# CHARLES UNIVERSITY IN PRAGUE <br> Faculty of Education <br> Department of English Language and Literature 

# THE EFFECTIVENESS OF TEACHING SYNTHETIC PHONICS TO EFL STUDENTS 

# EFEKTIVITA VÝUKY SYNTETICKÉ METODY ČTENÍ A PSANÍ V ANGLICKÉM JAZYCE U EFL STUDENTU゚ 

## DIPLOMA THESIS

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| Supervisor: | Mgr. Kristýna Červinková Poesová, Ph.D. |
| Author: | Lucie Urbanová |

## Declaration

I hereby assure that I worked on this diploma thesis independently. I did not use any different than the mentioned sources. The sources I used have been included in the reference list and the information has been fully acknowledged in the text.

I agree that the diploma thesis will be used for other academic purposes and stored in the library of the Faculty of Education at Charles University.

Prague, June 2016
Lucie Urbanová

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# The effectiveness of teaching synthetic phonics to EFL students 


#### Abstract

This diploma thesis deals with the effectiveness of systematic and explicit Synthetic Phonics teaching methods in the EFL learning environment. The theoretical part of the text investigates the similarities and differences between teaching Synthetic and Analytic Phonics. Whether synthetic phonics is essential not only for native English speakers, but also for EFL students is examined. Furthermore, it introduces the changes and development in phonics teaching in a historical context. The practical section describes the test preparation and presents how the research methodology was applied. It also examines the data collected from testing four groups of Prague primary school children who have different experience of phonics. Last but not least, the empirical section presents the results of 60 students' readings and analyses their performances concluding with an assessment as to whether explicit Synthetic Phonics teaching instruction helps EFL students in pronouncing words or not.


## Key words:

synthetic phonics, analytic phonics, phonemes, graphemes, pronunciation and articulation, spelling, reading, writing

# Efektivita výuky syntetické metody čtení a psaní v anglickém jazyce u EFL studentů 


#### Abstract

Abstrakt Diplomová práce se zabývá efektivitou systematické explicitní výuky syntetické metody čtení a psaní vanglickém jazyce u EFL studenti̊. Teoretická část zkoumá shodnosti a rozdíly mezi analytickou a syntetickou metodou výuky a tyto dva př́stupy porovnává. Práce projednává, zda je přístup syntetické metody přínosný nejen pro rodilé mluvčí anglického jazyka, ale také pro EFL žáky. Práce dále představuje změny a vývoj ve výuce této metody v kontextu historie. Praktická část, která následuje, popisuje přípravu testu a prezentuje provádění výzkumu. Zkoumá také data, která byla získána testováním čtyř skupin dětí pražských základních škol, které mají se syntetickou metodou výuky rozdílné zkušenosti. V neposlední řadě empirická část práce prezentuje výsledky testování čtení u 60 dětí a analyzuje jejich výkony stím, zda explicitní syntetická metoda výuky čtení a psaní pomáhá vyslovovat slova také EFL studentům nebo ne.


## Klíčová slova:

syntetická metoda výuky čtení a psaní, analytická metoda výuky čtení a psaní, fonémy, grafémy, výslovnost a artikulace, hláskování, čtení, psaní

## The list of abbreviations

## Analytic Phonics

APS Angel Primary School

B
boy(s)
CV consonant-vowel (structure)
EFL English as a Foreign Language
G
girl(s)
JP Jolly Phonics
L1 first language or mother tongue
L2 second language
MSMT Ministerstvo školství, mládeže a tělovýchovy, (Ministry of Education, Youth and Sports)

NCLB No Child Left Behind

NIH National Institute of Health
PBS Prague British School
PEP Phonics.cz Educational Programme
RP Received Pronunciation
SP Synthetic Phonics
SPS Slovenská Primary School
UIS UNESCO Institute for Statistic

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## 1 Introduction

3.000 students drop out of high school every day in America. The vast majority of them are kept away from continuing their studies because they lack reading and writing skills and are not able to keep up with their school classes. Data from grades 412 are also alarming, over 8 million students struggle with reading and writing tasks (Jay \& Strong 2008). As the numbers show, the statistics in America are staggering. Even children whose mother tongue is English experience reading difficulties and yet for students learning English as a foreign language, there is suddenly a new language code that they have to somehow accept and learn. To better understand EFL learners, we should put ourselves in their shoes, even though it may seem difficult, since most of us have already studied and comprehended English to a certain level of proficiency and thus may not be able to see the obstacles children encounter. Trying to remember the times when we started to learn English may help us to more understand young learners. The author remembers English lessons in her primary school being mostly student and workbook based, with no emphasis on speaking and lots of drill exercises. Despite this she enjoyed English lessons, being fascinated by knowing (even if little) two language codes where she could say "one word in two different ways and still it meant the same thing". She remembers that there was no sign of phonics instruction explaining that there are certain rules in English pronunciation. Secondary school lessons were of a similar basis. English lessons at pedagogical Lyceum in Litomyšl were, however, different with emphasis placed on clear pronunciation and presenting some basic, yet essential pronunciation rules explicitly. This was, compared to primary and secondary English classes, a completely different approach. University studies with English Phonetics and Phonology courses offered her a deep insight into how English language "really" sounds and that even though it is a very complex language, there really are some strict rules and letter-sound relationships. Despite information about the critical age when teenagers (14) or even very young learners (7) stop being able to hear and obtain a high quality level of pronunciation (Birdsong 1999), she fortunately experienced that clear pronunciation can also be learnt as an adult. She started being interested in pronunciation further when she spent two summers in England as an aupair in a mixed-marriage family. The family was based in London and spoke RP

English. When she travelled with the family for holiday to India, she understood that clear pronunciation really is an essential component of learning English. The native-like model of speaking is, however, not necessary. We should for aim speakers to be intelligible (Jenkins 2000). During her studies at the University of Derby in England, she had a school placement at Hilton Primary School and asked for the possibility to observe Phonics lessons. It was during a university lecture in Derby when one of the English speaking students was at the white board about to write GEOGRAPHY. She, however, turned to the class and asked for help not knowing correct spelling. This appeared alarming to us and we began to question what particular language problems native students may encounter. More importantly, we wanted to find how non-native students attempt to learn English and if the phonics method could also be applied on them.

Research was carried out in four Prague schools with children having different Phonics teaching experiences. They were chosen because the subjects were believed to reach different reading scores. There were sixty children taking part in the reading test which was designed by the researcher. Graphemes and phonemes of English language system that Czech learners in particular may find difficult to produce and the sounds can therefore lead to mispronouncing were considered. The emphasis was placed on discovering whether the Synthetic Phonics method of teaching native speaking children to read can also be beneficial to EFL students.

The Theoretical section offers an insight into Jolly Phonics research that was done on EFL students worldwide. It also presents the results of other Synthetic Phonics research in Spain, Germany and India, where there was a combination of two methods used. It also considered L1 learners as well as L2. The history of phonics instruction is also mentioned, focusing on Synthetic and Analytic Phonics. How it developed from the $15^{\text {th }}$ until present times is tracked along with which approach tended to be favoured at the time. Both methods will be analysed and their advantages and disadvantages evaluated. Brain research findings showing how the brain processes reading are also considered. Synthetic Phonics together with the Analytic Approach will be contrasted and different brain processes described. Finally, reading, one of the essential language skills, will be defined.

Returning full circle, we shall now finish by mentioning the literacy data findings. Literacy rates and data collected worldwide will be examined in the following section.

## 2 Literacy Rates

Are you reading this paragraph on your own? Then you should appreciate that you are not one of the 757 million adults (aged 15 years and older) or 115 million young who are illiterate and still cannot read or write. It is estimated that females are roughly two-thirds of them and lack basic reading and writing skills (UIS 2015).

According to new data released by UNESCO Institute for Statistic (UIS), the global illiterate population is shrinking. However, the numbers of adult and youth who are not able to read or write remains very high and is alarming. Therefore, the new literacy target includes the pledge that both adult men and women should achieve literacy and numeracy by 2030 (UIS 2015).

The research also shows that literacy rates for adults (15years and older) have improved. They are now reaching $85 \%$ globally. However, South and West Asia and sub-Saharan Africa still have the lowest rates. The literacy rate is below $50 \%$ in countries like Afghanistan, Mali and Senegal. Thanks to better access to schooling, literacy among youth (aged between 15 and 24 years) has also risen steadily. It has reached $91 \%$ globally. However, again in South and west Asia and in sub-Saharan Africa the literacy rates are just $84 \%$ and $70 \%$ respectively (UIS 2015). In the map below, we can see the youth literacy rate percentage globally. The data was collected in 2015.

Picture 1: Youth literacy rate worldwide in 2015


Source: The data and the map by the UNESCO Institute for Statistic, (UIS 2015).

## 3 Education and its importance

The literacy could have risen due to better access to schooling. However, to what extent is it a part of our lives and who exactly is responsible for it ? One may argue that it is parental obligation and if they fail, then school will not only educate children, but raise them up as well. However, it is not really true. Everything needs to start in families where priorities and the scale of value form children's personality first. Education starts where there is cooperation between parents and their children. Only then parents can support their offspring on their way to further education. We are not denying that there is no influence from the school system and school institutions, as they are an inseparable part of children's life and cannot be neglected. In fact, it is very important that the teachers, the parents and the children cooperate and work together. The teachers cannot achieve much on their own, but they can do a lot together with the parents and their children (New \& Cochran 2006).

