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**TEACHING ENGLISH SPELLING IN PRIMARY SCHOOL: PHONETIC, RULE-
BASED, VISUAL AND MORPHEMIC STRATEGIES**

Master's thesis

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PREFACE

Spelling and orthography of the English language play an important role in acquiring English language literacy, hence teaching how to write words correctly is one of the most important aspects of learning the English language.

Spelling is “the correct way of writing a word” (Macmillan Online Dictionary 2011). It is one of the most difficult areas in studying English not only for foreign learners but also for native speakers. When students learn English they face the challenge of spelling. The basis of spelling lay at primary school; it is an essential skill that students must master and develop during their studying. It is a real task for teacher how to teach pupils to spell correctly, because it is the base of language learning. For this purpose different techniques and strategies such as phonetic, rule-based, visual and morphemic strategies were worked out, which can help to improve and to develop spelling skills. It is important to understand how these strategies work and influence on students’ spelling in primary school, and also whether they are helpful or not.

The present Master’s thesis studies phonetic, rule-based, visual and morphemic strategies as helpful ways of teaching English spelling in primary school. The aim of the thesis is to reveal to what extent phonetic, rule-based, visual and morphemic strategies might influence on students’ spelling in primary school and to analyse these techniques.

The Master's thesis is divided into the Introduction, two chapters, the Conclusion, the summary of the research in Estonian and the list of references. The introduction gives a brief overview of the spelling history and methods, and also the questions that are always studied by researchers of English spelling. The first chapter provides an analysis of spelling difficulties and strategies used for teaching spelling. The second chapter focuses on interpreting of practical outcomes of the research and provides the analysis of sets of exercises improving spelling. It presents a teaching spelling experiment conducted in *Kohtla-Järve Kesklinna* primary school and its outcomes. The conclusion summarises the research and comments on its hypothesis.

INTRODUCTION

According to *Merriam-Webster Online Dictionary* (2013: para 1) spelling is “the forming of words from letters according to accepted usage”. The history of spelling goes back to the 11th century when English spelling was erratic. After that, during the period of 400 years English spelling became chaotic. The history of spelling starts with the missionaries who tried to write in English using the Roman alphabet. The spelling of Old English was mostly phonetic: all letters were pronounced. Then, the French arrived who brought into the language new forms and changed the old ones. For instance, “cwen” became “queen”, “mys” became “mice”. Besides that, the English language had a lot of different variants of pronunciation. Then, there were other influences on the English spelling system, so in the 16th century spelling reformers introduced the idea of using etymology – an explanation of the word’s origin. The academic dictionaries of later years, such as *Johnson’s* and *Webster’s*, did their best to standardise spelling, but with only limited success. All dictionaries just reflect popular choices of words. Moreover, the Internet also influences spelling (The story of English spelling 2013: para 2-7). Among researchers who have been interested in the origin of English spelling are Tennyson (1845), Lubbock (1908), Carnegie (1915), Dewey (1886), Wells (20th century), Kiisk (2008).

In most instances, English words are very difficult to convert from spoken sounds to corresponding written forms. Many people, especially children for whom English is a foreign language have problems with English spelling. It is very complicated. Hence, numerous questions are asked by users of English and researchers, for example, “Why is English spelling so difficult?”, “Why the letter ‘k’ is not pronounced in the word “know”?”, “How to teach the correct spelling?”, “What are the best methods of teaching English spelling?”, etc. According to Allan Kiisk (2008) the main reason of why English spelling is so difficult is that more than half of the letters in the English alphabet have multiple sounds and some letters are used for no sound at all.

Nowadays, English has become a global language with millions of people all over the world learning it. Dictionaries support learning by giving guidance with spelling and pronunciation of English words, but English spelling remains an issue for many language learners, especially for children. Teachers face this problem in primary school as well as in secondary. Students should be given regular guidance by the teacher. The latter should check up students’ written work and spoken language frequently so as to improve their literacy steadily. In order to understand how to spell a word students have to use two kinds of knowledge. The first is phonological and the second is morphological. The phonological

type includes the knowledge about regular correspondences between sounds and letters. The morphological type reveals what students know about the spelling of the morphemes that a word contains.

Nowadays, there are many various methods, rules, strategies, and ways that can help teachers teach students to spell correctly. These methods and approaches can vary depending on the level of knowledge and exercises that teachers use. The widely used categories of strategies are the following: phonetic, rule-based, visual and morphemic. The phonemic approach implicates that understanding the relationship between letters and their corresponding sounds is an important skill for a successful reading and spelling performance. The phonetic strategy is a strategy when a student listens to each sound in a word and then tries to represent these sounds with a letter or letter combination. Teachers teach this spelling strategy by teaching students basic phonograms. Many English words have regular phonemic patterns. These patterns help students spell these words alone using the base of their letter-sound relationships. For instance, the word “cat” has three sounds /c/, /a/, and /t/ and students do not have any difficulties to spell this word correctly because these three letters correspond to each of the sounds (c, a, and t) (Spelling approaches 2013: para 1).

The rule-based spelling strategy is another variant of teaching spelling. It includes recognizing the rules and generalizations of a language. For instance, a student has a better chance of spelling the word “kitchen” if he knows that the ‘ch’ sound is spelled like ‘tch’ when it follows a short vowel. In this case students should learn certain spelling rules such as each vowel has a short and long sound; many words or parts of words sound the same but are spelled differently; words consist of one or more syllables; silent letters; that there are words which sound alike but are different in writing – homophones, etc. However, many researchers claim that this type of strategy suits more the secondary students’ level.

The third type of strategies that is widely used is visual. When a student has a task to write a new word he often tries to spell it several ways to see which way looks correct. This kind of spelling is based on visual perception and understanding of written letters, such as the ‘j’ sound is spelled as ‘dge’. It helps students to remember words related to that concept. This strategy suits best when students work with homophones. In order to develop the visual spelling strategy students should read more and the teacher in turn should play more certain word games.

The knowledge of how the meaning of a word influences its spelling underlines the morphemic strategy or approach. Morphemes include prefixes, suffixes and bases of roots.

Many words in English can be created by following a small set of rules for combining morphemes. For example, the word “unbelievable” is made of the prefix ‘un’, the base “believe”, and the suffix ‘able’. Thereby the morphemic approach teaches students spelling for morphemes rather than whole words and the rules for combining morphemes to spell a whole word correctly. It also teaches how to add prefixes and suffixes to base words, and how to form compound words and abbreviations. The morphemic approach has several advantages. One of them is that morphemes are generally spelled the same across different ways such as in the morpheme ‘port’ which is spelled the same in the word “porter” and “important”. The second advantage is that even when the spelling of a morpheme changes across words, it happens in a quite predictable way. The morpheme “place” is spelled differently in the words “places” and “placing”, but the change is governed by the rule of dropping the final ‘e’. Another positive aspect of this approach is that the number of morphemes is fewer than the number of English words. Moreover, the number of ways or rules for combining morphemes is also small. Thereby, using morphemic strategies will allow students to spell more correctly rather than teaching students individual words through memorization of a weekly spelling list (Morphemic approach 2013: para 1-2).

There are more strategies and approaches besides these main four ones which are also commonly used by teachers: writing a personal list of words misspelled by students and referring to that list regularly; applying a limited number of mnemonic devices (Effective Spelling Strategies 2014: para 8). Furthermore, there are a number of interactive spelling programmes that are aimed at teaching spelling (Spelling Stars accessed in January, 2014).

With the existing variety of approaches and activities the issue of teaching spelling still remains topical. The present study attempts to analyse reasons why it is so with the following hypothesis in mind: a regular inclusion in the ELT class routine of activities based on recognition of phonemes in a word influences student’s ability to spell more correctly.

CHAPTER I

WAYS AND STRATEGIES OF TEACHING ENGLISH SPELLING

1.1. English Spelling Difficulties

Word knowledge is needed to be successful in reading, writing and other language skills. Good spelling can help students learn letter correspondence and vocabulary, and develop automaticity in reading and writing of words. However, English spelling, being a basic skill, might present difficulties for learning. Most languages such as Estonian, Finnish, Italian, Spanish, Hungarian, and Turkish adopt the alphabetical principle for their writing systems (Alphabetic principle 2013: para 2). It means that a letter or letter combination stands for a particular sound. According to the “Why English is so difficult?” article published on the TESS website, in some languages, for instance, in Spanish, Italian and Estonian, it is possible to predict the pronunciation of words looking at them as well as hearing how they are pronounced. This way is called “two way phonemicity” (Why English spelling is so difficult? 2013: para 1). In the French language, for example, it is possible at least to predict the pronunciation from the spelling of a word, even if the sound can be represented in more than one way. However, the English language does not have these peculiarities of spelling. Despite all its advantages, such as one gender, simple present, etc. the spelling issue makes English more difficult and incomprehensible for foreign learners especially when their native language does not have the alphabetical principle. It happens because English has many various ways of representing the same sound and has some letter combinations that can represent more than one sound.

One of the difficulties that makes English spelling complicated is ‘silent letters’. These letters are the ones that appear in the spelling of a word, but not in its pronunciation, for example, in the word “*knife*”, where the first letter ‘k’ is not pronounced. The word is pronounced as NIF (where the ‘i’ vowel rhyming with the word “*eye*”). Another example is the word “*listen*” where the letter ‘t’ is silent and the word is pronounced as LISS-en as well the word “*often*” can be pronounced either with ‘t’ or without depending on English dialects (The trouble with English 2013: para 5). Another important aspect that makes English spelling difficult is homophones (the words that are pronounced the same as other words but differ in meaning). The word can be spelled the same, for instance “*bear*” (an animal) and “*bear*” (to carry) or differently such as “*hour*” and “*our*”.

Understanding of these problems will help people understand the difficulties they might have learning English.

1.2. Methods of English Spelling as Ways of Literacy Improvement

English spelling is one of the most complicated aspects of English literacy. It happens because of its many irregular spellings. English spelling presents a number of difficulties for the language learners, especially when the alphabetical system of their native language does not coincide with the English alphabetical system. There are various methods, strategies and ways that can help people make English learning easier and improve their literacy. The commonly used methods of English spelling are phonetic, rule-based, visual and morphemic strategies that are presented in the next sub-chapter. However, other strategies are also used in order to improve literacy. One method is concentrated on the study of each word as a whole and as an individual problem. The other uses workbooks that are provided for early structural analysis and for frequent study of words in different contexts.

Different views on these two methods were considered in earlier studies. Viola Theman (1951) argued that emphasis on phonics for spelling purposes might be rather confusing than helpful. Children improve spelling because their individual spelling needs are given attention. Russel (1943), on the contrary, found that the systematic training in phonics had a great effect on students. He stated that it was better to begin from the first grade in order to improve spelling and literacy as the whole in the following grades. Another researcher Ernest Horn (1954) believed that there was no clear evidence for making adequate decisions about how much and in what way phonemes learning can improve spelling. However, he offered the idea that the systematic study of words in spelling lists may help students to improve their spelling skills. His research shows that it is more efficient to learn words in certain lists than in context, because the formers are learned easier and more quickly. Moreover, they are remembered longer and transferred more readily to a new context. Gertrude Hildreth (1955) said that the usage of textbooks and workbooks which combined the teaching of reading, spelling, and writing might be useful for learners as the way of spelling improvement. Hawley and Gallup (1922) in their research between the list and the sentence method of teaching spelling discussed the issue that children taught by the word-list method succeeded better than a group studying spelling by the sentence method did. Some other researchers such as Strickland (1955) and Jackson (1953) who paid attention to these two methods claimed that the multiple-sense approach in learning to spell a word would be the most suitable for teaching spelling. This approach includes seeing, hearing, speaking, and writing – all important factors.

“The Elementary School Journal” (1957) presents the “Evaluation of two methods

of teaching spelling” article where the experiment, the aim of which was to try to determine the comparative efficiency of the two methods, is described. The experiment was conducted in a school of Minnesota. At the end of the study the areas of agreement and disagreement in two methods of teaching spelling were stated.

