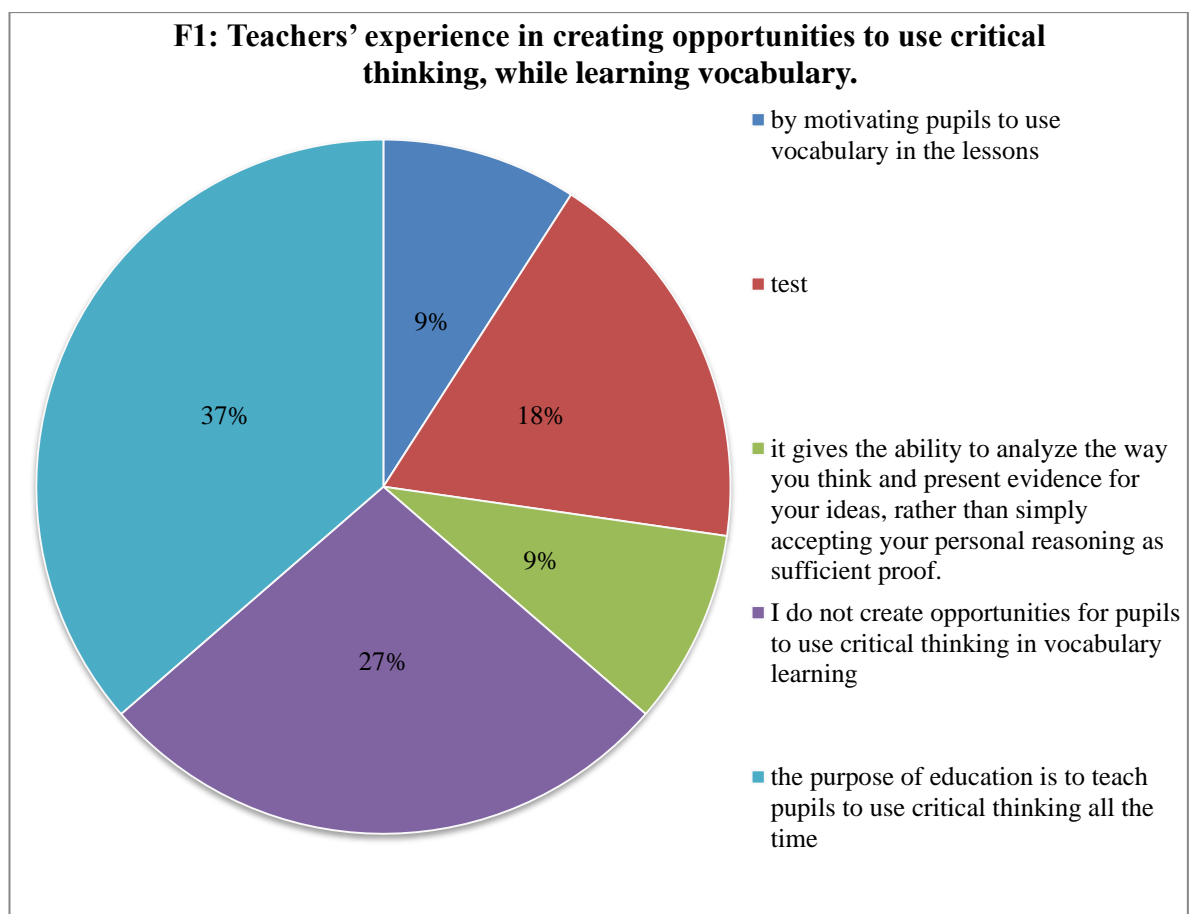


Figure 1. Teacher's experience in creating opportunities to use critical thinking, while learning vocabulary

The sixth question asked the respondents to select from one of the following options:

- I use Bloom's Taxonomy to plan my English language vocabulary lessons.