### 3.1 Primary school education

Cullingford (1997) questions the necessity of primary school education and the answer is clear: yes, it is. Some people see it as cornerstone of one's education, although there are many people who could argue about what education level is the most important and therefore put one before another. The vast majority come to the conclusion that primary schooling is nothing compared to higher education, e.g. university studies. Yet it is primary education that is the foundation upon which the education system is built (Lofthouse 1990). Some people clearly value higher university studies more than lower primary school system. Such people probably do not remember exactly the time when and where they were taught to read and write - such common, yet essential skills. Without these core skills it is not possible to enrol for studies at university, which many value so highly. It is clear that the importance of primary education and the skills required by the primary teachers are often undervalued (Cullingford 1997).

### 3.2 Reading and writing within primary schooling

Those who underestimate the lower education system also tend to take the view that it is (or that it must be) very easy to teach children reading and writing skills. However, quite the opposite is true. It is not just the teacher presenting letters of the alphabet and students memorizing them. Both reading and writing are complex cognitive processes and can be very time consuming. They are constructive processes and depend on one another. Reading and writing skills therefore cannot be taught separately. It is natural to learn both reading and writing together because they both frequently occur together in everyday life. Reading and writing are developed simultaneously and the whole process of acquiring the knowledge can be very timeconsuming (Sannahan, 1993). The views and opinions on teaching reading and writing skills have changed through time. However, nowadays, cross-cultural evidence and research suggests that in today's society, reading and writing should be learnt together, viewed together and used together. Only then it can be understood and appreciated fully (Sweet, 2011).

## 4 Reading

We have already mentioned that the view researchers have had on reading has changed through time, so how can we define reading and explain what it is and how it is seen through the eyes of today's society? According to Richard Anderson and the Commission on reading (1988:389) 'reading is a basic life skill. It is a cornerstone for a child's success in school, and, indeed, throughout life. Without the ability to read well, opportunities for personal fulfilment and job success inevitably will be lost.'
Reading can be defined as a process where meaning is constructed from written texts. Furthermore skilled reading can be seen as:

- constructive,
- fluent,
- strategic,
- motivated
- and a lifelong pursuit.

Reading is constructive when children use their everyday life knowledge to think and reason about all kinds of written material and about that which they read. Fluency in reading means that they master basic processes to the point where they are automatic. Children can then free their attention to concentrate on what they read and to analyse the meaning. Strategic reading is where one's reading is controlled in relation to one's purpose and the nature of the material. It also controls one's comprehension. Reading that is motivated is learning that written material can be interesting and informative and is able to sustain attention. Finally, reading as a lifelong pursuit is about development, refinement and continuous practices (Blanton 2002). (See also Appendix I)

### 4.1 Reading - many ways, one goal?

Technically it is probably not so difficult to come up with a definition of reading. However, what can be challenging is how to bring theory to practise. If it can be done, in what way and what method is the most suitable? Educators, linguists, teachers, parents and politicians are all actively involved in debates over reading approaches. They try to find an answer as to which method is the best for teaching young children how to read. However, so far it has seemed impossible even for
professionals to specify the best method with reading wars among professionals raging for decades (Kim 2008). People's opinions to different approaches change over time. So which system should we use?

There has been a lot of research done on how to teach literacy effectively and in what time frame the goals can actually be met. In many other issues, as well as in terms of literacy, "there's more than one way to skin a cat". We can say that in most cases it is true. There are multiple ways to accomplish something and usually more than one solution to a problem. In terms of teaching reading there are several approaches which have been debated and researched thoroughly. However, it is necessary to add that the above mentioned idiom also means that the final result will be the same even if an issue is approached in different ways. This is not always the case with reading. The instruction can significantly affect the results. Last but not least, the manner of instruction is as important as what is instructed (Reading Horizons 2016-a). In the following chapter we will discuss different reading approaches in terms of reading acquisition.

### 4.2 Approaches to teaching reading

As it was mentioned earlier there can be various possibilities for how a problem can be approached and dealt with and reading is not an exception. However, is it known which of them is best? Several methods will be examined and evaluated. These methods are: Analogy-based phonics, Embedded phonics, Phonics through spelling, Onset-rime phonics instruction, Analytic phonics and last but not least Synthetic phonics. The programmes can vary a lot but the distinctions between the approaches are not absolute. Moreover some programmes even combine different approaches (Armbruster et al. 2001-a). In the overview below we specify each programme and explain briefly the characteristics of them:
> Synthetic phonics: This method teaches young learners how to convert individual letter or letter combinations into sounds. It then presents how to blend the sounds together so that recognisable words are formed.
> Analytic phonics: Students focus on analysing letter-sound relationship in words they learnt previously. In this approach letter sounds are taught and pronounced in isolation after the actual reading has begun.
> Analogy-based phonics: Children work with so called "word families" comparing similar parts of words. They learn to use parts of word families they already know to figure out and identify words they do not know yet.
> Embedded phonics: Letter-sound relationships are presented to pupils during the reading of connected text. This approach is not systematic or explicit since young learners encounter different letter-sound correspondences as they read.
> Phonics through spelling: This phonics programme teaches students to segment words into individual phonemes. Words are then made by writing letters for phonemes.
> Onset-rime phonics instruction: Children are shown how to identify the beginning sound of the letter or letters in a word before the first vowel (the onset) and the sound of the remaining part of the word (the rime).
(Carnine et al. 2014)
To be more specific and to understand each approach in terms of practical implementation, the following section will present some example words, the way in which they are introduced to children and how students learn them.
> Synthetic phonics: Children first learn the sounds $/ \mathrm{k} /$, /æ/ and /t/ that are represented by C, A and T letters. When they master this skill, they blend the sounds together and form a word CAT. They also learn how to reverse the process segmenting a word CAT into its individual sounds.
$>$ Analytic phonics: Students are taught to recognize and say a word CAT first. When they master it by sight, they need to learn how to break the word into the smaller units recognising individual sounds, which means that children first learn to read by sight, and then understand letter sounds and correct spelling of words.
> Analogy-based phonics: Young learners apply this strategy when the words share similar parts in their spellings. As an example word we can use CAT again, by analogy to words such as SAT, RAT, PAT, BAT, FAT, MAT or HAT. This approach teaches pupils a set of keys they can use in reading words they do not know.
> Embedded phonics: There are no specific examples of embedded phonics approaches, but they include some basal reading or literature-based programmes where sight word reading is emphasised over phonetic decoding.
> Phonics through spelling: Children create a word in print by segmenting spoken words into phonemes and writing letters that represent those sounds. E.g. a word CAT can be sounded out as $/ \mathrm{k} /, / \mathfrak{\not} /$ and $/ \mathrm{t} /$ and then written phonetically.
(Reutzel \& Cooter 2013)
$>$ Onset-rime phonics instruction: Every one-syllable word has an onset and a rime. Some words have the same rimes and different onsets, other have the same onsets and different rimes. Using a word CAT as an example word, this word has the same rimes and different onsets with words such as SAT, RAT, PAT, BAT, FAT, MAT or HAT. Children learn a set of onsets and rimes and then combine it together reading whole words.
(Reading Rockets, 2015)

Even though the approaches are different, it is "phonics" or "phonics instruction" that occurs in all the methods. Therefore what "phonics" or "phonics instruction" actually means will be discussed. (See also Appendices II, III, IVa and IVb)

### 4.3 Phonics instruction

Phonics and phonics instruction is about teaching children the relationship between the letters (graphemes) of the written language and the individual sounds (phonemes) of spoken language. These relationships are presented to children so that they can apply them in practice when they use and write words. Being familiar with
these rules helps early readers recognise words they already know accurately and automatically and also helps them to "decode" new words they have not learnt. Overall, the alphabetic principle contributes strongly to the ability to produce words not only in isolation, but in connected texts as well (LINCS, 2016). Publishers of programmes of beginning reading instruction and teachers of reading sometimes use different names to label and describe these relationships, these may include the following:

- graphophonemic relationships,
- letter-sound associations,
- letter-sound correspondences,
- sound-symbol correspondences,
- sound-spellings.

Regardless of the label, the phonics instruction goal is clear. It is designed to help students to learn and use the alphabetic principle - the knowledge that there are predictable and systematic relationships between written letters and spoken sounds (Armbruster et al. 2001-b).

### 4.4 Which method is the most suitable?

On one hand, phonics instruction is something all of the methods have in common, but on the other hand, variety among the approaches is great. There is a wide range of phonics programmes available on the market today. Those that were presented are only few examples out of many, but they are the most widely used and known. They show us that reading can be approached in a number of different ways. Some of the methods we listed differ a lot and others had similar aspects and seemed to combine more than one approach. All methods are certainly tried and tested and sooner or later each method will (or should) lead to fluent reading and reading comprehension. It is important to recognise that despite all the discussions over new reading methods, there are still two approaches (or their combination) that are essential and being used throughout all phonics programmes. These two methods, which are believed to oppose one another, are Synthetic and Analytic phonics (Rayner et al. 2002).

Both approaches aim to teach reading skills in the best way possible. So why are they classed as "different"? To analyse it further the human brain and its functioning will be discussed. Brain functions are an inevitable part of learning to read and therefore it is something that cannot be neglected (Price et al. 1994). A deeper look into how the human brain reacts to different reading methods and how it processes reading will be discussed further in the following chapters.

### 4.5 How the brain processes reading - Synthetic vs. Analytic Phonics

Quite a lot of research has been done on how the brain processes reading when different methods of teaching reading are used. The Academic Associates Learning Centres compared the Synthetic and Analytic phonics approaches. In their work the different approaches were taken into consideration and the way reading is processed by a human brain was examined in detail (Price et al. 1994). Now we will compare both phonics methods and explain briefly how they work.

Whole word method, whole language method, look and say method or sight reading method - these are all names which can be used for the method using Analytic Phonics strategies. This approach emphasises word meaning over decoding sound parts and teaches children sight recognition of the whole word paying no attention to letter parts. It starts from the whole and shifts to the parts. In the end, the pattern of reading is rather complicated (Teach Reading Early 2010).