Here are the areas of agreement:

- Pupils in both groups studied words from a basic list, with the focus on power vocabulary.
- Pupils in both groups attempted to gain some understanding of the structure and derivation of words by analysing suffixes, prefixes, syllables, and root words.
- Pupils in both groups paid attention to the meaning of words.
- Pupils in both groups analysed the pronunciation of the words they studied.

Besides the agreements, the number of disagreements was made at the end of the research. The first one is that in the control group students studied words as an individual problem while in the experimental group students studied words in different contexts and by analysis. In the former, students used no workbook other than as a source for a basic word list. In the experimental group, on the contrary, students used a workbook and followed the exercise given. In the control group pupils “were taught as an individual problem, with supervised study to a point of mastery or near mastery, before attention was called to spelling principles, such as adding an ‘s’ to form a plural” (Cook 1957: 23). The words which pupils were taught were not used in written context until mastered. In the experimental group each word was analysed almost immediately, and was used in context. In the control group, students studied words in lists while in the experimental group words were studied in context or in a variety of exercises, such as gap filling demanding words containing short ‘l’ or long ‘o’. The latest area of disagreement between these two groups was the following: in the control group words were studied as wholes but in the experimental group the attention was paid to parts of words, for instance, initial consonant blend or vowel sounds.

In the summary of the research the teachers stated that the control group where the method of teaching spelling focused on the study of each word as a whole and as an individual problem was used, produced more very good spellers than the method that utilized workbooks which were provided for frequent study of words in context. However, children in two groups spelled words well. Also, the grade level did not seem to be a factor in the results observed. Despite the fact that the method based on studying words

holistically showed better results, teachers said that it would not be right to state that one method is better than another one because everything depends on the studied group, their level of knowledge, age, etc. Therefore, each teacher can choose which method suits better for his/ her pupils.

In addition to these two methods, there are some other strategies that can be used in order to improve English literacy. One of them is to be on lookout for unfamiliar words and make a mental note of the spelling while reading. Another one is to practise as many times as it is possible. If a student does not know how to spell a word correctly, he/ she should find it in a dictionary and after that practise it in order to learn this word. Students can keep an ongoing notebook of words and follow their progress. Moreover, it is better to learn words gradually not to learn them at once. Each time when a student learns a new word, it is useful to go back and practise the ones he/ she learned before it. Furthermore, teachers advise students to use the words they have already practised. They advise to do it in short different phrases. All in all, these guidelines might help students improve their spelling and literacy.

1.3. Phonetic, Rule-Based, Visual and Morphemic Strategies as the Most Common Ways of Teaching Spelling

Good spellers use a variety of different spelling strategies and apply them in everyday life. Traditionally, these strategies are divided into four main categories: phonetic, rule-based, visual and morphemic. Teaching English spelling at schools, teachers try to use all these strategies in order to develop and improve students' spelling skills. In order to understand why these strategies are useful it is important to give the description of them.

The phonetic strategy is connected with phonemes and sounds. The first that students have to learn is to listen for each sound in a word and to represent each sound with a letter or combination of letters. Teachers, in their turn, have to teach students basic phonograms – a letter or combination of letters that represent a sound. Here are basic phonograms, listed in the alphabetical order:

a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
p	qu	r	s	t	u	v	w	x	y	z	ai	ar	au	aw
ay	ch	ci	ck	dge	ea	ear	ed	ee	ei	eigh	er	ew	ey	gn

ie	igh	ir	kn	ng	nk	oa	oe	oi	oo	or	ou	ough	our	ow
oy	ph	sh	si	tch	th	ti	ui	ur	wh	wr				

(List of the Phonograms. Phonograms 2014: para 3)

For instance, the word “dig” has three sounds (/d/-/i/-/g/) and three phonograms (d, i, g) or the word “fridge” that has four sounds (/f/-/r/-/i/-/j/) and therefore four phonograms (f, r, i, dge). It is important to remember that the number of letters does not always correspond to the number of phonograms. It happens because of the multi-letter phonograms, when one sound is represented by one phonogram but that phonogram may have two or more letters. It is useful to pronounce a word slowly in order to hear each sound so that students can spell better. If students know that, for example, the sound /j/ is spelled as (dge) after a short vowel, he or she can spell the word “fridge” easily. However, English words are full of silent letters - letters which are not pronounced but must be written. The examples of these letters are “e” at the end of a word, in such words as “hate”, “plate”, “name”, etc.; “g” is not always pronounced before “n”, for instance, “gnat” or “sign”; “k” is not always pronounced before “n”, for example, “knot”, “knee”, “knife”; “h” (at the beginning of a word) in such words as “honest”, “hour”; the letter “l” in words “half”, “calm”, and “talk”; “n” is not pronounced after “m”, for example, “autumn”, “solemn”, “condemn”; “p” when it comes before “s”, “n” and “t” in words “pneumatic”, “psychology”, “psalm”, etc.; “r” sometimes is not pronounced at the end of a word if the next word does not begin with a vowel, for example, “far”; the letter “s” is also silent in the words “island” and “aisle”; “t” is usually silent after “s” in the words “whistle”, “castle”, “listen”, and “rustle”; it is also hard to hear it before “ch” in the following words “watch”, “fetch”, “itch”; the last silent letter is “w” when it comes before “r”, for example, “wrong” and “write” or sometimes before “h” in such words as “who” and “whole” (Gee, Watson 2003: 41).

In order to learn these phonemes better it is useful to have a spelling notebook, where students can write the phonemes as well as words with silent letters. It will help them in learning how to pronounce the words they want to use. Another variant is to make phonogram cards and then use them.

Besides the phonetic strategy, there is the rule-based spelling strategy that is also commonly used in order to teach students to spell correctly. This strategy is based on recognizing the rules and generalization of the language. Students have to know that one

sound can often have several possible spellings. For example, the sound /j/ can be spelled as “j” as in *joke*, “g” as in *giant*, or “dge” as in *fudge*, depending on its location in the word. However, there are many rules that can help students learn the sounds and make the correct choice while spelling a word. These rules can help in several ways. First of all, they demonstrate spelling patterns among seemingly unrelated words. Secondly, they show the connection between new words and words that students already know. Moreover, the rules explain how new words are built with the help of suffixes and prefixes. Furthermore, they help identify specific speech patterns that can often be clues to how words are spelled.

“The Usborne Guide to Better English. Grammar, Spelling and Punctuation” (Gee and Watson (2003)) book describes basic spelling rules as simply and as clearly as possible to provide the guidelines. The English language as other languages has consonant and vowel sounds. Firstly, the authors of the book present the rules of consonants’ spelling. Here are some examples of them. For instance, the sound “f” as in *fall* can be spelled:

1. “f” as in *frog*;
2. “ff” as in *giraffe*;
3. “gh” as in *laugh*;
4. “ph” as in *pheasant*.

Another example is with the sound “s” as in *salute* which can be spelled:

1. “ce” as in *mice*;
2. “s” as in *snake*;
3. “sc” as in *scent*;
4. “ss” as in *hiss*.

Also, there are examples of spelling the following sounds “g”, “j”, “k”, “sh”, and “z”. It is important to know that some letters can be soft or hard. For example, letters “c” and “g” can be either soft in the words such as *cinema* and *giant* or hard like in *card* and *gap*. It also depends on their location in words. Both letters can be soft when they are followed by an “e”, an “i” or a “y”. Moreover, consonants can be single in such words as *later* or *pony* or double, for example, *matter*, *poppy* and *puppy*. The authors of the book provide with a tip to think about the sound of the vowel before its writing. Double consonants usually appear after a short vowel sound.

After the description of consonant letters, Gee and Watson present spelling rules of vowel sounds. There are five vowels in the English alphabet: “a”, “e”, “i”, “o” and “u” and each of them has two sounds. For example, the vowel “a” can be short in words as *man*, *hop*, *pet*, and *tub* and can be long in *mane*, *hope*, *pipe*, and *tube*. There are many examples

of spelling of vowel sounds, here is one of them: the sound “i” as in *drive* can be spelled:

1. “i” as in *dime*;
2. “igh” as in *hight*;
3. “ie” as in *pie*;
4. “ye” as in *goodbye*;
5. “y” as in *cry*.

There is also mentioning of the “i” before “e” rule because “ee” sound is the most complicated and misleading. There is “i” before “e” in the following words: *achieve*, *believe*, *brief*, *chief*, *thief*, *field*, *grief*, *piece*, *shield*, and *siege*. There is “e” before “i” in words: *ceiling*, *deceive*, *conceit*, *receive*, and *perceive*. However, there are also exceptions to this rule in the words *seize*, *weir* and *weird*. Furthermore, the authors tell that the consonant “y” is sometimes used as a vowel. It depends on its position in a word. When it is at the beginning of a word, it acts as a consonant, for example *yoyo*. However, if it is at the end or has an “i” sound, it acts as a vowel, for instance *Wye valley*.

Another strategy that is commonly used in order to teach students to spell accurately is the visual spelling strategy. This principle is based on the visual acceptance of a word. When a student looks at a word, he/ she can say whether it is written correctly or not. This kind of spelling is based on visual perception and understanding of written letters, such as the ‘j’ sound is spelled as ‘dge’. This strategy is especially good for visual-spatial children. For those who see the world in images, it is difficult to create pictures that incorporate letters, particularly pictures and images that will live on as memorable pictures in the visual learner’s mind. Alexandra Shires Golon (2004) describes this problem in her book “*If You Could See the Way I Think: A Handbook for Visual- Spatial Kids*”. She states that colour will help children to image the pictures that can incorporate letters. For instance, “taking the ‘ie’ in the word “friend” and making them a different colour, even larger type, helps to secure the rule, or for them the image, that, in this instance, the ‘i’ precedes the ‘e’” (Golon 2004 para 2). This method is quite effective especially for those words that are unusual or rule- breaking in spelling. The author also writes that a certain table or ‘jail’ can help students with the visual acceptance of a word. Especially it works with rule-breaking words because the image of the word having been imprisoned for breaking the rules would stay in students’ memory. In order, to visualize it students have to draw an imaginary prison and place the word in jail behind the bars.

Sometimes, however, the method with jail or colour does not suit and the author recommends trying to add characters around letters of a word so as to create a story. The

main idea of the visual strategy is in the fact that if students successfully create an image of a word in their minds, they will spell it correctly in the future. Golon also presents some rules taken from Neurolinguistic Programming in order to use the visual strategy appropriately:

1. Write the spelling word in large print with bright-colored ink on a white piece of paper with the difficult part of the word written in a different color.
2. Hold the card in front of you as far as your arm can reach, a little bit above your eyes.
3. Study the word carefully, then close your eyes and see if you can picture the word in your imagination.
4. Now, do something wild and crazy to the word in your imagination – the sillier the better. (You could make it colorful, have the letters act like people or animals—anything that will help you remember how the word is spelled.)
5. Place the word somewhere in space, in front of you or above your head. Remember that there is an infinite amount of space around you that can hold an equally infinite number of words.
6. Spell your word backward with your eyes closed. Was there an even rhythm between the letters? Good! That means you are really looking at your picture.
7. Now spell your word forward with your eyes closed.
8. Open your eyes and write the word once.
9. Close your eyes again and see if your word is still where you placed it in space. It will stay there forever!

(Golon 2005: 3-4)

The fourth spelling way that also helps students improve their spelling is called the morphemic spelling strategy. It “focuses on the meaning of words and how they change when they take different grammatical forms” (Focus on Literacy: Spelling 1998: 13). The morphemic spelling strategy includes teaching students how words are constructed, how to use morphemes to help them to spell words and knowledge of suffixes and prefixes that words can have. Here are some examples of using the morphemic strategy:

1. To spell words such “anybody” students should use the knowledge about the spelling of “any” and “body” words. They also have to know that a compound word will have the same spelling because it has the same meaning base.

2. To spell words such as “unhappy” and “achievement” students have to know about adding prefixes as the former word and suffixes and in the latter one to the base word.
3. To spell words such as “hopped”, “carried”, “troubled” students have to know about generalizations about how to add suffixes to the base word.

