

**UNIVERSITY OF LATVIA
FACULTY OF EDUCATION, PSYCHOLOGY AND ART
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**MULTISENSORY APPROACH TO DEVELOP ENGLISH
HIGH FREQUENCY WORD RECOGNITION SKILLS
FOR 5 TO 6 YEAR OLD CHILDREN**

**MULTISENSORĀ PIEEJA
BIEŽI SASTOPAMO VĀRDU ATPAZĪŠANAS PRASMJU ATTĪSTĪBAI ANĢĻU
VALODĀ NO 5 LĪDZ 6 GADU VECIEM BĒRNIEM**

DIPLOMA PAPER

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DECLARATION OF ACADEMIC INTEGRITY

I declare that this study is my own and does not contain any unacknowledged work from any source.

Dace Lakse,

January 10, 2017

ABSTRACT

Reading is one of the essential skills that students learn at primary school. Many learners struggle to read high frequency words in English because these words do not apply decoding strategies that they know. Furthermore high frequency words appear in great quantity in a reading text. The author of the Diploma Paper has observed that there are children at the age 5 to 6 who have difficulties to recognize high frequency words and therefore their reading fluency and comprehension of a text is not very high.

The author has chosen a case study as a research method to explore how a multisensory approach can help develop English high frequency word recognition skills for students at the age 5 to 6. The empirical part was carried out at the International School of Latvia in the year 2016 from October 17th – December 9th. The class consisted of 21 students from the age of 5 to 6.

The author designed and implemented high frequency word activities using a multisensory approach for students, collected the data from pre- and post-reading assessments, questionnaires for students' reading motivation and high frequency word learning strategies, observations during activities, and an interview with the kindergarten teacher. The Diploma Paper can be used as a guideline for other students and teachers to develop English high frequency word recognition skills using a multisensory approach.

Key words: high frequency words, recognition skills, reading fluency, multisensory approach.

ANOTĀCIJA

Lasīšana ir viena no būtiskākajām prasmēm, ko skolēni apgūst sākumskolā. Daudziem skolēniem bieži sastopamie vārdi angļu valodā sagādā grūtības, jo tie nepakļaujas zināmajām lasīšanas stratēģijām. Turklāt bieži sastopamie vārdi parādās lielos daudzumos lasīšanas tekstos. Diploma darba autore ir novērojusi, ka ir bērni no 5 līdz 6 gadu vecumam, kuriem grūtības sagādā bieži sastopamus vārdus atpazīšana, tādēļ nav augsts lasīšanas ātrums un izpratne par tekstu.

Kā pētījumu metodi autore ir izvēlējusies gadījuma pētījumu, lai izpētītu, kā multisensorā pieeja var palīdzēt 5 līdz 6 gadu veciem skolēniem atpazīt bieži sastopamos vārdus. Pētījums tika veikts 2016.gadā no 17.oktobra līdz 9.decembrim Latvijas Starptautiskajā skolā.

Autore izmantoja multisensoro pieeju, lai izveidotu uzdevumus, mācot bieži sastopamos vārdus, apkopoja rezultātus pirms un pēc lasīšanas testiem, lasīšanas motivācijas un bieži sastopamo vārdu mācīšanas metodes aptaujas anketām, veica novērojumus mācību procesa laikā, kā arī intervēja bērnu dārza grupas skolotāju. Diploma darbs var tikt izmantots kā vadlīnijas studentiem un skolotājiem, kuri vēlas attīstīt bieži sastopamo vārdu atpazīšanas prasmes, izmantojot multisensoro pieeju.

Atslēgvārdi: bieži sastopamie vārdi, atpazīšanas prasmes, lasīšanas ātrums, multisensorā pieeja.

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INTRODUCTION

Reading is one of the essential skills that is taught in primary schools. At the same time it is a very complex and difficult task and many English language learners try to break the reading code to become proficient readers. For many young learners it is a real challenge to learn to read because there are five components: phonemic awareness, phonics, fluency, vocabulary and text comprehension that should be combined in the learning process in order to become a reader. Most of the time children are engaged in activities that reinforce their reading skills. Young learners have a lot of activities where they wonder about sounds, letters, words, their writing and spelling patterns, rules for these patterns, and word meaning. After students have developed their phonemic awareness where they have learned to hear and identify individual sounds in spoken words they are ready for phonics that help students to read and find relationships between the English alphabet and sounds. The phonics program helps children to read familiar and not so familiar words and steadily enrich their vocabulary.

When young learners have learned some phonics rules and are ready to read and write they discover that there are some words in English called high frequency words or sight words that do not follow rules that they have learned and are spelled differently. Furthermore they notice that high frequency words appear in a great number in any reading texts. For some young learners, especially for nonnative English speakers, it is hard to understand the meaning of the high frequency words in a text and additionally it is hard to comprehend the text at all. According to Blevins (2006) there are 250 high frequency words that are often used by children up to 70-75 percent in texts. Even young learners who have developed their phonemic awareness and phonic skills can have difficulties to read high frequency words. Furthermore it slows down reading fluency and comprehension of the text. The problem for many young learners is how to learn to read high frequency words that do not correspond to decoding strategies that they know and that appear in great quantity in the reading text. In addition, they are asked to memorize high frequency words and for many children it is a real challenge to memorize all of these.

There are many young learners who struggle to read high frequency words because they need to learn these words by sight. There are pupils who easily memorize the whole word but there are also learners who struggle to remember high frequency words. As reported by the National Reading Panel (2000) the results showed that 44 percent of Grade 4 students were not

able to read first grade level texts and have also very low reading fluency and comprehension of a text. According to Falzon et al. (2011) 15 to 20 percent of elementary school children have difficulties to acquiring reading and spelling skills. Additionally with a time there forms a large gap between students who have high frequency word proficiency and students who have not yet mastered this skill, and as the years go on, the gap becomes wider and wider (National Reading Panel, 2000).

Not only young learners struggle to read and memorize high frequency words but also teachers struggle in teaching high frequency words to children. They try to choose activities that in their opinion will help young learners to achieve better results in acquisition of high frequency words but this does not always work.

The author of The Diploma Paper has noticed that there are young learners who easily remember words by sight and understand their meaning but at the same time there are children who have difficulties to read because they cannot remember and recognize high frequency words and cannot comprehend the text because they are not familiar with high frequency words. Some learners have a very low reading fluency because they struggle to recognize high frequency words and therefore they have problems comprehending the text they are reading.

Educators emphasize that reading fluency is a link between word recognition and comprehension of the text and according to Rasinski (2012) reading fluency has been considered as a key component of proficient reading. It influences not only the learning success of a student across the curriculum but also can cause reading difficulties at school through the years and even later. Thus high frequency words have drawn more attention in recent years because good high frequency word recognition skills ensure better reading fluency and comprehension skills.

Based on this the **aim** of the Diploma Paper is **to explore how a multisensory approach can develop high frequency word English recognition skills for 5 to 6 year old children.**

The author sets the following **objectives** in order to achieve this aim:

1. to study and analyze literature on high frequency words and activities with a multisensory approach that can help to develop English high frequency word recognition skills for 5 to 6 year old children;
2. to design activities for teaching high frequency words recognition skills with a multisensory approach;

3. to implement activities with a multisensory approach that help develop high frequency word recognition skills for 5 to 6 year old children;
4. to gather and analyze data from reading tests, observations from activities, questionnaires, and an interview with the kindergarten teacher in order to determine how activities with a multisensory approach can develop English high frequency word recognition skills.

In order to reach the aim of the Term Paper the author concentrates on the following **research questions**:

- what the role of high frequency words have in teaching reading in primary school is;
- how a multisensory approach can be applied in lessons in primary school;
- how multisensory approach activities should be implemented to teach high frequency word recognition skills.

The chosen **method of research** is a case study at the International School of Latvia. The case study was carried out in the year 2016 from October 17th till December 9th. The group consists of 21 learners in kindergarten.

The author of the Diploma Paper mostly uses standpoints of these authors: Kaye P. (1884), Pinnell and Fountas (1998), Monroe and Staunton (2000), Nation (2001), Cooper (2002), Franzese (2002), Bear et.al. (2004) Pikulski and Chard (2005), Minskoff (2005), Williams (2005), Blevins (2006), Linan-Thompson et al. (2007), Lawrence (2007), Walpole and McKenna (2007), Meadan et al. (2008), Lawrence (2008), Henry (2009), Phillips and Feng (2012), Blackwell and Laman (2013), Weakland (2013), Kamala (2014), and Collen et al. (2016).

Data collection methods used were pre- and post-reading tests, observations from activities, questionnaires for students about their attitude towards reading and their opinion about activities used during the case study and an interview with the kindergarten teacher.

The reading tests before and after the high frequency word activities will be done to compare the data if activities with a multisensory approach help students develop high frequency word recognition skills. The reading tests also will show students' strengths and weaknesses. Data from observations tests during high frequency word activities will indicate students' learning needs. There will be two kindergarten questionnaires made. One of the questionnaires will reveal young learner motivation and attitude towards reading before and after learning

activities to see if there are some changes after high frequency word activities. Another questionnaire will reflect young learner opinion about activities with a multisensory approach that were used during the case study. During the interview with the kindergarten teacher her thoughts about teaching high frequency words to students at the age 5 to 6 will be presented.

Outline of the chapters:

Chapter 1 contains the definition and characteristics of high frequency words; it gives the term and definition of high frequency words and explores theoretical standpoints from various researchers describing the role of high frequency words in reading.

Chapter 2 gives characteristics of the multisensory approach and describes activities with a multisensory approach to develop high frequency word recognition skills for students at the age 5 to 6.

Chapter 3 reflects the case study and analyzes and interprets the results of the research.

1. THE CONCEPT OF HIGH FREQUENCY WORDS

At the beginning it is necessary to determine the term and definition of ‘high frequency words’ and clarify what this concept means as various terms such as sight words, instant words, irregular words, quick-and-easy words, core words, nonphonetic words and high utility words can be used to denote high frequency words. Researchers working in this field have used different terms and description for high frequency words.

According to Otto and Stallard (1975) there are some attempts seen to describe high frequency words in 1831 by Cobb where he characterized high frequency word reading as “No person should attempt to read until he is able to call or pronounce at sight the words most commonly met within the composition” (Otto and Stallard,1975: 9). Later on in the year 1936 Dolch used the term ‘sight words’ in his book *A Basic Sight Word Vocabulary* with 220 high frequency words and was convinced that all these words should be learned by sight-said method, whereas Fry published *The New Instant Word List* in 1980 and used another term that is seen already in the title of the book ‘instant words’ with 300 most frequently used words. Following this list Fry increased it to 1000 words and emphasized, like Dolch, that students have to memorize these words by sight (Farrell et al., 2013a).

In the year 1998 Pinnell and Fountas (1998) used another term ‘high frequency words’ and the authors define high frequency words as ‘**core words**’ that occur often in reading and writing materials. Also Williams (2005), similar to Pinnell and Fountas (1998) states that high frequency words are a core set of vocabulary used in different kinds of texts for young readers and they have to learn to read them quickly and automatically otherwise it is hard for them to understand a text and that is why the author also uses only the term ‘core words’. Additionally Pinnell and Fountas (1998) point out that high frequency words can be very useful for readers by helping struggling readers to use words they know already and that help to guide them through a text. Developed readers know many high frequency words that help them to move quickly through a text because these high frequency words support their reading fluency. Being able to write a certain amount of high frequency words helps writers to write more meaningful information without hesitation and paying a lot of attention to writing words correctly because they are able to do this.

Further Nation (2001) uses the term ‘high frequency words’ and describes them as very important words because although they make up a small group of **function words**, but they nevertheless occur in great quantity in different spoken and writing texts. Also Bear et al. (2004) use the term ‘high frequency words’ and additionally offer another term - ‘high utility words’. The authors do not agree with other authors that high frequency words should be memorized and they describe it as “a brute memorization and offers students no opportunity to form generalizations, which can extend to the spelling of thousands of unstudied words” (Bear et al. 2004: 196). That might be the reason why authors advise sorting high frequency words by finding similarities and differences between the words. They also suggest choosing only those high frequency words that are often used in students reading and writing text and that are not very far from the students’ development level. They offer to post other theme words that might cause difficulties for some time period on walls for easy reference. Pikulski and Chard (2005) agree with the term ‘high frequency words’ and define them as high frequency words that appear over and over again in our language. Also Blevins (2006) and Eide and Gabrielson (2013) agree with this definition and use the same term.

Cooper (2002) uses both terms ‘sight words’ and ‘high frequency words’ describing these words as the most encountered words in any text. For example the word - “the” appears approximately every tenth word in children’s reading texts. Additionally he stresses that high frequency words do not follow the rules of spelling and produce a lot of difficulties for students to read them.

Authors like Hall and Moats (1999), Franzese (2002), Palmer and Bayley (2004), Williams (2005), Torgesen and Hudson, (2006), Meadan et al. (2008), Sullivan et al. (2013), Weakland (2013) and Blackwell and Laman (2013) use the term ‘sight words’ but like Franzese (2002) describes them as quick-and-easy words, Reutzel and Cooter (2007) call them ‘instant words’ and Linan-Thompson et al. (2007) together with Henry (2009) use only the term ‘irregular words’. Hall and Moats (1999), Minskoff (2005) and Henry (2009) determine that high frequency words should be learned visually and that is the reason why they should be identified automatically as whole words without analysis and rapidly. Linan-Thompson et al. (2007) and Meadan et al. (2008) also agree that students have to read high frequency words fluently and automatically at first sight.

Minskoff (2005), Walpole and McKenna (2007) and Farell et al. (2013b) use both terms ‘sight words’ and ‘high frequency words’, whereas Farell et al. (2013b) point out that the term ‘sight words’ is often used as a term but in reality it reflects already the process of learning the words by memorization. According to Monroe and Staunton (2000) Ehri in 1995 points out that "sight word reading refers not to a method of teaching reading but to the process of reading words by accessing them in memory" (Monroe and Staunton , 2000:14). Minskoff (2005) uses both terms as synonyms by pointing out that high frequency words are words that appear most frequently in early reading material and these are sight words that should be learned first. Additionally the author also distinguishes functional sight words that are words that appear in our everyday lives, such as, exit, poison and unphonetic irregular words that should be only taught by sight.

Thereby Walpole and McKenna (2007) distinguish definitions for high frequency words and sight words by defining sight words as “any word that can be pronounced immediately, at sight, without conscious analysis” (Walpole and McKenna, 2007: 165) and emphasize that they do not agree that high frequency words are looked upon as synonyms for sight words and give another term for high frequency words. They describe a high frequency word as “a word that occurs so often in the text that readers must be able to pronounce it automatically in order to achieve fluency” (Walpole and McKenna, 2007: 164).

Blackwell and Laman (2013) state that high frequency words can be read from recalled memory. They are convinced that high frequency words should be learned by memory otherwise all attention goes to decoding, analyzing or predicting instead of focusing to understand the meaning of high frequency words. Furthermore they have an opinion that learning to read by sight means not decoding them but recognizing and reading words quickly by sight.

Pinnell and Fountas (1998) say that high frequency words serve more as function words in a text. Additionally they add that children who are reading a great deal will learn more words because they know how words look in print, and also when children get older their reading vocabulary will grow much faster than their written vocabulary. Therefore it can be concluded **the high frequency words can be described as words that occur often in reading and writing material, works as function words and should be identified automatically as whole words without analysis and rapidly in order to achieve reading fluency.**

Hall and Moats (1999) emphasize that automatic word recognition is a crucial skill without which the reader cannot remember what the text is about if a reader needs to stop all the time to decode words. According to Nation (2001) there are 2000 frequently used words that form over half of the words used in written text. Therefore learning to read high frequency words automatically can ease reading. After the analysis made by the author these 2000 words appear in 90 percent of conversations, 87 percent of fiction, 80 percent of newspapers and 78 percent of academic texts. Cooper (2002) also indicates that from 600, 000 English words only 13 of them (a, and, for, he, is, in, it, of, that, the, to, was, you) appear in 25 percent of texts that are read. Therefore children see these words every day in many places and some children will learn them very fast but some children will need some instruction to remember these words. Furthermore there are 100 words that make up 50 percent of the words we read. Additionally the author stresses that many high frequency words have more influence on the flow and coherence in any of the text we read and serve more as function words rather than having a strong meaning in themselves.

Blevins (2006) agrees with this information and indicates some more facts about high frequency words and their use as function words, such as, *a*, *the* and *and*. Furthermore, these 250 words are commonly used by children in up to 70-75 percent in their writing. Other research done by Hall and Moats (1999) showed how many times each word occurred in schoolbooks for students from the third through eighth grades. The results showed that 109 words are in 50 percent of the text, 1000 words are in 75 percent of the text and 5000 different words are in 90 percent of the text. The other 10 percent were 80 000 words that occurred not so often in student school books. Skilled readers recognize high frequency words very fast.

Marzouk (2008) gives five reasons for teaching high frequency words to children:

- do not follow commonly used phonics rules,
- can be memorized only by sight,
- improve reading fluency that leads to reading comprehension,
- those who fail – lose interest in reading and school,
- raise motivation, interest and pleasure for reading.

The National Reading Panel (2000) researchers have demonstrated that “students who are at risk for reading difficulties require instruction that directly targets the acquisition of fluent word recognition skills” (The National Reading Panel, 2000: 96). Also Nation (2001) points out that high frequency words are very important in the English language and there should be considerable time spent on these by teachers and students. The author of the Diploma Paper can strongly agree that there should be more time spent on developing high frequency word recognition skills because according to Falzon et al. (2011) there are almost 15-20 percent students who have difficulties developing themselves as readers. Based on these findings it can be concluded that students should spend more time developing their high frequency word recognition skills, reading fluency and comprehension skills in order to become proficient readers and raise their confidence and autonomy in reading.

Blackwell and Laman (2013) point out the students who are not actively engaged in activities may lose interest and motivation and get bored. Furthermore, there are some children that might even experience frustration because they are not able to focus, that are disruptive and have difficulties to hold their interest. As the research has shown these students later in their lives lose interest in reading and have lower comprehension skills. Also, according to Palmer and Bayley (2004) and Weakland (2013), there is another group of students who require more time and instructions in order to learn high frequency words and these are students with learning problems and disabilities. Stuart et al. (2000) indicate students who had motivation had an advantage in learning high frequency words. Additionally, they state that the learning tasks for children should be clear by giving explicit instructions and giving extra support in how the tasks should be accomplished.

It can be concluded that both terms ‘high frequency words’ and ‘sight words’ are most often used by researchers. Most of the authors use them as synonyms. There are some other terms that can be used to describe high frequency words but they are mostly used only by one author and have not reached recognition. Thereby the author of the Diploma Paper agrees with the term ‘high frequency words’ and uses it in the Diploma Paper. The term ‘high frequency words’ can be used to define words that appear most frequently in a text, such as, ‘the, a, is, it’ which students can read automatically without decoding in order to reach the reading fluency. The authors indicate these characteristics for high frequency words:

- occur often in reading and writing materials,

- core vocabulary in a text,
- function words in a text,
- irregular words because they do not follow rules of spelling,
- automatic word recognition,
- should be learned in isolation and in context,
- improve reading fluency.

The term ‘high frequency words’ is often used together with reading fluency and in the next subchapter the role of high frequency words in reading fluency will be determined.

1.1. THE ROLE OF HIGH FREQUENCY WORDS IN READING FLUENCY

Linan-Thompson et al. (2007) hold the view that regardless of whether students have developed good phonics skills, there are many young readers who struggle to comprehend a text and their reading fluency is very low. They stress that **only automatic word recognition and good reading fluency allow students to comprehend the text**. As mentioned above high frequency words that often appear in texts should be recognized automatically without decoding which is the reason why high frequency words are mostly viewed as part of reading fluency. According to Rasinski (2012) **reading fluency has been considered as a key component of proficient reading** in recent years. In the past reading fluency was overlooked but nowadays it has received great attention and is crucial because reading fluency in particular ensures a high level of reading achievements and comprehension.

The National Reading Panel (2000) defines reading fluency as the ability to read text with accuracy, appropriate rate, and good expression and especially the development of high frequency words in reading fluency is essential in developing early reading foundational skills. Furthermore, they point out that those students who are fluent readers usually achieve better results at school and in their adult life. They also emphasize that reading fluency can be developed from reading practice. Additionally it is necessary for young children’s independence, autonomy and development of their reading experiences as they grow older, as well as - for their confidence in reading.

The research done by the National Center for Education Statistics in the year 2005 proved that students who have problems acquiring high frequency word recognition skills struggle to read across the curriculum and, furthermore, if they do not approach the problem seriously in earlier years, they can have difficulties in reading through school (Sullivan et al., 2013). Joshi et al. (2002) give different reasons for that: family background, lack of appropriate reading materials and motivation, quality of reading instructions and some cognitive weaknesses. McElheran (2010) points to the educators' report done by Norman & Wood (2008) which states that children who do not learn to read fluently by first grade are at risk of falling further behind their peers each year. That is the reason why Meadan et al. (2008) stress that it is essential to develop high frequency word competence in children which is necessary for their reading independence and will help through the school curriculum.

Pikulski and Chard (2005) draw attention to the fact that if early readers cannot instantly identify high frequency words, such 'as', 'the', 'and' and "at" they are unlikely to become fluent readers. High frequency words are also described as words with serious challenges because they do not correspond to spelling rules. Additionally it is difficult to teach high frequency words to students because they have to memorize them. Pikulski and Chard (2005) admit that **reading fluency is achieved when reading is instant, accurate, and automatic** and allows a reader to link his attention to comprehension instead of decoding a word. If a reader can read words fluently, it indicates that a student has reached the Fully Alphabetic stage according to Ehri's theory, where words are read – rapidly and with instant recognition. Additionally the authors point to the readers that are at the Partial Alphabetic stage at which students mix up words, such as - 'were' and 'where', 'wire' and 'wore'. Furthermore they add that the readers are at the Consolidated Alphabetic if they can recognize whole words instantly. At this stage readers not only decode words instantly but also store letter patterns across different words. In the last Fully Alphabetic stage readers are ready to be fluent.