On the other hand when we consider Phonics method and its effects on reading, the whole process differs a lot. With Synthetic Phonics children are taught the individual sounds of the letters first. Students also learn how to segment words into their individual parts and blend them back together to create a word. They know that segmenting and blending are reversible processes. However, it is not only reading instructions that vary. It is the way our brain processes reading also (Teach Reading Early 2010).

You can see a comparison of both reading approaches in the picture below. Figure I is concerned with Analytic Phonics and Figure II analyses Synthetic Phonics.

## Picture 2: Brain processing reading

Figure I: Analytic phonics method

## Information In



Figure II: Synthetic phonics method

## Information In



Source: The Figures by Academic Associates Learning Centers, (AALC 1997).
In Figure I we can see what happens when the information is sent to the brain. It first enters the right hemisphere, which has no connection to language and is primarily concerned with memory. The word is then recalled from memory and recognised as a picture. Then it is sent to the left hemisphere which is concerned with language. The picture is first sorted and immediately translated into language. Afterwards it is sent to the right side of brain again where it is stored as an idea or a concept. Reading can certainly be taught this way. However, it is lots of effort to do so when words are shifted from one part of brain to the other and then back again. Therefore, the confusion that arises from this method can be large. One of the reasons may be the data that is constantly shuttling from one part of the brain to the other (AALC 1997).

When we look at Figure II and compare it with Figure I, we can see the brain processing reading in a different way. After the information enters brain, it goes straight to the right side of human brain. This part deals with language, so a word can be recognised as a language immediately. The piece of language then goes to the right hemisphere where it is stored as a concept or idea. Learning to read this way avoids unnecessary information shuttling from one part of human brain to the other. This process is therefore a smooth, one-way flow of data which saves time and energy (AALC 1997). (See also Appendix V)

One of the reasons is the way brain functions when it processes reading, although the merit should also be taken into consideration. If methods of teaching reading in the past are also taken into account, was Synthetic Phonics always the method of choice or were other methods considered more effective at the time? This will be discussed in the following parts of the thesis.

## 5 Phonics instruction development in a historical context

This chapter will take us through the history of teaching phonics. It will highlight the most important dates or periods of time when crucial changes around Phonics teaching took place. A clearly arranged timeline leading from the past to the present should make the overview structured and well organized.

15th to 18th Century: Hornbooks are used to teach children reading. They consist of a sheet of paper tacked to a leather, bone or wood frame. They are protected by a leaf of horn. They often have a handle that could either be tied to a child's waist or held. Hornbooks usually include the alphabet in upper and lower case. There is also a list of the vowels and a syllabarium (syllabary) below. They usually start with a cross, and consist of an invocation to the Trinity and the Lord's Prayer. Phonics in this part of the history used a method of teaching phonics that is very similar to today's Analytic Phonics, as it is believed that the list of syllable sounds needs to be mastered before learning to read (TLL Indiana University 2009). We can see an example of a hornbook and a syllabary text
 in the picture.

Source: The picture by TLL Indiana University, (TLL Indiana University 2009).

Year 1655: In history of phonics, this year is connected to Blaise Pascal, a French mathematician, who invented synthetic phonics. Pascal's approach refers to a method that is associated with teaching of reading where sounds (phonemes) are linked to particular letters (graphemes). They are pronounced in isolation first and then blended together (synthesised). History seems to be on the side of Synthetic phonics method now (Rodgers 2001).

1700's to 1800's: Battledores followed by Spellers are typical for this period of history. Battledore is a child's primer which is usually made of two to three thick paper pages. Stiff cardboard primers have either printed or impressed alphabet or numerals on them (Meriam-Webster 2015). The alphabet is usually in capitals as well as in lowercase letters. We can also find pairs of letters for phonics lessons here. There are letters of the alphabet in order, but out of order too which helps children to distinguish between different letters (not
 only learning them by heart). Battledores include a list of the consonants, a syllabary and two lists with threeletter words. They are usually illustrated with biblical or everyday life scenes that are familiar for young learners. They also included a prayer or a short story (University of Washington Libraries 2016). As we can see in the example picture of one of the Battledores, it is not only the alphabet, but syllables that are presented. Furthermore there are word families, words with similar patterns. Therefore, apart from Synthetic and Analytic phonics aspects we can also see the connection to Analogy-based phonics or Phonics through spelling methods (University of Washington Libraries 2016).

Source: The picture by the Digital Collections, Children's Historical Literature Collection, English Battledore, (University of Washington Libraries 2016).

Year 1783: This year is linked to Noah Webster. In his Speller he uses a syllabary to teach synthetic phonics to students. Five generations of children were taught this way. His method is believed to be powerful as it introduces early words that have more than one syllable. This enables young readers to progress to higher reading levels after a period of time spent on getting to know the syllabary and some common one-syllable words (The Phonics Page 2014-a).

Early 1800's: Spellers followed by Readers are used when reading is introduced. Learning to read includes working with the syllabary using phonetic methods. What is important is the fact that children learn spelling prior to reading. Young learners are also not allowed to read vocabulary they do not know and that has words that have not yet been learned how to spell. Spelling books used in the 1700's and early 1800's are according to Noah Webster teaching children how to spell and read. It means they are used for both purposes - for phonics as well as spelling purposes (The Phonic Page 2014-a).

1826-1876 Elocution Era: This can be said to be the whole word methods era. Approaches similar to the whole word method are used with teachers who pronounce words that are unknown to their pupils. A great emphasis is placed on reading for meaning and elocution (one's manner of speaking in public). Students recite memorized stories from their Readers and recite them aloud as a class. Spellers are still used, however, no longer as the beginning reading material. They are now used in the upper grades (Rodgers 2001).

Years 1844 and 1851: At the first sight they are only two different years. However, there are also two men and most importantly two different opinions on how reading should be taught. It was Horace Mann who advocates whole word methods for teaching reading in his Seventh Report in 1844. However, a couple of years later R. G. Parker finds himself on the side of systematic phonics approach. He placed a warning in the preface to his "First Reader" apparently aimed at teachers who would introduce words by their meaning rather than by their sounds (Rodgers 2001).

Year 1866: Leigh Print was already developed two years earlier by Edwin Leigh, who spent twenty years designing the system. Leigh Print is a self pronouncing print which is first used in the St. Louis Schools. It is the most popular from 1868 - 1873. It allows children to learn how to read much faster than conventional reading approaches.

However, advocates of whole word methods do not share the same opinion, and it was therefore removed from most schoolbooks (The Phonics Page 2014-b). How reading (vowels and consonants separately) is introduced by Leigh Print can be seen in the pictures below.

VOWEL SOUNDS.
ム

1. At as in ate.
2. a as in at.
3. ( 1 as in for.
4. $\theta$ as in fall.
5. $a$ as in what.
6. a as in care.
7. A as in ask.

## E

1. e as in mete.
2. $e$ as in met.
3. 7 as in thare.
4. $e$ as in veil.
5. $\Theta$ as in term.

I

1. $i$ as in pine.
2. $i$ as in pin.
3. $\dot{\mathrm{F}}$ as in shire
4. i, as in firm.

O

1. $O$ as in note.
2. O as in not.
3. O as in done.
4. $\Theta$ as in fer.
5. $\Theta$ as in d $\theta$.
6. () as in wolf.
7. $\theta$ as in feod.
8. $O O$ as in foot.

U

1. El as in tube.
2. II as in tub.
3. 12 as in furl.
4. El as in rede.
5. U as in push.

Y

1. I] as in type.
2. y as in hyp.
3. I as in myrrh.
$\mathrm{r}=1 . \mathrm{r}$, in
cur, her, sir, word, myrrh. cur, her, sir, word, myrrh.

## CONSONANT SOUNDS.

b. - bib bob batbe bible babble bobbin.
d. - did add odd eddy ladder saddle.
f. - fan fin if off fife fifty offer effect.
o. - gag gig egg giggle foggy buggy.
h. - he hat him hot hut hop hymn.
j, g. - jet jut jar Jane gem age ginger.
k, c. - ken kite ask can arc ziyc.

1.     - lo let ill ell lull elm lily sillg.

In. - me my aim maim lame hammer.
n. - no in name none nine linnet Fannie.
p. - pip pop pup apt poppy hopper.
l, $\mathbf{I}$. - ray red rip, erb ore murmur.
s, C. - so sin sun gas ice cent sister.
t. - tan ten tin top ate net tattle.
V. - vat vex vine voice live of vivid.
W. - we win was way went wire word.
$x=k s .-a x$ ox box fox wax six except'.
y. - ye yet you year yeast young yore.

Z, S. - zest zone zeal is has was maze.
Ch. - chap chin such inch church chitchat.
Sh. - shall shun shop ash wosh shipshape.
th. - thin flayk bafh oafh trufh clofh.
th. - this than thus that with bathe lathe.
Wh. - what whe when whip why whare.

Source: The picture by A ministry of 40L, Leigh Print, (The Phonics Page 2014-b).

Year 1879: A phonetic edition of readers that includes a modified version of Leigh Print is published by William Holmes McGuffey. The readers reflect McGuffey's ability to memorize and are therefore based upon whole-word methods of reading. Young learners are taught strings of words. This activity is followed by incorporating the words in context. Children are given a short text in which they find words they have learnt. Older readers deal with various poems, stories, essays or speeches (Prezi 2016).

Years 1893 to 1896: In the United States, a survey of Public Schools, 1883 - Joseph Rice finds out that it is not word methods, but phonics that leads to better results in reading tests. Therefore, in 1895 and 1896 spelling tests are given to 33,000 students all over the United States and he finds that children using synthetic phonics have better spelling results than those learning to read under analytic phonics instruction (Rice 1912).