Moreover, students should know that in English most words that have the same meaning base are spelled the same. If the meaning is different, so the spelling is different too. Teachers should teach students this type of strategy by the instrumentality of the words’ meanings and derivations. Furthermore, they have to practise word building with students, introduce word associations, and teach knowledge of word structure, for example, past tense.

Teachers to make the learning of spelling easier for students commonly use all these four strategies. It is useful to use these strategies with students of different levels and to combine them. It will help students learn and understand spelling better. The identification of phonetic, rule- based, visual and morphemic strategies become important implications for spelling instructions. At all stages students have to learn how to use these ways of spelling in order to develop and increase their literacy.

1.4. Word Study as a New Approach to Study Spelling

Besides the common ways of teaching spelling, teachers are trying to develop and find new modern approaches to study spelling. It happens because sometimes traditional approaches are not effective enough. Word study is a new and alternative spelling strategy which is based on learning of word patterns rather than memorizing unconnected words. It is a cohesive approach that combines word recognition, vocabulary and phonics as well as spelling.

Word study gives students opportunity to investigate and understand patterns in words. If students know these patterns, they need not learn to spell one word at a time. For instance, the difference between hard ‘c’ as in “cap” and soft ‘c’ as in “cell”. After practicing using many words connecting this letter, students understand that ‘c’ is usually hard when it is followed by consonants and vowels, for example in the words “cat”, “cot” and “cut”. On the contrary, ‘c’ is usually soft when it is followed by the vowels ‘i’ (as in “circus”), ‘e’ (in “celery”) and ‘y’ (as in “cycle”) (Leipzig 2000: para 5). The word study approach is also designed to develop knowledge that can be used in reading as well as to develop students’ abilities in phonics and vocabulary.

Word study works for students in preschool and high school. At the very beginning of study, a teacher has to use a spelling inventory to understand the level of students' spelling knowledge. When groups are created, teachers make different instructions based on the stage of development of each group. Moreover, teachers choose a certain list of words that reflect a particular spelling pattern and sequence these patterns to match students' development. The most important thing is that spelling rules are not dictated by teachers but students have to discover and learn spelling patterns and generalizations by themselves. Using this strategy teachers encourage students to compare words, find differences and similarities. The best method for this is called sorting, when students separate words in various features. Moreover, students can make a notebook to record the known patterns and their new understanding about the words; they may construct a word wall with all patterns or just play different games and try to find examples of studied patterns while reading books.

This approach can help students find logical spelling patterns that can be categorized. Teachers, in their turn, have to determine each student's needs first and after that create a word list. Thereby, they take into account the identity of each student. Moreover, using this method, students become part of word study groups that learn together and help each other. In contrast to the traditional approaches, with the word study students discover patterns and make generalizations about words by themselves. Furthermore, this method helps students develop their creativity. They do not need to do usual workbook pages with writing, copying or reciting but they learn new words by doing sorts and other hands-on activities. Finally, teachers test students' pattern knowledge rather than their ability to memorize a single word.

However, it will be not correct to state that word study is better than traditional methods. It can be used as a supplementary way of teaching spelling. Each teacher can use various strategies and ways of improving spelling considering the level and abilities of students because sometimes what is good for one is not good for another one. The word study method shows that the improvement of teaching spelling is constantly developing. Teachers are trying to find new possibilities to make studying spelling easier and interesting for students.

1.5. Spelling Reform

The spelling reform is directed to make English spelling more phonetic and consistent, so that spelling could match pronunciation better and follow the alphabetical principle. The

main reasons of the spelling reform are, first of all, to make it easier for learners, and secondly, to make it more appropriate for international communication. Spelling reform issues can be divided into two groups. The former uses the traditional English alphabet and the second one replaces it, which means, for example, adding letters from other alphabets. Noah Webster was one of the reformers who made changes in American English, abandoning the second silent 'l' in verbs such as "*travel*" and "*cancel*" when forming the past tense. He also changed the 'ce' in words like "defence", "offence" and "pretence" to 'se'. Moreover, he dropped the 'u' from the words such as "humour" and "colour" and dropped the 'k' from the following words "publick" and "musick" (Noah Webster's Spelling Reform 2014: para 1).

Nothing is standing at the same place. Everything is changing and developing as well as spelling that needs extensive repair or replacement. Allan Kiisk in his "*Simple Phonetic English Spelling: Introduction to Simpel- Fonetik, the Single-Sound-per-Letter Writing Method*" book presents the examples of two books, one is "*Spelling Dearest*" by Niall McLeod Waldman and the second is "*Spellbound*" by James Essinger.

According to the first book, the English language has "by far 'the worst and most irrational and inconsistent alphabetical spelling system in the entire world'" (Kiisk 2008: 133). "*Spellbound*" states that people who learn English as the second language find spelling as a joke or "a nightmare deliberately designed to bamboozle and perplex anyone who tries to learn it" (Kiisk 2008: 133-4). At the same time, "*Spellbound*" concludes that it is difficult to change the present spelling system because it represents cultural heritage. However, Allan Kiisk does not agree with it. He, in his turn, offers to use the Simpel-Fonetik method.

The advantage of this spelling is that "one can write what one hears and write it down accurately and reliably" (Kiisk 2008: 136). Besides that using this method, students can correctly pronounce slang and dialect expressions using the single-sound-per-letter writing. Moreover, new and foreign words can be written in such a way that everyone knows how to pronounce them. There is no need to explain how to pronounce names of products, companies, people, etc., because the writing serves as the pronunciation key. The pronunciation of many English words is difficult and complicated for learners, because learners cannot expect "to have a uniform pronunciation of words when the letter 'a' has eleven different sounds, the letter 'o' at least seven, 'e' and 'u' at least six..." (Kiisk 2008: 137). Using Simpel- Fonetik spelling learners know how to pronounce words correctly, without the use of a dictionary. This is one way of spelling reform trying to make English

easier and faster to learn.

Despite the arguments for the reform, there are also some obstacles that can prevent it. One of them is public resistance that has been always strong. Secondly, English vocabulary combines Germanic, French, Latin, and Greek words, which have different phonemes and approaches to spelling. The reform tends to favour one approach over another that leads to the fact that many words must change spelling to fit the new scheme. Moreover, the spelling of some words such as “*tongue*” and “*stomach*” is un-indicative of their pronunciation; by changing the spelling one would change the shape of the word. Furthermore, there are many various regional differences in pronunciation that can be the obstacle to the spelling reform (Start the Campaign for Simple Spelling 2009).

1.6. Who Makes the Decision How We Spell

There are various rules how to spell words, but who decides how to spell them correctly? Masha Bell, an independent literacy researcher, and the author of many articles and books on English spelling, such as e-book “*Spelling It Out: The Problems and Costs of English Spelling*” (2012) wrote an article “*Who Decides How We Spell?*” (2010) in her “*English Spelling*” web log. According to the article, many countries have official representatives who have their eyes on correct spelling. It is the *Academie* in France, for example. If people feel that some words are difficult to read and spell, they turn to such organizations which in their turn make or recommend spelling changes. Scandinavian countries, except for Denmark, are trying to make learning to read and write much easier. Finland, for instance, has made Finnish spelling so simple that now it is as easy as child’s play. German-speaking countries have also tried to make writing easier since 1800. The last German spelling reform was in 2005.

However, there is no organization that follows the accuracy of English spelling. People use different dictionaries as the main helpers in this question. At the same time, writers of dictionaries offer the most commonly used spellings. There are many borrowed words from other languages. For example, from French “beef” or “mustard” and now these words have sensible spelling, but too many others are still spelled according to the French spelling system. The same with the words “photo” and “telephone” in which such countries as Spain and Germany made respelling changed the ‘ph’ into the letter ‘f’, while English insists on the ‘ph’.

Masha Bell states that people have to change their attitude to spelling by dictionary. Thereby, it could be possible to improve English spelling. However, it would break the

traditional spelling that was offered a long time ago because it is so exceptional. The author says that English spelling was developed in the 7th century from Latin sculptures and was mainly shaped by the people who did not consult with anyone else. Even when English became the official language of England, intellectual discourse continued to be in Latin. One of the most difficult aspects of English spelling is the unpredictable use of consonants doubling in such words as “arrow”, “arise” and “arrive”. It is also mainly to Johnson’s reverence for Latin (Bell 2010: para 16).

In that way, the rules of correct spelling come from the history of languages. Thereby, the main factors that influence on English spelling system are borrowed words from other languages, the history of English spelling and current direction of spelling. All these points make spelling one of the most complicated areas not only for foreign learners but also for native English speakers. The basis of spelling lay at primary school; it is an essential skill that students must master and develop during their studying. It is a real task for a teacher how to teach pupils to spell correctly, because it is the base of language learning. For this purpose, different techniques and strategies such as phonetic, rule-based, visual and morphemic strategies were introduced; they can help to improve and to develop spelling skills. It is important to understand how these strategies work and influence on students’ spelling in primary school, and also whether they are useful and to what extent.

The following chapter presents a research into spelling strategies with the task to find out how they influence students’ spelling. It is important to place the problem of spelling in the context of Estonian schools (with one particular school taken as an example) in order to verify the necessity of the research and to reveal to what extent phonetic, rule-based, visual and morphemic strategies might influence students’ spelling in primary school and to analyse these techniques.

CHAPTER II

PHONETIC, RULE-BASED, VISUAL AND MORPHEMIC STRATEGIES OF TEACHING ENGLISH SPELLING IN PRIMARY SCHOOL

2.1. Topicality of Research

According to *Merriam-Webster Online Dictionary* (2013: para 2) research is “tedious inquiry or examination; *especially*: investigation or experimentation aimed at the discovery and interpretation of facts, revision of accepted theories or laws in the light of new facts, or practical application of such new or revised theories or laws”. The more information researchers have the better and more accurate will be the result of a target. Research is the result of previous advanced knowledge. It is designed to solve a particular problem or to confirm or to refute the already being one.

The improving and developing teaching is a long and difficult process. It includes the researches in different aspects of teaching such as listening, reading, spelling, vocabulary, methods of teaching, ways of teaching, etc. Thus, it is an ongoing process. It is quite frequent that researchers make a number of investigations on the same topic but with focuses on various aspects. At the end of research, scholars make conclusions or state other issues that will be investigated in the future.

Various researches on the topic of spelling have encouraged conducting research based on different methods of spelling. In order to understand the level of students’ ability to spell correctly and to find out which methods are used to improve students’ spelling skills a study was needed. It was assumed that the most common methods of teaching spelling are phonetic, rule- based, visual and morphemic strategies. Before making the research, all these strategies and ways of teaching spelling were studied. The research was made with the help of spelling exercises offered to students to practise their spelling skills and knowledge of how English words are spelled.

2.2. Sets of Exercises

Spelling is one of the most common problems for foreign learners. In order to make it easier and explain all common features of spelling, researchers develop different exercises that can help to practise and to improve spelling. First, rules help learners remember spelling of types of words, especially those that are formed by adding suffixes. The first rule is using ‘i’ before ‘e’, for example in such word as “fiery”. The second one is dropping the final ‘e’ in words “achievement”, “judgment”, etc. Next is changing the final ‘y’ to ‘i’ in “trying” or “occupying”. The last one is doubling a final consonant in the

following words “accidentally”, “transferring” and “unforgettable”. However, even the knowledge of these rules does not always help. Thereby, on the basis of the preliminary studies of the topic under discussion a set of exercises has been devised to teach students spelling. The set includes the types of exercises that are described below.

Sample Set of Spelling Exercises

1. Complete the words with correct letters, for example, *a_ _ id_nt_l_ _* (accidentally) and *f_ _r_* (fiery). This kind of exercises is used to practice in silent letters which are not pronounced but should be written.

2. In each of the following pairs, only one word is spelled correctly; the other is a common misspelling of that word. Choose the correct one. For example, *a) accidentally* *b) accidently* (word's meaning is “happening unexpectedly or by chance”). This exercise is aimed at the visual acceptance of the words. One of the strategies that uses this word game is called the visual spelling strategy.