According to Blackwell and Laman (2013) Ehri divided reading in four reading development phases: Pre-alphabetic, Partial Alphabetic, Full Alphabetic and Consolidated Alphabetic phases. In the Pre-alphabetic phase students do not have alphabetic knowledge but they learn words by visual clues and the same happens with high frequency words. In the Partial Alphabetic phase students are able to see connections between sounds and the alphabetic letters and try to find some connections with certain letters in the words but they have difficulties to

decode words that are unknown and unfamiliar. Children at this stage usually recognize words by their first or last letter and it often leads to reading mistakes and that happens also with high frequency words. In the Full Alphabetic phase students have developed their understanding of letter and sound relationships and are able to decode unknown words. The Consolidated Alphabetic phase is the final phase of high frequency word development at which students are able to remember high frequency words by memory and become fluent in reading and can pay more attention to comprehension of the text. The authors add that only after going through all four reading phases will a student be able to achieve literacy, and points out that in each phase students should go through development of learning high frequency words in order to start to memorize them. Furthermore, they emphasize that each developing phase helps students in different ways to put high frequency words in their memories.

Beech (2005) points directly to the third reading development phase by Ehri the Alphabetic phase where students are using not only alphabetic principles in reading but are also learning to recognize high frequency words. Furthermore the author emphasizes that students with full alphabetic skills can achieve better results in high frequency word recognition. Additionally Ehri calls this phase the most important in reading learning because especially in this phase high frequency word vocabulary is put in the center and students adopt strategies that help them handle different words.

Pikulski and Chard (2005) are convinced that the indicators of reading fluency are accuracy, quality and reading rate of oral reading, and reading comprehension. Also Blevins (2006) acknowledges the importance of high frequency words for fluent reading. He also indicates that high frequency “words carry a little meaning; they affect the flow and coherence of the text” (Blevins, 2006: 131). Hall and Moats (1999) define reading fluency as a reader’s ability to read fast without stopping in order to identify a word and that a reader has the ability to recognize words automatically.

Blevins (2006) states that reading fluency is “the ability to read smoothly, easily, and readily with freedom from word recognition problems” (Blevins, 2006: 221) and there are three signs that indicate that a student is reading with automaticity. These are reading expression, reading aloud and retelling a story and, equally, comprehension of a text after reading or listening to it. Furthermore he emphasizes that fluency is crucial for comprehension and enjoyable reading and if there is a lack of fluency then usually the reader will read slowly,

clumsily, with constant mistakes, will have problems paraphrasing and will not have correct intonation. The author stresses that in order to develop fluency students have to recognize high frequency words automatically. Additionally he emphasizes that it is not only the accuracy of words read but also the speed at which a student is reading high frequency words that determines the student's fluency.

Ehri (2008) emphasizes that just looking at high frequency words should activate pronunciation and the meaning of the word for skilled readers. Therefore the high frequency word recognition should happen automatically. The author describes this quality a value because only then readers can pay attention to the content of the text. There is a core list of high frequency words developed in 1983 by Harris and Jacobson, that counts 10, 240 high frequency words that should be taught at school. A powerful mnemonic system is required to remember these words. Also, according to Ehri there is an advantage in learning high frequency words by sight because then it is faster to decode words. Thereby, fast word recognition leads to reading fluency and that is a reason why it is important to build a high frequency word vocabulary (Blackwell and Laman, 2013).

Normally, students continue to increase their store of high frequency words as they expand their range of reading after elementary school, but if they don't maintain relatively high levels of reading practice, they can fall behind. Each year, students must add large numbers of words to their high frequency vocabulary in order to maintain their ability to read grade-level text fluently, because the range of unusual, or infrequent, words in grade-level text increases annually (Torgesen & Hudson, 2006).

According to Pikulski and Chard (2005) fluent readers read a text with speed, accuracy and appropriate expression. Furthermore they point out that reading fluency leads not only to developed letter and word recognition skills but also to developed oral skills that are crucial for becoming a fluent reader. Additionally they describe **reading fluency as a bridge between automatic word recognition and comprehension of a text**. Pinnell and Fountas (1998) have earlier emphasized that "children need to develop flexibility and fluency to enhance comprehension and enjoyment of reading and writing" (Pinnell and Fountas, 1998: 10).

Rasinski (2012) points out that **reading fluency is a link from word recognition to comprehension**. The author also absolutely agrees with Pikulski and Chard (2005) and emphasizes that it is not enough that students are able to read words accurately; they have to read

words automatically and that will lead to reading fluency and comprehension of a text. Additionally he highlights that reading fluency should be a hot topic for teachers because reading fluency should be not only looked on as ability to read fast but reading with meaning and all instruction that focuses only on speed in reading should be regarded as wrong. Rasisnski (2012) stresses that the goal for readers should be to read words in texts accurately and automatically. When the words in a text are identified automatically, readers can employ most of their limited cognitive energy to that all-important task in reading: text comprehension.

Eide and Gabrielson (2013) state the **reading fluency is like a gate to reading comprehension**. The research says that in order to become skillful readers students should learn many skills: phonemic awareness, alphabetic principle and systematic phonics, fluency and high frequency words, vocabulary development, handwriting and spelling, reading comprehension and all of these skills should be taught systematically. They also acknowledge that there are many points of view that researchers have regarding teaching high frequency words to students. Also Sullivan et al. (2013) admit that knowledge of **high frequency words plays a significant role in reading words fluently** in connected text and comprehension of a text.

Weakland (2013) describes high frequency word recognition skills as the ability to determine the pronunciation and meaning of a word in print. There are two aspects for word recognition that should be highlighted: accuracy and speed. The level of word recognition skills determines the difference between a good and a poor reader. If readers automatically recognize words it gives the possibility of paying all of their attention to the meaning of the text. Otherwise they focus on decoding the words rather than on comprehending the text. It is hard for readers to change their attention from word recognition to comprehension as this might lead to tiredness and frustration. Results of the research done by Stuart et al. (2000) clearly show that specifically the development of high frequency word recognition skills is influenced by “characteristics of the child, of the words to be learned, and of the teaching conditions” (Stuart, 2000: 24).

In the opinion of Marzouk (2008) a **lack of high frequency word vocabulary in beginning readers can contribute to a decrease in comprehension and motivation**. Additionally, high frequency word vocabulary can assist young readers with finding a purpose for reading. **Reading can become slow and discouraging without knowledge of high frequency words** (Monroe and Staunton, 2000). Weakland (2013) agrees with this opinion and

adds other facts that can influence students' ability to acquire high frequency words, such as, motivation, attitude, relationships between students and a teacher and students' behavior.

Overall it is crucial to stress that the high frequency words should be looked at as core vocabulary in texts because they appear very often in reading and writing materials and a lack of reading fluency in beginning readers can contribute to a decrease in comprehension and motivation. Knowledge of high frequency words plays a significant role in order to read words fluently. Furthermore, reading fluency should be viewed on as a bridge between automatic word recognition and comprehension of a text and precisely reading fluency has been considered as a key component to comprehension. Research shows that students who have good recognition skills achieve better results at school because they are able to read a text with good speed and pay attention to comprehension of a text instead of word recognition. The next subchapter represents different high frequency word lists that are created by different authors over the years.

1.2. HIGH FREQUENCY WORD LISTS

The origins of high frequency lists are found when reading became more important. In early schools students used only high frequency word drills in which each student was supposed to read and write the word until they knew it and only then they could start to learn a new one. Seeing that some of the words occur more often teachers started to create lists of the most common and most difficult words that students should learn (Otto and Stallard, 1975). Furthermore, according to the authors there are more than 3,000 word lists made and published in the past 100 years. Though high frequency words in lists differ there is a lot of overlap among them. Moreover, it has not changed over time. For example, in the book *A Compilation of Preschool Children's Word Frequency Counts* by Newman and Bailey in 1973 the 1,000 most frequently used words are published from eight basic spoken lists, and from the 188 most frequently used words 169, appear in all of these lists. The most amazing aspect is that these lists present the usage of the words throughout time from 1928 to 1971.

Otto and Stallard (1975) says that teachers have used high frequency word lists for over two centuries and in the 19th century they have been looked at as an essential part of beginning reading instruction. The authors have also selected and compared 16 high frequency word lists and designed their own high frequency word list that they named *One Hundred Essential Sight*

Words (See Appendix 1). These 100 words appeared in all lists and are often used in spoken and written language. The list is suggested to be used for all grade levels, but especially for elementary school students.

According to Farrell et al., (2013a) one of the most known high frequency word lists is the *Dolch Sight Word List*, published in 1936 in the book *A Basic Sight Word Vocabulary*. It includes 220 high frequency words that are arranged in a list by frequency in texts (See Appendix 2). Furthermore there is a Dolch 220 word list by grade level (See Appendix 3) but there is no evidence that Dolch made it. The authors advocate not using the grade level frequency word list but advise teachers to make their own high frequency word list from books they use in their classroom. Also Walpole and McKenna (2007) have mentioned earlier that the high frequency word lists that are offered in books or on websites can be used but the words used in these lists might not appear in the reading materials students are using in a class. Thus the authors suggest generating high frequency word lists from the reading materials that are in the classroom. Another well-known word list is published by Fry in 1980 and is called *The New Instant Word List* with 300 of the most frequently used words (See Appendix 4). Later on Fry increased this list up to 1000 words and emphasized that students have to memorize these words by sight. Additionally authors compared 100 words from the Dolch and Fry lists (See Appendix 5) and concluded that differences in the word lists might be from the different sources they used in creating their lists as Dolch used reading materials for kindergarten to Grade 2 but Fry from Grade 3 to Grade 9.

Blevins (2006) indicates that the Dolch Basic Sight Vocabulary that contains 220 words and was created more than 60 years ago is still current because all the words from the list can be found in great quantity in different texts today. The author also suggests using the list with the 150 most frequent words in order of frequency (See Appendix 6) that was taken from the *American Heritage Word Frequency Book*. Also Hall and Moats (1999) suggest using the same high frequency word list suggested by Blevins because these words appear most often in children's schoolbooks.

To sum up, the high frequency words should be looked at as core vocabulary in texts because they appear very often in reading and writing materials, and a lack of reading fluency in beginning readers can contribute to a decrease in comprehension and motivation. Reading fluency should be looked at as a bridge between automatic word recognition and comprehension

of a text. If there is no serious approach to this problem in earlier years, students will have difficulties in reading throughout school and there will be a risk of falling further behind their peers each year. Thus it is necessary for young readers to develop independence, autonomy in reading. High frequency words should be taught in isolation and in context. The high frequency word lists to teach to students should be designed by teachers based on suggestions from different high frequency lists by the authorities in this field and the reading materials the particular class has.

As mentioned above, students who struggle at recognizing high frequency words fail not only in reading but also in other subjects and with years they fall behind in many areas taught at school. Furthermore, it can cause frustration and decrease motivation to read. Primary school educators emphasize and the author of the Diploma Paper has also observed that children at age 5 to 6 like to learn through their senses and playing. Therefore in the next chapter the concept of multisensory approach and activities with a multisensory approach that help develop English high frequency word recognition skills for students at age 5 to 6 will be described.

2. THE CONCEPT OF THE MULTISENSORY APPROACH

In this chapter the concept of a multisensory approach and activities that can be used to develop high frequency recognition skills for students at age 5 to 6 will be described. National Reading Panel (2000) highlight that high frequency word recognition has an important role in texts and it is essential that high frequency words are taught with different activities and that all students receive appropriate learning instruction by considering their learning styles. They also emphasize that it is essential for young learners to be involved in playful activities where they play with words, letter names and their sounds, sing songs, as well as, participate in oral, writing and drawing activities. According to Farrell et al. (2013a) Dolch and Fry were both strongly convinced that high frequency words should be only learned by the sight method. However, many authors are convinced there are different ways how high frequency word recognition skills can be developed to students at the age 5 to 6.

Henry (2009), Obaid (2013) and Butkus (2015) declare that students have to use a multisensory approach in order to develop high frequency recognition skills because young learners have different learning styles and ways of processing and remembering information. Therefore, teachers have to choose teaching methods that are appropriate for each student's learning style to ensure that. Thus individual students are able to learn through their strongest modality. Moreover, it is proven that elementary students learn best using a tactile and kinesthetic approach. Authors draw attention to the fact that the multisensory approach has a long history in education. Over the years teachers have used different multisensory approach techniques to make learning interesting, motivating and diverse for students, especially for students with special needs. Thus using a variety of activities with the multisensory approach helps students to better understand and remember information. First of all it is necessary to determine the term and definition for the multisensory approach and how the multisensory approach can be used in the learning process with high frequency words.

2.1. THE TERM AND DEFINITION OF THE MULTISENSORY APPROACH

Based on the information by Henry (2009) Falzon et al. (2011) the history of the multisensory approach goes back to the 1930s when Orton made a neurological research inspired

by Helen Keller and Grace Fernald that used kinesthetic methods in order to reinforce visual and audial associations. Based on this the author built his own concept that was named the Orton-Gillingham program because Anne Gillingham put it together. The program consists of the concept of the importance of different multisensory techniques in the learning process. Falzon et al. (2011) say the programs that were developed later, for example, Alpha to Omega, Wilson Reading System, and Beat Dyslexia are based on the Orton-Gillingham method. The key to learning in each of these programs is the multisensory approach to the learning process where students can use all their senses simultaneously – to hear, to say, to see, to feel and to write.

Murphy (1997), Kamala (2006), Lawrence (2007) and Butkus (2015) define the multisensory approach as the VAKT method that stands for four different sensory modalities: Visual, Audial, Kinesthetic and Tactile, where visual is for seeing, audial for hearing and kinesthetic and tactile for touching and handling with objects. Also Minskoff (2005) indicates the multisensory approach is a **learning process where visual, auditory, kinesthetic and tactile methods are used**. As well, it is a well-established and best practice in education. Henry (2009) uses a description similar as Minskoff's (2005) emphasizes that **all of these modalities should be related to each other**. Only instead of the term 'multisensory approach', the author uses the term 'multisensory instruction'. Additionally, students should simultaneously be using visual symbols, corresponding sounds and kinesthetic-tactile input.

Kamala (2006) believes that learning happens only through all senses and they are like a gate for students who learn English. Furthermore "when learning takes place through more than one sense the students'" learning capacities and the retention of the learnt materials have been improved" (Kamala, 2006: 33). Additionally the author states that especially the use of a kinesthetic and tactile approach gives a long term signal to students' brains. Moreover, the multisensory approach **develops not only the learners' strong sense channel but also helps to develop the weaker channel**. The author suggests using at least two of the senses in an activity. According to Ureno (2012) the use of the multisensory approach means helping the students to learn through more than one of the senses. Furthermore the multisensory approach **effectively stimulates students to participate in the learning process**. Obeido (2013) asserts the multisensory approach happens only when all sensors are activated and integrated in activities when students hear, see and touch. Platt (2015) defines the multisensory approach as combinations of activities where different learning styles are used.

Lawrence (2007) is convinced that the multisensory approach is a **foundational strategy for learning** because it not only increases students' achievements because several senses are used in the learning process but also helps to engage students in all learning activities. It is stressed that the **greatest benefit of using the multisensory approach is the students' absolute involvement in the learning process** because according to the author people remember only 10 percent of what they have read, 20 percent of what they have heard, 30 percent of what they have seen, 40 percent of what they have said and 90 percent of what they have seen, heard, said and done.

Butkus (2015) names the multisensory approach as power in education because in **using the multisensory approach, multiple messages are sent out to the brain of a child simultaneously**. If a child has difficulty learning by listening, there is a possibility to learn by moving or seeing. Furthermore, the author states that using all senses at the same time makes it possible for a student to retain information because young children tend to remember better by moving.

The findings of Falzon et al. (2011) propose that reading should be taught using only the multisensory approach. Furthermore, the research concludes that **the multisensory approach can be adjusted to all students' preferable learning styles**. Ureno (2012) and Obaid (2013) also agree in **literacy and language learning the multisensory approach is especially beneficial**. Also Minskoff (2005) holds the view that the multisensory approach should be not only included for teaching word identification but also for reading comprehension that is much harder to do, but this method includes the use of various senses that are used with the reading material. It is advised using not only students' visualization but also visual aids – pictures, maps, graphs, diagrams, story webs for narrative texts and graphic organizers for expository texts to help students to understand the reading material. According to research conducted by Pressley, Symons, McGoldricks & Snyder in 1995 it was affirmed that use of representational imaginary helps improve student memory.

Lawrence (2007) indicates that by **using the multisensory approach all preferable learning styles are awakened in students by seeing, touching, hearing, smelling, tasting, moving, thinking and enjoying**. It is especially suggested to use the multisensory approach **with very young children when they learn to read**. Designing relevant and engaging interactions not only enhances student learning, it also **affects students' long-term intellectual**

development. Use of the multisensory approach increases engagement, promotes deeper participation, and advances the prospect that learning can be fun.

Ureno (2012) also draws attention to students who are English language learners and like special needs students have difficulty with reading and literacy and require more attention. Therefore the author is convinced that the multisensory approach is the best solution for English learners. Butkus (2015) also acknowledges that the multisensory approach is very helpful especially for beginner readers.

Kamala (2006), Henry (2009), Falzon et al. (2011), Ureno (2012) and Obaid (2013) acknowledge that the multisensory approach is not only beneficial for students with special needs but for all students, as they can learn to read and spell more easily at an earlier age. Falzon et al. (2011) emphasize that a multisensory approach also includes scaffolding techniques that help struggling students. Obaid (2013) indicates that teachers must carefully determine which of the activities they will choose for their students and use the most appropriate learning tasks where all the senses can be used.

To sum up, the term ‘multisensory approach’ is used by most of the authors. Thus the author of the Diploma Paper will use this term. The multisensory approach is defined as the VAKT method, which stands for Visual, Audial, Kinesthetic and Tactile, where visual is for seeing, audial for hearing and kinesthetic and tactile for touching and handling objects. Therefore the basis of the multisensory approach is to incorporate all learning styles for auditory, visual, kinesthetic and tactile learners. A multisensory approach means learning through more than one of the senses and it helps to increase students’ achievements. The multisensory approach develops not only the learner’s strong sense channel but also helps to develop the weaker channel. The multisensory approach is named as a foundational strategy for learning, a gate to learning and power in education. All preferable learning styles are awakened in students by seeing, touching, hearing, smelling, tasting, moving, thinking and enjoying. It is especially suggested to use the multisensory approach with very young children when they learn to read. Use of the multisensory approach increases engagement, promotes deeper participation, and advances the prospect that learning can be fun. Therefore in the next subchapter activities with the multisensory approach for developing high frequency word recognition skills will be described.

2.1. MULTISENSORY ACTIVITIES TO DEVELOP HIGH FREQUENCY WORD RECOGNITION SKILLS

It is suggested to use activities with multisensory approach in order to incorporate all learning styles for auditory, visual, kinesthetic and tactile learner that help to develop not only the learner's strong sense channel but also helps to develop the weaker channel. Use of the multisensory approach increases engagement, promotes deeper participation, and advances the prospect that learning can be fun and effectively stimulates students to participate in the learning process. This subchapter is devoted to describing activities for developing high frequency word recognition skills using multisensory approach.

Blevins (2006) recommends that high frequency words should be taught using explicit instructions because it is not so easy for children to learn high frequency words as they learn regular words that apply phonic rules. He indicates that some of the high frequency words that students often mix up when they learn them, for example, the words *of, for* and *from; on* and *no; was* and *saw; words with th* and *w*, such as, *there, them; what were; their, then; what, where; this, these; went, will; that, this; and when, with*. He states the following suggestions in order to teach high frequency words for students:

- say aloud a high frequency word and use it in a sentence,
- write a sentence on a white board and underline the high frequency word while reading the sentence to students,
- have a discussion with students about specific features the high frequency word contains,
- ask students to spell aloud the high frequency word as a teacher points to the high frequency word,
- ask students to write a high frequency word in the air,
- use matching games,
- write a high frequency word on a paper and display with other high frequency words on the wall and regularly review all learned words.

Nation (2001) points out these activities to teach high frequency words:

- direct teaching by teacher explanation or peer teaching,
- direct learning by learning from flash cards or using dictionary,
- incidental learning by guessing from context in reading or in communication,

- planned encounters by leveled reading and vocabulary exercises.

McElheran (2010) recommends in activities with the multisensory approach the use of:

- all students' senses,
- explicit instructions,
- authentic and meaningful tasks,
- high frequency words in isolation and in variety of contexts,
- interactive technologies,
- interactive games,
- interactive books,
- social skills – reading to each other,
- engagement and fun.

Palmer and Bayley (2004) and Minskoff (2005) also state that **high frequency words should be taught in isolation and in a variety of contexts**. They emphasize that it is essential first of all to teach high frequency words in isolation in order to highlight the visual characteristics of each word. After students have learned to recognize high frequency words in isolation they can start to learn to recognize high frequency words in a text that is a complex task because they should not only identify high frequency words but also understand the meaning of all the words. As another guideline Minskoff (2005) draws attention to teach high frequency word with spelling each word. This method helps learners to **use their visual memory in order to remember the sequence of letters in a word**. The author stresses that there should be all word identification skills including visual, audial, phonics, and analysis of words taught to students, especially for struggling students.

The authors Pikulski and Chard (2005), Walpole and McKenna (2007) and Farrell et al. (2013a), similar to McElheran (2010), strongly agree with this idea that that there should be more attention linked to sounds and patterns rather than the word itself because “the key to teaching high frequency words is to explain the relationships between graphemes and phonemes in the word, drawing attention to those which are familiar and which need more attention” (Walpole and McKenna, 2007: 66). Furthermore, using decoding where it is possible is like “the key to unlocking the word and simplifying the memory task for beginner readers” (Walpole and McKenna, 2007: 66). They also advise to include high frequency words in phonics lessons as early as possible. Conversely, Palmer and Bayley (2004) state that it might be confusing for

young readers to learn phonics and high frequency words at the same time. They advise first teaching phonics and then introducing the high frequency words by explaining that there are words that do not apply phonics rules but should be recognized as whole words.