Years 1889 to 1900: The whole word elocutionary methods and the sentence method go hand in hand with the loss of spelling books in many school institutions. However, this leads to poor reading as well as spelling abilities of young learners. Phonics is therefore returned to schools at least through regular spelling lessons. Phonics (introduced in second grades and above) is used along with whole word and sentence approaches (Rodgers 2001).

Years 1900 to 1930: Even now there are whole word methods that continue to be used, but it is important to mention the role of Phonics too. It was resulting in excellent reading as well as spelling abilities and is inseparable part of teaching reading to young children (Rodgers 2001).

Year 1921: Thorndike publishes his work "The Teacher's Word Book" which is a list that consists of 10,000 most common words in the English language. This is a collection of sight words children need to recognize by sight and know with automaticity. Education reformers turned back to the whole-word method. It seems that the reading pendulum began to shift with Phonics being abandoned once again (Prezi 2016).

Year 1930: "Dick and Jane" is the book that is new to the reading scene and will be used for the upcoming forty years. Thank to Thorndike's word list the vocabulary in readers is also now controlled in the upper grades, unlike earlier whole language methods where new vocabulary (in the upper grades) needed to be taught through spelling or earlier with the help of phonics. Educators believe that children can learn to
read whole-words as easily and naturally as they learn how to communicate. The Analytic phonics approach prevails in 1930' as well (The Phonics Page 2014-c).

Year 1955: "Why Johnny Can't Read" is the book published by Rudolf Flesch. The work advocates and demands a return to phonics. Public reactions are positive and changes in terms of introducing Phonics again are welcome. However, the book and its claims are rejected by majority of educators, because its claims are only rhetorical, not research based (Prezi 2016).

Year 1966: The Hanna Study is in charge of research done on the most common 17,000 English words. It reveals that English language phonetic regularities are underestimated. Research shows that there are more rules than it is commonly assumed. Such findings give Synthetic Phonics more credit. A book "Spelling Structure and Strategies" summarizes the data of this study (Hanna et al. 1966).

Year 1967: "Learning to Read: The Great Debate" is published by Jeanne S. Chall, a psychologist. It is a comprehensive insight into hundreds of reading methods studies, examining 55 years of studies. J. S. Chall publishes her studies after two years of compiling and summarizing her data. Again, this study is good news for Phonics. She finds that reading is a developmental process and, furthermore that it is Phonics that is more effective in teaching children to read than whole words methods. She also divides phonics into implicit and explicit methods. Last but not least, her findings prove that students who are taught Analytic phonics excel in early years, but later tend to fall behind experiencing difficulties when sounding out words independently (The Phonics Page 2014-c; Prezi 2016).

1980's to 1990's: Chall's research seems to be ignored and again the use of whole words method increases. This approach is newly called "Whole Language". The method is literature-based and emphasises word meaning. It aims to teach children to read through the writing process. Except for sounding out the initial letter of the word, there
is little or no instruction given in phonics. Teachers are encouraged to focus the content of their lessons on what students interests are and motivate them in this way (The Phonics Page 2014-c; Prezi 2016).

1990's: Brain research is done in the 1990's using a new imaging technique (functional MRI). The findings show that the brain processes reading sound by sound. The parts of the brain used in reading were identified by medical scientists. They then observed working brain cells and the flow of oxygen-rich blood into them. The findings were that subjects knowing how to sound out words were able to process what they see in a rapid speed. On the other hand, people who do not know how to segment words show less blood flow to the language centers. Moreover, in some cases the brain activity evidence is low. Scientist are not sure why brain reacts this way, but the research seems to be suggesting that the brain learns to read the same way it learns to speak - one sound at a time. We hear words. That is what our experience is. However, our brain processes sounds (phonemes), and by putting them together they become words. The same process is in operation when we read. The human brain processes one sound at a time, but it is perceived as a whole word being processed. Good readers appear to read whole words at a time, as the process is fast. What is really happening is that they convert the letters on the page into sounds. And the brain finally recognizes groups of sound as word units (Child Development Institute 2015).

Year 1999: Another set of research is being conducted. This time it is by Dr. Reid Lyon of the National Institute of Health (NIH). He reports on the findings collected by research on over 34,000 students. The research findings highlight the importance of phonics teaching and point to the role phonemic awareness has in teaching children to read (The Phonics Page 2014-c).

2000's: Brain research done at this time shows changes in the brain of students having poor reading skills and it summarizes as to what happens when phonics is applied in such cases. It mentions that poor readers improve their reading ability when they are taught how to read using phonics rather than whole-word methods (Science 2004).

Year 2001: This is the year when No Child Left Behind, (NCLB) legislation passes being signed by President Bush. NCLB consisted of Reading First Initiative which is a program that supported reading programs including explicit and systematic phonics instruction. The Synthetic Phonics reading method is put forward and seen as a progressive reading approach (Prezi 2016).

Year 2006: A study on dyslectic learners finds that children suffering from dyslexia can improve their spelling when being taught synthetic phonics. The study also presents that phonics manner of teaching reading is able to change pupils' brain's activity patterns to be similar to the brain of readers experiencing no difficulties in learning to read (Dahms 2006).

Year 2011: Year 2011 is connected to Stanislas Dehaene and his article called "The Massive Impact of Literacy on the Brain and its Consequences for Education" where he explains brain functioning and how it processes letters. He is at the side of Synthetic Phonics Approach and recommends this method without learning sight words (Dehaene 2011).

Year 2014: Surprisingly, we are going back in time now. Don Potter publishes a version of Noah Webster's Speller (1908). The version of this speller is used by 40L volunteers to teach many students and some of these young readers are able to read well above their current reading grade level (The Phonics Page 2014-c).

In conclusion to what was presented in the chapter showing changes in teaching phonics in the past, this reading instruction graph shows the development of phonological instruction going from 1650' until 2000. The scale $(0-10)$ on the left side of the graph indicates which approach was more important, whether it was meaning (whole-word methods, Analytic Phonics), or sound (phonics, Synthetic Phonics). 0 refers to pure meaning, while number 10 indicates pure sound. City schools are marked in blue, red color indicates rural school institutions. The graph gives us a clear overview of how
different phonics approaches took turns in a historical context in being more favored or neglected.

## Graph 1: Reading instruction graph - Reading Instruction in the United States



Source: The graph by A ministry of 40L, History of Reading Instruction, (The Phonics Page 2014-c).

The data was collected from old school textbooks in print, and, therefore, the reading instruction graph is only estimating how phonetics instruction kept developing. It indicates an average of the teaching methods which were used across all schools. Researchers agree on a terrible spelling disability that usually occurred after each drop. The declines after 1826 and 1930 were seen as particularly catastrophic. Some researchers believe that spelling skills were so poor that the indicators/lines should plummet to Code 2 (Rodgers 2001).

It is believed that teachers in large cities generally have less autonomy than those in rural areas. Rural areas prior to 1900 - or so called "The Independent West" was removed from the new reading plans which were centered on the East Coast and later included e.g. McGuffey Leigh print Readers. However, even areas where whole-word methods were promoted had a fair number of Schoolmasters who were speaking out against whole-word methods and were committed to using phonics in their schools. Even in the early 1800's teachers could have continue teaching phonics if they wished
with copies of Webster's Speller being available. Later, in the 1930's and 1940's educators would have had access to their phonics materials which was old and supplemental, but could have been used if teachers had wanted to. At first sight it seems that those who are in charge of educating young learners always had a choice to use preferred methods and it remains the same now. However, overall, there tends to be one method that is being put forward and seen as the most affective (Rodgers 2001, The Phonics Page 2014-c).

## 6 The Reading Wars

Synthetic and Analytic Phonics are two of the most prominent reading instruction methods today. Despite the fact there were some periods of time when a combination of both methods (phonics and whole-word approach) used to teach reading, the reading instruction timeline indicates that it was usually either Synthetic Phonics or Analytic Phonics being the more popular method. The reading wars are legendary, as an old disagreement over how to teach children to read seems to be an everyday issue. Whether we want it or not, there will probably still be one phonics approach prevailing and its advocates who strongly support one side of the barricade. Even though it is the synthetic phonics teaching method that is a research based winner at the moment, we should never stop asking whether it is the best way to teach students how to read or whether there are more effective alternatives (Lemann 1997). So is it Synthetic or Analytic Phonics that is more effective? What are the similarities and differences between them? What are their pros and cons? We have already explained the specificities of each method using an example word to see how the approach works in practice. The following text will focus on the similarities and differences as well as strengths and weaknesses of both teaching-how-to-read methods.