3. Write the correct letter: **a) to E or not to E?**

e.g. *tru_ly*; *argu_ing*; *car_ful*.

b) IE or EI?

e.g. *rec_ _ ving*; *w_ _ rd*; *n_ _ ther*.

c) I or Y?

e.g. *tr_ ed*; *cr_ d*.

These exercises are based on the spelling rules that were mentioned above. They deal with vowel sounds because they are considered as the most confusing part of spelling.

4. Correct spelling mistakes, for instance, using the following words *aparatus*, *apologise*, *humoros*. This task also belongs to the visual strategy, where learners can see the mistakes and correct them.

5. Find and underline the words in the text. This exercise is connected with reading tasks, because the more learners read the more they improve their spelling skills.

6. Dictations (write down the words from Russian to English and just in English) are also used as a way to improve spelling skills. This sort of exercises is the most difficult because learners have to remember all spelling rules and most of misspelled words.

7. Classification (vowel sounds). This exercise is also used in order to have practice in vowels, especially in pronunciation, because learners have to know that English words are not written the same way as they are pronounced. For instance,

/ɪ/	/e/	/æ/	/ɑ/or/ɒ/	/ʌ/	/ʊ/
in	well	man	not	up	

More exercises can be devised by a teacher to help students improve their spelling depending on students' needs. What is important, the exercises should be different in their types and should cover a wide range of problems students might face while learning to spell English words correctly.

2.3. The Most Common Misspelled Words

Commonly misspelled English words are words that are often unintentionally misspelled in writing. Considering the fact that spelling can vary depending on different country or region, the word “common” is subjective. There are several reasons why these words are misspelled. One of them is that words have different prefixes such as ‘un-’, ‘in-’, ‘re-’, etc. and suffixes, for instance, ‘-ing’, ‘-ness’, ‘-less’, thereby words can contain thousands of variations from combining prefixes and suffixes added to the root of words. Some words have double letters such as “beginning”, “disappoint”. Others have silent letters, for example, “knife” and “achievement”. Another problem that influences misspelling is mispronunciation, which researchers claim to be the most common cause, for example, the word “grateful” is misspelled as “greitful”. Moreover, homophones make spelling more confusing when a person hears two words with different meanings but with the same pronunciation, for instance, “right”, “write”, and “rite” (Commonly Misspelled Words. Wikipedia 2013: para 1-6). Furthermore, English is influenced by every major language on the Earth. Among key English spelling problems there are four of them: consonant doubling and unpredictable spelling of the following sounds EE, the O-E-sound and OO-sounds. However, there are more problems in connection with other sounds as well.

To support teachers and learners various Internet sites offer lists of commonly misspelled English words. Each source gives its explanation of why these words belong to

the list. However, there are words that are enlisted with various sources; and they have been used for the experiment.

The list of the 50 commonly misspelled English words provided by Bordwell and Associates at http://wedolegal.com/50_common_misspelled_words.htm (accessed on October 2013) includes the following words:

- accidentally
- achievement
- argument
- beginning
- calendar
- changeable
- defendant
- definite
- disappoint
- embarrass
- existence
- fiery
- grateful
- harass
- humorous
- immediately
- incidentally
- independent
- indispensable
- judgment
- mischief
- misspell
- ninety
- noticeable
- occasion
- occurrence
- permissible
- prevalent
- privilege
- prominent
- pursue
- questionnaire
- relevant
- repetition
- rhythm
- separate
- shining
- siege
- suppress
- susceptible

- tomorrow
- transferring
- truly
- twelfth
- unforgettable
- vacuum
- vigilant
- visible
- volume
- wherever

These are the words, which were the object of the study in the English class of *Kohtla-Järve Kesklinna* basic school.

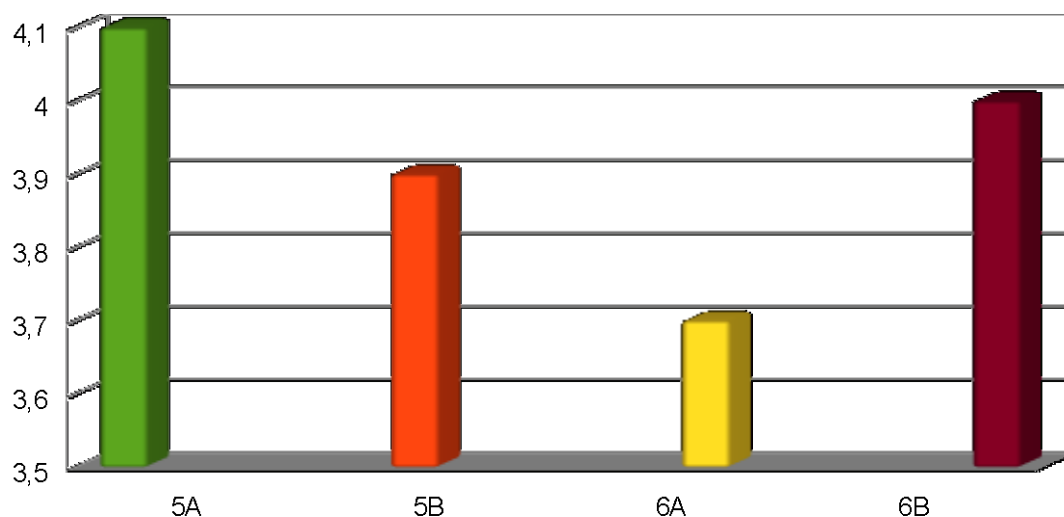
2.4. The Place, Participants and the Duration of the Experiment

Kohtla- Järve Kesklinna Põhikool/ basic school was chosen as the place for conducting research. The choice was not accidental because the author of the paper works as teacher of English at this school, and her teaching experience of three years in primary school shows that spelling presents a challenge to students and it needs special attention of the teacher. Thereby it was necessary to collect data and analyse it in order to reveal how spelling strategies influenced students' spelling; the ultimate goal was to devise a programme that will help teachers to teach spelling. Firstly, it was planned to carry out an experiment at the primary school level and at the upper secondary level to compare situations at lower and higher school levels. However, in the year 2013 the school lost its title as the *gymnasium* and it was restructured into basic (compulsory) school. *Kohtla- Järve Kesklinna* basic school is a compulsory basic school (to follow terminology adopted by the Ministry of Education and Research of Estonia – see <http://www.hm.ee/index.php?1510024>) where 476 students study and 42 teachers work. The school has division into two stages: grades 1-4 and grades 5-9. Usually classes are delivered in two parallels, but sometimes in three groups of the same grade. There is also a class of students with special needs. Teachers use the National Curriculum for Basic Schools as the main source of teaching information. The basic language of instruction in the school is Russian; the second language is Estonian which students begin to learn in the first grade as a compulsory subject. The foreign language is English, which is taught as an optional subject in the first two grades and as a compulsory subject starting from the third grade.

The main participants of the experiment were students from the 5th and 6th grades (primary school). The classes were taught in parallel in order to make a comparison

between experiment and control groups' performances. Moreover, the choice of these classes was made with the point that at these stages it is better to follow the process of learning, to find mistakes and weaknesses of spelling, to find out how students were taught spelling at the very beginning and which level they have at the primary stage. As the author of the research teaches these classes, she could observe and study changes and development during the whole period of the experiment. The 5th "A" grade consists of 22 students. The average mark in English is 4.1. The 5th "B" grade also includes 22 students. The average mark in English is 3.9. The choice of these two classes is justified by the fact that both of them have the same students' number and the average mark is approximately the same. Moreover, they are taught with the same syllabus and the same books. The class 6th "A" has 13 students. The average English grade is 3.7. The 6th "B" class consists of 13 students as well. Their average English grade is 4. They also have the same syllabus and student's books. Moreover, the number of students and their level of language is approximately the same. The following diagram shows the average results of the 5th and 6th grades and as it can be seen they are almost at the same level. The proposed experiment will show if systematic spelling exercises with one of the groups in each grade level can influence students' spelling skills.

Table 1. Students' Progress in the 5th and 6th Grades



The duration of the experiment was four months, from October until January. During this period, students from the 5th and 6th grades did different exercises based on the improving spelling skills and finally they wrote a final test that determined the final results of the research.

2.5. The Process of the Research

The research was provided by the instrumentality of the experiment in *Kohtla-Järve Kesklinna* basic school. The classes were separated into two groups. The first group was marked with letter “A”. There were 5“A” and 6“A” classes. The second group was marked with letter “B”; there were students from 5“B” and 6“B” classes. The students from the former group had pre-training during the research. The latter, on the contrary were offered translation of the words the spelling of which they had to learn without any explanations of why the spelling was so complicated. The division of the classes into groups “A” and “B” was done randomly to follow the results of “A” classes and “B” classes and then compare them.

At the beginning of the experiment students had to write a preliminary test. The test consists of the most common misspelled words in English. The test represents the list of 50 words that are written in the alphabetical order. The task was the following: students had to choose the correct spelling variant of the written words. It was planned as a preliminary test in order to understand how students associated new words with their spelling. Moreover, it was interesting to see whether students chose correct words by using their visual skills and some basic knowledge of spelling. After that, students’ works were collected for analysis. The results of the preliminary test are described in the sub-chapter “Research Outcomes”.

Next step included the detailed explanation of the spelling of each word. Each group received a list of five difficult words at the beginning of every lesson. The first group “A” received the words with detailed explanations while the group “B” had only translations of these words. Thus, the first group of five words for the group “A” included the following information:

- **Accidentally** - /aksɪˈdɛnt(ə)li/ - случайно. The adverb is formed from the adjective “accidental”. The most difficult part of the spelling is the suffix of the adverb “ly” and the double “c” at the beginning of the word.
- **Achievement** - /əˈtʃiːvm(ə)nt/ - достижение. This word is formed from the verb “achieve” with the suffix “ment”. The most complicated thing for the learners is two “e” in the middle of the word because when the word is pronounced these two “e” are silent.
- **Argument** - /ˈɑːgjʊm(ə)nt/ - довод. The word is formed from the verb “argue” where the silent “e” is lost before the suffix “ment”.

- Beginning - /bɪ'gɪnɪŋ/ - начало. The word is formed from the verb “begin” with the suffix “ing”. The most complicated part is the additional “n” in the word.
- Calendar - /'kælɪndə/ - календарь. The most complicated part of this word is the final “r” that is not pronounced.

The second group “B” got only the transcription and translation of these words. After that, students had to pronounce these words with the teacher in order to practise pronunciation of new words. The home task for each group of students was the same: to learn new words.

At the beginning of the next lesson students had to write a short individual dictation paper on these words. Sets of exercises were different and changed from time to time. The exercises were described in the first chapter. The examples of the dictations are presented below:

1. Write the words with correct letters:

__ al__nda__

A__g__ment

A__ __i__v__ment

2. Choose the correct spelling:

a) acidently b) accidentally

a) beginning b) begining

a) kalendar b) calendar

After the tests there was analysis of the works to see how students had learnt the words and improved their knowledge. For the research, 11 sets of exercises that contained five or six words in each were devised.

The results of these short tests were different. It depended on students’ preparation to these tests. However, sometimes the results of the group “A” were a little bit higher than the results of the group “B”. But there was no clear difference between groups “A” and group “B”.

After four months of practicing difficult words there was a pre-test before the main test on 50 words. The preliminary test consisted of 32 misspelled words from the list. These words were also chosen randomly.

1. Choose the correct variant of the word:

accidentally	acidently
bigining	beginning
achievement	achivment
curios	curious
incidentally	insidently
questionnaire	questionare
saseptibl	susceptible
ritm	rhythm
transferring	transferring
embarrass	embaras

2. Write the correct letter:

A__ gument, __ alenda__, con__ __ __ ous, condem__, d__ fendant, disa__ __
oint, f__ __ ry, hum__ r__ us, independ__ nt, notic__ __ ble.