Monroe and Staunton (2000), Franzese (2002), Bear et al. (2004), Pikulski and Chard (2005), Blevins (2006) and Reutzel and Cooter (2007) suggest teaching words by making a **word wall** on any surface where words can be displayed and easily reached, moved and on eye level with the children. The authors stress that word walls help children to recognize high frequency words automatically and they can gain fluency. Additionally high frequency words can be placed in **alphabetical order** or the order in which they are taught. Franzese (2002) recommends using **word walls together with games**. Bear et al. (2004) advises for students to practice writing high frequency words by **dictation in their note books** and checking with a chart if they have written words correctly. Pikulski and Chard (2005) point out that high frequency words that are seen on the word wall should be **very visible and used every day**. Both Monroe and Staunton (2000) and Reutzel and Cooter (2007) state that a **word wall is a way how to link student attention to high frequency words in isolation** and becomes part of students' high frequency word vocabulary.

Another activity that is mentioned by many authors, including, Stuart et al. (2000), Blevins (2006), Monroe and Staunton (2000), Pikulski and Chard (2005), Meadan et al. (2008), McElheran (2010), Phillips and Feng (2012), Blackwell and Laman (2013) describe how high frequency words can be learned in isolation using a **flash card** method. Blevins (2006) describes the flash card method in which a high frequency word is written on one side of a card and then on the other side a meaningful phrase or sentence is written that can help students to remember the high frequency word. Students look at the high frequency words and practice to read high frequency words in isolation and in a context. For struggling learners the authors suggest combining the **flash card method with a picture based method**. In this way students create or imagine a picture that might go together with a high frequency word, for example, a box of cereal. Students have to draw it and write underneath 'box of cereal' and they have to underline the target word of. Pikulski and Chard (2005) suggest using high frequency **word drills** using flash cards every day.

After the research that was done by Meadan et al. (2008) where high frequency words were presented with three different methods: in isolation, in sentences and with pictures, it was

concluded that using **the flash card method together with pictures helped students to identify more words than without pictures**, especially for students with disabilities. Blackwell and Laman (2013) are also convinced that the flash card method is effective together with a picture-based method based on the authors' research that was made in a Midwestern city where a traditional flashcard method was compared with a picture based method. The outcome of the research showed that **flashcards increased speed but flash cards together with pictures increased not only speed but also accuracy**. Furthermore, as the research showed, they suggest not using only teacher prepared pictures but also advise asking students to **draw their own pictures that better help them to memorize high frequency words**.

In the research done by Phillips and Feng (2012) the flashcard method and a multisensory approach were compared in order to determine which of these methods was more effective in teaching high frequency words to kindergarten students. In the multisensory method students wrote letters and high frequency words in the air using both hands. In the multisensory method students were asked to write with one hand and say letters from the high frequency word on the other hand. For example, if they had to write the high frequency word 'who' the student started with the letter 'w' on the shoulder, then with the letter 'h' on the elbow and at the end the letter 'o' on the wrist. Finally the student wrote and said the whole high frequency word. **The research proved that the multisensory approach was more effective than the flash card method** because the multisensory approach not only engaged all students actively in the activity but also helped students to understand the meaning of the high frequency words due to the authors' suggestions to use pictures and sentences with this activity and afterwards engage in tasks where students could apply new high frequency words in sentences. For visual learners, Minskoff (2005) suggests using the key method where students imagine a keyword to understand the unknown word; for auditory learners, he suggests reading to each other, listening to other and changing a voice tone; and for kinesthetic and tactile learners, the use of highlighters to identify important words and ideas and writing in the air.

Collen et al. (2004) and McElheran (2010) suggest using the **copy, cover and compare** method. The copy, cover and compare method, asks students to cover and copy high frequency words from memory after they have been looking at words for some time. Collen et al. (2004) represent the research where two teaching strategies were used: the copy, cover and compare method and the picture-word matching method for teaching sight word recognition. The research

proved that **the copy, cover and compare method was more effective than the picture-word matching method** because students could identify more high frequency words when they were presented with one picture. Also the speed of recognition of high frequency words was faster and additionally the word recognition skills were maintained after a week. According to McElheran (2010) the research showed that students mastered for 100 percent of all the taught words with the copy, cover and compare method, and that is the reason why this method is suggested for teaching high frequency words to students.

McElheran (2010), Phillips and Feng (2012) and Blackwell and Laman (2013) suggest using technology based method for teaching high frequency words especially nowadays when technology are very popular and teachers use them to support students in their learning process, such as **SMART boards with interactive screens, Power Point presentations, and interactive games and stories**. The research done by Blackwell and Laman (2013) showed that the **use of technology by teaching high frequency words became more meaningful to students because it allows many students to listen and view at the same time. It also includes touching the screen, thus students to use all of their senses**. Also Phillips and Feng (2013) agrees that the use of SMART boards help to show high frequency words more visibly, increase attention and allows students to interact with the board. There are interactive games offered on the websites education.com and abcdya.com where an interactive high frequency word memory game is offered in three levels, Bingo, high frequency word recognition game and spelling practice. The list (See Appendix 7) offers different activities with multisensory approach on website where students can be actively engaged by moving, touching, seeing, reading and listening

Franzese (2002), Williams (2005) and Blevins (2006) recommend the **use of children's literature**, like a teacher reading stories to students or students to each other. Additionally, they recommend free writing activities and dictations for developing high frequency word recognition skills. Franzese (2002) emphasizes the use of big books not only to reinforce high frequency word recognition skills but to involve students' senses where they use their sight by looking at the word, hearing by listening to the word and touching by forming the word on a carpet and with magnetic letters. Additionally Williams (2005) offers a collection of poems about different topics, where students can develop high frequency word recognition skills, improve their fluency, expand their vocabulary and build their confidence. Students can do all these activities in fill-in-the-blank pages. Each page highlights one of the high frequency words and with a poem

students practice to read, write and spell. Furthermore there are some additional activities suggested, such as, creating a poetry notebook, coloring and illustrating poems, reading poems alone or with a buddy and sharing poems with family members. Students can also create their own poems and share with other students.

The activity pages that are offered by Cooper (2002) give students the chance to practice to trace and write high frequency words. Furthermore, in order to engage students in writing activities the author suggests using some fun activities and games, such as writing silly sentences, word searches, Bingo games and Hangman. Kaye (1984), Franzese (2002), Palmer and Bayley (2004), Weakland (2013) and Blackwell and Laman (2013) also suggest using **games** with young readers. Kaye (1984) gives reasons for using games with students:

- allow to teach of nearly every skill a beginning reader needs,
- allow to use all students' senses,
- wake interest to learn,
- engage and make fun for everyone,
- can be played in any time,
- help to involve parents in their children's education.

The authors suggest using games, such as, memory games, word hunts, word chains, mazes, bingo, matching words, poster words, 3-D words, jigsaw sentences, building up the words, and talk and draw - to improve high frequency word recognition skills and vocabulary.

Weakland (2013) also points out that playing games not only develops students' motivation and engagement in the learning process but is also is one of the most influential teaching strategies. Blackwell and Laman (2013) advise using games to deliver lesson material either during regular instructional time or in between lessons when games are defined as an enjoyable activity by the participants. Furthermore they help to **show the value of teaching material, raise interest, help struggling students to overcome difficulties in a playful manner**. It is also mentioned that teacher-made-games are more effective than commercially produced games because they focus more on students' needs and are more efficient. Franzese (2002) recommends these games: Starts Like, Sounds Like, Hangman and Loo-Say-Name-Cover-Write-Check, Bingo, Memory game, Fishing high frequency words, Make My Name (See Appendix 8). Palmer and Bayley (2004) recommend using the following kinds of games: Word hunt, Bingo; Eat your words, Word Chain, Secret message, and Joined-up-memory (See

Appendix 9) Reutzel and Cooter (2007) suggest using Word Detectives where students search for high frequency words in a text.

Butkus (2015) highlights the importance of using a multisensory approach with high frequency words activities because the author is convinced that students only learn when all of their senses are involved in the learning process. Thus the Butkus (2015) suggest using **songs** for students to help them to memorize the most commonly used high frequency words. The songs that are made by the author are not only funny, with catchy music, pictures and movements the students can repeat and a lot of repetitive words that are easy to remember as children sing along but also gives the possibility for students to learn by seeing, hearing, saying and acting out. This method is suitable especially for students who like music, rhythm and movements. The author suggests that at the beginning to point to the word and spell it aloud several times together with students accelerating the speed each time. Then the movements should be showed and practiced without music and only after that music should be added.

Pinnell and Fountas (1998) have an opinion that twenty-five to thirty high frequency words should be recognized by the end of kindergarten and by the end of Grade 1 native English speakers should recognize fifty to one hundred words quickly and accurately. They also agree that some children at age 5 to 6 can know more or fewer high frequency words but they have to learn high frequency words with some good examples that they can use for new word learning. Additionally they emphasize that students have to learn to use high frequency words meaningfully for personal interests, writing messages and stories in a correct way so that these high frequency words would allow them to write other words. Franzese (2002) disagrees on this point of view, saying that in her teaching experience, students aged 5 to 6 can learn approximately one to three words in a week and usually by the end of the school year they can learn approximately one hundred sight words. Bear et al. (2004) say that there should be 24 to 40 words in the year taught to students at ages 5 to 6. Walpole and McKenna (2007) suggest even teaching three to five high frequency words each day by reviewing these words periodically.

To sum up, during activities where the multisensory approach is used students need to see, hear, smell, taste and touch. The more the senses are activated, the more messages are sent to students' brains. Students should be actively engaged in authentic and meaningful activities with systematic and explicit instructions that will reinforce recognition skills of high frequency words. In order to develop high frequency word recognition skills it is recommended to use word

walls, flash-cards, copy, cover and compare, technology, children's literature, and different games and songs in activities with multisensory approaches. Additionally it is recommended to teach high frequency words both in isolation and in a variety of contexts. A majority of the authors advises teaching high frequency words after some phonics skills are learned and suggests using decoding strategies with the high frequency words during activities where it is possible. Guidance about the number of high frequency words that should be taught to students at age 5 to 6 over the year is given. In the next chapter activities with a multisensory approach based on theoretical suggestions and advice will be designed and implemented in lessons to develop English high frequency recognition skills for children aged 5 to 6.

3. CASE STUDY ON ACTIVITIES WITH THE MULTISENSORY APPROACH THAT DEVELOPS HIGH FREQUENCY WORD RECOGNITION SKILLS

The analysis of theoretical sources has presented that high frequency words occur in great quantity in reading texts, and according to Blevins (2006), there are 250 high frequency words that are often used by children in up to 70-75 percent of texts. If students are not able to recognize these words their reading fluency is low and they are not able to comprehend a text. Therefore, students should be actively engaged in authentic and meaningful activities with systematic and explicit instructions that will reinforce the recognition skills of high frequency words. The use of a multisensory approach to develop high frequency word recognition skills are suggested in theoretical literature. The multisensory approach is named as a foundational strategy for learning because it not only increases students' achievements, as several senses are used in the learning process but also helps to engage students in all learning activities, promotes deeper participation, and shows that learning can be fun. The aim of the Diploma Paper is **to explore how a multisensory approach can develop high frequency word English recognition skills for 5 to 6 year old children.** Therefore first, theoretical literature about high frequency words and the multisensory approach to teach high frequency words to students at age 5 to 6 was studied to find viewpoints from different authors about this issue. Second, activities with the multisensory approach were designed and conducted. Finally, in order to reach the aim of the Diploma Paper the data were collected and analyzed:

- Pre- and post-reading tests in isolation and in context were made with kindergarten students in order to compare the data before and after high frequency word activities by using the multisensory approach.
- Observations during activities were made to see students' progress and identify their next needs.
- A questionnaire was made to determine students' attitudes towards reading before and after the activities.
- After the high frequency word activities students' likes and dislikes towards activities with the multisensory approach were reflected in the form of a questionnaire.

- An interview with the kindergarten teacher was made to reflect on her thoughts about teaching high frequency words to children at age 5 to 6.

The chosen research method was a case study that was made at the International School of Latvia. The case study was carried out in 2016 from October 17th till December 9th. It is essential to highlight that at the school where the case study was done English is the language of instruction in classrooms and the students, as shown in the school's official documents, come from different countries with different levels of English proficiency. Of 21 students in the class there were only five native English speakers. Eleven students have been learning English for two years and four for one year. The major nationalities represented in the class were Latvian and Russian. Some other nationalities represented in the class were Swedish, Finnish and Chinese. Divisions by nationalities can be seen in Figure 3.1. In the class there were 11 boys and 10 girls, all of them 5 to 6 years old.

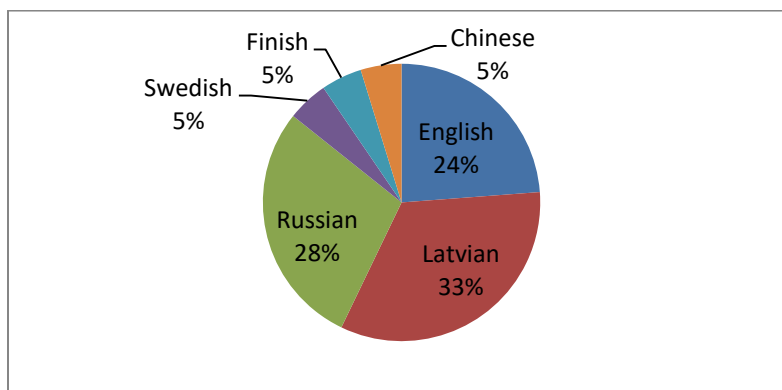


Figure 3.1. Students by Nationalities

To fulfill the aim of the Diploma Paper, high frequency word activities designed and conducted with the multisensory approach will be displayed in the next subchapter.

3.1. HIGH FREQUENCY WORD ACTIVITIES DESIGNED AND CONDUCTED WITH THE MULTISENSORY APPROACH

In the beginning of the case study a reading test in isolation and in context were made in order to determine which high frequency words young learners know. Afterwards the author of the Diploma Paper applied the multisensory approach to create high frequency word activities

based on advice from theoretical sources and the results from the reading tests in isolation and in context. The ideas for designing and implementing the activities in lessons have been taken mostly from these authors Pinnell and Fountas (1998), Cooper (2002), Franzese (2002), Bear et al. (2004), Palmer and Bayley (2004), Williams (2005), Blevins (2006), Reutzel and Cooter (2007), Lawrence (2007), Marzouk (2008), McElheran (2010), Phillips and Feng (2012), Blackwell and Laman (2013), Weakland (2013) and Butkus (2015), and the websites: sightwordsgame.com (2013), education.com (2016) heidisongs.com (2016), sightwords.com (2016) and maketaketeach.com (2016).

According to Lawrence (2007) the use of the multisensory approach should increase engagement, promote deeper participation, and show that learning can be fun and during activities all preferable learning styles should be stimulated in students by seeing, touching, hearing, smelling, tasting, moving, thinking and enjoying. Therefore the author of the Diploma Paper used different kinds of activities during the lessons that would actively engage students in the learning process and stimulate as many senses as possible.

The aim of the lessons was not only to teach new high frequency words to students but also to reinforce the knowledge of high frequency words that have been taught to the students before the case study. The reason for that was because the test of high frequency words in isolation showed that there are 41 percent of students who not able to recognize the taught high frequency words. The other 59 percent of students were able to recognize high frequency words at different levels of proficiency as can be seen in Figure 3.1.1. Thus many activities were designed and implemented in order to reinforce recognition skills of taught high frequency words for all students.

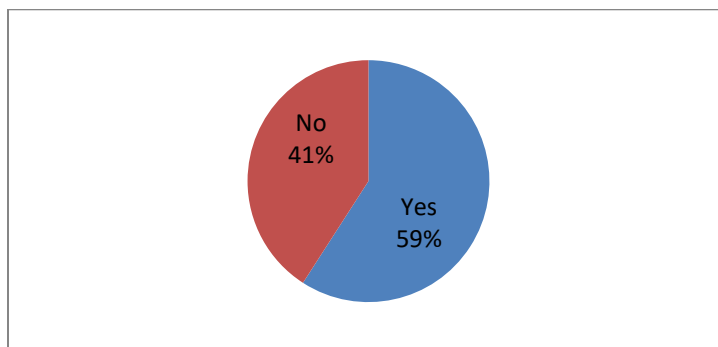


Figure 3.1.1. Pretest of High Frequency Words in Isolation

As suggested by Palmer and Bayley (2004) and Minskoff (2005) high frequency words should be taught in isolation and in a variety of contexts. The authors also indicated that students should first learn to recognize high frequency words in isolation and only then in context. Thus the test of high frequency words in context was made that indicated that there were even more students who have difficulty to recognize high frequency words. In Figure 3.1.2. it is seen that there are 2 percent more students who have difficulty to recognize high frequency words in context than in isolation.

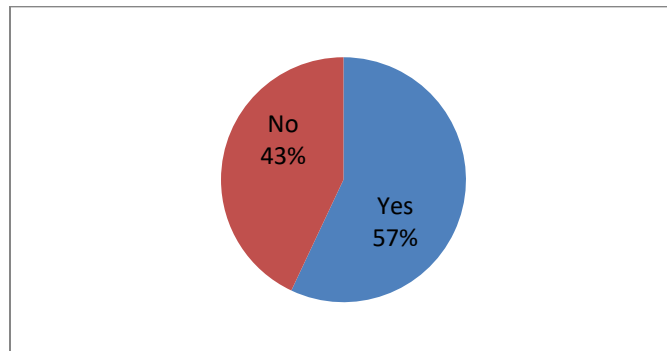


Figure 3.1.2. Pretest of High Frequency Words in Context

The pretest in context also revealed that students who struggled to recognize high frequency words also had difficulty comprehending the text. The results for comprehension of the text are seen in Figure 3.1.3., which shows that only 24 percent of students could understand the text or some parts of it. The majority of students were not able to understand the text. The pretest in context matched with opinion from the theoretical literature that, if students have difficulty recognizing high frequency words, their reading fluency is low and they are not able to comprehend the text. It confirms that high frequency words play an essential role in reading fluency that is a gate to comprehension of a text.

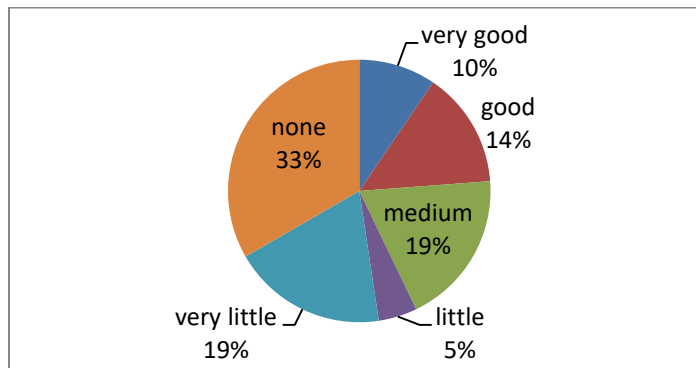


Figure 3.1.3. Comprehension of High Frequency Words in Context

Both pretests in isolation and in context showed that most of the students have problems recognizing and comprehending already taught high frequency words. Thus many of the activities were created and implemented in order to reinforce recognition skills of taught high frequency words in isolation and in context for all students. The lessons were twice each week. Usually one of the lessons was based more on reinforcing the learned high frequency words but the other lesson combined activities with repetition of taught words with the introduction of a new high frequency word. All activities were chosen in order to incorporate as many senses as possible, actively engage the students in the learning process, and increase interest that learning can be fun in order to recognize high frequency words. During activities small prizes were given to students to raise their motivation.

The author of the Diploma Paper followed the high frequency word list created at school (See Appendix 10). The list shows the high frequency words that have been taught before the case study, during the case study and high frequency words that will be taught later in the year after the case study will be done. The lesson plan for high frequency word activities with the multisensory approach was designed and implemented during an empirical study at the International School of Latvia (See Appendix 11).

The activities for introducing a new high frequency word every week were chosen fairly similar in order to ensure that all senses are activated during the learning process and all students are actively engaged in the activities.

Activity No. 1: Writing in the Air (See Appendices 12 and 13)

Aim of the activity: to introduce the new high frequency word; to foster recognition of the high frequency word, to stimulate all students' senses and active engagement; to promote the understanding of shapes and sequence of the letters, and to develop comprehension skills.

Rationale: This activity Writing in the Air was recommended by Blevins (2006) and Phillips and Feng (2013) as an activity with a multisensory approach because it stimulates all the students' senses. Minskoff (2005) and Butkus (2015) recommended including in this activity the spelling of the letters in the word in order to remember the sequence of letters in a word. For students who have difficulty understanding in which direction they have to read, the website sightword.com had an additional recommendation for this activity that stated that students should be provided with visuals, where they can see the high frequency word with an arrow underneath showing in which direction they have to read. Additionally, as suggested by Blevins (2006), it is

essential that students also learn not only to say the high frequency words in isolation but also to use the word in sentences – in context. Therefore sentences were written on a paper with some pictures to help all children to understand the meaning of the word.

Procedure: 1) At the beginning of the activity students looked at the teacher drawing the high frequency word in the air and after that they were asked to do the same movement together with the teacher; 2) the teacher asked students to say the number of letters and spell the letters in the word; 3) as mentioned above, for struggling students big letters were prepared to show in which direction they have to read; 4) students were asked to say the word we can make from these letters; 5) after receiving the answer students were asked to explain the meaning of the word and give some examples; 5) questions were asked to help students better understand sentences and highlight the new high frequency word.