- I use Bloom's Taxonomy to plan my vocabulary instruction.
- I use Bloom's Taxonomy to plan lessons about vocabulary.
- I use Bloom's Taxonomy when planning lessons that include vocabulary.
- I do not use Bloom's Taxonomy

Three teachers use indicated that they use Bloom's Taxonomy to plan their English language vocabulary lessons. Four teachers do not use Bloom's Taxonomy, one teacher uses Bloom's Taxonomy to plan her vocabulary instruction and one teacher uses Bloom's Taxonomy to plan lessons about vocabulary.

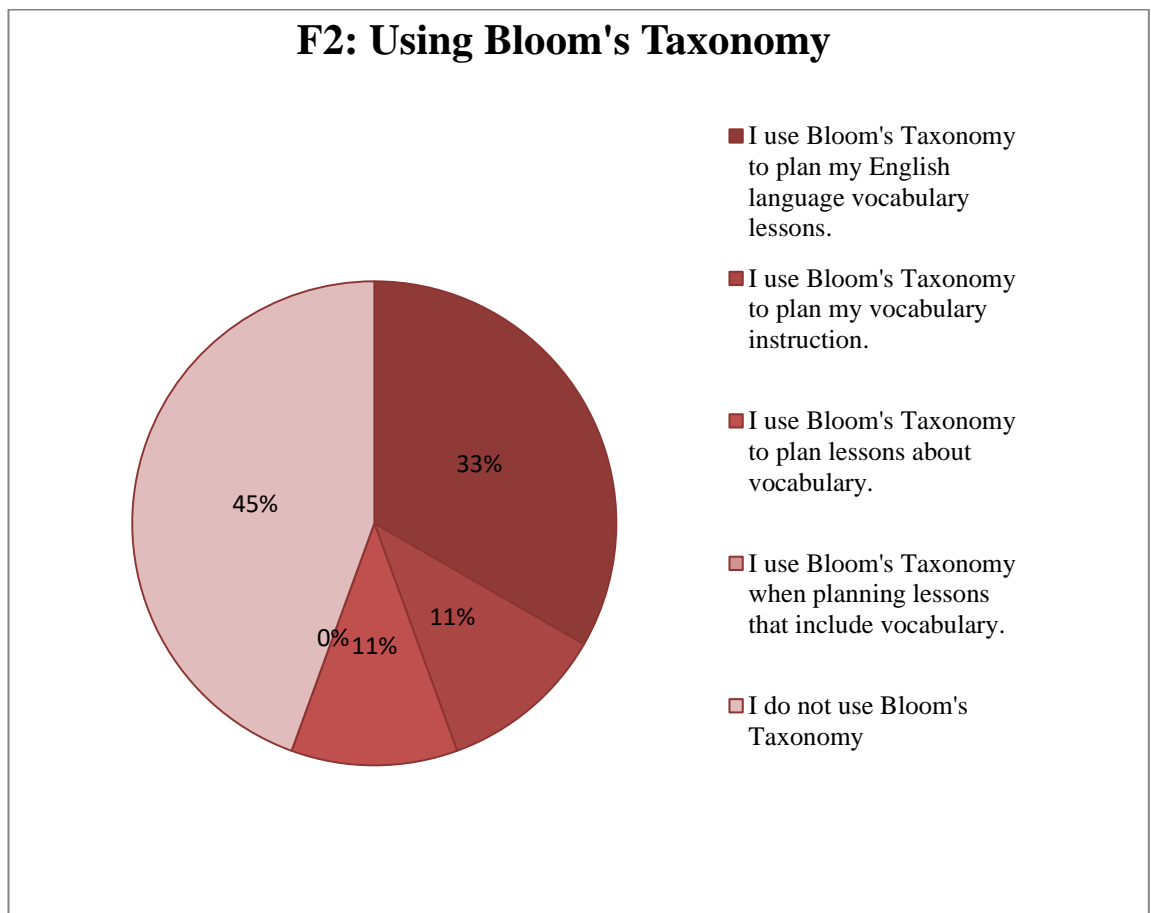


Figure 2. Using Bloom's Taxonomy by the teachers of Narva Gymnasiums

The last statement was inquiring about the effectiveness of using critical thinking and Bloom's Taxonomy in vocabulary teaching. Four teachers agreed with this statement, while two teachers strongly agreed; however, two teachers strongly disagreed and one teacher was undecided.