3. Correct mistakes (if necessary):

- | | | | |
|--------------|-------------|--------------|--------------|
| a) Volum | d) tomorrow | g) occasion | k) greitful |
| b) Whereve | e) siege | i) mispeld | l) eksistens |
| c) Vaigilant | f) pursu | j) imidiatly | m) jadment |

The last step of the experiment was the final test, where students received the list of the 50 misspelled words that they worked on at the very beginning of the research and they had to choose the correct variant of the word. They wrote the same test in order to see how they improved their knowledge of words.

2.6. Using of Phonetic, Rule- Based, Visual and Morphemic Strategies during the Research

The exercises that were offered to students during the research were based on the following strategies: phonetic, rule-based, visual and morphemic strategies. All these strategies were also used during the learning of new words as well. The new words were presented with the help of these strategies. It was made in order to find out which strategy is the most useful in teaching spelling. Another question was to understand whether these strategies influence the improvement of spelling at all.

According to the *Dictionary.Com* (2014: para 1) phonetic spelling is “the representation of vocal sounds which express pronunciations of words. It is a system of spelling in which each letter represents invariably the same spoken sound” and it “constitutes an alteration of ordinary spelling that better represents the spoken language,

that employs only characters of the regular alphabet, and that is used in a context of conventional spelling”. The phonetic alphabet and phonetic transcription were created on the base of phonemes. The latter is a visual representation of speech sounds. Various phonetic strategies were introduced to help students learn phonemes and apply them correctly in spelling. The usage of phonetic strategies supposes that students have acquired phonemic awareness. According to SEDL (*“Southwest Educational Development Laboratory”*) (The Importance of Phonemic Awareness in Learning to Read 2014: para 1) phonemic awareness is “a critical skill for learning to read an alphabetically written language.” It is the ability to hear and manipulate the sounds in spoken words. The knowledge of phonemic awareness is important because it requires readers to notice how letters represent sounds; it gives readers a way to approach reading of new words and sounding out. Moreover, it helps understand the alphabetical principle. Phonemic awareness is a cognitive skill that consists of three pieces such as a linguistic unit or the phoneme, the understanding of the phoneme and the ability to manipulate such phonemes (The Importance of Phonemic Awareness in Learning to Read 2014: para 4).

However, not each student from both groups “A” and “B” was able to define the phonemes, hear the correct sound and write it. Thereby, in some cases it was necessary to devote some time to explanations of some phonemes. Despite difficulties, the phonetic strategy was the mostly used strategy of teaching difficult words, because it helped to explain more clearly why words had certain difficulties in spelling and how to avoid them in writing. In order to understand how the phonetic strategy worked it was necessary to include activities based on recognition of phonemes in words in the class routine. It was important to include these types of exercises in each lesson to follow the results.

In the phonetic strategy students from the group “A” had to listen for each sound in a word and then tried to represent those sounds with a letter or letter combination. Thereby, the teacher said an unknown word making an accent on the most difficult sound and students had to try to write it down. After that both the teacher and students pronounced the word again. For example, the word “conscious”, where the most complicated sound is ‘sc’ and the ending ‘ous’. Sometimes, it was difficult for students to realise what letters represent these sounds because these sounds do not have equivalents in Russian. As it was already mentioned students received five new words each lesson. The group “A” got them with explanations of difficulties, the group “B” without any explanations. After that, students had to write a short dictation or another kind of a test paper in order to assess the knowledge of new words. The control of the words presented with the phonetic strategy

was mostly based on the check of the phonemes of the words. The common activity was the dictation, when the teacher dictated words in English and students had to write them down. The results showed that students from the group “A” had better percentage of the correctly written words than students from the group “B”. However, sometimes the result was vice versa, it depended on the words and the level of students’ preparedness for the class.

It is not enough to spell only with phonograms. Another spelling strategy that was used during the experiment was the rule-based spelling strategy. The understanding the difficulties of the words on the side of the rules and generalizations of the language is also important. There are different spelling rules that students have to be aware of to spell correctly. During the research, students from the group “A” had the explanation of the difficult words with the rules whereas students from the group “B” did not have it. Basic spelling rules were the following: forming adverbs, words’ endings and silent letters. The latter was the most difficult for students. Silent letter is a letter that does not correspond to any sounds in the word’s pronunciation. Not each word has a silent letter. The most common silent letter is “e”, especially at the end of words. In order to check the correctness of spelling of words with silent letters, there were a number of exercises such as *fill in the gaps* or *write the correct letter*, for instance in the following words “pursue” (p_ rs_ _), “separate” (separ_ t_), “siege” (s_ _g_) and so on. Another exercise was *to correct the mistakes*, for example, in such words as “volume” (volum), “calendar” (kalenda), “definite” (definit), etc.

Other spelling rules were also introduced, i.e. such as the formation of nouns from verbs, e.g. “argument” from the word “argue” (where is also a silent letter “e”), or formation of adverbs from adjectives, e.g. “incidentally” from the word “incidental”. Students from the group “A” were familiarized with all these rules during the research. Students from the group “B” were also presented with some of the most difficult rules. This strategy was also commonly used in order to present difficult letters, because even in Russian, the native students’ language, they learn spelling with the help of rules.

The visual acceptance is also important in learning new words. Besides phonetic and rule-based spelling strategies there was also used the visual spelling strategy. When students hear a new word, they picture it in their mind. They try to imagine what letters are in this word and when they write the word students copy the image that they have in mind. If the image is clear, there are no difficulties for students to write the word correctly. If the word’s spelling is not so easy, students try to write different variations of the word in order

to choose the correct one. The visual strategy was used by the students when they did the list of the 50 most difficult words the first time. They tried to remember whether they had already seen the words previously and tried to choose the correct one. As well as in the final test, students used this strategy because they had two variants of a word in the test where they had to choose the correct spelling version.

The visual way of teaching spelling was used in both groups “A” and “B”. First of all, the teacher pronounced a new word. Students had to listen to it and write the word as they think it should be spelled. Then, the teacher asked one student to write the word on the board. Next, they corrected the spelling of the word together with the class and finally, the teacher gave the correct variant of the word if the student’s variant was incorrect. Another activity with difficult words was to find these words in the text. Students received the list of five misspelled words and after that the teacher gave them a short text where they were supposed to find them. For example,

A defendant stood in front of the judge. There was too silent in the courtroom. Everyone was waiting for the judge decision. Nobody, victim and defendant wanted to be disappointed in the decision. However, there was not a definite answer whether the man was guilty or not. The judge was embarrassed by the statements of the judicial trail’s participants. (a teacher’s text)

This is an example of a text composed by the teacher herself. The words under a study are underlined in the text. Though the text is quite difficult for the 5th and 6th grades, the point was not to read for comprehension but to find and underline difficult words. Students were given the meaning of some other words such as “courtroom”, “decision”, “victim”, “trail”, and “participants” to ease text’s understanding.

The third activity, that was based on the visual way of spelling, was to choose the correct variant in two words. Students were given two variants of the word, for instance,

- Acidently – Accidentally
- Sid – Siege, etc.

and they had to choose the correct one. This exercise develops students’ visual acceptance and improve memorizing abilities. Another exercise that also belongs to the visual strategy is the correction of spelling mistakes. This activity also assists students in visual memorization and as a result improves their literacy.

The fourth main spelling strategy that was used during the research was the morphemic spelling strategy. This way of teaching spelling is based on the knowledge of the meaning of a word and how this meaning can influence on its spelling. The morphemic approach was also widely used during the research because a huge number of difficult words had suffixes and prefixes. A morphograph is the smallest unit such as prefix, suffix,

base and root. These elements influence the word's meaning and spelling. Thereby, recognizing different morphographs can help students create different words. The main advantages of this strategy are the following:

1. Morphographs are generally spelled the same across different words. For instance, the morphograph "port" is spelled the same in the words "porter", "deport" and "important".
2. When the spelling of a morphograph changes across the word, it does so in a predictable way. For example, "trace" is spelled differently in the words "trace" and "tracing" but the change is governed by the rule for dropping the final "e".
3. The number of morphographs is not as big as the number of words in English.
4. There are not so many rules of combining morphographs.

(Best Practice in Spelling: Sight Words, Phonics, Morphemes. Power Point Presentation Slides 21-23)

It is important to mention that students had not been familiarized with the certain suffixes and prefixes of the words before doing exercises. Thereby, students from the group "A" got the knowledge about morphemes during the research. It was not difficult for them to understand the way of formation new words because similar morphemic rules exist in the Russian language. The list of 50 most common misspelled words included different parts of speech that were formed with the help of prefixes and suffixes, for example, "accidentally", "argument", "curious", "grateful", "indispensable", "susceptible", etc. The most common parts of speech formed with morphemes were adverbs, nouns and adjectives. The most popular were the suffixes '-ment' in such words as "achievement", "judgment"; '-able'/'-ible' in the following words "changeable", "indispensable", "susceptible", etc. The prefixes of the words on the list were the following: 'im-' in the words "immediately", 'in-' in the words "independent" and "indispensable" and 'mis-' in the words "mischief" and "misspelled".

The activities that were connected with the morphemic strategies were to write correct suffixes or prefixes or word formation. For instance, with the word "achieve" students had to write the correct suffix '-ment' in order to form the noun from the verb. Another activity based on the morphemic strategy was to write the correct letter in the suffix of a word. For example, the word "suscept_ble" should be filled with the letter "i" instead of "a". Moreover, during the research, the teacher explained students the meaning

of the morphemes, for instance, that the prefix ‘mis-‘ means “wrong” or “mistaken”. Thereby, students received not only the knowledge of the new words but the additional data about morphemes.

The using of phonetic, visual, morphemic and rule- based strategies in teaching spelling was the main point of the research. The main idea was to find out how these ways of teaching influence pupils’ spelling and literacy as such. The students from the group “A” were learning all these four strategies during the research while students from the group “B” received simple explanations and translations of the words. It was obvious that students from the group “A” accepted new words more easily because they had the explanation of the difficulties. With the help of the strategies students from the group “A” could make assumptions about the difficulties of the words. They were able to do it due to the similarity of the difficulties in the words. Lately, they could even explain why the words belong to the group of mostly misspelled words. Moreover, literacy improvement was seen with other skills such as reading. When students read the texts they could name other words which did not belong to the 50 misspelled words on the list but had the same peculiarities, such as silent letters, prefixes or suffixes. It had also good influence on their spelling in general.

It is not correct to state that the group “B” had much worse results because they did not have the explanation of difficulties and they were not familiarized with the strategies in detail. Of course, they could not explain exactly why the words had such difficulties but they used their visual acceptance of new words quite successfully. Their memory was more directed to simple memorizing of words rather than to understanding of these difficulties and avoiding them in the future. It would be much easier for them to learn new words using these strategies because when students study spelling of words, they usually try to memorize the sequence of letters without comprehension.

Based on the results that students achieve more in learning with spelling strategies, it is possible to suggest that a successful spelling programme should be devised in order to improve students’ literacy. Such programme should be focused on activities that encourage and enable students to take control of their learning. It should help to develop the concepts and skills essential for good and accurate spelling. This programme should also include all these strategies and the other ones in order to interest students and make their learning easier. Students should examine words carefully to see patterns of relationships and to know important details necessary for good spelling. Moreover, the teacher should encourage students to master words through practice activities and to develop good

spelling habits so children could apply this knowledge and concepts in their writing. All in all, students have to be active in learning and teachers in their turns have to do everything to encourage students for learning.