### 6.1 Synthetic vs. Analytic Phonics - differences and similarities

The differences will be examined first since there are very few similarities between these two reading approaches. A list of differences will be presented first and then the similarities if there are any.
> The pronunciation of the sounds: Synthetic Phonics (SP) compared to Analytic Phonics (AP) puts much more emphasise on teaching the pronunciation of all the phonemes correctly from the start. In AP it is often taught incorrectly. As an example the letter $\mathrm{S} / \mathrm{s} /$ can be used. AP presents this sound as "suh", compared with SP which makes the sound as a "sssss". The consonant part at the end is crucial. Blending does not work properly when the pronunciation is incorrect. It is much harder to recognize the word MAT in "muh" "ah" and "tuh"
instead of in $/ \mathrm{m} /$, $/ \mathfrak{x} /$ and $/ \mathrm{t} /$ which are pure sounds of the letters. There is a similarity between SP and AP, as AP is also concerned with letter sounds (especially initial letters). However, the way they are produced is different (Get Reading Right 2016).
$>$ The importance of each sound: SP cares about all the sounds in the words no matter what position they are in. Each phoneme - initial, middle, or the one at the end of a word is important. AP, on the other hand, emphasises the initial sounds only. (Identifying sounds at the middle or end of words comes later.) This, however, may cause problems reading longer words, as it only works well only for short words. Moreover, concentrating on the initial sounds encourages guessing as a reading strategy. The only similarity is the concentration on the initial sounds, however the rest is different (Children's Books and Reading 2015-b; Get Reading Right 2016).
> Position: As has already been mentioned the ability to hear and identify phonemes in all positions in words is essential in SP compared to AP which concentrates on initial sounds, word families, onsets and rimes (Get Reading Right 2016).
$>$ The role of the alphabet: SP does not introduce the letter names initially. Children first learn the 44 phonemes and the way each of them can be represented. The purpose of this is having students know that one phoneme e.g. /s/ can have many spelling variations. It can either be: "ce", "ss" or "s", as in GRACE, MISS and SIT, but it is all read the same as /s/. As opposed to SP, the alphabet is central to AP. It concentrates on 26 letters and works with the corresponding sounds they have. Again, when we take GRACE, MISS and SIT, children using AP may get confused as there is only one sound that can be, it is however, applied on more than one spelling pattern (Get Reading Right 2016).
> Spelling: Compared to AP where spelling is presented separately, children under SP instruction are taught that the alphabetical code is reversible. Letters and sounds work together. This means that if they are able to read a word, they are also able to spell it. AP method puts similarly spelt words into so called rhyming families and they are learnt together. Here is an example of a rhyming family:

TREE, FREE and THREE (Children's Books and Reading 2015-b; Get Reading Right 2016).
$>$ The role of guessing: Although most don't realise there are many pronunciation and spelling rules in English. English is far more logical than most people believe. There is a strict relationship between the spoken and written form of the language. It therefore, does not need guessing to read successfully, only systematic teaching. Alternatively in AP, guessing (especially from the initial sounds) and using cues are strongly encouraged. Again these two approaches have not much, if anything in common (Gacek 2014; Children's Books and Reading 2015-b).
$>$ Exceptions to the rule: AP has too many exceptions for children learning to read whereas in SP there are only minimal exceptions. These are also presented in a friendly way so that children learn them quickly and accept the rules easily. The words which do not undergo any spelling and sounding out rules are called sight words (Get Reading Right 2016). These will be discussed in more detail later.
> Speed: Beginning readers want to read straight away. Only then will they feel their learning has been successful. The SP method allows them to feel successful. 8 sounds over 2 weeks get children reading right away. In contrast the AP method is rather slow. There is only 1 sound presented in one week and this delays reading progress, which is unnecessary (Gacek 2014; Get Reading Right 2016).

### 6.2 Synthetic vs. Analytic Phonics - advantages and disadvantages

There are advantages and disadvantages to all educational methods and the same with reading approaches. There is not a "best" method which has no negatives. This is one of the reasons some professionals use a combination of two, or even more approaches that are available on the market, to find a relevant way of teaching how to read to a majority of children (Wren 2003). In the overview that follows we will concentrate on the positives ( + ) and negatives ( - ) of each method.

## Synthetic Phonics:

+ This reading technique introduces sounds that are represented by a single letters and those represented by two letters at the same time. Children get used to individual letters sounding different in different words. It is therefore less confusing for them. Using an example letter A, Students know very early that this letter has more than one "typical" sound /æ/ as in CAT, because e.g. it can be found in a word RAIN too.
+ Vocabulary that is seen as irregular in AP is usually regular in SP approach.
(Children's Books and Reading 2015-a)
+ Children who know the SP reading strategy can easily pronounce long words or words they have never seen before. This method allows young readers to deal with words such as WOODPECKER or MUSHROOM as easily as they do with TAP or SUN.
+ Compared to other methods, SP makes the writing system more transparent by giving it a logical structure and pronouncing rules.
+ Students are able to read simple books in 11 or 12 weeks. In the beginning, children are less likely to get bored, because the pace at which correspondence between letters and sounds are introduced is fast. Enjoyable stories and lively actions accompany learning new sounds from the start. This promotes reading and makes the fast pace of learning manageable.
+ This approach can help children struggling with reading and having early reading problems, as it helps bringing them up to the level of their age group.
(Huata 2006; Children's Books and Reading 2015-a)
- The fast speed at which children learn to read words in isolation does not mean that they can understand the meaning. Education specialists believe that reading comprehension is the key to successful reading. They also argue that children undergoing SP reading instruction lack this ability, because learning to read does not start with beginner readers' ability to sound out words and blend them together again.
- Blending and sounding out individual sounds cannot continue forever. It is important that children also recognise whole words because it is this skill that leads to fluent reading. Reading fluency leads to comprehension and finally to appreciation of the written materials.
- Emphasising decoding practices over text comprehension can influence young readers and turn them off literature. Having students uninterested in books is the last thing teachers of reading would want.
- So called "skill and drill" lessons may become an everyday routine. Blending and segmenting can turn into an activity that is rather boring. It stops learning and playing with letters and sounds from being fun.
(Huata 2006; Lyle 2014; Children's Books and Reading 2015-a)


## Analytic Phonics:

+ This approach seems to be an efficient tool helping children to develop a large sight vocabulary. It can be then used both in spelling and reading activities.
+ In particular this method is very useful for words that are not phonetically regular and where it is difficult to apply any pronunciation or spelling rules. Some examples are words like: COULD, WOULD or SHOULD. When a child encounters the rime "OULD" in one of the words, the rest of them will be learnt easily.
+ New vocabulary is not introduced separately. Children learn new vocabulary in context with the goal to increase overall understanding. This makes reading activities more meaningful.
+ Reading is interesting and made fun from the start. The AP method uses books and young learners can engage with all sort of written material.
(Huata 2006; Children's Books and Reading 2015-b)
- Discovering that there can be more than one sound to a single letter (depending on the word it is found in) can be confusing for beginner readers A common example is the letter "O" and its different pronunciation in DOG, FOOD, FOLD
and SHOUT. Moreover, the system of knowing what sound each letter of the alphabet represents can later become a case of memorizing word families.
- Very often teachers do not introduce the alphabet with all letters and their sounds to children properly.
- When children come across a word they do not know how it is pronounced, they may "skip" the word and never learn it.
(Huata 2006; Children’s Books and Reading 2015-b; All About Learning Press 2016)
- This reading technique promotes guessing. It can either be contextual guessing when a word is guessed from context of the whole sentence, or a word guessing which uses initial sounds, rimes or onsets to figure out the meaning. This may lead to reading inaccuracies.
- With approximately one letter introduced each week this method is classed as relatively slow compared to other phonics approaches.
- Despite the fact that this method is effective with many students, a fair amount of young readers under AP teaching instruction still struggle with reading.
(Children's Books and Reading 2015-b; All About Learning Press 2016)


### 6.3 Balanced literacy

With the Phonics approach focusing on correspondences between individual letters and sounds and the whole language approach emphasising text comprehension and identifying words in context of literature, it seems that Synthetic Phonics and Analytic Phonics will never be reconciled. The philosophy of reading has been struggling to find the best way out of reading wars raging for years. However, balanced literacy is believed to be a key to success nowadays, as it strikes a balance between phonics and whole-word approach combining both methods by using the strongest elements of each. Today teachers can make their own decision whether they will use phonics or the whole-word method. Most of them, however, use combination of these reading strategies. They teach students letter-sound correspondences using phonics, but they also put words in contexts and literature-based texts so that reading becomes
meaningful and children learn how to comprehend. On the other hand Synthetic Phonics is the most recommended method at the minute (Reading Horizons 2016-b; Strickland 2016). We will investigate this reading strategy further in the following part concerned with the effects of this method on EFL students across the world.

## 7 Synthetic Phonics teaching and its effects on EFL students

Reading specialists in English speaking countries have been interested in if and how the Synthetic Phonics method works for decades. Large amount of research has been done on this and the results were staggering. Synthetic Phonics has been proved to work and has a positive impact on both children having no reading difficulties as well as those who struggle with reading. This was indicated in the Clackmannanshire study which examined and compared the effects of teaching Synthetic and Analytic Phonics in 8 schools (Johnston R \& Watson J, 2005). Sir Jim Rose also confirmed this with his "Independent review of the teaching of early reading", also called "Rose Report". This report focuses on The National Curriculum or the National Literacy Strategy and recommends using the phonics approach systematically. It suggests that the curriculum needs to be rich and multisensory (Rose 2006). The evidence that Synthetic Phonics method works with native students has been presented however, is it the same with EFL learners whose first language is not English? This will be considered whilst having closer look at students learning English as a foreign language worldwide.

### 7.1 Jolly Phonics and research on EFL students worldwide

Jolly Phonics (JP) is a child-centred synthetic phonics method that aims to make learning fun. It teaches five key skills for reading and writing and it uses a multisensory approach. It teaches letter sound combinations using actions and songs. The five key skills are: letter-sound correspondences (not only alphabet letters, but e.g. diagraphs such as AI or SH too), letter formation, blending, segmenting and last but not least tricky (sight) words. There has been research done in countries worldwide trying to evaluate whether this method is effective with EFL students (Farokhbakht \& Nejadansari 2015; Jolly Learning 2015-b) The research findings will now be examined.

## JP Research I - ESL learners

This study was done on 112 children who were five years old out of whom 96 were second language learners. The students were divided into two groups. One was undergoing the phonics method and the other was taught using the whole-word method.

All the children were tested prior to the research with spoken and written language being tested along with phonological awareness and alphabet knowledge. Children were post-tested once more right after the intervention in addition to one year later. Findings showed that students taught by phonics highly benefited from this method. Phoneme awareness and knowledge of phonics increased considerably and this influenced children's reading and writing abilities (Stuart 1999).