Observations: During the activity most of the students followed the teacher and did the same movements. It was seen that they enjoyed making shapes of the letters in the air and also trying to guess letters and the high frequency word. Usually there were students who could name letters and say the high frequency word. However, there were some students that were struggling to recognize letters and the high frequency word. Therefore visuals helped them to see the letters and the direction in which they have to read. It was observed that for some students it was difficult to explain the meaning of the word and give an example. Therefore sentence examples were very useful for struggling students to help them to understand the meaning of the high frequency words and comprehend the sentence.

Activity No. 2: High Frequency Word Songs with Movements (See Appendix 13)

Aim of the activity: to introduce the new high frequency word; to foster recognition of the high frequency words, to stimulate all students' senses, especially for kinesthetic learners, the understanding of shapes of the letters with a body and remember the sequence of the letters.

Rationale: 1) High frequency word songs for children and activities were suggested by the creator of the songs Butkus (2015). Additionally, Collen et al. (2004) and Meadan et al. (2008) recommended using pictures and sentences in order to help struggling readers to understand the meaning of the high frequency word.

Procedure: 1) Students were asked to repeat letters, the high frequency word and sentences several times after the teacher; 2) pictures with sentences from the song were put on the wall; 3) students were asked to do movements after the video; 4) the teacher and students brainstormed

what movements they could show with their bodies for the letters and the high frequency word; 5) after a short brainstorm the teacher and students agreed on showing some movements for particular letters and a word, such as for the high frequency word 'it' the first letter was shown with jumping up and the next letter was shown by stretching hands sideways, and when doing this student were asked to say the name for the letters as well. The word itself was shown simultaneously by jumping up and stretching hands sideways and saying the word 'it'; 6) finally students were doing all the movements and saying letters, the high frequency word and sentences with music.

Observations: All students had a lot of fun and were very engaged in these activities because they liked to move and show all the letters with their bodies. This activity was very good for kinesthetic learners. The songs themselves were very funny, captivating and encouraging. The video was made so that the students could move, see, hear and sing along with the high frequency words, letters and sentences that were flickering on the screen and to draw attention to the letters and the word itself. Best of all the possibility to make the word with their bodies helped many students to remember the high frequency word.

Activity No. 3: Writing Worksheets *Poems* (See Appendix 14)

Aim of the activity: to foster recognition of high frequency words, to stimulate all students' senses, to promote the understanding of shapes and sequence of the letters, to develop reading fluency and comprehension skills; to foster social skills.

Rationale: The worksheets were made and suggested by Williams (2005). Nation (2001) and McElheran (2010) recommended reading to each other in order to reinforce reading skills and fostering social skills, as well.

Procedure: 1) Students were supposed to trace or write the learned high frequency word in sentences that also formed a poem; 2) students were asked to practice reading the poem to each other or to the teacher.

Observations: This activity helped many students to develop better recognition skills of high frequency words and also gain reading fluency because some of the students read the poem to each other several times. It was challenging for many students to read sentences but with this task the poem was read, which helped to develop the recognition of high frequency words and reinforced reading speed.

Activity No. 4: Writing Worksheets (See Appendix 15)

Aim of the activity: to foster recognition of high frequency words, to stimulate all students' senses, promote the understanding of shapes and sequence of the letters, to develop reading fluency and comprehension skills; to foster social skills.

Rationale: The worksheets were made and suggested by Cooper (2002).

Procedure: 1) In the worksheet students were asked first of all to trace the new learned high frequency word and then write it several times; 2) students were supposed to cut and glue the letters for the high frequency word; 3) students wrote a sentence with the new high frequency word.

Observations: During writing activities there were some students who were writing very fast but for some students it was quite a hard process because they were not only struggling to write letters, but also to write a sentence. The writing of a sentence helped students to understand better the meaning of the high frequency word. Many students had problems with the shapes of the letters, for example, they mixed up the letters 'b' and 'd', when they were writing the high frequency word 'do'. Thus this activity helped them to learn the proper shape of the letter.

Activity No. 5: Word Wall (See Appendix 16)

Aim of the activity: to stimulate recognition of high frequency words, to develop reading fluency; to foster visual memory.

Rationale: The word wall activities were suggested by many authors, such as Johnston (1998), Monroe and Staunton (2000), Franzese R. (2002), Bear et al. (2004), Pikulski and Chard (2005), Blevins (2006) and Reutzel and Cooter (2007).

Procedure: 1) After introducing the new high frequency word the card with the word was put on the word wall. The kindergarten teacher had the word wall with learned high frequency words in the class already and the author of the Diploma Paper also followed this activity because the words up on the word wall were used very often during the activities; 2) words from the word wall were used every lesson when it was necessary for students or an activity.

Observations: High frequency word cards were placed next to the doors. They were seen very well when the students were sitting on the carpet, but no when the students were sitting at their tables. The students could benefit more if the high frequency cards were bigger. It was a very good reference for students to look at during activities. It also reinforced their visual memory.

Activity No. 6: Flash Cards (See Appendix 17)

Aim of the activity: to bring students' attention to the high frequency words at the beginning of a lesson or an activity; to develop automatic word recognition skills; to foster visual memory.

Rationale: The flash card method is suggested by such authors as Stuart et al. (2000), Blevins (2006), Monroe and Staunton (2000), Pikulski and Chard (2005), Meadan et al. (2008), McElheran (2010), Phillips and Feng (2012), Blackwell and Laman (2013).

Procedure: Students looked at the words and repeated the words after the teacher.

Observations: This was an easy activity for students because they just looked at the words and repeated them after the teacher. Observations showed that the flash card method helped many struggling readers to improve their high frequency word recognition skills because students could see, listen and repeat words at the same time. Furthermore, the observations showed that students recognized words better when they were taught in isolation with flash cards rather in context. This was especially true for emergent readers.

Activity No. 7: Matching Activity (See Appendix 18)

Aim of the activity: to stimulate high frequency word recognition skills, visual memory, logical thinking, to foster social skills.

Rationale: High frequency word matching activities with pictures or without pictures were recommended by Collen et al. (2004), Meadan et al. (2008) by Blevins (2006) and Blackwell, McElheran (2010) and Laman (2013).

Procedure: 1) Each student received one part of one of the high frequency words and tried to find the other part of the high frequency word; 2) after finding the right partner both students read their high frequency word aloud and said an example in order to see if they had understood the meaning of the word.

Observations: During the activity most of the students could find their partners but there were several students who were struggling to find their partners because they had difficulty matching the word. Therefore colors were used to help all students to develop better recognition skills. Some of the partners also had problems saying the high frequency word and giving an example.

Activity No. 8: Word chain

Aim of the activity: to stimulate high frequency word recognition skills, reading fluency and visual memory, to foster social skills and active engagement.

Rationale: This activity was suggested by Kaye (1984) and Palmer and Bayley (2004).

Procedure: 1) After the matching activity all students were asked to make a circle and show their high frequency word to other students so that all of the students were able to see all the high frequency words; 2) a word chain was played where students were asked to read words and each time add a new word to the word chain.

Observations: The word chain was a challenge for some of the students because they struggled to recognize and say words aloud. If they had difficulties reading a word, other students or the teacher helped them and they repeated the word after them. However this was a very good activity for all students to gain fluency in reading high frequency words.

Group activities:

Two lessons were specially planned for activities in smaller groups in order to be more interactive. During these lessons students were divided into four groups to do activities at four different stations. Each activity was planned for approximately 15 minutes at each station. In each group there were five students. Two teacher assistants helped with all activities in the groups. Before all activities a task at each station was explained. Students were divided into groups by using a high frequency word matching activity.

Activity No. 9: First Station - Build the Words (See Appendix 19)

Aim of the activity: to develop recognition of high frequency words, and reading fluency; to stimulate all students senses and active engagement; to promote the understanding of sequence of the letters; to foster social skills.

Rationale: The idea was taken from the website maketaketeach.com

Procedure: 1) Students were asked to make words from cut out letters. The words that they were supposed to make were in front of them on a big paper; 2) at the end they read all the high frequency words to each other or to the teacher.

Observations: During this task students were very engaged in the activity, which helped them to remember the sequence of the letters in the word. It also developed visual memory because they were comparing their built words with the words in front of them. Reading to each other helped them to gain fluency and interacted with each other. They could read and listen to high frequency words.

Activity No. 10: Second Station - Roll and Read (See Appendix 20)

Aim of the activity: to develop recognition of high frequency words, and reading fluency; to stimulate all students' senses and active engagement; to foster social skills.

Rationale: The idea was taken from Kaye (1984) and the website mrsgilchristscsclass.blogspot.com.

Procedure: Students were asked to roll a dice and read the line with high frequency words according to the number on the dice.

Observations: As it was a small group it worked really well. During this activity students could not only read but also were able to listen how other students were reading high frequency words. During this activity students gained better reading fluency because they could practice to read lines, sometimes several times.

Activity No. 11: Third Station - Reading Path Way (See Appendix 21) **and Writing Worksheet** (See Appendix 14)

Aim of the activity: to develop recognition of high frequency words, and reading fluency; to stimulate all students' senses, to foster social skills and active engagement.

Rationale: The idea was taken from Keay (1998) and the website sightwords.com

Procedure: 1) Students were supposed to read high frequency words on the carpet in the form of a path; 2) only one student could read at a time on the Reading Path Way while other students were doing other work; 3) on a prepared worksheet students were writing a high frequency word in a poem and after finishing it they read the poem to each other.

Observations: During this activity students were very engaged because they liked to move from word to word. To raise their motivation small prizes were given to students at the Reading Path Way. While one student was reading the words on the carpet other students were working independently with the worksheet. Reading to each other helped them to gain fluency in recognition of high frequency words.

Activity No. 12: Fourth Station - Rainbow Tracing (See Appendix 22)

Aim of the activity: to develop recognition of high frequency words, and reading fluency, stimulate visual memory; to foster social skills.

Rationale: The idea was taken from the website confessionsofaprimaryteacher.blogspot.com

Procedure: 1) Each student had a worksheet and had independent work; 2) there were eight high frequency words written in the color of the rainbow. Students were supposed to find words from the top box on the worksheet and color according to the color; 3) after they found all the words and colored them they connected all the words by the colors used to color the words.

Observations: Students loved this activity because many students like to color. For some of the students it was hard to find high frequency words because they were written in different font and size. Students also liked to practice reading the words to each other that again helped them develop high frequency word recognition skills.

Activity No. 13: I Spy High Frequency Words in a Bottle (See Appendix 23)

Aim of the activity: to develop recognition of high frequency words and reading fluency; to stimulate all students' senses and active engagement; to foster social skills.

Rationale: The idea for this activity was taken from the sightword.com website in order to stimulate all students' senses and engage in interesting activity.

Procedure: 1) Students were divided into groups again using a high frequency word matching game; 2) each group had a bottle filled with grain and 12 high frequency words written on small colored papers; 3) one of the students was supposed to shake the bottle and read one of the high frequency words; 4) other students listened to the word and all of them wrote the high frequency word on a special lined paper that kindergarten students use every day for writing; 5) the student who said the word checked if students had written the word correctly and if not, then helped with the writing by repeating the word or saying the letters; 6) After that the student gave the bottle to the next student and the student with the bottle said the next high frequency word; 7) at the end each group read aloud all the words they had seen and written on the paper.

Observations: This was quite popular activity for most of the students and they actively participated, especially they liked to shake the bottle and spy a high frequency words between grains. In a playful manner students could use all of their senses - movement, sight, listening, writing, touch and even smell.

Activity No. 14: Animals on Each Other (See Appendix 24)

Aim of the activity: to foster recognition of a high frequency word 'on', to stimulate all students' senses active engagement; to develop reading fluency and comprehension skills; to foster social skills.

Rationale: The idea was taken from the authors Collen et al. (2004), Minskoff (2005), Meadan et al. (2008), Blevins (2006), McElheran (2010), Blackwell and Laman (2013).

Procedure: 1) Students had seven pictures of animals in different sizes; 2) first of all they arranged the animals; 3) they had to put the animals on top of each other and so were using high frequency words with pictures.

Observations: Students were very engaged in this activity. They were working in groups and collaborated with each other while discussing how to arrange pictures. Reading sentences helped them to understand better the meaning of the high frequency word.

Activity No. 15: A Worksheet *Books* (See Appendix 25).

Aim of the activity: to foster recognition of a high frequency word, to stimulate all students' senses, to develop reading fluency and comprehension skills; to foster social skills.

Rationale: It is advised by Palmer and Bayley (2004) and Minskoff (2005) and McElheran (2010) that high frequency words should be learned to be used in context. The idea how to design the worksheet was taken from the website: enchantedhomeschoolingmom.org.

Procedure: 1) The worksheet *Books* for students was created by the author of the Diploma Paper. Eleven learned high frequency words in sentences were included in the worksheet *Books*; 2) students were asked to read the text and fill the gaps in the sentences by choosing high frequency words from the word bank box. Some pictures were put on the worksheet for struggling students; 3) at the end they were asked to read the sentences aloud to the teacher; 4) students practiced reading to each other while waiting their turn. This helped them gain fluency in reading.

Observations: The activity showed that many students were able to read the text and put high frequency words in sentences correctly, therefore, showing good comprehension.

Activity No. 16: Make Words With Play Dough (See Appendix 26)

Aim of the activity: to develop recognition of high frequency words; to stimulate all students' senses and active engagement; to stimulate the understanding of shapes and sequence of the letters; to foster social skills.

Rationale: This idea was taken from Monroe and Staunton (2000) and Phillips and Feng (2012). This was also advised on the website maketakeandteach.com.

Procedure: 1) Students were asked to make high frequency words that they see on the worksheet; 2) during this activity students were asked to read aloud the high frequency word after it was made with play dough; 3) finally students were asked to read all the words to the teacher.

Observations: This activity was very good for tactile and kinesthetic students because students could form letters. For many students it was still a problem to recognize the letters 'd' and 'b' and they often mix them up. Also the letter 's' caused difficulty and this activity helped some of the

students to understand in which direction it should be. It also helped students to see the sequence of letters in the word and improve their recognition of high frequency words.

Activity No. 17: Catch and Read (See Appendix 27)

Aim of the activity: to foster recognition of high frequency words, to stimulate all students' senses and active engagement, to develop reading fluency; to foster social skills.

Rationale: This activity is suggested especially for kinesthetic and tactile students on the website kidsactivitiesblog.com.

Procedure: 1) Students were asked to sit in a circle and catch a ball with high frequency words; 2) after they caught the ball they were supposed to read one of the high frequency words.

Observations: Students loved this activity because they could move and it was fun to catch the ball and read a high frequency word. However this activity should be suggested for smaller groups because with 21 students in the class many students were waiting for their turn while only one student could catch the ball and read.

Activity No. 18: Game Word Detectives (See Appendix 28)

Aim of the activity: to foster recognition of high frequency words, to stimulate all students' senses, and active engagement; to foster visual memory.

Rationale: It was suggested by Reutzel and Cooter (2007) and on the website education.com where students were asked to look for high frequency words in a text. The story was taken from kidsworldfun.com

Procedure: 1) The story contained 14 of the learned high frequency words; 2) students had the text and also the high frequency words in front of them that they were supposed to find in the text with a magnifying glass.

Observations: In this activity the students were fascinated to use a magnifying glass because they could see big letters and imagine that they are detectives. The text itself was written with small letters and it was pretty hard for some of the students to spot high frequency words in text.

Activity No. 19: Writing in the Air with a Partner (See Appendix 29)

Aim of the activity: to stimulate recognition of high frequency words and all students' senses and active engagement, to promote the understanding of shapes and sequence of the letters; to foster social skills.

Rationale: The idea was taken from Blevins (2006) and Phillips and Feng (2013).

Procedure: 1) One of the students wrote the word in the air but the other read it in the air and then wrote it on the specially prepared worksheet; 2) then students switched roles and did the same activity.

Observations: It was based on the activity where a new high frequency word was introduced by the teacher, only this time students were showing the words to a partner. This activity was challenging for many students because some of the students struggled with forming some letters such as ‘d’ and ‘b’, some of the students had difficulty in which direction they should be writing and for some it was hard to understand instructions.

Activity No. 20: The Big Book Have You Seen My Cat by E. Carle (See Appendix 30)

Aim of the activity: to develop recognition of high frequency words, especially ‘you’, from the reading material, to stimulate all students’ senses and active engagement, to develop reading fluency; to foster social skills.

Rationale: The idea for this activity was taken from Franzese (2002) and Blevins (2006), who suggests that a teacher reads to students or a student reads a story to each other and identify high frequency words in a text.

Procedure: 1) Three students were invited to come to the front of the class; 2) one of students was asked to put the chosen word using magnetic letters up on the board and at the same time to read this word by checking with a finger under each letter to see if the word is made correctly; 3) the second student wrote the word on a white board and the third student pointed to the word in the book; 4) the other students in the class wrote the chosen high frequency word on a carpet and said the word aloud; 5) finally each student read a sentence from the book and pointed to the learned high frequency words.

Observations: This teaching activity involved students’ senses where they used their sight by looking at the word, hearing by listening to the word and touch by forming the word on a carpet and with magnet letters. Students were actively engaged in this activity, and they especially liked to write the words on the carpet and read the story.

Activity No. 21: Sudoku (See Appendix 32)

Aim of the activity: to foster recognition of high frequency words, to stimulate all students’ senses and active engagement, to develop reading fluency; to foster social skills and logical thinking.

Rationale: The idea for this game was taken from sightwordgame.com

Procedure: 1) Students were asked to arrange five high frequency words in empty places on condition that the word might be used only once in a column and in the line in their worksheets; 2) to make the task easier missing words were given to students; 3) additionally, students were asked to read all the words to the teacher after the finished task.

Observations: This activity was a real challenge for many students because it was hard to arrange high frequency words as asked in the task. Instructions and little cards with high frequency words helped many students achieve very good results in this task.

Activity No. 22: Reading Game I Have, Who Has (See Appendix 31)

Aim of the activity: to foster recognition of high frequency words, to stimulate all students' senses and active engagement, to develop reading fluency; to foster social skills.

Rationale: The idea was taken from the website superteacherworksheets.com

Procedure: 1) Each student received a card with two high frequency words; 2) students not only had to read but also follow what other students were reading in order to have a turn; 3) students were standing in a circle on a carpet and after reading the card the student was able to sit on the carpet.

Observations: All students were involved in the reading activity. During this activity listening skills were used because in order to read the card they were given, they were supposed to listen attentively. Many students helped other students who had difficulty reading the high frequency word on their cards. Thus students were not reading their cards but also other cards.

Activity No. 23: Games with the Interactive Board (See Appendix 33)

Aim of the activity: to foster recognition of high frequency words, and reading fluency, to stimulate all students' senses and active engagement.

Rationale: The idea was suggested by McElheran (2010) and Blackwell and Laman (2013) and these websites: education.com and abcdya.com

Procedure: During this activity two interactive games were used from these websites: 1) a high frequency word memory game in which students' touched two cards and read the words; 2) a high frequency word recognition game in which students looked and listened to sentences; 3) they were asked to point to some high frequency words.

Observations: As there are 21 students in the class this activity was difficult to do because everyone wanted to do the activity. Students liked this activity very much and all the students wanted to come to the front and touch the screen. However it was hard to involve all the students

in the activity at the same time because only one student could touch the screen and other students had to wait for their turn. To solve this problem each child should have a computer or it should be done with a smaller group of students.

In conclusion, there were activities with the multisensory approach designed and implemented in lessons based on advice from the theoretical literature and the results from a pretest of high frequency words in isolation and in context. The outcome of activities showed that students could incorporate all their senses, and were very actively engaged in the learning process. The activities increased their interest in learning, and they understood that learning can be fun which was one of the aims in designing the activities. With each activity students steadily reinforced their recognition of high frequency words, gained fluency and comprehension. Overall, activities with the multisensory approach during the case study showed a positive outcome that will be presented in the next subchapter.

3.2. ANALYSIS OF STUDENTS' READING TESTS AND OBSERVATIONS

To reach the aim of the Diploma Paper pre- and post-tests for high frequency words in isolation and in context were made with kindergarten students in order to compare the data before and after high frequency word activities using the multisensory approach. The tests showed students' strengths and weaknesses in the recognition of high frequency words. There were also observations made during activities to see students' progress and identify their next needs.

After setting up a test in isolation and in context, and a questionnaire, a pilot study was conducted with 2 students. No adjustments were made for the questionnaire or with the test of high frequency words in isolation because students understood all the questions and were able to answer them, but there were some changes made in the test in context. In the first version the reading test was written as a paragraph but after a pilot study sentences were numbered and written separately. The changes were made because it was easier for students to follow where the beginning and the end of the sentence is and to comprehend the sentence. Additionally, in the worksheet to collect the data for reading fluency and comprehension, an additional table for each sentence comprehension was made. All the pre- and post-tests were made in the kindergarten

class individually with each student. The time taken to test a student was approximately 10 to 15 minutes.

Minskoff (2005) stressed that high frequency words should be taught in isolation and in context and that was the reason for creating two tests. One of the tests had words in isolation but the other offered high frequency words in context. Both tests were prepared by the author of the Diploma Paper in order to see if there is some difference in how students can recognize high frequency words in isolation and in context, and also to determine students reading fluency and comprehension of the text.

In order to create a high frequency reading test words were taken from the high frequency word list that was created at school where the case study was done. From 52 high frequency words that are taught at school in kindergarten 30 high frequency words in isolation were included in the reading test (See Appendix 34). The reading test in isolation consisted of the high frequency words students have learned already and the words they will learn later in the year.

There were 15 high frequency words already taught by the kindergarten teacher before the case study began and the author of the Diploma Paper followed this list because students were taught according to this list (See Appendix 10). That was also the reason why exactly these words were included in the reading test in isolation. Along with the taught high frequency words there were another 15 high frequency words included from the high frequency word list used at school to see if there are some students who are able to read high frequency words that have not been taught at school yet. Students did the test in isolation twice before and after the high frequency word activities.