Evaluation	Numbers of teachers	Percentage
1- strongly disagree	2	22.2%
2- disagree	0	0%
3- undecided	1	11.1%
4- agree	4	44.4%
5- strongly agree	2	22.2%

Table 5. The effectiveness of using critical thinking and Bloom's Taxonomy in vocabulary teaching

2.4 Research conclusion

The aim of the research was to investigate if teachers in Narva Gymnasiums teach pupils to use critical thinking skills in vocabulary development. According to the responses of the questionnaire, the majority of the teachers' responses indicate that critical thinking is highly developed at the Gymnasium level. The research has shown that most teachers are undecided if the current level of vocabulary development is sufficient for gymnasium level pupils. However, some of the teachers think that the current level of vocabulary development is sufficient for gymnasium pupils. According to the teachers' responses, the Estonian National Curriculum offers guidance for the development of gymnasium level pupils' vocabulary, but only six teachers think this way, other three teachers assumed that the Estonian National Curriculum does not offer guidance for development gymnasium level pupils' vocabulary. An important finding to emerge in this study is that most teachers in Narva gymnasiums create opportunities to develop critical thinking skills while learning vocabulary. Mostly, teachers from the Gymnasiums do not use Bloom's Taxonomy, but consider that critical thinking and Bloom's Taxonomy are effective in vocabulary learning.

In conclusion it can be said that the responses of the questionnaire were absolutely different and a research conclusion is mostly based on the majority of Narva gymnasium teachers' responses.

CONCLUSION

To sum up all of the results of the current research, a general conclusion has to be made. As was already discovered, one of the most important skills of language learning in vocabulary instruction. In order to expand vocabulary development teachers need to develop pupils' critical thinking skills.

The main purpose of the present research was to achieve the following aims: to understand the role of vocabulary instruction in English language teaching and learning, to gain an understanding of critical thinking skills with an emphasis on higher order thinking skills and to understand the extent that critical thinking skills are part of English language vocabulary teaching and learning. The theoretical part reviewed the theory of critical thinking skills and an explanation of higher order thinking skills. The practical part of the research includes an overview of an empirical research. The main reason of this research was to find out Narva gymnasium teachers attitude to the importance of vocabulary learning and it's connection between critical thinking skills.

Several limitations need to be acknowledged. First of all, the survey was conducted with only small sample size, with only with nine teachers from three gymnasiums there is not enough data to make a general conclusion. Secondly, it can be assumed that factors such as time of year, or the focus of the lesson or semester may have had an influence on teachers' responses.

The results indicated that vocabulary plays an important role in foreign language learning. To develop and improve English language abilities and knowledge pupils need to know words and to understand them. Vocabulary learning is closely related to critical thinking skills. Additionally, the Estonian National Curriculum states a need to strengthen students critical thinking skills and to expand their vocabulary development. The empirical part of the thesis showed that the majority of teachers from three Narva Gymnasiums try to connect vocabulary instruction with critical thinking skills by using different strategies and methods. Almost every teacher from the Narva Gymnasiums consider critical thinking as an essential component for vocabulary development.

More research is needed to better understand, for example to discover the reasons why Narva gymnasium teachers do not use Bloom's Taxonomy. Other suggestion of a research is to find if teachers of Narva gymnasium trained in Bloom's

Taxonomy. The third example for a potential, future research is to find out what professional development opportunities for teachers that exist in Narva regarding teaching critical thinking skills.

In this way, it can be said that all of the aims of the thesis were achieved. However, the hypothesis of the thesis that teachers from Narva Gymnasiums do not develop pupils' critical thinking skills is not fully proven. From the results of the questionnaire, is clear that most teachers develop critical thinking skills differently, but they do not use Bloom's taxonomy.