## JP Research II - Akwa Ibom State, Nigeria

5 schools in 3 senatorial districts of the Akwa Ibom State in Nigeria took part in this research that consisted of 168 primary-one pupils. It tested whether pupils' reading skills would improve and be enhanced by using the phonics method. The experimental group of children received JP training. This group gained 3-29 months on their reading age, which is approximately 5.3 to 5.7 years according to the Burt Reading Test. The results showed that this program has a positive effect on student's reading abilities (Ekpo et al. 2007). (See also Appendix VI)

## JP Research III - Hyderabad, India

There has been research conducted in the low-income areas of India, namely in Hyderabad. The research was done by the University of Newcastle and it was measuring pupil's progress in Reading and Spelling tests. 20 private low-income schools took part with over 500 students. There were 241 children in the control group from 6 schools and 265 children from 14 schools who comprised the learning group. The teaching as well as testing started in 2004 and finished in 2005. Girls outperformed boys and it was evident that the number of days children spent on JP appeared to be influential too. The overall data showed clear evidence of a positive impact of this method in reading as well as in spelling (Schagen I \& Shamash 2007).

## JP Research IV - Nigeria

Reading skill improvement of Nigerian children was measured using a mixed method approach. Children were tested through the standardised reading and spelling tests
which provided quantitative data. Qualitative data was collected by interviews with teachers. The findings demonstrated that the JP instruction improves students' reading achievement and increases teachers' interest in teaching English (Eshiet 2012).

## JP Research V - Cross River State, Nigeria

There was an investigation into the effects of the JP approach on basic literacy skills and its improvement. Almost 300 students from 6 schools took part in the test. The research took 8 months. The system of testing was as follows: one group students received JP session daily, the other group continued with traditional English lessons consisting of rote learning and memorisation. There was also a pre-test and post-test comparison measuring a number of basic literacy skills. The findings revealed that the JP group of students scored a much higher level on literacy assessment than those who were taught according to their normal literacy instruction (Shepherd 2013).

### 7.2 Synthetic Phonics and research on EFL students

The JP approach research findings have shown that this method of teaching children to read can be beneficial to students and its implementation can lead to improvements in literacy skills. However, there were also other countries involved in the research and they did not use the JP method. Using other reading programs, but still synthetic phonics based, they tried to evaluate whether the phonics reading technique really is effective on EFL students. We have chosen two countries, Colombia (L1 Spanish), Germany (L1 German) and India (L1 Kanada/Hindi) in which similar research was carried out. The tests and the result findings will be presented in the following chapters.

## SP Research I - Bogota, Colombia

The research took place in Colombia, Bogota in the catholic bilingual school for girls. 85 children who were tested were first graders, most of them 7 years old. They had been studying at the school for about 3 years prior to the research and they already had some English lessons during these years. They already knew the English alphabet and the
proper pronunciation of the main diagraphs. $\mathrm{SH}, \mathrm{WH}, \mathrm{CH}$ and TH . They were also able to use some vocabulary related to classroom English, household objects or farm animals. Everybody's mother tongue was Spanish (Martínez 2011). The researcher observed the classes one year prior to the research and used these main data sources: class notes and observations, surveys, students' grades and colleagues' interviews. One of the language aspects that was tested was reading comprehension in the first period of midterm and the results were following:

20 girls scored above average - average grade 93\%
9 girls performed below average - average grade $34 \%$
56 students were average - average grade $75 \%$
(Martínez 2011)
To track the effects of phonics method there were seven exams set during the school year and student's results were examined. The results showed that there we no significant changes in the groups performing above or on average. However, in the group of low performing students' the results were surprising. In the beginning the students scored $34 \%$ on average, it then rose to $59 \%$ and was still rising reaching an incredible $89 \%$ on average. They even surpassed their high performing fellow students. During their final exam their scores dropped again, but there was still a significant difference compared to the results they had at the beginning of the year (Martínez 2011).

Graph 2: Average grades throughout the academic year


Source: The graph by Gist Education and Learning Research Journal, Explicit and Differentiated Phonics Instruction as a Tool to Improve Literacy Skills for Children Learning English as a Foreign Language, (Martínez 2011).

The findings indicate that phonics is beneficial not only with native English speakers, but it can also be broadened to EFL students. Apart from other findings and results, this action research confirmed a positive influence on an EFL learner's reading comprehension. The research also revealed that L1 knowledge can be transferred into L2 and therefore EFL teachers should be aware of this trying to bridge the knowledge students have. Last but not least, the research found out that children's pronunciation improved when young learners were reading in English which had a positive impact on the understanding of what was read and therefore, supported text comprehension (Martínez 2011).

## SP Research II - North Rhine-Westphalia, Germany

The research project was conducted in North Rhine-Westphalia on second grade children, (aged 7) testing whether the phonics-based approach has any effects on phonological recoding ability and reading skills. It aimed to combine both, learner's first language and the target language. Therefore both principles German elementary reading programs and English elementary reading schemes were employed (Frisch 2009).

Even though English and German are very similar in terms of the phonological structure, the approach to how to teach children reading skills will be different in both languages. English with its letter-sound correspondences is the most inconsistent language in the world. Therefore, compared to English, the German spelling system is consistent and "easier" to read (Goswami 2005).

Research findings revealed that there is a positive effect on children's communication skills when written English is also integrated into English lessons. Written English activities in the primary EFL class can stop learners from starting to use so called "invented spelling", which is usually wrong and refers to children's own pronunciation rules usually based upon their mother tongue pronunciation rules. Part of the research also aimed to find out what methods primary school teachers use in their lessons to introduce the English writing system which is opaque and irregular. Despite the latest research findings that recommend the phonics method, and moreover German script is not introduced this way either, the results were surprising as the majority of the teachers still use whole-word methods (Frisch 2009). Finally it says students are already familiar with breaking the code in German and that it would be valuable to actively support children by systematically helping to crack the English code. Developing an adaptation of the phonics program for the German EFL learners which takes some crucial language aspects into account was suggested. These are: learner's L1 structure and rules, English language structure and rules and difficult English sounds which may cause problems to German EFL learners (Frisch 2009).

## SP Research III - Karnataka, India

10 year-old children speaking Kanada took part in the research that was carried out in Karnataka, India. Two systems of teaching reading were compared:
a) Synthetic Phonics approach
b) Kanada-mediated synthetic phonics approach (modified approach where English letter sounds were also represented by the Kanada symbols)

The modified approach was where tapping into student's pre-existing graphophonological awareness was supposed to help them with reading acquisition. The
research results were surprising. Group undergoing the SP instruction method scored very well and outperformed the group with the standard non-phonics classroom method. However, the Kanada-mediated synthetic phonics group of students in their reading, spelling and graphophonological tasks, performed even better than SP group. The results were obvious after 5 weeks of instruction. Therefore, it seems to be beneficial when the metalinguistic knowledge of the mother tongue is combined with "traditional" English SP method (Nishanimut et al. 2013).

This time with Karnataka study, we can say, indeed, "last but not least". It took into consideration one of the most important things from which beginning readers can benefit and that is metalinguistic knowledge of learners' L1. We can see how important it is to bridge the knowledge between L1 and L2 and use the linguistic system of students' native language to facilitate English learning. So it is concluded that a combination of two separate language systems is essential to language learners. Therefore, there have to be some differences in variety of foreign language acquisition. Do any students learn their mother tongue faster than others or are there no differences at all? What are the nationalities (if any) which tend to acquire language easily making less errors when reading? What languages have got more transparent language systems than others? These questions will be answered in the following chapter.

## 8 Reading development across languages

To be able to see the evidence base across languages, it is essential not to polarize and rather be taking a step back from the "synthetic" vs. "analytic" phonics debate. Sooner or later, most students will become competent and skilled readers of their languages, but compare to other, in some languages it happens faster. What may be the key factors? One appears to be spoken language and its phonological complexity and the other one is written language and its spelling consistency. This is the reason why there should be a thorough understanding of cross-language differences and similarities. Only then optimal reading strategies in different languages can be set (Goswami 2005).

We have already mentioned phonological complexity of the language as a key factor in reading acquisition. Children acquire readings skills much faster when the structure of their mother tongue is simple, consonant-vowel (CV). Languages with such CV structures are for example Italian, Spanish or even Chinese. As the second key element we listed the consistency of the symbol-to-sound mapping. This can either be one letter/letter cluster with only one possible way to be pronounced, e.g. Greek, Italian and Spanish. Or, in some alphabetic orthographies, one letter/letter cluster can have multiple pronunciations, e.g. Danish and English. It can be similar with spelling too (Ziegler et al. 1997)

English suffers from inconsistency in both, pronunciation and spelling. This makes it an exceptionally difficult alphabetical language because it is difficult for many students to learn about letter sounds when a single letter can have multiple ways of its pronunciation. Think of the letter A in CAT, WAS, SAW, MADE and CAR. One grapheme ends up having four phonemes (Goswami 2005).

## Comparison of reading development across languages

"European Concerted Action on Learning Disorders as a Barrier to human Development" conducted a large-scale, careful cross-language reading comparison. Scientists from 14 European Community countries took part in the research. Together they developed a set of real words (BALL, TOY) and non-words/pseudo words (FIP, DEM). The items (an individual set for each language) were then presented to students
from participating countries during their first year of learning to read. Phonics was taught at all schools (Seymour 2003). The student's results are in the table below. The data (\% correct) was obtained as a result of the large scale study of reading skills at the end of grade 1 in 14 European languages.

Table 1: Comparison of reading development - 14 European languages

| Language | Familiar real words | Pseudo-words |
| :--- | :---: | :---: |
| Greek | 98 | 92 |
| Finnish | 98 | 95 |
| German | 98 | 94 |
| Austrian German | 97 | 92 |
| Italian | 95 | 89 |
| Spanish | 95 | 89 |
| Swedish | 95 | 88 |
| Dutch | 95 | 82 |
| Icelandic | 94 | 86 |
| Norwegian | 92 | 91 |
| French | 79 | 85 |
| Portuguese | 73 | 77 |
| Danish | 71 | 54 |
| Scottish English | 34 | 29 |

Source: The table by British Journal of Psychology, Foundation literacy acquisition in European orthographies, (Seymour 2003).