The reading test in context (See Appendix 35) was made from the high frequency word list that is taught at school and mostly from the words students have learned before the case study. The learned high frequency words that were included in the reading test in context were: a, I, and, is, me, can, see, am, we, the, go, in, my, like, to and high frequency words that students have not learned yet: it, are, this, and girl. There were also some nouns included in the reading test in context that students are familiar with, such as, dad, books and a library. The aim of the test was to see if students could recognize familiar high frequency words in context and understand the meaning of a text. The reading test in context consisted of six simple sentences. Pictures were made to check students' comprehension (See Appendix 36). There were two pictures for each sentence made – one that showed the correct answer but the other presented the

wrong answer. Also, scales for comprehension and reading fluency were made on a special template to collect the data for the reading test in context (See Appendix 37).

Figure 3.2.1 displays the results from the pre-and post-reading tests in isolation. It was evident that all students together were able to read 192 words more in the posttest, which makes the result 30 percent better than in the pretest.

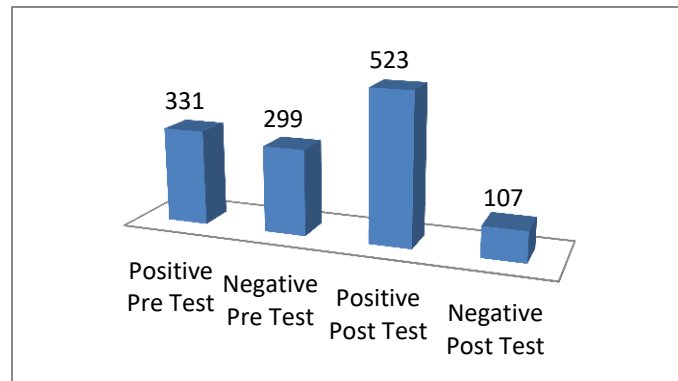


Figure 3.2.1. Results in the Reading Pre- and Post-Test for High Frequency Words in Isolation

As can be seen in Figure 3.2.2. all students together were able to read 166 words in the posttest than in the pretest which makes a 24 percent improvement in reading high frequency words in context. It is also clear that there is a bigger improvement in students' ability to recognize high frequency words in isolation than in context. Additionally, results for each student also showed that there are students who are able to recognize high frequency words in isolation but have difficulty reading these words in a text.

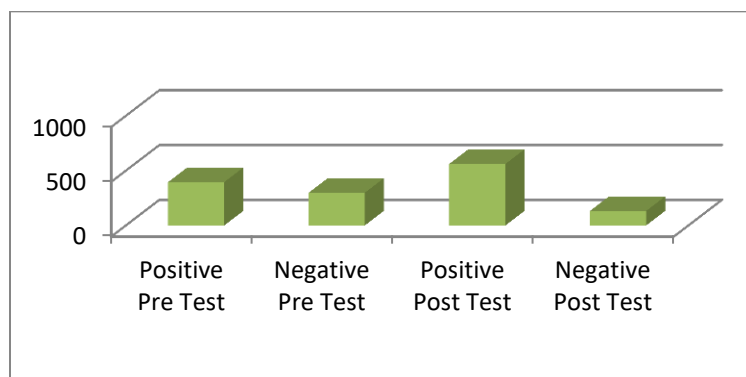


Figure 3.2.2. Results in the Reading Pre- and Post-Tests for High Frequency Words in Context

Figure 3.2.3. shows the results from the reading pretest for the high frequency words that were taught before the case study. The results in red indicate how many students had difficulty recognizing high frequency words and it is clear that the majority of students struggled to recognize many of the taught high frequency words.

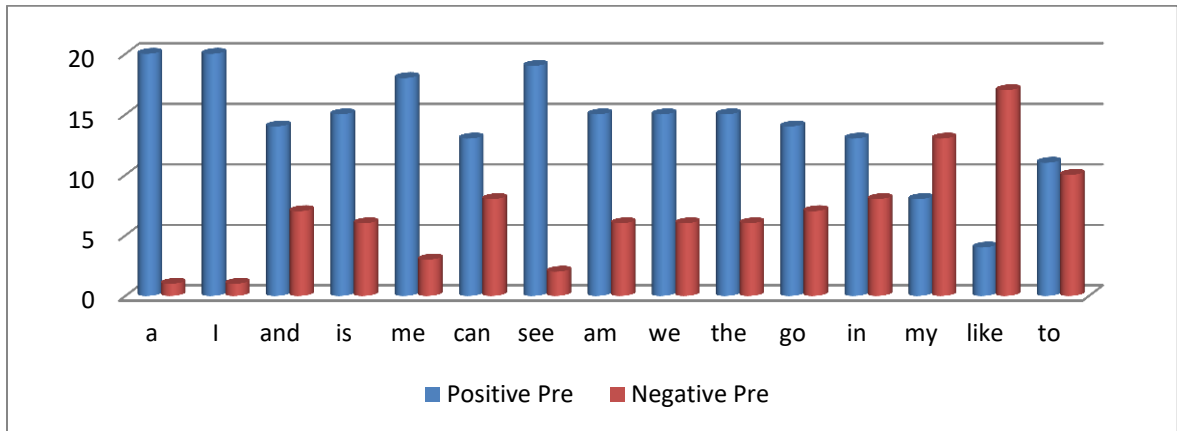


Figure 3.2.3. Results in the Reading Pretest for High Frequency Words in Isolation Learned before the Case Study

The results changed after using activities with the multisensory approach because the results of the reading posttest showed very good results as seen in figure 3.2.4. There were only one or two students who had difficulty recognizing certain high frequency words.

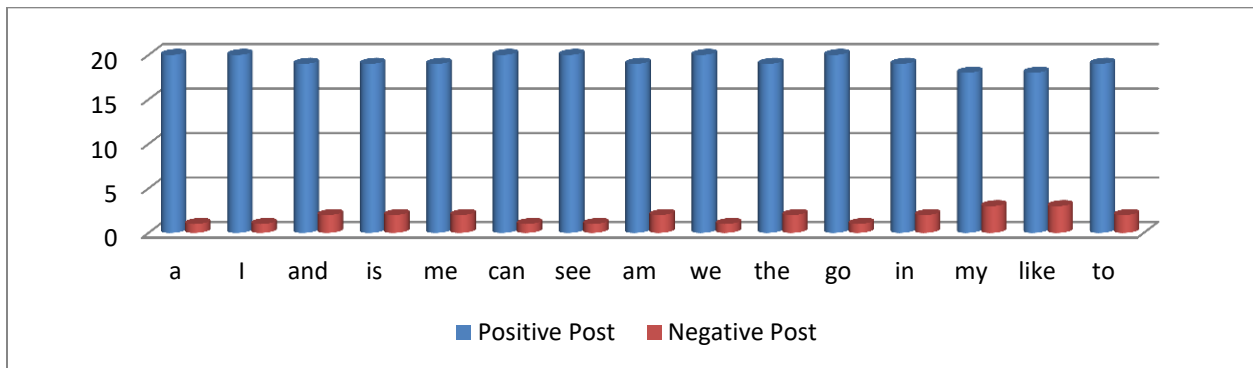


Figure 3.2.4. Results in the Reading Posttest for High Frequency Words in Isolation after Using the Multisensory Approach

Figure 3.2.5. displays the results from the reading posttest for the high frequency words that were introduced and learned with the multisensory approach during the case study. It is seen

that activities with the multisensory approach have helped to develop better results for high frequency word recognition than the previous activities without the multisensory approach.

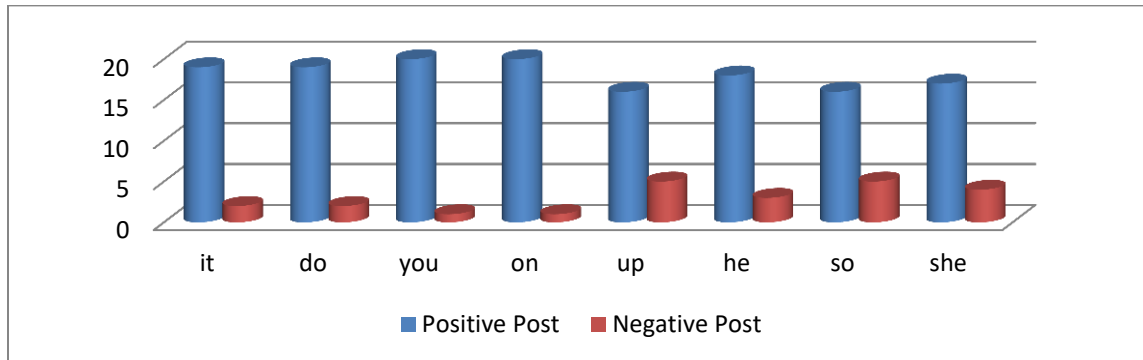


Figure 3.2.5. Results in the Pre- and Post-Reading Test for High Frequency Words in Isolation learned only with the Multisensory Approach

In conclusion it is visible of the results of the reading tests that activities with the multisensory approach helped students to improve faster and improved their high frequency word recognition skills. The improvement was also seen during activities with the multisensory approach when observations were made by the author of the Diploma Paper.

During the high frequency word activities observations were made when the teacher commented during activities about observed improvements and possible needs (See appendix 38). Usually not all of the high frequency words were tested at each activity but only the words that were used during the particular activity. For example, during the activity Rainbow Trace only 8 high frequency words were used. At the end of the activity students were asked to read the words to the teacher. All the notes were made on the students' worksheets that were later collected and processed. The assessment from this activity showed that students had better results than in their pre-reading assessment for the same words. In the pretest in isolation there were 38 percent of the students but during the Rainbow Trace activity there were only 21 percent of students who still had difficulty reading particular words, such as, like, me, in.

During the activity with play dough students made 12 high frequency words from play dough and at the end of the activity they were asked to read all of the words to the teacher. The assessment showed that 82 percent of students were able to read all high frequency words. This activity also revealed which high frequency words still cause difficulties for the majority of students and these were: is, see, like and my. The observations and tests during activities helped

to identify the difficulties students have and also showed that students steadily develop better high frequency recognition skills.

The observation and reading tests showed that students who had problems recognizing high frequency words also had problems comprehending the text because their reading fluency was low. In figure 3.2.6. the results for reading fluency is displayed. It is obvious that reading fluency improved during the case study.

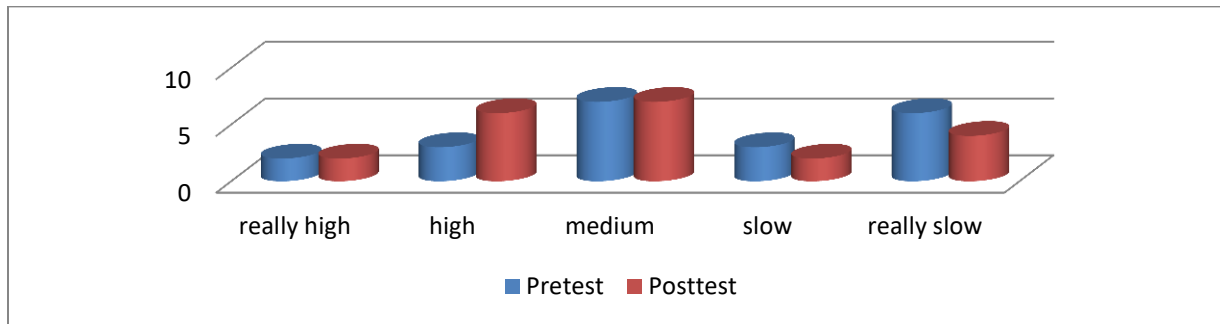


Figure 3.2.6. The Results for Reading Fluency from the Pre-and Post-tests of High Frequency Words in Isolation

The reading results showed that students doubled their reading fluency and this seen in the results in the reading comprehension of the text in Figure 3.2.7.

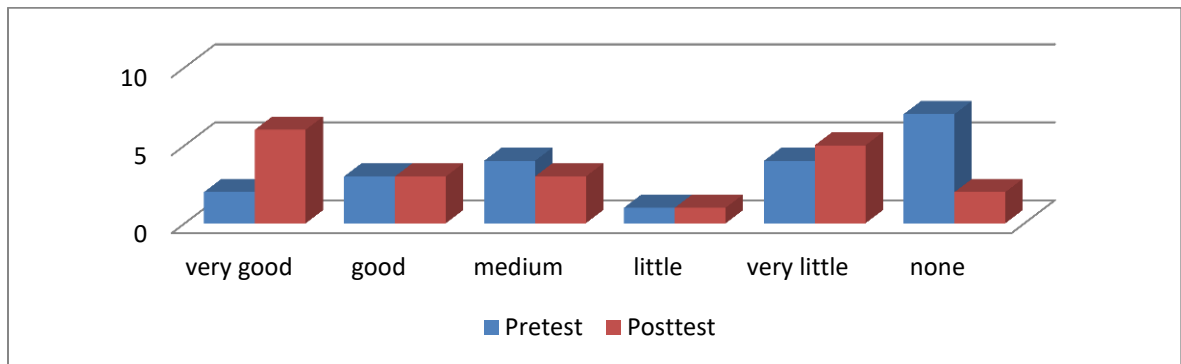


Figure 3.2.7. The Results for Comprehension from the Pre-and Post-tests of High Frequency Words in Isolation

The pretest results showed that one fourth of all students who had problems recognizing high frequency words also were not able to understand the text. Students whose reading fluency

was at a medium level or lower showed that they have some problems understanding the text, nevertheless they were able to read words and could look at pictures. Students who had good reading fluency were able to comprehend the text without the pictures. The results in the reading posttest in isolation showed that almost all students had improved their reading fluency and also their comprehension skills.

In conclusion it is seen that activities with the multisensory approach not only help develop high frequency recognition skills but also improve students' reading fluency and comprehension of a text. In the next subchapter analysis of students' questionnaires will be presented.

3.3. ANALYSIS OF STUDENTS' QUESTIONNAIRES

The author of the Diploma Paper carried out two questionnaires for young learners. One of the questionnaires inquired about students' motivation and attitude towards reading before and after the high frequency word activities. The other questionnaire identified the students' point of view about activities that were used during the case study.

In the first questionnaire that was done before and after the high frequency word activities students reflected on their attitude towards reading (See Appendix 39). This questionnaire was made based on the theoretical standpoint that motivation and attitude towards reading influence a learner's ability to acquire high frequency words (Weakland, 2013). In the questionnaire there were five questions that students answered by coloring one of three faces. A student was supposed to choose a face that reflected the student's attitude towards reading – a smiley face showed a positive attitude and that a student likes to do what is written in the question, a neutral face reflected an undecided attitude and a sad face showed that a student has a negative attitude and does not like to do what is asked in the question. Overall the results before and after the high frequency word activities showed that students have a positive attitude towards reading because the majority of the students 83 percent before and 80 percent after responded that they like books, going to the library, listening to stories, reading and writing on their own as seen in Figure 3.3.1.

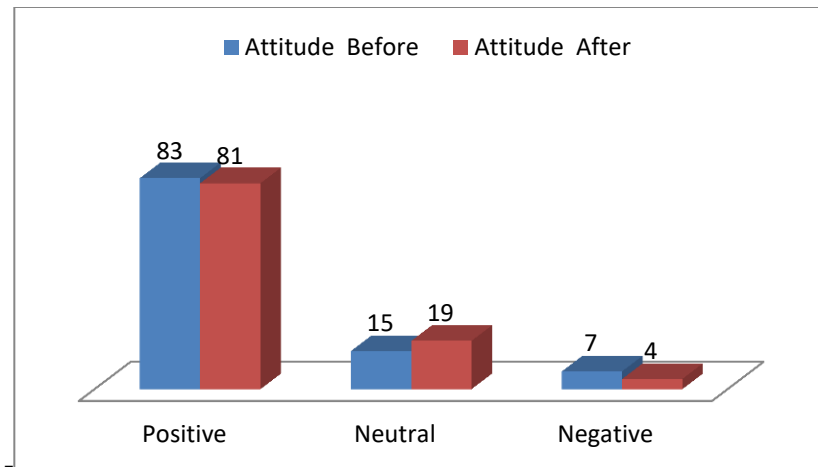


Figure 3.3.1..Students' Attitude towards Reading

The most positive attitude was towards listening to the stories where 19 students out of 21 responded positively before and 18 after the high frequency word activities. Other students stayed neutral because they were not so sure about their response. Some negative aspects were seen when students were asked to reflect on their attitude towards writing. There were four students who seemed to have a negative attitude and three students with not so sure feelings towards this aspect but after the high frequency word activities they had more positive responses and only one had a negative reply.

There were more negative answers seen after the high frequency word activities towards reading. The author of the Diploma Paper considers that the reasons for that might be because some of the lessons were very intensive and required active participation. As well, some of the lessons were very late in the afternoon when students felt very tired but they still were asked to participate in all activities.

To determine what opinion students have about activities that were used during the case study another questionnaire was made (See Appendix 40). There were 21 activities with the multisensory approach included in the questionnaire and students were asked to express their opinion about each activity during the case study. The results showed, as seen in Figure 3.3.2., that 78 percent of students had a positive attitude towards the activities and only nine percent of students had some negative experience from the activities. Overall as a class, students had a very positive attitude towards all the activities with the multisensory approach. There were seven

students who liked all of the activities, and seven students who liked almost all of activities. There were also two students who had negative feelings towards almost all of the activities.

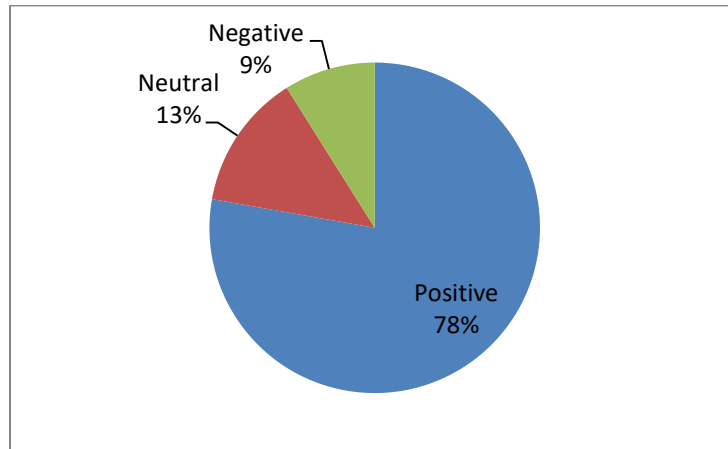


Figure. 3.3.2. Students Opinion about Activities used during the Case Study

The results from the questionnaire also revealed each student’s likes and dislikes towards activities done during the case study. As seen in Figure 3.3.3. each activity was liked by the majority of the students and this proves that using the multisensory approach helps to capture most of the students’ interest, and increase motivation and engagement in activities. This was also observed by the author of the Diploma Paper during the case study. In addition, the reading tests of high frequency words in isolation and in context and observation showed that the use of the multisensory approach helped to develop high frequency word recognition skills for students at age 5 to 6.

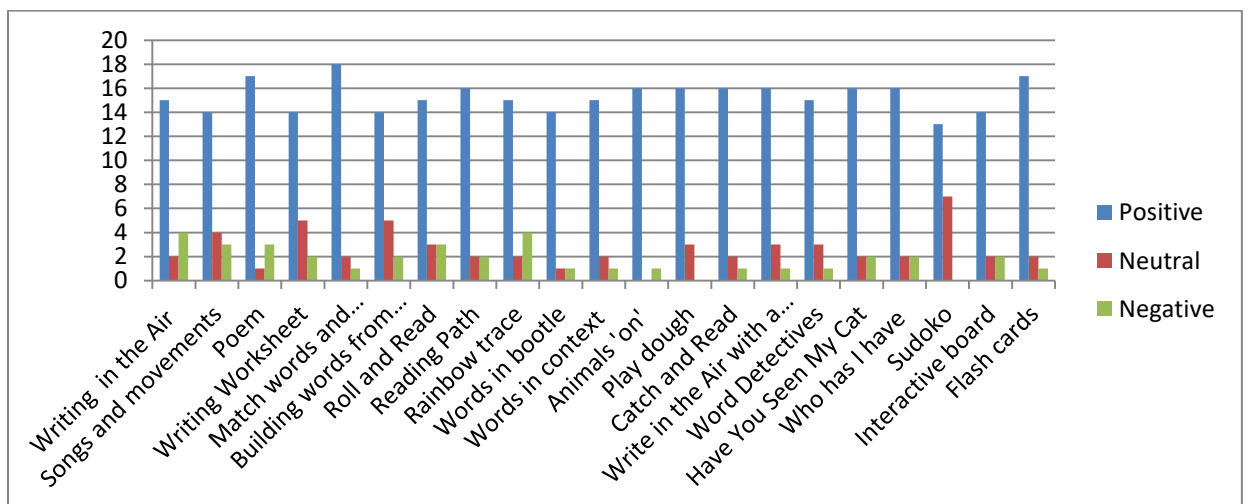


Figure 3.3.3. Students Opinion for each Activity

It could be concluded that the multisensory approach helps to develop high frequency word skills because they incorporate all learning styles for auditory, visual, kinesthetic and tactile learners. Furthermore, activities with the multisensory approach help to engage students actively and in a fun way in the learning process. The evidence of that was seen in the results from questionnaires that showed students were highly motivated to participate in activities with the multisensory approach.

3.4. ANALYSIS OF THE INTERVIEW WITH THE KINDERGARTEN TEACHER

The interview with the kindergarten teacher was conducted as one of the data collection methods in order to find out the teacher's thoughts about teaching high frequency words to students at age 5 to 6. The aim was to clarify if the kindergarten teacher faced the same problems and difficulties that the author had observed in her teaching experience and that were also mentioned in the theoretical literature, and what activities the kindergarten teacher used to develop high frequency word skills to young learners.

The interview consisted of 22 questions and it was conducted in the class and lasted approximately 25 minutes (See Appendix 41). The first two questions inquired about the teachers experience in education. The next two questions, from No. 3 and No. 4, were about the teacher's experience in teaching high frequency words to students. In the next five questions, from No. 5 to No. 9, the kindergarten teacher answered questions about problems and difficulties in teaching high frequency word recognition skills to children at age 5 to 6 and also if there was a difference in learning high frequency words for nonnative and native English speakers. The next nine questions, from No. 10 to No. 19, inquired about the kindergarten teacher's experience teaching high frequency words to students at age 5 to 6. The last three questions, from No. 20 to No.22, asked feedback about the activities with the multisensory approach that were used in the case study at school with kindergarten students.