SUMMARY IN ESTONIAN

Eesti gümnaasiumide riiklik õppekava näitab selgelt vajadust arendada tugevaid kriitilise mõtlemise oskusi õpilastele gümnaasiumi tasandil ning tugevaid kommunikatiivseid oskusi, mis nõuavad laia ja sügavat sõnavara tundmist. Kuid enamik inglise keele õppetunde koolides ei toeta sõnavara kriitilist mõtlemist õppimisel.

Bakalaurusetöö teema on „KÕRGEMA ASTME MÕTLEMISE OSKUSTE ROLL JA MÕJU INGLISE KEELE SÕNAVARAÕPETUSES NARVA KOOLIS”. Käesoleva töö eesmärk on mõista sõnavara õpetamise rolli inglise keele õpetamisel ja õppimisel, omandada kriitilise mõtlemise oskuste mõistmist, süvenedes kõrgema järjekorra mõtlemise oskustesse ja mõista, mil määral on kriitilise mõtlemise oskused osa inglise keele sõnavara õpetamisest ja õppimisest.

Töö autor püüab vastata kolmele uurimusküsimusele:

1. Kas Narva Gümnaasiumi õpetajad tajuvad kriitilist mõtlemist kui inglise keele sõnavara arengu olulist komponenti?
2. Mil määral kasutatakse Bloomi taksonoomiat sõnavara õpetamisel?
3. Kas gümnaasiumiõpilastele piisab praegusest sõnavara arengust?

Bakalaureusetöö on jaotatud kolmeks osaks. Töö koosneb sissejuhatusest, kahest peatükist ja kokkuvõttest. Sissejuhatus selgitab sõnavara õppimise tähtsust, uurib sõnaõppe mõistet sõnavara õppestrateegiatega, annab lühikese ülevaate sõnavara õpetamise ajaloolisest taustast ja pöörab tähelepanu sõnavaraõppe ja kriitilise mõtlemise oskuste vahelisele seosele.

Esimeses peatükis, mis on samas ka teoreetiline, on kirjeldatud kriitilise mõtlemise oskuste teooriat ja on pakutud selgitust kõrgema astme mõtlemise oskuste kohta.

Teises peatükis on esile toodud uuring, mis koosneb küsitlusest, tasemetööst ning saadud tulemuste analüüsist. Küsitluse ja tasemetöö abil saadud tulemuste analüüs näitab, et Narva gümnaasiumi õpetajate jaoks on oluline kriitilise mõtlemise arendamine lapsel selleks, et sõnavara õppida. Bloomi taksonoomiat sõnavara õpetamisel Narva Gümnaasiumis ei kasutata ja õpetajate jaoks on praegusest sõnavara arengust üldiselt Narva Gümnaasiumi õpilastele piisav.

Kokkuvõttes antakse ülevaade terve töö eesmärkidest, töö tulemustest. On kirjeldatud piiranguid ja ettepanekuid tulevaste teadusuuringute jaoks. Kokkuvõttes kommenteeritakse ka hüpoteesi.

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APPENDICES

Appendix 1

Questionnaire

The following questionnaire is created to find out the teachers attitude towards the teacher's attitude to the connection between vocabulary instructions and critical thinkingskills. The questionnaire consists of six statements. For selecting statements is used Likert scale.

1. Vocabulary learning is highly developed at the Gymnasium level.
2. The current level of vocabulary development is sufficient for gymnasium pupils.
3. The National Curriculum offers guidance for development gymnasium level pupils' vocabulary.
4. I create opportunities for my pupils to use critical thinking while learning vocabulary.
5. Explanations of the previous answer.
6. I use Bloom's Taxonomy to:
 - plan my English language vocabulary lessons
 - plan my vocabulary instruction
 - plan lessons about vocabulary
 - when planning lessons that include vocabulary
 - I do not use Bloom's Taxonomy
7. Explanations on the previous answer.
8. It is effective to use critical thinking and Bloom's Taxonomy in vocabulary teaching.

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