2.7. Research Outcomes

There was a preliminary test at the beginning of the research to familiarize students of both “A” and “B” groups with the 50 most common misspelled words. The test consisted of these 50 words (see below) where students had to choose the correct spelling variant in their opinion. The same test was given to the students of both groups at the end of the experiment in order to find out whether phonetic, rule-based, visual and morphemic strategies helped the students from the group “A” to improve their level of literacy and secondly, how the level of literacy of students from the group “B” changed without using of these strategies.

accidentally	acidently
ahivment	achievement
agument	argument
beginning	bigining
kalendar	calendar
changeable	changebl
difendant	defendant
definit	definite
dissappoint	disappoint
embarrass	embaras
existans	existence
fiery	feiry
grateful	greitful

harass	haras
humoros	humorous
immediately	imidiatly
insindentali	incidentally
independent	indipendant
indispensabl	indispensable
judgement	judgment
mischif	mischief
mispeled	misspelled
nainti	ninety
noticeable	notisabl
occasion	acceisn
okurens	occurence
permisibl	permissible
privalent	prevalent
privilege	priveledg
prominent	prominet
pursju	pursue
questionnaire	questionare
relevant	relivant
ripitishn	repetition
rhythm	ritm
seprate	separate

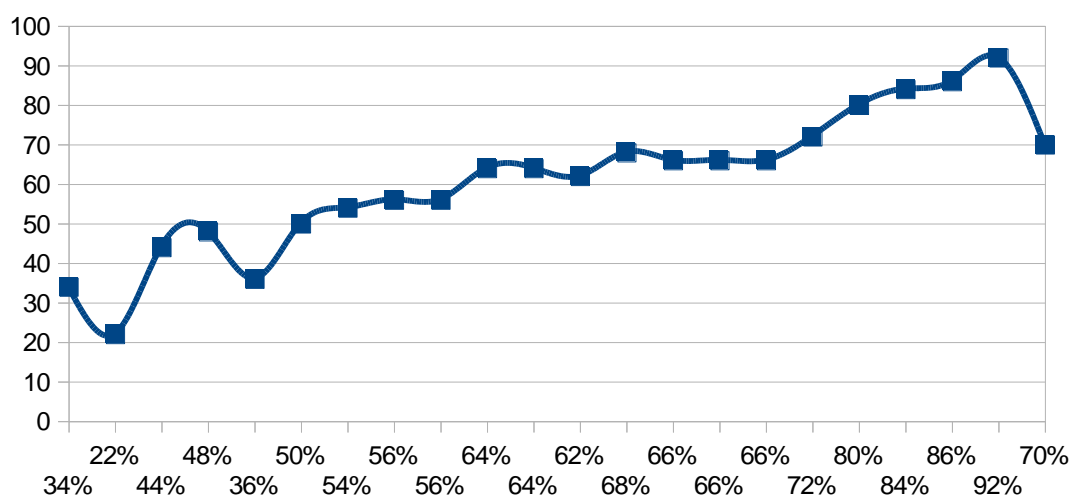
shaining	shining
saig	siege
suppress	supres
susceptibl	susceptible
tommorow	tomorrow
transferring	transfiring
truli	truly
twelfth	tvelvh
unfogetabl	unforgettable
vacuum	vacum
vaigilant	vigilant
visible	visibl
volum	volume
wereve	wherever

The calculation was made in accordance with the following scheme: 50 words stand for 100%. In order to know the student's percentage of correctly spelled words it was necessary to multiply 100 by the number of the correct words that the student chose and after that to divide it by 50. The same scheme was used in the final test and the preliminary test with 32 words. The research estimate was divided into three parts. The first part was the preliminary test of the 50 most commonly misspelled words so as to familiarize students with the new words; the second part was a short individual paper based on the 32 most commonly misspelled words from the list of the 50 words. It was done in order to check students' progress and to prepare them for the final test on the words. The third part was the final test which consisted of the list of the 50 misspelled words that students received at the beginning of the experiment. Thus, the results of the preliminary test with 50 words, 32 words and, finally, 50 words were obtained during the experiment.

The first diagram shows the results of the preliminary test of the 50 most

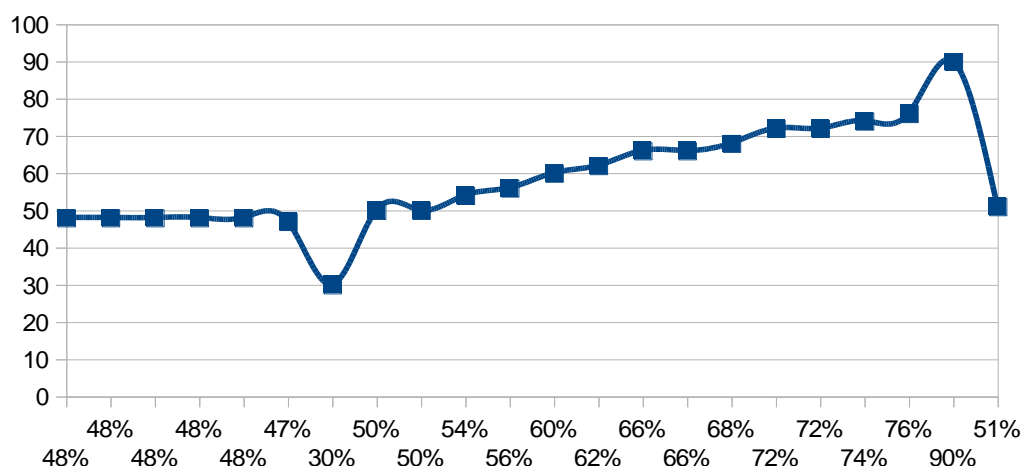
commonly misspelled words. They are the results of the 5A class that belonged to the “A” group who learnt the words with the use of the strategies. All 22 students wrote the preliminary test. The diagram allows to state that the result without using any strategies is higher than the average. One of them is even at the highest point. Thus, the main aim for this class was to increase or reduce these percentages in order to see whether the strategies helped them or not.

Diagram 1: The Results of the Preliminary Test of 50 Words (Group A, 5A)



The second diagram shows the results of the preliminary test of the 50 most commonly misspelled words in the group “B” (class 5 “B”) where the strategies were not used during the experiment. In comparison to the first diagram it is possible to say that the preliminary result of the class 5”B” is also higher than the average. 22 students wrote the preliminary test.

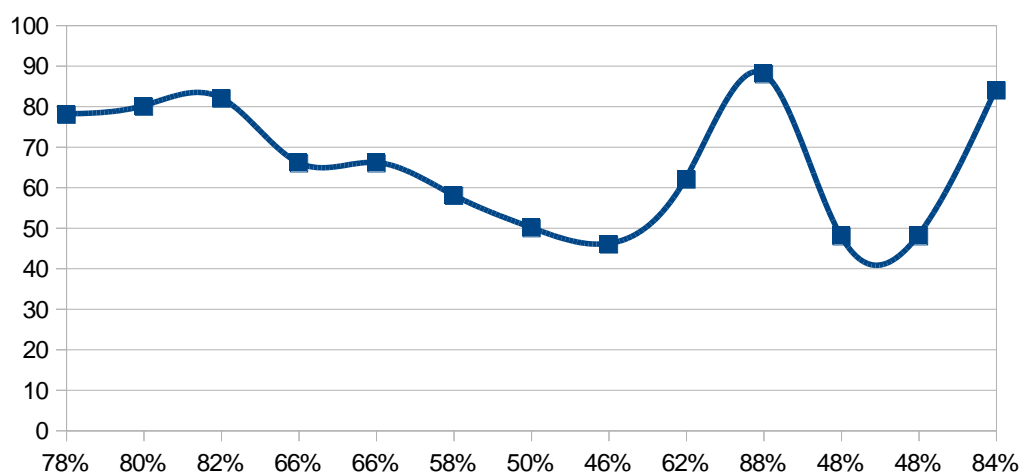
Diagram 2: The Results of the Preliminary Test of 50 Words (Group B, 5B)



To sum up, the results are almost the same, so the level of students from grades 5 is also the same, which shapes the research task to reveal how the results would change at the end of the experiment and whether the strategies influenced or not on the result .

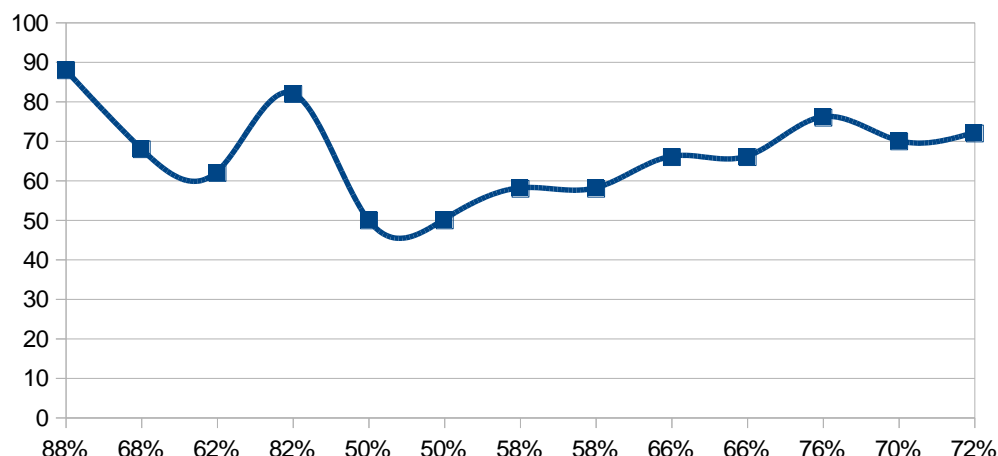
The classes 6”A” and 6”B” have also the same number of students and the results of the preliminary test were almost the same. The first diagram shows the results of the 6”A” class. The number of students is 14 and the same amount of students wrote the test. The results of the test are higher than the average.

Diagram 1: The Results of the Preliminary Test of 50 Words (Group A, 6A)



The second diagram shows the results of the test of the 6”B” students from the group “B”. The number of students is 13, however, only 12 of them wrote the test. Looking at the table, it is possible to say that the results are almost the same as in the 6”A” class. The percentage is higher than the middle parameter.

Diagram 2: The Results of the Preliminary Test of 50 Words (Group B, 6B)

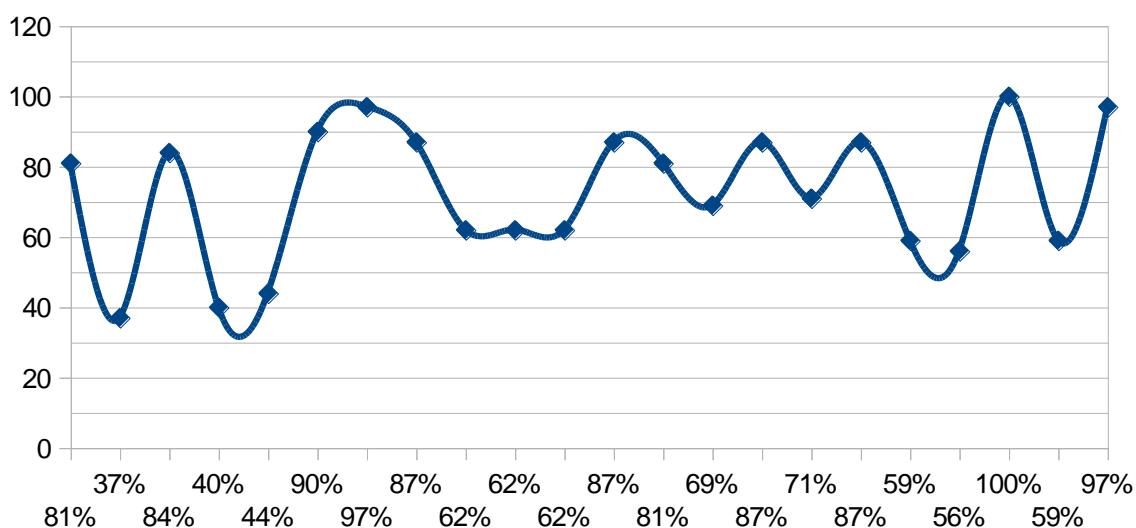


The preliminary results showed that all students had almost the same level of English in their groups. It is also possible to say that students have good visual acceptance of new words because the percentages were higher than the average number. Also, it showed that besides visual acceptance they knew some basic spelling rules. After the preliminary test, the main aim of the research was to find out how the spelling strategies would influence on the students' literacy results at the end and how they might or might not change the spelling of those students who had not been exposed to spelling strategies in their learning.

After the preliminary tests an active preparation and learning of the 50 words took place in two groups by doing various exercises. As it has been described above, the group "A" had the explanation of difficulties with the strategies whereas the group "B" learnt the same words but without spelling strategies. After a number of short tests with five or four new words from each lesson, students wrote a test that included 32 commonly misspelled words. The results of the 32 word test are presented below in diagrams.