The kindergarten teacher has 19 years of teaching experience. The teacher has taught kindergarten for the last three years but in previous years she has been a Grade 1 teacher at the same school for several years and has taught high frequency words to this group. She also has competence in teaching young learners to read including, high frequency words. The

kindergarten teacher observes the same problem that the author of the Diploma Paper has seen with students at this age. Many students have difficulty recognizing high frequency words because they do not follow the phonics principles and for many young learners it is a real challenge to memorize all these words. As to the problem of why it is so hard for students to recognize high frequency words, the kindergarten teacher assumes that students do not have enough opportunities to use high frequency words and that reduces their ability to remember high frequency words. As well, enthusiasm, experience and parent influence play an important role. In her teaching experience the kindergarten teacher has noticed that the ability to recognize high frequency words also influences reading fluency and comprehension skills which affirm the observations seen by the author of the Diploma Paper and many researchers on this issue. The teacher does not agree that nonnative speakers have more problems in acquiring high frequency words, but rather that it depends more on the students' maturity, parent support and cognitive support.

The kindergarten teacher has two lessons a week to teach high frequency words to students with different activities as part of language studies. The teacher uses different activities, such as, coloring high frequency words, cutting and pasting letters in correct order, reading and writing and playing some games. The teacher acknowledges that students at this age learn best through games and repetition, and activities should include all language skills: reading, writing, listening and speaking. She adds that games require a lot of preparation time but that she would like to include more games in lessons and also activities with physical responses. To teach the high frequency words a list was created by previous kindergarten teachers that are based on the Dolch list and reading materials that they have in the class. It was mentioned also by Farrell et al. (2013 a) that teachers should create their own high frequency word lists based on materials that students are using every day in their classrooms. As there are different proficiency levels of knowing high frequency words the teacher works individually with students who have problems acquiring high frequency words by providing them with more opportunities and practice to learn high frequency words rather than using strategies for a differentiated classroom. Additionally, high frequency words are given as homework to practice at home.

During the case study the kindergarten teacher was always in the class in order to see all the activities with the multisensory approach. Therefore her opinion about likes and dislikes about activities was asked. During the case study the teacher liked best the activity where

students were building words with play dough. As very effective activities the teacher acknowledged activities where students were singing songs and doing the movements, matching cut words and making a word chain, Reading Path, Word Detectives and Sudoku. The teacher is planning on using these activities after the case study is over.

The most difficult task from the point of view of the teacher was the activity in which students were writing in the air with partners. The reasons for that were unclear instructions and that the task was too hard for some of the students because they still struggled to recognize and form letters. The activity could be more effective with clear instructions and scaffolding for some of the students. The teacher thinks that students have developed better high frequency recognition skills during the case study and that it was a very helpful additional exposure.

Based on the data analysis, the author of the Diploma Paper can conclude that that the kindergarten teacher has also observed that there are students at this age that have problems acquiring high frequency words that do not follow the phonics principles and students have difficulty reading these. Furthermore for many students it is a real challenge to memorize high frequency words. The kindergarten teacher also gave her opinion about the most effective activities using the multisensory approach to develop high frequency word recognition skills for students and these could be repeated again in the class. These activities were making words with play dough, songs with movements, matching cut words and making the word chain, building words from letters, Reading Path Way, and games Word Detectives and Sudoku. As the most difficult activity Writing in the Air was recognized. Finally, all questions and answers were useful for the Diploma Paper.

CONCLUSION

Reading is looked at as an essential skill that children at age 5 to 6 should acquire in primary school. All young readers should try to become proficient readers. English high frequency words that appear in great quantity in reading texts and do not apply phonics rules cause a lot of problems for many young readers who struggle to recognize them in texts. Therefore the Diploma Paper was written to explore how the multisensory approach can develop English high frequency word recognition skills for 5 to 6 year old children.

Firstly, the author of the Diploma Paper, after analysis of different theoretical sources introduced and clarified the term and concept of high frequency words. It was concluded that high frequency words should be looked on as core vocabulary in texts because they appear very often in reading and writing materials. Furthermore high frequency words play an essential role in reading fluency and in comprehension of a text. Additionally, reading fluency should be considered as a bridge between automatic word recognition and comprehension of a text. The high frequency words should be taught in isolation and in context. The high frequency words list should be designed by a teacher based on suggestions from high frequency lists made by the authorities in this field and the reading materials the particular class has. In addition, the class atmosphere and students' reading motivation should be considered because it might influence students' attitudes towards learning. It was also advised that students should practice high frequency words throughout the school day in multiple contexts and teachers have to engage students in authentic and meaningful activities.

Secondly, literature on the multisensory approach was analyzed and it was discovered that the multisensory approach has been described as a foundational strategy for learning because it not only increases students' achievements but also helps to engage students in all learning activities and shows that learning can be fun. The multisensory approach should be viewed as a learning process where visual, auditory, kinesthetic and tactile methods are used. It was suggested to use the multisensory approach especially with very young children when they learn to read. During activities where the multisensory approach is used students need to see, hear, smell, taste and touch and there should be at least two sensory modalities included in each activity.

Thirdly, to reach the aim of the Diploma Paper, guidelines from the theoretical literature were followed to design activities with the multisensory approach in order to develop high frequency word recognition skills for students at 5 to 6 that have been implemented in lessons. A case study was carried out at the International School of Latvia in a kindergarten class.

Finally, data from reading tests, questionnaires, observations and an interview with the kindergarten teacher were gathered and analyzed. The results from analysis of data showed a satisfying outcome because the results of the reading test in isolation and in context after the activities showed that students have developed high frequency recognition skills. The data analysis showed that in the activities with the multisensory approach students achieved better results than in activities before the case study. The observations during activities showed that students steadily develop high frequency word recognition skills. The results for comprehension showed better results for students who had better high frequency recognition skills and reading fluency that correspond with theory. The results from questionnaires displayed that overall students were highly satisfied with the activities during the case study and also their attitude towards reading was very positive.

During the interview with the kindergarten teacher it was also acknowledged that there are students at age 5 to 6 who have problems recognizing high frequency words that do not apply phonics rules and memorizing high frequency words that also influence their reading fluency and comprehension of a text. The teacher is planning to incorporate these activities during English language classes. The empirical data gained from reading pre-and post-tests, observations, questionnaires and the interview with the kindergarten teacher correspond with theory that activities with multisensory approach where all senses are used not only increases students' achievements but also helps to engage students in all learning activities, promote deeper participation and shows that learning can be fun. The aim of this research was to prove that the use of the multisensory approach helps to develop high frequency skills for children at age 5 to 6. Therefore the aim of the Diploma Paper was achieved.

As this study was completed only over several weeks, it would be beneficial to do some other studies to see if the results remain the same after a longer period of time. Also other age groups and larger number of students could be included in the research.

THESES

1. Reading is looked at as an essential skill that children at age 5 to 6 should acquire in primary school in order to become proficient readers.
2. The high frequency words should be looked at as core vocabulary in texts because they appear very often in reading and writing materials.
3. The high frequency words play an essential role in reading fluency because and exactly reading fluency is considered as the key to comprehension.
4. Reading fluency is like a bridge between automatic word recognition and comprehension of a text.
5. The high frequency word list that should be taught to students has to be designed by a teacher based on suggestions from high frequency lists made by the authorities in this field and the reading materials that are used in the class.
6. Students should practice high frequency words throughout the school day in multiple contexts and teachers have to engage students in authentic and meaningful activities that will reinforce knowledge and use of high frequency words in isolation and a variety of contexts.
7. The basis of the multisensory approach is to incorporate all learning styles for auditory, visual, kinesthetic and tactile learners.
8. All preferable learning styles are catered for seeing, touching, hearing, smelling, tasting, moving, thinking and enjoying.
9. The multisensory approach happens only when all sensors are activated and integrated in activities when students hear, see and touch.
10. The multisensory approach is a foundational strategy for learning because it not only increases students' achievements because several senses are used in the learning process but also helps to engage students in all learning activities.
11. The multisensory approach is described as a power in education because when using the multisensory approach multiple messages are sent out simultaneously to the brain of a child. If a child has difficulty learning by listening, there is a possibility to learn by moving or seeing.
12. Class atmosphere and motivation towards reading should be considered because it might influence students' attitude towards learning.

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APPENDICES

Appendix No. 1

One Hundred Essential Sight Word List by Otto and Stallard

ONE HUNDRED ESSENTIAL SIGHT WORDS				
a	down	it	out	three
about	for	just	over	to
after	from	know	put	too
again	get	like	right	two
all	go	little	said	up
an	good	look	saw	us
and	got	made	say	want
any	had	make	see	was
are	has	me	she	we
at	have	my	so	went
away	he	new	some	were
be	her	no	take	what
big	here	not	that	when
but	him	now	the	where
by	his	of	them	who
came	how	off	then	will
come	I	old	there	with
could	if	on	they	would
did	in	one	think	you
do	is	our	this	your

Otto, W., Stallard C. (1975) One Hundred Essential Sight Words. Madison: Wisconsin University. [pdf] Available at: <http://files.eric.ed.gov/fulltext/ED116156.pdf> [Accessed 29 October 2016].

Appendix No. 2

Dolch List by Frequency

Dolch 220 List by Frequency

1 the	38 then	75 its	112 let	149 must	185 pick
2 to	39 little	76 ride	113 help	150 start	186 hurt
3 and	40 down	77 into	114 make	151 black	187 pull
4 he	41 do	78 just	115 going	152 white	188 cut
5 a	42 can	79 blue	116 sleep	153 ten	189 kind
6 I	43 could	80 red	117 brown	154 does	190 both
7 you	44 when	81 from	118 yellow	155 bring	191 sit
8 it	45 did	82 good	119 five	156 goes	192 which
9 of	46 what	83 any	121 six	157 write	193 fall
10 in	47 so	84 about	120 walk	158 always	194 carry
11 was	48 see	85 around	122 two	159 drink	195 small
12 said	49 not	86 want	123 or	160 once	196 under
13 his	50 were	87 don't	124 before	161 soon	197 read
14 that	51 get	88 how	125 eat	162 made	198 why
15 she	52 them	89 know	126 again	163 run	199 own
16 for	53 like	90 right	127 play	164 gave	200 found
17 on	54 one	91 put	128 who	165 open	201 wash
18 they	55 this	92 too	129 been	166 has	202 show
19 but	56 my	93 got	130 may	167 find	203 hot
20 had	57 would	94 take	131 stop	168 only	204 because
21 at	58 me	95 where	132 off	169 us	205 far
22 him	59 will	96 every	133 never	170 three	206 live
23 with	60 yes	97 pretty	134 seven	171 our	207 draw
24 up	61 big	98 jump	135 eight	172 better	208 clean
25 all	62 went	99 green	136 cold	173 hold	209 grow
26 look	63 are	100 four	137 today	174 buy	210 best
27 is	64 come	101 away	138 fly	175 funny	211 upon
28 her	65 if	102 old	139 myself	176 warm	212 these
29 there	66 now	103 by	140 round	177 ate	213 sing
30 some	67 long	104 their	141 tell	178 full	214 together
31 out	68 no	105 here	142 much	179 those	215 please
32 as	69 came	106 saw	143 keep	180 done	216 thank
33 be	70 ask	107 call	144 give	181 use	217 wish
34 have	71 very	108 after	145 work	182 fast	218 many
35 go	72 an	109 well	146 first	183 say	219 shall
36 we	73 over	110 think	147 try	184 light	220 laugh
37 am	74 your	111 ran	148 new		

Farrell, L., Osenga, T., Hunter, M. A. (2013a) Comparing the Dolch and Fry Frequency Word Lists. *Readsters, LLC*, [pdf] Available at: <http://www.readsters.com/wp-content/uploads/ComparingDolchAndFryLists.pdf> [Accessed 22 October 2016].

Appendix No. 3

Dolch List by Grade Level

Dolch 220 List by Grade

Pre-Primer		Primer		1 st Grade		2 nd Grade		3 rd Grade	
a	look	all	out	after	let	always	or	about	laugh
and	make	am	please	again	live	around	pull	better	light
away	me	are	pretty	an	may	because	read	bring	long
big	my	at	ran	any	of	been	right	carry	much
blue	not	ate	ride	as	old	before	sing	clean	myself
can	one	be	saw	ask	once	best	sit	cut	never
come	play	black	say	by	open	both	sleep	done	only
down	red	brown	she	could	over	buy	tell	draw	own
find	run	but	so	every	put	call	their	drink	pick
for	said	came	soon	fly	round	cold	these	eight	seven
funny	see	did	that	from	some	does	those	fall	shall
go	the	do	there	give	stop	don't	upon	far	show
help	three	eat	they	going	take	fast	us	full	six
here	to	four	this	had	thank	first	use	got	small
I	two	get	too	has	them	five	very	grow	start
in	up	good	under	her	then	found	wash	hold	ten
is	we	have	want	him	think	gave	which	hot	today
it	where	he	was	his	walk	goes	why	hurt	together
jump	yellow	into	well	how	were	green	wish	if	try
little	you	like	went	just	when	its	work	keep	warm
		must	what	know		made	would	kind	
		new	white			many	write		
		no	who			off	your		
		now	will						
		on	with						
		our	yes						

Farrell, L., Osenga, T., Hunter, M. A. (2013a) Comparing the Dolch and Fry Frequency Word Lists. *Readsters, LLC*, [pdf] Available at: <http://www.readsters.com/wp-content/uploads/ComparingDolchAndFryLists.pdf> [Accessed 22 October 2016].

Appendix No. 4

Fry's Word List by Frequency

Fry 300 List by Frequency

1	the	51	will	101	over	151	set	201	high	251	important
2	of	52	up	102	new	152	put	202	every	252	until
3	and	53	other	103	sound	153	end	203	near	253	children
4	a	54	about	104	take	154	does	204	add	254	side
5	to	55	out	105	only	155	another	205	food	255	feet
6	in	56	many	106	little	156	well	206	between	256	car
7	is	57	then	107	work	157	large	207	own	257	miles
8	you	58	them	108	know	158	must	208	below	258	night
9	that	59	these	109	place	159	big	209	country	259	walk
10	it	60	so	110	years	160	even	210	plants	260	white
11	he	61	some	111	live	161	such	211	last	261	sea
12	was	62	her	112	me	162	because	212	school	262	began
13	for	63	would	113	back	163	turned	213	father	263	grow
14	on	64	make	114	give	164	here	214	keep	264	took
15	are	65	like	115	most	165	why	215	tree	265	river
16	as	66	him	116	very	166	ask	216	never	266	four
17	with	67	into	117	after	167	went	217	start	267	carry
18	his	68	time	118	thing	168	men	218	city	268	state
19	they	69	has	119	our	169	read	219	earth	269	once
20	I	70	look	121	name	170	need	220	eye	270	book
21	at	71	two	120	just	171	land	221	light	271	hear
22	be	72	more	122	good	172	different	222	thought	272	stop
23	this	73	write	123	sentence	173	home	223	head	273	without
24	have	74	go	124	man	174	us	224	under	274	second
25	from	75	see	125	think	175	move	225	story	275	later
26	or	76	number	126	say	176	try	226	saw	276	miss
27	one	77	no	127	great	177	kind	227	left	277	idea
28	had	78	way	128	where	178	hand	228	don't	278	enough
29	by	79	could	129	help	179	picture	229	few	279	eat
30	word	80	people	130	through	180	again	230	while	280	face
31	but	81	my	131	much	181	change	231	along	281	watch
32	not	82	than	132	before	182	off	232	might	282	far
33	what	83	first	133	line	183	play	233	close	283	Indians
34	all	84	water	134	right	184	spell	234	something	284	really
35	were	85	been	135	too	185	air	235	seemed	285	almost
36	we	86	call	136	means	186	away	236	next	286	let
37	when	87	who	137	old	187	animals	237	hard	287	above
38	your	88	am	138	any	188	house	238	open	288	girl
39	can	89	its	139	same	189	point	239	example	289	sometimes
40	said	90	now	140	tell	190	page	240	beginning	290	mountains
41	there	91	find	141	boy	191	letter	241	life	291	cut
42	use	92	long	142	following	192	mother	242	always	292	young
43	an	93	down	143	came	193	answer	243	those	293	talk
44	each	94	day	144	want	194	found	244	both	294	soon
45	which	95	did	145	show	195	study	245	paper	295	list
46	she	96	get	146	also	196	still	246	together	296	song
47	do	97	come	147	around	197	learn	247	got	297	being
48	how	98	made	148	farm	198	should	248	group	298	leave
49	their	99	may	149	three	199	American	249	often	299	family
50	if	100	part	150	small	200	world	250	run	300	it's

Farrell, L., Osenga, T., Hunter, M. A. (2013a) Comparing the Dolch and Fry Frequency Word Lists. *Readsters, LLC*, [pdf] Available at: <http://www.readsters.com/wp-content/uploads/ComparingDolchAndFryLists.pdf> [Accessed 22 October 2016].

Appendix No. 5

The Table of 100 Words Compared from Dolch and Fry Lists

**Frequency Rankings of 130 Words Compared
Top 100 Dolch Words and Top 100 Fry Words Combined
Frequency Rankings from Dolch 220 List and Fry 1000 List
Listed Alphabetically**

Dolch Rank	Word	Fry Rank	Dolch Rank	Word	Fry Rank	Dolch Rank	Word	Fry Rank	Dolch Rank	Word	Fry Rank
5	a	4	100	four	166	58	me	-	29	there	41
84	about	54	81	from	25	-	more	71	210	these	59
25	all	34	51	got	98	56	my	81	18	they	19
37	am	88	35	go	74	68	no	77	55	this	23
71	an	43	81	good	111	49	not	31	non list	time	68
3	and	3	93	got	147	66	now	90	1	to	5
83	any	138	99	green	443	-	number	76	90	too	135
63	are	15	20	had	28	9	of	2	122	two	71
85	around	147	166	has	69	17	on	14	24	up	52
51	as	16	34	have	24	54	one	27	181	use	42
70	ask	166	4	he	11	123	or	26	71	very	116
21	at	21	28	her	62	-	other	53	86	want	144
33	be	22	22	him	66	31	out	55	11	was	12
129	been	85	15	his	18	73	over	101	non list	water	84
61	big	159	88	how	48	-	part	100	-	way	78
79	blue	537	6	i	20	-	people	80	36	we	36
19	but	31	45	if	50	97	pretty	925	62	went	167
103	by	29	10	in	6	91	put	152	50	were	35
107	call	86	77	into	67	80	red	327	48	what	33
69	came	143	27	is	7	76	ride	615	44	when	57
42	can	39	8	it	10	90	right	134	95	where	128
64	come	97	75	its	89	12	said	40	192	which	45
43	could	79	98	jump	613	48	see	75	128	who	87
non list	day	94	78	just	120	15	she	46	59	will	51
45	did	95	89	know	108	47	so	60	23	with	17
41	do	47	53	like	65	30	some	61	-	word	30
87	don't	128	39	little	106	94	take	102	57	would	63
40	down	30	47	long	94		than	84	127	write	72
-	each	44	28	look	70	14	that	9	60	yes	471
96	every	102	162	made	98	1	the	1	7	you	8
167	find	91	114	make	64	104	their	49	74	your	58
146	first	83	218	many	56	32	them	58			
16	for	15	150	may	99	38	then	57			

**Frequency Rankings of 130 Words Compared
Top 100 Dolch Words and Top 100 Fry Words Combined
Listed by Dolch Frequency, then Fry Frequency**

Dolch Rank	Word	Fry Rank	Dolch Rank	Word	Fry Rank	Dolch Rank	Word	Fry Rank	Dolch Rank	Word	Fry Rank
1	the	1	34	have	24	67	long	90	100	four	166
2	to	5	35	go	74	68	no	77	103	or	16
3	and	3	36	we	36	69	came	143	103	by	29
4	he	11	37	am	88	70	ask	166	-	word	30
5	a	4	38	then	57	71	very	116	104	use	42
6	I	20	39	little	106	72	an	43	-	each	44
7	you	8	40	down	95	73	over	101	102	which	45
8	it	10	41	do	47	74	your	38	104	their	49
9	of	2	42	can	39	75	its	89	-	other	53
10	in	6	43	could	79	76	ride	615	108	many	56
11	was	12	44	when	37	77	into	67	112	these	59
12	said	40	45	did	98	78	just	120	114	make	64
13	his	18	46	what	33	79	blue	537	nearlist	time	68
14	that	9	47	so	60	80	red	517	106	has	69
15	she	46	48	see	75	81	from	28	102	two	71
16	for	13	49	not	31	82	good	122	-	more	72
17	on	14	50	were	35	83	any	138	107	write	73
18	they	19	51	get	96	84	about	54	-	number	76
19	but	31	52	them	58	85	around	147	-	way	78
20	had	16	53	like	65	86	want	144	-	people	80
21	at	21	54	one	27	87	don't	228	-	than	82
22	him	66	55	this	23	88	how	48	105	first	83
23	with	17	56	my	81	89	know	108	nearlist	water	84
24	up	52	57	would	63	90	right	134	109	been	85
25	all	34	58	me	112	91	put	152	107	call	86
26	look	70	59	will	51	92	too	135	108	who	87
27	is	7	60	yes	421	93	got	247	107	find	91
28	her	62	61	big	159	94	take	104	nearlist	day	94
29	there	41	62	went	167	95	where	128	102	made	98
30	some	61	63	are	13	96	every	202	130	may	99
31	out	55	64	come	97	97	pretty	933	-	part	100
32	as	16	65	if	30	98	jump	613			
33	be	22	66	now	90	99	green	442			

Farrell, L., Osenga, T., Hunter, M. A. (2013a) Comparing the Dolch and Fry Frequency Word Lists. *Readsters, LLC*, [pdf] Available at: <http://www.readsters.com/wp-content/uploads/ComparingDolchAndFryLists.pdf> [Accessed 22 October 2016].