The data gained through this research was striking. As we can see in the table above, children whose languages had consistent spelling systems (Greek, Finnish, German, Italian, Spanish), were close to perfect in both, non-word as well as word reading. On the other hand, English-speaking children with $29 \%$ correct non-words and $34 \%$ correct words, performed extremely poor. Further research showed that even after two years of phonics instruction, English children performed worse. When we compare Danish, Portuguese and French students with their scores lower than $80 \%$ to Greek or Finnish children, there is again a significant difference between them. However, this is compatible with reduced orthographic consistency of these languages. Finally, when we compare French, Spanish and English students, the Spanish group reaches the top results faster than French children. On the other hand, French students are better than

English readers and when German and English pupils are compared, German group scores better results. In conclusion, the research findings show us that learning to read English is a more difficult task than knowledge of reading in Finnish, Spanish or Italian. It can, therefore, be more complicated for these nationalities to crack the English code, because their native language system is completely different (Goswami 2005). (See also Appendix VII)

For more information on language background see Appendix VIII where you find additional information about Spanish, German, Kannada, Telugu and additional Hindi, Russian, Chinese or Japanese to see what language difficulties students encounter worldwide.

## 9 Practical Part

To bridge the two main parts of this thesis and to investigate Phonics instruction not only theoretically, but also practically, we have carried out research on primary school children attending three different primary schools as well as the Phonics.cz educational programme in Prague. This enabled us to work with a great variety of young learners undertaking various English tutoring that ranged from methods used in the lessons, the weekly estimated amount of English exposure (mainly during English lessons at school), to possible Phonics teaching that could be undertaken either as the part of the actually schooling, or as an afterschool activity. The test that was designed consisted of three parts and was recorded. This allowed us to look into some of the language aspects later as well as helping us to discover the difficulties or problems pupils encountered. It also uncovered the differences among children and their reading attempts. The recordings were listened to first and transcribed afterwards. The amount of sounds and words pronounced correctly was then counted, analysed and used in our research.

We will not only focus on the actual numbers, but will also talk about the mistakes children made and repeated. The pros that Phonics instruction has will be examined although we will concentrate on the cons of the reading method that could lead to some serious misunderstandings in communication. Phenomena will also be highlighted. Word stress, sentence stress and rhythm, connected speech or intonation may not seem to be part of this research, however quite the opposite is true. Therefore we would like to indicate some pronunciation aspects that were studied and used in the research. Last but not least we gained some useful information on how children see English and its written and spoken part. The data was analysed in terms of each group individually, however, this will be also be combined to form a conclusion on whether systematic Phonics instruction really works on EFL students, or not and what language support may be the best for them.

Our hypotheses therefore are:
$>$ Does the Synthetic Phonics approach help EFL students in pronouncing words or not?
> Can Synthetic Phonics instruction affect pronunciation negatively?
> Are EFL learners aware of the pronunciation and spelling rules in English?

## 10 The Research

Three Prague primary schools and one group of children attending a Phonics language course participated in the research that was done during the summer semester 2015 and also in October and November 2015. Four different groups of children were tested to gain a variety of perspectives to evaluate whether systematic explicit Phonics instruction works on children learning to read or not. Diversity was sought after in the level of English in the young language learners as well as their Phonics experience. The children were either exposed to Phonics method on a daily basis or were at least given some Phonics instruction or had never experienced Phonics and therefore might have found our reading test difficult. The groups of children were chosen from different schools with different experiences of Phonics instruction. Details and a brief description of each school or the language course provide us with some information on the teaching and introducing Phonics in a particular school or course.

## The Prague British School, K Lesu 558/2 14200 Praha 4

The children in this school start their Phonics lessons in reception class when they are four or five. There are around three half hour sessions a week for children in Year 1. Children in Year 2, who are six to seven years old, children with poor phonics skills or children who are new to school, continue with three half an hour sessions a week. The groups are small with up to only three children. Other children have two sessions a week in the autumn term and only one session a week in the spring term. The spring term sessions focus more on grammar skills. We expect these children to experience no major problems decoding the words containing the sounds they have already been taught. Therefore, it is estimated that they should on average successfully read approximately $50-75 \%$ of the words tested.

## Angel Primary School, Angelovova 3183/15, 14300 Praha 12

Angelova Primary School is the faculty school. The pupils here undertake explicit systematic Phonics teaching from their first grade. Their classes are partly led by native speakers and are split in two groups for their English lessons. Bilingual classes have two
hours of English lessons and two hours of a workshop in English a week in their first year. The amount of English lessons and workshops is the same in the second grade too, but children attend extra individual reading lessons with a native speaker who comes into their classroom. Reading sessions as well as workshops continue in the third grade with students gaining one more English lesson per week. The children were taught how to sound out and blend sounds back together and they know basic Phonics rules. Considering the amount of time Prague British School pupils spend on Phonics and the different age and grade, the results of those children from Angel Primary School should be similar to Prague British School outcomes.

## Phonics.cz educational programme

Phonics.cz is the educational programme that gained the MSMT accreditation in 2014. It offers a variety of Phonics courses designed for children, teachers or even parents. Katerina Gacek is the founder of the programme and she is also the course leader. Even though Ms. Gacek was open to cooperating with us and taking part in our research, it was unfortunately not possible due to the strict school rules and conditions at some schools. We were however able to test at least some students and we hope we find the results useful. We estimate the children should perform above average. The reason for this could be the systematic approach in teaching how to read English. However, children were younger, most of them eight years old, which means they attended either second or third grade which could impact the results. We know that most children experienced many types of English input in an everyday environment. However, they might not have had their English lessons at schools yet. Even though English is widely spread and being taught in all primary school grades starting from the first, it still is not compulsory until the third grade. Some of the children might not have started their English lessons at school yet, which although unlikely needs to be taken into account.

## Slovenská Primary School, Slovenská 1726/27, 12000 Praha 2

Slovenská Primary School is a faculty school along with the Angel Primary School. However, children here do not experience systematic Phonics instruction. It does however, unlike other schools in our country, offer English lessons from the first grade.

Children in their first and second grades are given two lessons of English in one week, with third grade students having three lessons and fourth and fifth graders attend four lessons of English a week. We do not know about any extra language courses or activities in this school that would provide young learners with the sound decoding system introduced by Phonics. We are also unsure, as with the other school, if children attend English courses or have extra English lessons out of school. We also cannot say whether these children were introduced to some, if any, rules of how English is pronounced and the fact that there are certain rules that can be applied to some group of words and therefore pronounced easily. Even though this group of children should be seen as one in which Phonics instruction was not introduced, and therefore the results should be if not unsatisfactory then very weak, we should first investigate to find out more about the testing and some factors that could influence the children's performance.

## 11 The Reading Test

The reading test has been especially designed for children learning English as a foreign language. We wanted children not to lose focus therefore; the test consisted of three different activities which although they looked different, tested the same objectives. The exercises were linked together making the task consistent. Each of the reading blocks required approximately 5 to 7 minutes. The time needed to complete the test was therefore estimated to range between 15 to 21 minutes on average. However, there was no time limit and there was no influence on how much time children would want to complete the reading activities and to answer the additional questions that were asked by the researcher before and after the test.

### 11.1 Language of instruction

The language of instruction was primarily English, since the reading test was in English. However, we needed children to understand the instructions properly and there might be a wide range of levels of language proficiency as there were children speaking fluently as well as children who barely understood the language. Therefore we decided to set English as the instructional language first, but we made sure that everybody understood. We did that by asking children not only whether they know what to do, but asking them to repeat the task back using their own words. This was very important, as we needed to eliminate misunderstanding which could lead to not finishing the test successfully. We can say that English use in terms of giving instruction could be estimated as ranging between 50 to $100 \%$.

### 11.2 Carrying out the research and information about testing

The children were taken out of their lessons individually and the test was administered. In some cases it was possible to find a quiet place to test the children, but in most of them, we could not, as it was the school time and all the classrooms were being used. This meant the testing needed to be done in the corridors which made it difficult, especially during break times. The children were disrupted easily by the noisy surroundings, which was considered a great disadvantage. The pupils needed to be
asked to repeat what they said and it did not only prolong the testing time, but children also lost their focus. Overall, some of the children needed to be motivated again and this could influence their performance and the results could be negatively affected.

Children's parents or their legal representatives were informed by a letter that was given to them by their class teachers. First, the letter introduced the purpose of the research and kindly asked parents and their children to take part in it. It also informed them about the voice recordings to be taken during the test. Last but not least, we declared that the research is anonymous to retain privacy of all people taking part in it. It means that we did not use children's names. Instead, each child was given a unique code including his/her sex and a number. (E.g. the code B3 is a boy whose recording was taken as the third, the code G5 gives the information that it is a girl and she was recorded as the fifth child in her classroom.) It is, however, not only this information we have available about the children. We also know the name of the school they come from, their age and their parent's nationality as well. We are happy to say that none of the people who were asked to participate with us disagreed. All parents or legal representatives showed their interest by agreeing with the research being carried out in their schools and classrooms and their children taking part in the test. Moreover we are happy to say that they expressed their interest in the research results too.