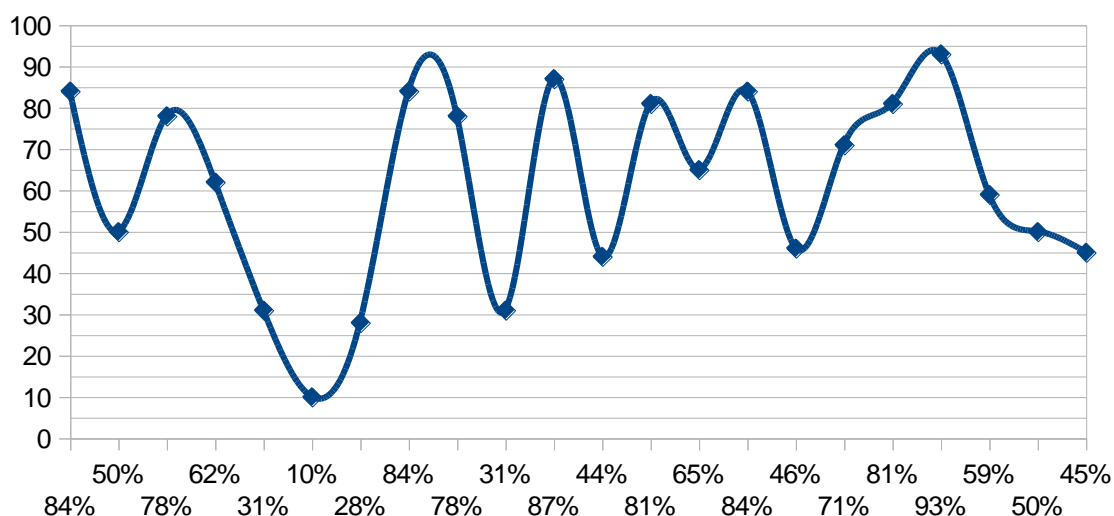
The first diagram shows the results of the test of the class 5"A". As the diagram shows, the results are higher than 100 percent. This group was given words' explanations and various strategies were applied in the class; high results testify for the success of this kind of teaching.

Diagram 1: The results of the test of 32 words (Group A, 5A)



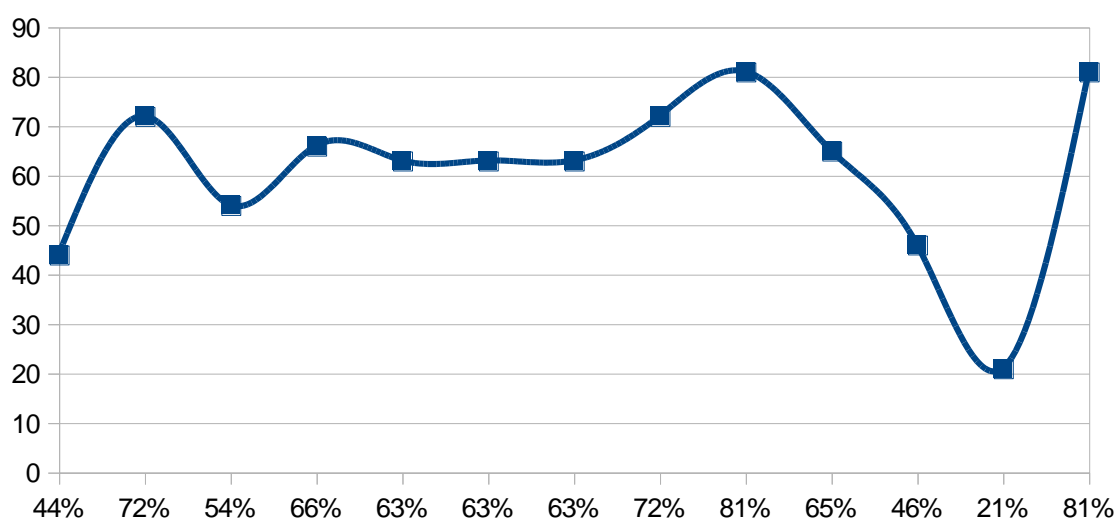
The second diagram shows the results of the test of the class 5”B”. The results are different from the class 5”A”. In some cases there are numbers higher than the average but there are some results that are lower than the average. However, it is not correct to assume that such results are directly linked with the absence of spelling strategies during the explanation of words. There could be other factors that influenced the results, for instance, students’ unpreparedness for the test. Anyway, the results could have been higher if the students had understood the difficulties of the misspelled words. However, if to compare the results of this test with the results of the preliminary test which included the 50 commonly misspelled words, the results vary from the lowest to the highest, whereas in the first test (see diagram 2: The results of the preliminary test of 50 words (Group B, 5B)) the results are increasing to the highest meaning).

Diagram 2: The results of the test of 32 words (Group B, 5B)



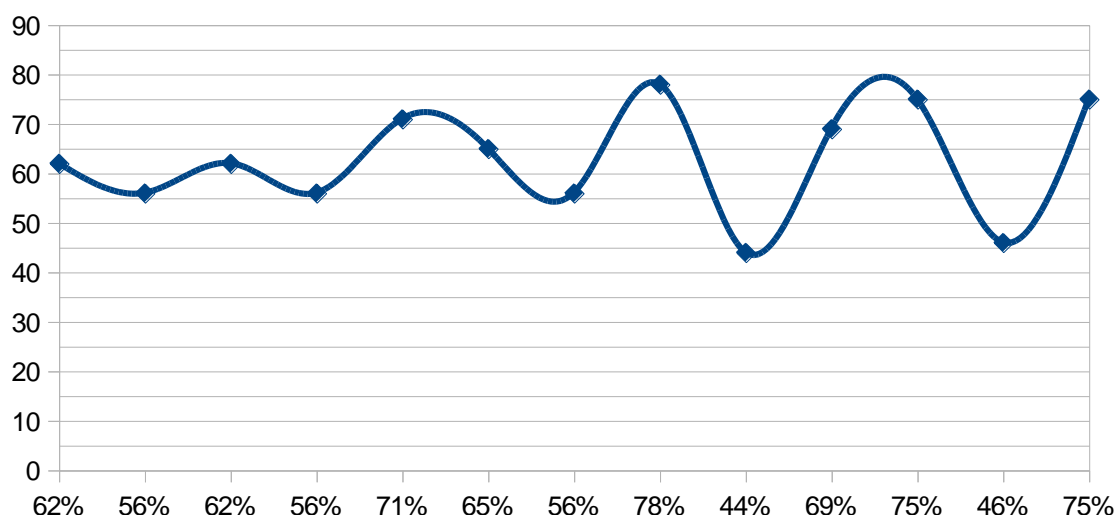
The results of the 6 grades are also different from each other and from the preliminary test on the 50 words. The first diagram shows the results of the class 6''A'' students who used the spelling strategies during the research. The results vary from the lowest number to the highest percent. In general, the percent is higher than the average, the result of 21% is explained by the fact that one student was absent at the beginning when students wrote the first preliminary test on the 50 words and he missed most of the English classes during the period of the research.

Diagram 1: The Results of the Test of 32 Words (Group A, 6A)



However, the results of the class 6“B” are higher than the results of the students from the 6“A” class, despite they did not use the spelling strategies during the research the way students from the group “A” did. It could be connected with that fact that students from the class 6“B” were better prepared for the test than students from the 6“A” class.

Diagram 2: The results of the test of 32 words (Group B, 6B)



Summarizing the results of the test on the 32 commonly misspelled words, it can be suggested that students increased their results in both groups “A” and “B”. However, students from the 5“A” class showed better results than students from the 6“A” class where both classes used the spelling strategies; in general the group “A” had the higher level than students from the group “B” where students did not apply any spelling strategies.

The last stage of the research was the final test on 50 misspelled words, where students had to choose the correct variant of a word. The diagrams show the results of the first preliminary test and the final test on the 50 words in order to see the difference and students’ development.

The first diagram shows the results of the preliminary and the final tests of the class 5“A”. The results are noticeably better. Three students even have the highest percent of 100. It shows that the usage of phonetic, ruse- based, visual and morphemic strategies increased students’ level of literacy. Thereby, it is possible to state that strategies were useful during the research and students increased their level of literacy.

The second diagram reveals the results of the class 6“A” students. The final test showed that students also increased their results by using the spelling strategies. Only one student stayed at the same level. Other students increased their percents greatly. Thereby,

in this case it is also possible to say that spelling ways and rules helped students improve their spelling skills.

Summarizing the whole results of the group “A” students who applied phonetic, rule-based, visual and morphemic strategies during the research, it can be stated that the strategies increased students’ level of correct spelling, and thus, they developed and improved their level of literacy.

Diagram 1: The Results of the Final Test (Group A, 5A)

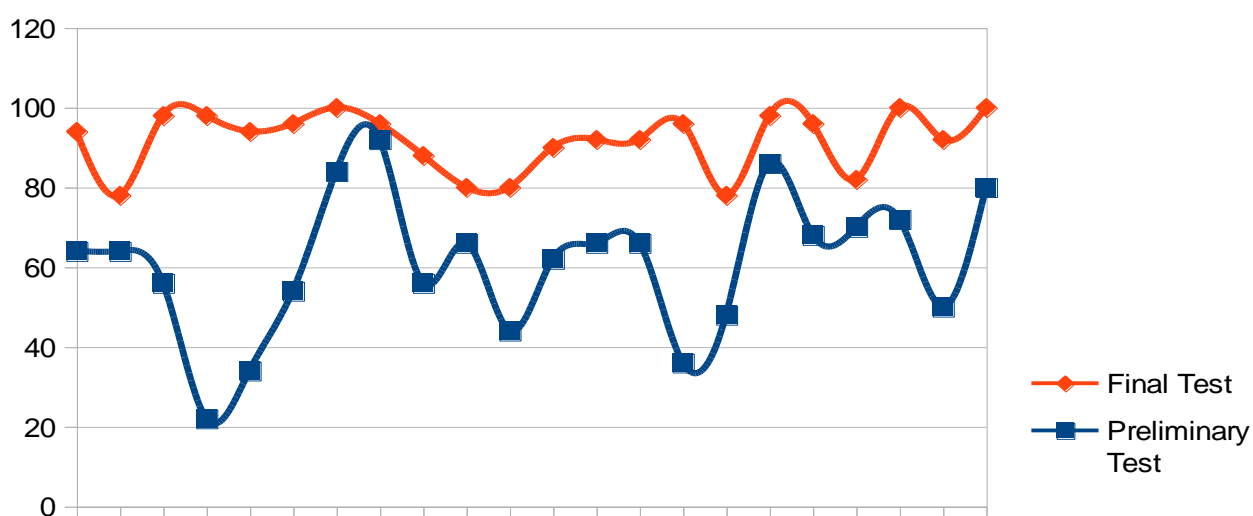
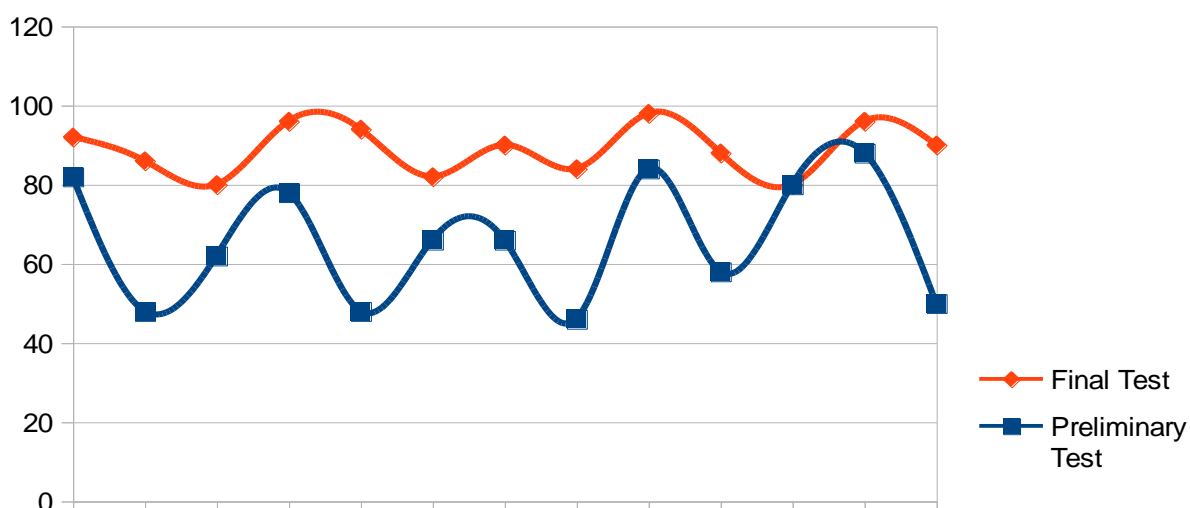


Diagram 1: The Results of the Final Test (Group A, 6A)



Students from the group “B” also improved their results as two diagrams below illustrate it. The former diagram shows the results of students of the class 5”B”. As the

diagram presents students who did not receive strategies-based teaching of spelling during the experiment also improved their results. The results are noticeably higher than the results of the preliminary test on the 50 words. Thereby, it can be stated that spelling strategies are not the only aspect that influences students' spelling. Students improved their spelling skills and learnt 50 words well. However, they could write much better if they used the strategies during the learning of these words.