Appendix No. 6

The Most Frequent Words from American Heritage Word Frequency Book

The Most Frequent Words

This chart contains the 150 most frequent words (in order of frequency) in present tense English according to the *American Heritage Word Frequency Book*.

the	could	they	on
of	no	at	may
and	make	be	some
a	than	this	in
to	first	from	good
is	been	I	new
is	long	have	write
you	little	or	our
that	very	by	said
it	after	one	the
he	words	had	man
for	called	not	too
was	just	will	any
on	where	each	day
are	most	about	same
but	know	how	right
what	get	up	look
all	through	out	think
were	back	them	such
when	much	then	here
we	before	she	take
there	also	many	why
can	around	some	things
an	another	so	help
your	came	these	put
which	come	would	years
their	work	other	different
said	three	its	away
if	word	who	again
do	must	now	off
into	because	people	went
has	does	my	old
more	part	made	number
her	even	over	
two	place	did	
like	well	down	
him	as	only	
see	with	way	
time	his	find	

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Appendix No. 7

Activities on the Websites with Multisensory Approach to develop High Frequency Words

Games and teaching strategies, such as - Air Writing and Pathway

<http://www.sightwords.com/sight-words>

Multisensory teachings of high frequency words, such as - Make the words from play dough

<http://blog.maketaketeach.com/teaching-sight-words/>

Roll and Read

<http://mrsgilchristclass.blogspot.com/2012/06/roll-and-read-freebie.html>

Rainbow Trace

<http://confessionsofaprimarteacher.blogspot.com/2012/02/rainbow-tracing-sight-words.html>

Sudoku

<http://www.sightwordsgame.com/sightwordgames/sight-word-games-sudoku-myself/>

“I Spy” high frequency word sensory bottle

<http://www.sugaraunts.com/2013/06/i-spy-sight-word-sensory-bottle.html>

Kinetic high frequency word activity with a beach ball: Cath and Read

<http://kidsactivitiesblog.com/6586/kinetic-sight-word-activity>

Games, such as, Word detectives, I Have, Who Has, Hopscotch, Magnetic Magic

<http://www.carlscorner.us.com/SightWds.htm>

<https://www.superteacherworksheets.com/dolch/dolch-words-preprimer-i-have-who-has.pdf?up=1466611200>

Sight Words: When They Just Don't Stick:

<http://thisreadingmama.com/sight-words-when-they-just-dont-stick/>

Appendix No. 8

Instructions for Games Suggested by Franzese (2002)

Starts Like, Sounds Like students are asked to write high frequency words after a teacher has given some clues, for example, it starts like window and sounds like tent. The children are supposed to write the word went.

Hangman is another version for the game hangman where students are asked to choose a high frequency word from the word wall that could be put in a sentence, for example, the sentence is I_____ a toy for my birthday (got).

Loo-Say-Name-Cover-Write-Check a teacher writes a high frequency word on a board and asks children to look at the word, say it, and name the letters. Then the teacher covers it and children write the word. After they have written it, the teacher uncovers the word and children check if they have written it correctly.

Bingo, where each child gets a bingo card and bingo markers that they put on a card if they hear the word from their card.

Memory game by saying words on the cards and matching two similar cards.

Fishing High Frequency Words where one of the student is fishing words but another makes the word from the magnetic letter.

Make My Name, where children are asked to form a high frequency word from magnetic letters, check if they have made it correctly and practice to write the word on a wipe-off board.

Use of big books (children stories) is used with reading material and three students are invited to come in the front of the class. One of students is asked to put the chosen word using magnetic letters up on the board and at the same time, when reading this word, the student should check with a finger under each letter to see if the word looks correct. The second student writes the word on a white board and the third student points at the word in the book. The other students in the class write the chosen high frequency word on a carpet and say the word at the same time.

Franzese, R. (2002) Reading and Writing in Kindergarten: A Practical Guide. New York: Scholastic Professional Books

Appendix No. 9

Instructions for Games Suggested by Palmer and Bayley (2004)

In the Word hunt each student has a set of sight words and a duplicate set that is hidden in different places. Students can work individually or with a partner in order to find all sight words.

Eat your words, where each student is supposed to make a high frequency word from the dough that a student is struggling with. After they have cooked the cookies they are displayed students read the high frequency words. After eating the cookies they try to remember high frequency words they had and try to display them on the word wall or word bank or somewhere else.

Word Chain, where each player has to remember all the words said and add one more to the word chain.

In the Secret message the teacher writes a secret message with black letters and some important sight words with red letters, where the black letters are visible but red letters are covered. The text contains a message where students have to find something that has been lost or to discover some information. They have to do a certain task in order to reveal the message and each time they reveal a message they can uncover one of the high frequency words. The tasks might be connected also with sight words, for example, the students have to find five words “they” in the classroom or find five words “you” in books. It is suggested to give little prizes after this activity for each student.

In Joined-up-memory students are asked to write sight words, for example, he-the-they.

Palmer, S., Bayley, R. (2004) Foundations of Literacy: A Balance Approach to Language, Listening and Literacy skills in the early years. Stafford: Network Education Press.

Appendix No. 10

High Frequency Words List in the Kindergarten Class

High Frequency Words taught in the Class before the Case Study	High Frequency Words taught during the Case Study	High Frequency Words that will be taught after the Case Study
a I and is me can see am we the go in my like to	it do you on up he so she	at no an all girl not are got now sit as had off then ball has or they be her out this boy him play too by his put

Appendix No. 11

Plan for High Frequency Word Activities with the Multisensory Approach during the Case Study
at the International School of Latvia

High Frequency Word Activities with the Multisensory Approach during the Case Study

Dates	Activities in the class during the case study
October 17-21	Pre-assessment and questionnaire about reading motivation
October 31-November 4	Introduce the high frequency word 'it' with activities: writing in the air, Heidi songs, poem worksheet Add the high frequency word 'it' to the word wall. Review of all learned high frequency words with activities: flash cards, Match game, Word Chain
November 7-11	Introduce the high frequency word 'do' with activities: Writing in the air, Heidi songs, poem worksheet Add the high frequency word to the word wall. Repeat the previous song 'it' and movements. Use flash cards with all learned high frequency words Building high frequency words Roll and Read Reading Path Rainbow Trace
November 14-18	Introduce the high frequency word 'you' with activities: writing in the air, Heidi song, poem worksheet Add the high frequency word to the word wall Repeat all previous songs and movements. Use flash cards with all learned high frequency words Words in a bottle High frequency word worksheet
November 21-25	Introduce the high frequency word 'on' with activities writing in the air and high frequency word worksheet.

	<p>Add the high frequency word to the word wall.</p> <p>Animals on each</p> <p>Repeat all previous songs and movements.</p> <p>Use flash cards with all learned high frequency words.</p> <p>Words in context the story “Books”</p>
November 28- December 2	<p>Introduce to high frequency words ‘he’ and ‘she’ with activities writing in the air and high frequency word worksheets</p> <p>Add high frequency words to the Word Wall.</p> <p>Use flash cards with all learned high frequency words.</p> <p>Make words with play dough</p> <p>Catch and Read</p> <p>Writing in the Air</p>
December 5-9	<p>Word detectives</p> <p>Read the story Have You Seen My Cat?</p> <p>Reading game I have Who has</p> <p>Suduko</p> <p>Using Interactive board</p> <p>Post Assessment for students</p> <ul style="list-style-type: none"> - Questionnaire about reading motivation and activities used during high frequency word activities for students - Interview with a kindergarten teacher

Appendix No. 12

Visual Material for the Activity Writing in the Air

it



Sight Words: Teach Your Child to Read (2016) [Online] Available at:
<http://www.sightwords.com/sight-words/lessons/> [Accessed 23 October 2016].

Appendix No. 13

Visual Materials for the Song “it”



It is red. The apple is red.



It is green. The grass is green.



It is blue. The sky is blue.



It is yellow. The sun is yellow.

What color is **it**?

What is **it**?

High Frequency Word Writing Worksheets *Poems*

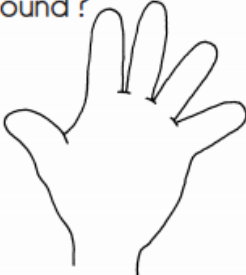
Name: _____

Write the sight word on the lines.

Sight Word
it

What Is It?

Is _____ red?
Is _____ black,
with spots on its back?
Is _____ small?
Is _____ round?
Can _____ fly all around?
Is _____ a ladybug
I just found?



Draw a ladybug on the hand.


Name: Anastasiya

Write the sight word on the lines.

Sight Word
it

What Is It?

Is it red?
Is it black,
with spots on its back?
Is it small?
Is it round?
Can it fly all around?
Is it a ladybug
I just found?



Draw a ladybug on the hand.

Williams, L.R. (2005) Sight Word Poetry Pages: 100 Fill-in-the-Blank Practice Pages That Help Kids Really Learn the Top High Frequency Words. New York: Scholastic.

Appendix No. 16

Word Wall in the Kindergarten Classroom



Appendix No. 17

Flash Cards Used with Students



Appendix No. 18

High Frequency Word Cards Used to Pair Students

my	is
me	am
we	go
go	in
to	it









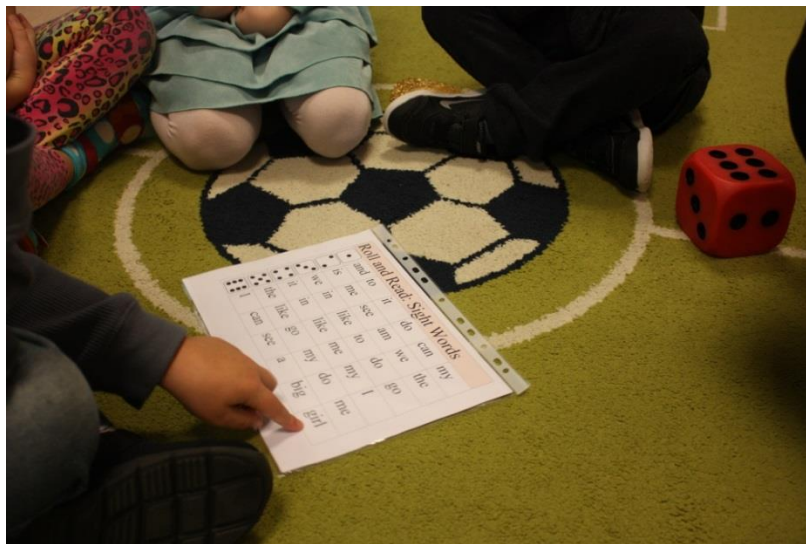
Make these words:

my	like	see
can	the	and
it	go	we



Make Take and Teach: Hands on Activities for Primary Classrooms (2016) [Online] Available at: <http://blog.maketaketeach.com/teaching-sight-words/> [Accessed 28 October 2016].

Roll and Read: High Frequency Words						
	and	to	it	do	can	my
	is	me	see	am	we	the
	we	in	like	to	do	go
	it	in	like	me	my	I
	the	like	go	my	do	me
	I	can	see	a	big	girl



Gilchrist C. Mrs. Gilchrist's Class (2012) [Online] Available at:
<http://mrsgilchristsclass.blogspot.com/2012/06/roll-and-read-freebie.html> [Accessed 28 October 2016].

Words for the Reading Path Way of High Frequency Words on the Carpet

my	is
me	am
we	go
go	in
to	it



Sight Words: Teach Your Child to Read (2016) [Online] Available at:

<http://www.sightwords.com/sight-words/games/pathways/> [Accessed 28 October 2016].

High Frequency Word Rainbow Tracing Activity Worksheet

Rainbow Tracing - High Frequency Words

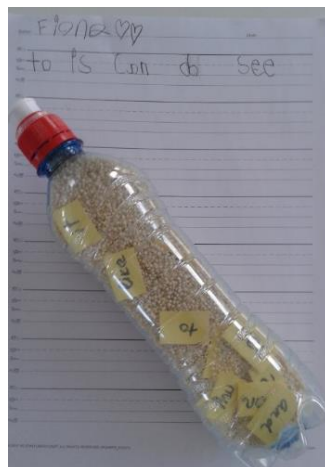
Try to find following words and color each one in the correct order. Connect similar words.

me my in go is like see and

Try to find following words and color each one in the correct order. Connect similar words.

Appendix No. 23

Materials for I Spy High Frequency Words in a Bottle Activity

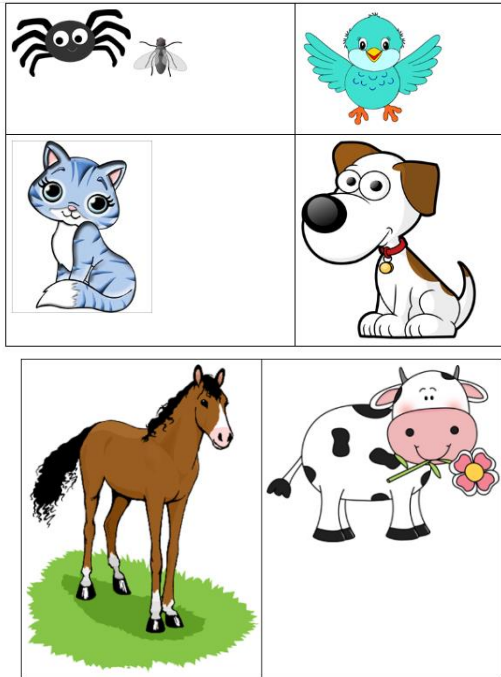


Sight Words: Teach Your Child to Read (2016) [Online] Available at:

<http://www.sightwords.com/sight-words/games/pathways/> [Accessed 28 October 2016].

Appendix No. 24

Materials for the Activity Animals on Each Other to Foster the High Frequency Word 'on'



This is a fly **on** a spider.

This is a spider **on** a bird.

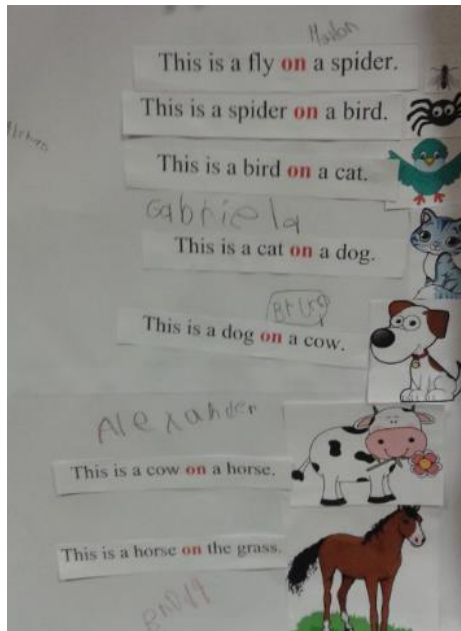
This is a bird **on** a cat.

This is a cat **on** a dog.

This is a dog **on** a cow.

This is a cow **on** a horse.

This is a horse **on** the grass.





BOOKS

Write words from the box in sentences!

1. I have a book.

2. _____ is my book.

3. But this book is from _____ library.

4. I _____ to read books.

5. _____ you like books?



Yes

No

a the do it like



BOOKS

Write words from the box in sentences!

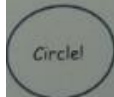
1. I have a book.

2. it is my book.

3. But this book is from the library.

4. I like to read books.

5. do you like books?



Yes

No

~~a~~ ~~the~~ ~~do~~ ~~it~~ ~~like~~

Enchanted Homeschooling Mom (2016) [Online] Available at:

<http://enchantedhomeschoolingmom.org/2015/01/popping-sight-words-and-sentence-building-game/> [Accessed 7 November 2016].

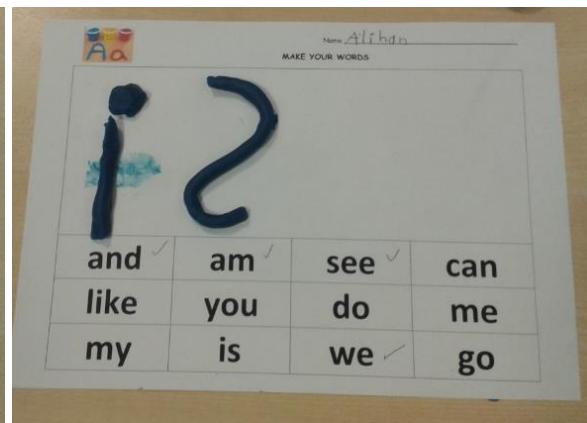
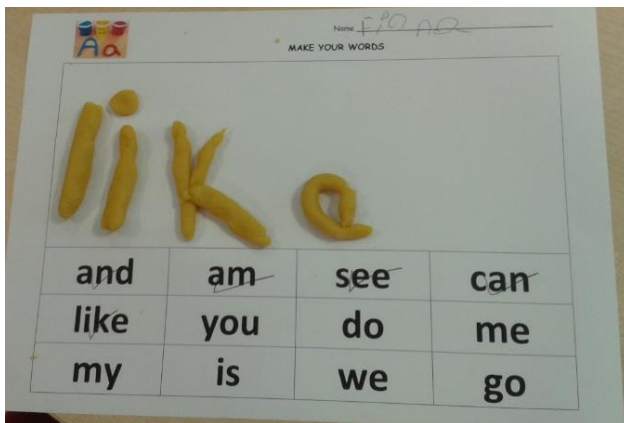
Making High Frequency Words from Play Dough Activity Worksheet



Name _____

MAKE YOUR WORDS

and	am	see	can
like	you	do	me
my	is	we	go



Make Take & Teach: Hands on Activities for Primary Classrooms (2016) [Online] Available at: <http://blog.maketaketeach.com/teaching-sight-words/> [Accessed 18 November 2016].

Appendix No. 27

Catch and Read Activity



Kids Activities Blog (2016) [Online] Available at: <http://kidsactivitiesblog.com/6586/kinetic-sight-word-activity> [Accessed 28 October 2016].

Word Detective Activity

Circle sight words in the text: Name _____

Unhelpful Friends



Bunny rabbit lived in the forest. He had many friends. He was proud of his friends.

One day Bunny rabbit heard the loud barking of wild dogs. He was very scared. He decided to ask for help. He quickly went to his friend deer. He said, "Dear friend, some wild dogs are chasing me. Can you chase them away with your sharp antlers?"

The deer said, "That is right, I can. But now I am busy. Why don't you ask bear for help?"

Bunny rabbit ran to the bear. "My dear friend, you are very strong. Please help me. Some wild dogs are after me. Please chase them away," he requested to the bear.

The bear replied, "I am sorry. I am hungry and tired. I need to find some food. Please ask the monkey for help."

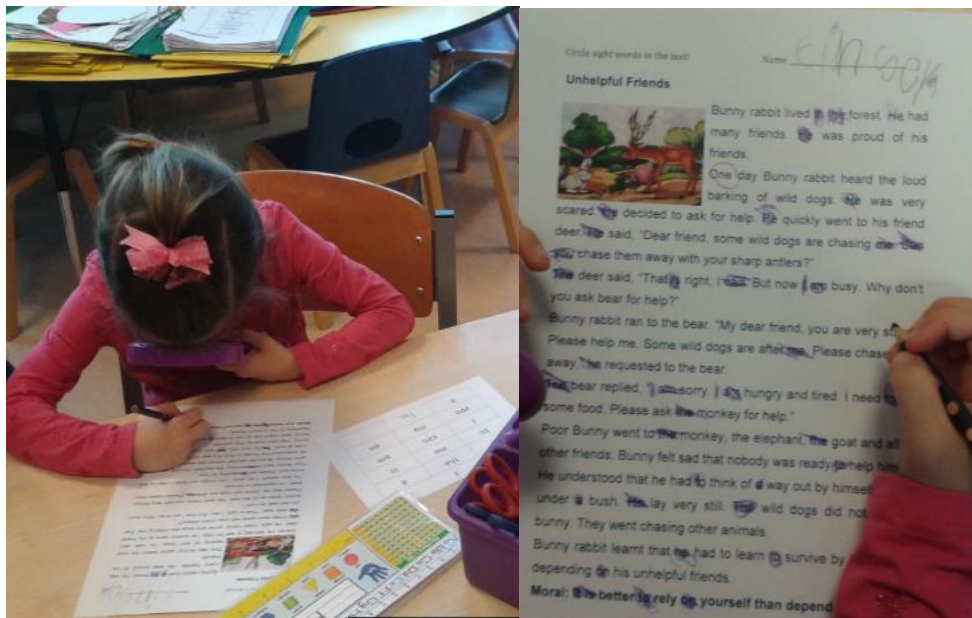
Poor Bunny went to the monkey, the elephant, the goat and all his other friends. Bunny felt sad that nobody was ready to help him.

He understood that he had to think of a way out by himself. He hid under a bush. He lay very still. The wild dogs did not find the bunny. They went chasing other animals.

Bunny rabbit learnt that he had to learn to survive by himself, not depending on his unhelpful friends.

Moral: It is better to rely on yourself than depend on others.

in	the	a
to	me	is
I	can	am
you	my	on
it	he	



Kids Activities Blog (2016) [Online] Available at: <http://kidsactivitiesblog.com/6586/kinetic-sight-word-activity> [Accessed 28 October 2016].

Appendix No. 29

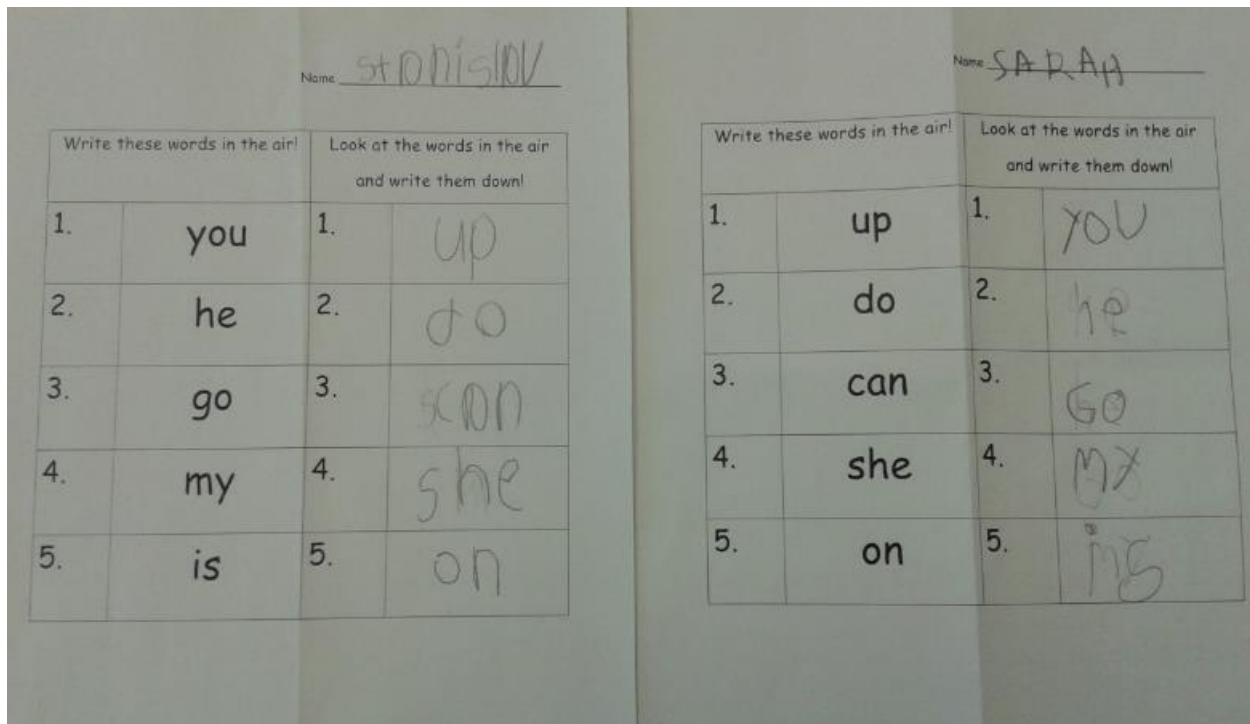
Writing in the Air with a Partner Activity Worksheet

Name _____

Name _____

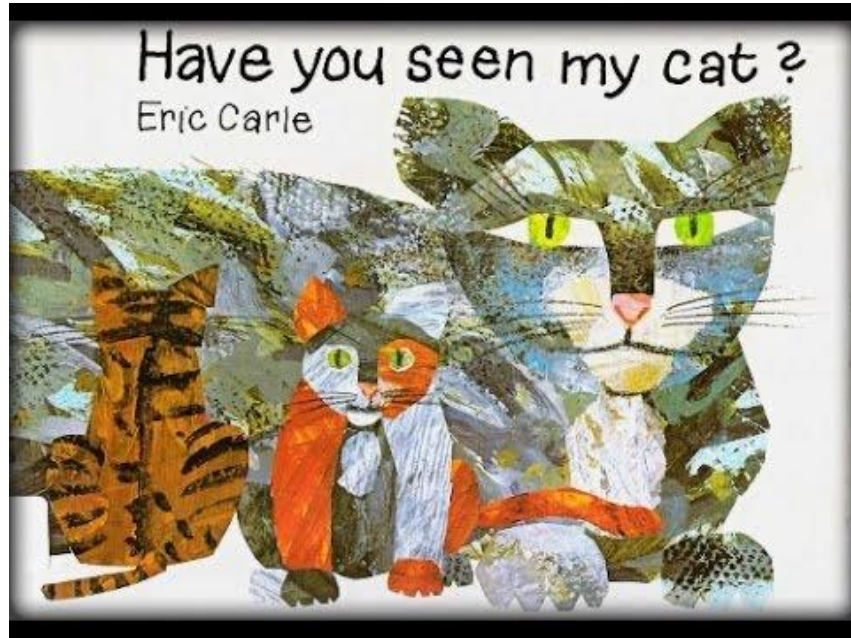
Write these words in the air!		Look at the words in the air and write them down!	
1.	you	1.	
2.	he	2.	
3.	go	3.	
4.	my	4.	
5.	is	5.	

Write these words in the air!		Look at the words in the air and write them down!	
1.	up	1.	
2.	do	2.	
3.	can	3.	
4.	she	4.	
5.	on	5.	



Sight Words: Teach Your Child to Read (2016) [Online] Available at:
<http://www.sightwords.com/sight-words/lessons/> [Accessed 23 October 2016].

Materials of Activity Have You Seen My Cat? by Eric Carle



This is not my cat!

Have you seen my cat?



Carle E. Have You Seen My Cat? New York: Scholastic, 2000.

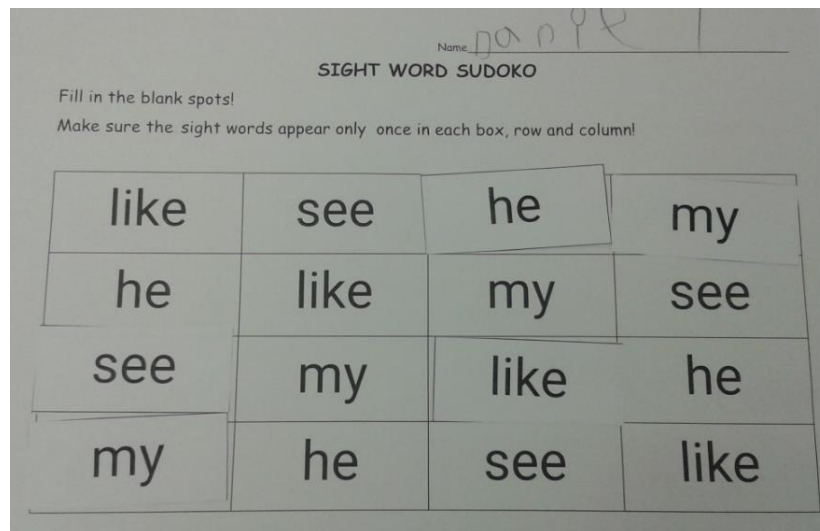
Name _____

SUDOKU

Fill in the blank spots!

Make sure the sight words appear only once in each box, row and column!

like	see		
he	like	my	see
	my		he
	he	see	like



Sight Word Games (2013) [Online] Available at:

<http://www.sightwordsgame.com/sightwordgames/sight-word-games-sudoku-myself/> [Accessed

27 November 2016].

Reading Cards for the Game Who Has, I Have

I have I Who has a ?	I have a Who has and ?
I have and Who has is ?	I have is Who has me ?
I have me Who has can ?	I have can Who has see ?

I have see Who has am ?	I have am Who has we ?
I have we Who has the ?	I have the Who has go ?
I have go Who has in ?	I have in Who has my ?

I have my Who has like ?	I have like Who has to ?
I have to Who has it ?	I have it Who has do ?
I have do Who has you ?	I have you Who has on ?

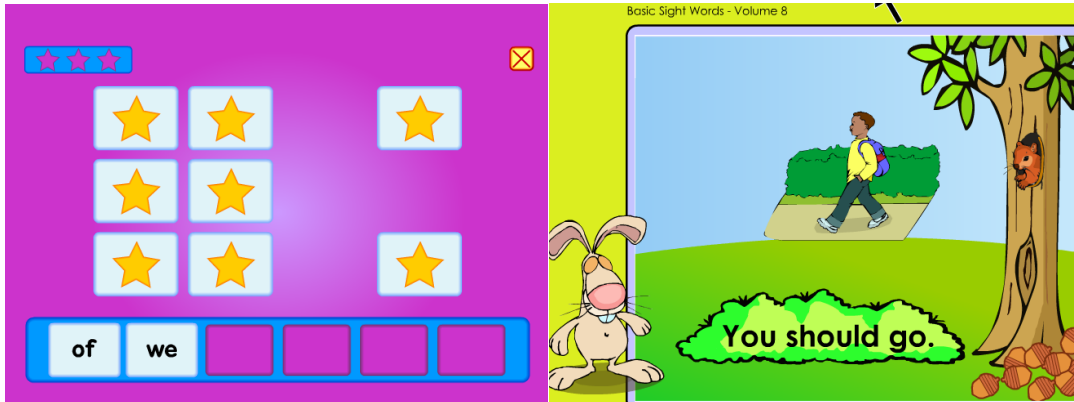
I have on Who has up ?	I have up Who has he ?
I have he Who has so ?	I have so Who has she ?
I have she Who has a ?	

Super Teacher Worksheets. (2016) [Online] Available at:

<https://www.superteacherworksheets.com/dolch/dolch-words-preprimer-i-have-who-has.pdf?up=1466611200> [Accessed 23 October 2016].

Appendix No. 33

Using the Interactive Board



Education.com (2016) [Online] Available at: <http://www.education.com/games/sight-words/> [Accessed 28 October 2016].

Abcya.com (2016) [Online] Available at: http://www.k5learning.com/sites/all/files/sample_lessons/Basic%20Sight%20Words_Lk_V8_t1a/Basic%20Sight%20Words_Lk_V8_t1a.swf [Accessed 28 October 2016].

Appendix No. 34

Pre- and Post-Test of High Frequency Words in Isolation

High Frequency Word Assessment

Name _____ Age _____ Nationality _____

Dates: Pre-Assessment _____ Post-Assessment _____

Place a checkmark ✓ in the box for each correct answer.

Pre	Post			Pre	Post	
		a				it
		I				do
		and				you
		is				on
		me				up
		can				he
		see				so
		am				she
		we				at
		the				no
		go				an
		in				all
		my				this
		like				are
		to				girl

Name Alexander Age 5 Nationality Russian

A

Dates: Pre-Assessment _____ Post-Assessment _____

Place a checkmark ✓ in the box for each correct answer.

Pre	Post			Pre	Post	
✓	✓	a		.	✓	it
✓	✓	I		.	✓	do
	✓	and			✓	you
✓	✓	is		.	✓	on
✓	✓	me		✓	✓	up
.	✓	can		.	✓	he
✓	✓	see		.	.	so
.	✓	am		.	✓	she
✓	✓	we		.	✓	at
✓	✓	the		.	✓	no
✓	✓	go		.	✓	an
.	✓	in		✓	✓	all
.	✓	my		✓	✓	this
.	✓	like		✓	✓	are
.	✓	to		.	✓	girl

Pre-and Post-Test of High Frequency Words in Context

High Frequency Word Assessment in Context

Name _____ Age _____ Date _____

Place a checkmark ✓ under the word for each correct answer.

1. I am a girl and I go to school.

2. This is my dad.

3. We are in the library.

4. I like books.

5. I can see a book.

6. My dad will read it to me.

High Frequency Word Assessment in Context

Name Alexander Age 5 Date October 9, 2014

Place a checkmark ✓ under the word for each correct answer.

1. I am a girl and I go to school.
✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
2. This is my dad.
✓ ✓ ✓ ✓ ✓
3. We are in the library.
✓ ✓ ✓ ✓ ✓ ✓ ✓
4. I like books.
✓ ✓ ✓ ✓ ✓
5. I can see a book.
✓ ✓ ✓ ✓ ✓ ✓ ✓
6. My dad will read it to me.
✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓

High Frequency Word Assessment in Context

Name Alexander Age _____ Date December 12, 2014

Place a checkmark ✓ under the word for each correct answer.

1. I am a girl and I go to school.
✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
2. This is my dad.
✓ ✓ ✓ ✓ ✓
3. We are in the library.
✓ ✓ ✓ ✓ ✓ ✓ ✓
4. I like books.
✓ ✓ ✓ ✓ ✓
5. I can see a book.
✓ ✓ ✓ ✓ ✓ ✓ ✓
6. My dad will read it to me.
✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓

*

Appendix No. 36

Pictures used in the Pre- and Post-Test of the High Frequency Words in Context for the Reading Comprehension of Sentences

Sentences	Correct Answer	Wrong Answer
1.		
2.		
3.		
4.		
5.		
6.		

Appendix No. 37

Template for Reading Fluency and Comprehension from the Pre- and Post-Test of High
Frequency Words in Context

Name _____ Date _____

High frequency words used in sentences:

Learned words this year: a I and is me can see am we the go in my like to

Will be learned later this year: it are this girl

Place a checkmark ✓ in the box for the reading fluency

Reading Fluency	very high	high	medium	slow	really slow

Place a checkmark ✓ in the box for each correct answer.

Comprehension of the sentences	1st	2nd	3rd	4th	5th	6th

Place a checkmark ✓ in the box for the comprehension of the text:

Comprehension of the text	very good 6 correct answers	good 5 correct answers	medium 4 correct answers	little 3 correct answers	very little 1-2 correct answers	none 0 correct answers

Name Allyson Date December 17, 2016

High frequency words used in sentences:

Learned words this year: a I and is me can see am we the go in my like to
 Will be learned later this year: it are this girl

Place a checkmark ✓ in the box for the reading speed.

Reading Speed	very high	high	medium	slow	really slow
			✓		

Place a checkmark ✓ in the box for each correct answer.

Comprehension of the sentences	1st	2nd	3rd	4th	5th	6th
	✓	✓	✓	✓	✓	✓

Place a checkmark ✓ in the box for the comprehension of the text.

Comprehension of the text	very good 6 correct answers	good 5 correct answers	medium 4 correct answers	little 3 correct answers	very little 1-2 correct answers	none 0 correct answers
		✓				

Appendix No. 38
High Frequency Word Observation List

High Frequency Word Observation List

Date _____

Activity: _____

Name / HFW						
and						
am						
see						
can						
like						
you						
do						
me						
my						
is						
we						
go						

High Frequency Word Observation List

Date Nov 28, 2016

Activity: Building Words with Play Dough

Name/ HFW	Five	Looked	Machin	Pencil	Friend	Whisper
and	✓	✓	.	✓	.	✓
am	✓	✓	.	.	✓	✓
see	✓	✓	.	✓	✓	✓
can	✓	✓	✓	✓	.	✓
like	✓	✓	✓	✓	,	✓
you	✓	✓	✓	✓	.	✓
do	✓	.	.	✓	.	✓
me	✓	.	✓	✓	.	✓
my	✓	.	.	✓	.	✓
is	✓	.	✓	.	.	✓
we	.	✓	✓	.	.	✓
go	✓	✓	✓	✓	.	✓

- they loved it from the beginning
- helped Mary understand to understand in a line direction starts for letters (t, d, s)
- can see sequence of the letters
- all ready to come after
- help read other if somebody has problem to read a letter

Appendix No. 39

Questionnaire for Students' Reading Motivation

Name _____ Age _____ Date _____

Students Reading Motivation Assessment

This is how I feel about books:



This is how I feel about the library:



This is how I feel when someone reads to me:



This is how I feel when I have to read:



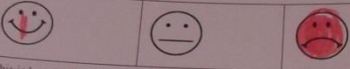
This is how I feel when I have to write:



Name Nicolay Age 5 Date October 17 2016

Students Reading Motivation Assessment

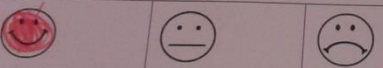
This is how I feel about books:



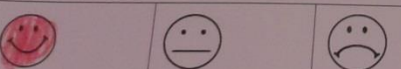
This is how I feel about the library:



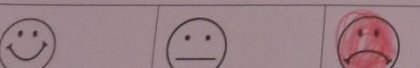
This is how I feel when someone reads to me:



This is how I feel when I have to read:



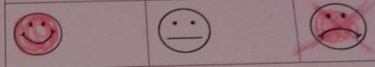
This is how I feel when I have to write:



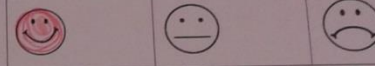
Name Nicolay Age 5 Date December 7 2016

Students Reading Motivation Assessment

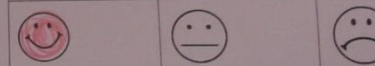
This is how I feel about books:



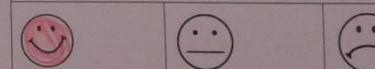
This is how I feel about the library:



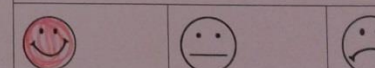
This is how I feel when someone reads to me:



This is how I feel when I have to read:

































This is how I feel when I have to write:




































Student Questionnaire for High Frequency Word Activities with the Multisensory Approach

Name _____ Age _____ Date _____



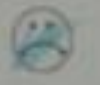








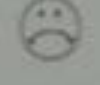


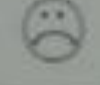


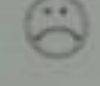


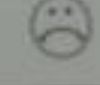


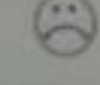


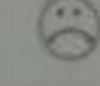


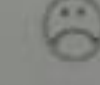
Students Reflection on High Frequency Word Learning Activities

Learning Activities	Positive	Neutral	Negative
Writing in the Air			
Singing songs and doing the movements			
High frequency word poem worksheet			
High frequency word worksheet			
Match cut words and make a word chain			
Building high frequency words from letters			
Roll and Read			
Reading Path			
Rainbow Trace			
Words in a bottle			

Words in context - Books			
Animals on each other - the word "on"			
Make words from play dough			
Catch and Read			
Write in the air with your partner			
Word Detectives			
Story Have You Seen My Car?			
Game Who Has? I Have			
<u>Sudoku</u>			
Using technologies			
Using flash cards			

Name Brendan Age 5 Date November 3, 2016

Students Reflection on High Frequency Word Learning Activities

Learning Activities	Positive	Neutral	Negative
Writing in the Air			
Singing songs and doing the movements			
High frequency word poem worksheet			
High frequency word worksheet			
Match cut words and make a word chain			
Building high frequency words from letters			
Roll and Read			
Reading Path			
Rainbow Trace			
Weeds in a bottle			

December 7, 2016

Interview with a Kindergarten Teacher

1. How many years have you been a teacher?

19 years

2. How many years have you taught a kindergarten class?

3 years

3. As a kindergarten teacher have you always taught high frequency words to students?

Yes.

4. Have you taught high frequency words to some other classes?

Yes, 1st grade.

5. What is the biggest problem for students at age 5 to 6 to learn to read?

Students need to know letter sounds to help with decoding. They can learn some sight words as these rely on memory. The problem with high frequency words is that not all follow the phonics principles that relate to letter sounds.

6. Have you observed that there are students that have difficulties to memorize high frequency words at age 5 to 6?

Yes.

7. Where is the problem that some of the students at age 5 to 6 have difficulties to recognize high frequency words?

Language learners have the greatest difficulty. If students do not get sufficient exposure and opportunities to use high frequency words their retention of the words is significantly reduced.

Maturity and enthusiasm also play a significant role. With additional parent support the process is faster.

8. From your opinion does recognition of high frequency words improve students reading fluency and comprehension of a text?

Yes. If a student no longer has to decode every word in a sentence then their fluency is greatly increased. Reading fluency also helps increase comprehension.

9. Do nonnative speakers have more problems to learn high frequency words than English native speakers?

This depends on their maturity as well as parental support. Cognitive ability will also have an impact.

10. How many lessons during a week do you spend on teaching high frequency words?

Explicitly - 2 lessons.

11. How do you decide which high frequency words to teach to students?

I try to use the words we will be using in class. I use the Dolch list as a guide.

12. Why do you teach exactly these high frequency words and how did you decided in which order to teach words that are on your high frequency word list? (in the red folder)

I joined a kindergarten team where the teacher was using the dolch sight words. I did not question this and have continued in the same vain.

13. How do you teach high frequency words or what kind of activities do you use?

I teach high frequency words as part of my language group rotations. The activities vary. Students color sight words, cut and put the letters in the correct order. They also complete sight word poems so reading and writing are involved. We also play some sight word games including Uno which the students really enjoy.

14. From your point of view what are the best learning activities using multisensory approach to develop high frequency recognition skills at age 5 to 6?

Children at this age learn best through games, but this requires more preparation. Repetition is important. Activities should include - reading, writing, listening and speaking.

15. What are some other activities with multisensory approach that you would like to include in your lessons?

I would like to include more total physical response activities in my lessons as vocabulary connected to actions helps retention.

16. The reading tests showed that there are some really strong readers and students who barely can read. Do you use differentiation while teaching high frequency words?

Unfortunately, there is little differentiation with sight word activities. I do try to provide additional exposure for those students who are struggling, I work with them more closely and provide more opportunities for them to practice and use sight words.

17. What do you do with struggling readers? How do you help them to overcome difficulties? Struggling students need additional support and this may require one-to-one assistance. I will read for students and guide them through a task so that it doesn't seem quite so overwhelming.

18. Do you ask your students to practice high frequency words at home? If yes, what kind of tasks these are?

We send home sight words on a ring and ask parents to practice these with their child.

19. Which of the activities during the case study did you like the most? Why?

Using playdough was my favorite. We have done this in the past, but I had not used it for a long time. I could see the student enjoyment and it was a great way to reinforce letter/sound knowledge. Now that the students have covered all the letters in the alphabet, I will return to this activity and incorporate it more frequently. I also find these activities very effective: songs and with movements, matching words and making a word chain, Reading Path, Word Detectives and Sudoku.

20. Which of the activity was not effective during the case study? Why?

All the activities were helpful, but the writing in the air in pairs was the most problematic. More instructions were required. Once teachers worked with the different pairs they were more successful, Students all still don't know how to form letters correctly which meant guessing was difficult. Students also weren't able to tell when one letter was written and the next one was begun. Once they started to guess letter by letter the activity was more successful. Some students were also facing each other which meant the letters were written in reverse. These problems were fixable so further lessons should be more successful.

21. Will you use some of the activities that were used during the case study?

Yes. I will definitely return to using play dough. I will also try to incorporate more total physical response activities. I would also like to incorporate the reading path.

22. Have you seen that students have developed high frequency word recognition skills during the case study activities using multisensory approach?

Yes, additional exposure has been very helpful.

Thank you!