The latter diagram shows the results of the students from the class 6''B''. Students also could develop their level of literacy and improve it well. Two students have a 100 percents result of leaning correct spelling of difficult words. It demonstrates again that spelling strategies do not play the key role in teaching spelling, they can just help students but everything depends on students' ability to learn and understand words.

Diagram 1: The Results of the Final Test (Group B, 5B)

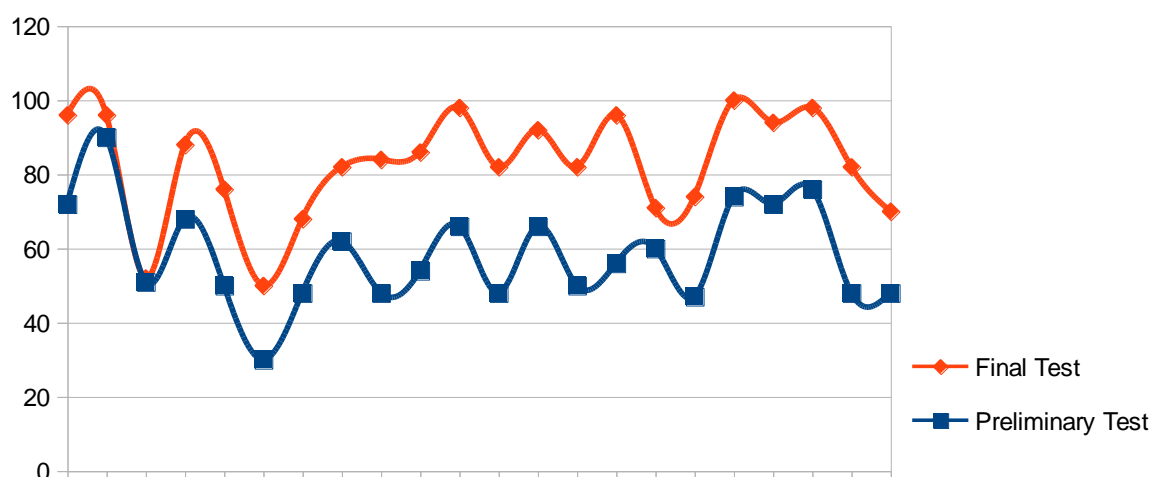
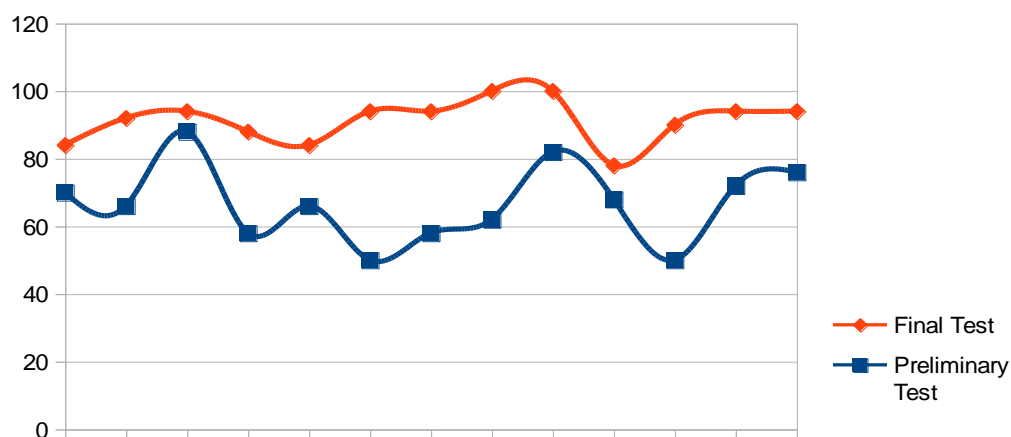


Diagram 1: The Results of the Final Test (Group B, 6B)



To conclude, to meet students' needs it was necessary to conduct research and experiments as students had weaknesses in orthography, hence, it was necessary to find out whether certain spelling strategies could help students; moreover, it was believed that a special programme of teaching spelling based on these strategies had to be developed.

There were used many different types of teaching spelling during the research and thereby, the results of the final test showed that in both "A" and "B" groups the level of spelling increased. The results of the "A" group are higher than the results of the "B" group that proves the statement that phonetic, visual, rule-based, and morphemic strategies improve the level of students' spelling skills and make teaching spelling more successful in terms of the percentage of correctly learnt commonly misspelled words. The hypothesis which states that regular inclusion in the English language teaching class routine of activities based on recognition of phonemes in a word influences student's ability to spell more correctly was also proved.

In view of positive results as to the role of spelling strategies in the development of students' level of literacy, it seems to be reasonable to devise a programme of teaching spelling based on the exercises that were used during the research. The first rule that should be used during teaching spelling is that activities must be logically structured. Secondly, the activities must be used regularly, i.e., in every lesson. Thirdly, the teaching spelling programme must be based on the main three aspects such as content-richness, structure and methodology.

The content-richness means that exercises must include different types of tasks. Each exercise must be directed to the development and practice of various spelling difficulties. For instance, the improvements of the vowels interchange in such words as "receiving" and "weird" where students often make mistakes writing these words with the "ie" letters; classification of vowel sounds, practice of silent letters, etc. In that way, students will get more practice and learn the most complicated aspects of English spelling. Furthermore, teachers should include not only spelling dictations but also exercises based on an authentic context such as texts or listening exercises, where students have to work with words and follow their usage in sentences.

Moreover, spelling exercises must be well-structured. Exercises must be planned logically, as it was written before they must be various and represent all spelling aspects. The teacher has to provide students with spelling exercises each lesson in order to follow the process of development of these skills. The teacher has to provide students with different exercises each lesson in order to interlace them and to pay attention to the most

problematic issues of students' study. Furthermore, spelling exercises are to be developed on the basis of the National Curriculum and the programme that students follow at schools.

The last but not least aspect that must be included into the spelling studying programme is methodology. All exercises are to be based on the developed theories and methods of teaching spelling. There are many different tips and ways of teaching spelling that teachers have to use them in their work. It is an ongoing process where teachers invent new exercises or develop the existing ones. Besides the techniques, there are key approaches to teaching spelling that are also useful in teaching spelling. By creating spelling exercises teachers have to take into consideration students' difficulties in spelling and, hence, prepare learner-centred spelling exercises.

The set of exercises presented in this thesis was devised on basis of the listed above principles. These exercises were tested during the research and showed that they were suitable and helpful in teaching spelling. All these spelling exercises can be used during teaching spelling. However, it is necessary to remember that the success of these spelling exercises in terms of the number of correctly learnt commonly misspelled words depends on some aspects. First of all, it is students' level of spelling awareness and overall English language mastery. If students are good at English, they will not have any serious difficulties with spelling, but if they have problems with spelling, then they will need to pay more attention to spelling than others do. The second aspect is time. It is important to give students spelling exercises regularly but sometimes teachers simply do not have time for this because of the basic teaching programme that they must follow. Thirdly, the appropriateness of exercises: it happens quite often when existing exercises are not suitable for students and teachers have to make necessary corrections in order to make them appropriate for students' level.

CONCLUSION

Spelling is one of the most complicated problems for English language learners. There are many various ways and methods of teaching spelling that can help students to make the learning a success. Phonetic, rule-based, visual and morphemic spelling strategies are the object of the present research. The research to reveal to what extent these spelling strategies influence students' spelling was conducted in *Kohtla-Järve Kesklinna* basic school. Two groups "A" and "B" were tested. The former practiced words with the use of spelling strategies, the latter, on the contrary, studies words without any spelling strategies. Students from both groups developed their spelling skills on the basis of the list of the most commonly misspelled words.

The introduction presents the brief history of English spelling and issues considered both by teachers and researchers of spelling problems. There is also a short description of phonetic, rule-based, morphemic and visual strategies of teaching spelling. The first chapter presents the description of phonetic, morphemic, visual and rule-based spelling strategies as the most common ways of spelling. It also discusses English spelling difficulties, spelling methods and spelling reforms.

The second chapter gives the description of the research based on the use of the spelling strategies in the classes of *Kohtla-Järve Kesklinna* basic school and supports the argument that regular inclusion of activities based on recognition of phonemes in a word influences students' abilities to spell more correctly. Students wrote three tests to check spelling of difficult words by applying/ not applying spelling strategies. The results of the tests are presented in various graphs and schemes. The set of exercises that was used during the research, the preliminary test of 50 words, the test of 32 words and the final test as well as the list of 50 the most commonly misspelled words are also presented in this chapter. The recommendation and the programme of teaching spelling is based on the results of the research and it includes a set of exercises that was used during the research.

The results of the research showed that students from the group "A" increased their spelling skills after using the spelling strategies. However, the "B" group also showed good results and their spelling improved but the percentage was not as with the group "A". Thereby, phonetic, morphemic, rule-based and visual strategies can be used successfully as a supportive way of teaching spelling in English language classes.

SUMMARY IN ESTONIAN

Antud magistritöö teemaks on foneetiliste, visuaalsete, morfeemsete ja reeglitele toetuvatele strateegiate uurimine, mis õpetavad Inglise keele õigekirja. Antud töö põhiline eesmärk on välja selgitada, kuidas erinevad õigekirja õpetamise meetodid mõjuvad Inglise keele õigekirjale põhikoolis ning analüüsida saadud tulemusi. Selleks, et välja selgitada, kuidas antud strateegiate kasutamine mõjub Inglise keele õigekirja tasemele, on läbi viidud uurimus Kohtla-Järve Kesklinna Põhikoolis. Uurimuse ajal on esitatud hüpotees: korrapärane ülesannete täitmine foneemide tuvastamise abil jaatavalt mõjub õpilaste õigekirjale.

Uurimuse käigus viiendate ja kuuendate klasside õpilased jagati gruppideks “A” ja “B”. Õpilastele pakuti viiskümmend sõnu eriti keerulise Inglise keele õigekirjaga. “A” grupp õppis neid sõnu spetsiaalsete strateegiate abil, kuid “B” grupp vastupidi, ilma strateegiateta. Pärast praktiliste ülesannete ja vahepealsete testide, mõlema grupi õpilased kirjutasid lõputöö, mis näitas, et “A” grupi tulemus osutus parem, kui “B” grupi. Uurimuse tulemused viivad järeldusele, et foneetilised, visuaalsed, morfeemsed ja reeglitele toetuvad strateegiad jaatavalt mõjuvad Inglise keele õigekirja tasemele, järelikult, hüpotees on õige.

Diplomitöö koosneb sissejuhatusest, kahest põhiosast, kokkuvõttest ja kirjanduse loetelust.

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