The children did not know about the recordings being taken during their reading. The reason for this was to eliminate possible concerns, or in some pupils the attempts to take advantage of this fact and pretend to be reading in a different way than they are normally used to. Although the intention was obvious, we cannot be sure that none of the children were given the information by their parents. However, the pupils were not told by the researcher before the actual testing. The ultra compact H 1 recorder (ZOOM H1) was used to record student's performances. This device offers professional-quality stereo recording in either MP3 or WAV formats. The H1's Audio-Level with its input gain prevents overload and distortion automatically and its low cut filter also eliminates low frequency noises. We found all these functions very useful later on when we analysed the data, as without such parameters we would not be able to decode and analyse more than half of the recordings and gained data. Our WAV files were 24-bit and its sampling rate was of 96 kHz .

The test started with a very brief introduction which served as a language warm up to help children "switch" into English. It also was an icebreaker as most of the children did not know the researcher and therefore they could be shy and concerned about the testing. They were asked a few questions about their name, age, family or hobbies. As it was a dialogue, the researcher interacted with children introducing herself trying to encourage them to answer the questions. The whole activity finished with a brief conclusion including researcher's questions about children's learning English as a foreign language experience. Children were asked whether they use English outside of their classroom (with their friends) too, if they attend any language schools or studios, if they spend holiday abroad (and need to use English on their own), or whether they speak English at home with their parents due to the fact that they are or speak English. Although, we did not ask about Phonics learning experiences specifically, it was obvious children experienced some. Only one group was not taught Phonics systematically, the other three groups of children were learning them more or less under the systematic instruction. However, we did ask the fourth group of children that had no Phonics experience, to find out whether the children knew about some rules that can help them to read English more easily. The research outcomes will be discussed in the chapters that follow.

## 12 The Reading Test Preparation

As mentioned in the previous chapter, an original reading test was designed that focused the on language phenomena being investigated. The test consists of three parts. Each exercise deals with a student's ability to read and pronounce words properly. However, we have used a variety of activities to entertain children, retain their interest, keeping them motivated and focused. The imaginative story was used behind the whole reading test which we found very useful as children were in most of the cases highly motivated throughout the whole testing. The first part of the test focused on reading plain words. After reading two lines, children could turn over the stripe of paper and discovered a part of the puzzle. At the end of the activity they met the Alien. His name was Zush - which is a non-word. This brought them to a different world. Children needed to learn his language to be able to travel to his planet. The second exercises therefore took children through the list of non existing words that taught them his language. In some cases pupils were asked to guess what each non-word could probably mean. Later the translation was given to them, so that they could understand the whole list of non-words. We used this moment to check student's ability to read high frequency words that served as part of the translation. When children could understand all of the words, Zush took them to his planet. Then they were given a story about his planet to find out what it is like. The story was imaginary. This meant it did not allow students guessing from the context, but they needed to read and pronounce words properly. It also helped us to see what problems students experienced in terms of single sound decoding. As English is a foreign language for the students we tested and they were still primary school children, we printed out some pictures to support children's text comprehension and increase the possibility to understand a story line if they did not. (See Appendix IX)

### 12.1 The Sound Systems

Jolly Phonics (http://jollylearning.co.uk/) is one of the most famous Phonics teaching programmes widely spread in England and in English speaking countries. Jolly Phonics is also used all over the world and together with other Phonics programmes
helps children to meet their needs when they learn English. Some phonics programmes combine the ability to read words using Phonics method on the one side, on the other one they deal with the language aspects such as grammar or vocabulary too. We had a closer look at some phonics programmes available, not only at those concerning English to be a mother tongue. Our research, however, deals with Phonics and its impacts on EFL students. This fact made us search for an adequate programme that would suit EFL learners better. Despite our efforts we were not able to find any courses or materials available for Czech students, which was unfortunate. However, we came across Fix-it Phonics teaching programme (http://www.letterland.com/products/esl) and decided to take into consideration the letters and sounds that were pointed out by this educational programme. We included the letters that especially Czech students tend to mispronounce. By combining ESL Fix-it Phonics letters and concentrating on the language needs of our Czech EFL students at the same time, we hope we finally met the needs of all children we tested or at least we tried to.

### 12.2 The Tested Sounds

The original Fix-it Phonics course consists of three levels, each of them introducing different phoneme and grapheme structures. First the letter is introduced, then some vocabulary including this letter is presented and later on, when children know enough sounds (at least first three mostly used) they start building up the whole words. In the table below we can see the list of the sounds that children learn in each level, sounds that are in a boldface are the sounds that we decided use in the exercises in our test. The reasons for choosing them will be clarified.

Table 1: The tested sounds according to the levels

| Level <br> 1 | S, A, T, P, I, N, M, D, G, O, C, K, CK, E, U, R, H, B, F, L, J, V, W, X, Y, Z, <br> QU, AEIOU long vowels, blends, the Alphabet |
| :---: | :--- |
| Level | letters A-Z, NG, CH, SH, TH, A-E, AI, AY, E-E, EE, EA, I-E, IE, IGH, Y |
| 2 | as I, O-E, OA, OW, U-E, UE, EW, OO, AR, OR, ER, IR, UR |$|$| Level |
| :---: |
| 3 | | A-Z, OO, OY, OI, AW, AU, OW, OU, WH (wheel), WH (who), PH, AIR, |
| :--- |
| EAR (bear), EAR (hear), suffixes er/est, full/ful, ly, less, ness |

The children of this age already know how to read, and therefore it was not necessary to test all of the sounds and sound combinations that are listed above. Some letters have exactly the same pronunciations as in Czech, for instance letter S with its /s/sound. We therefore focused on the sounds, which are more problematic for EFL students in Czech, instead. We wanted to find out whether Phonics instruction helps here. In English some letters have more than one way in what they can be pronounced. E.g. the letter G can either be /g/ or /dz/. In this case we included both options of its pronunciation, even though one of them causes no problems to Czech learners, and it is $/ \mathrm{g} /$. It is similar with the letters V and W. In Czech they both sound the same. However, we used the letter V in our research as well. The chosen sounds and sound combinations will be discussed in more details with an attempt to predict the possible problems. It is predicted the mispronounced sounds listed below will be produced by Czech EFL learners. Bilingual children and their performances are, however, also taken into consideration.

- $\mathbf{A} / \mathfrak{æ} /$ as in ant - usually mispronounced as $/ \mathrm{L} /$ or $/ \mathrm{e} /$
- G /dz/ as in gem - usually mispronounced only as /g/
- $\mathbf{C} / \mathbf{k}$ / as in cat - usually mispronounced as /ts/
- CK /k/ as in kick - usually mispronounced as /tsk/
- $\mathbf{U} / \mathbf{N}$ as in but - usually mispronounced as $/ v /$
- $\mathbf{R} / \mathbf{r} /$ as in run - usually mispronounced as hard $/ \mathrm{r} /$
- $\mathbf{J} / \mathbf{d} \mathbf{3}$ as in $j u g$ - usually mispronounced as $/ \mathrm{j} /$
- W/w/ as in wet - usually mispronounced as /v/
- X /ks/ as in fox - usually not mispronounced, but could also be /iks/
- $\mathbf{Y} / \mathbf{j} /$ as in yes - usually mispronounced as $/ \mathbf{I} /$
- QU/kw/ as in quick - usually mispronounced as /kv/, but could also be /ko/
- NG/y/ as in king - usually mispronounced as $/ \mathrm{yk} /$, but could also be /nk/
- $\mathbf{C H} / \mathbf{t} \mathbf{f}$ as in chin - usually mispronounced as / $\mathrm{x} /$
- $\mathbf{C H} / \mathbf{k}$ as in Chris - usually mispronounced as /x/
- SH / $\mathbf{j}$ as in shop - usually mispronounced as /sh/
- TH / $\boldsymbol{\theta} /$ as in thin - usually mispronounced as $/ \mathrm{t} /$, /s/ or /f/ and also /th/
- TH/ठ/ as in this - usually mispronounced as $/ \mathrm{d} /, / \mathrm{z} /$ or $/ \mathrm{v} /$ and also /th/
- AI/eI/ as in mail - usually mispronounced as /aj/ or /aı/
- AY/ei/ as in tray - usually mispronounced as /aj/ or /aı/
- EE /i:/ as in tree - usually mispronounced as /e/ or long E
- EA/i:/ as in eat - usually mispronounced as /ea/
- IE /ai/ as in pie - usually mispronounced as /re/
- IGH /aı/ as in right - usually mispronounced as $/ \mathrm{Ik} /$ or $/ \mathrm{ikx} /$
- $\mathbf{Y}$ as I/aI/ as in fly - usually mispronounced as /i/
- OA /əo/ as in toad - usually mispronounced as/oa/
- OW /ao/ as in now - usually mispronounced as /pf/ or even /bv/
- UE /u:/ as in blue - usually mispronounced as /ve/
- EW /ju:/ as in stew - usually mispronounced as /ef/
- EW /u:/ as in chew - usually mispronounced as /ef/ or even /ev/
- $\mathbf{O O} / \mathbf{u}: /$ as in moon - usually mispronounced as $/ \mathrm{p} /$ or long O
- $\mathbf{O O} / \boldsymbol{v} /$ as in book - usually mispronounced as $/ \mathrm{p} /$ or long O
- AR/a:(r)/ as in car - usually mispronounced with hard /r/ as / $\mathrm{rr} /$ or /a:r/
- OR / $\mathbf{:}$ :(r)/ as in fork - usually mispronounced with hard /r/ as /pr/ or /0:r/
- ER /ə(r)/ as in tiger - usually mispronounced with hard /r/ as /er/ or /r/
- ER/3:(r)/ as in term - usually mispronounced with hard /r/ as /er/
- IR /3:(r)/ as in girl - usually mispronounced with hard /r/ as /ir/
- UR/3:(r)/ as in fur - usually mispronounced with hard /r/ as /vr/
- OY / $\mathbf{\imath} /$ as in boy - usually mispronounced as $/ \mathrm{pj} /$
- OI /aı/ as in boil - usually mispronounced as $/ \mathrm{pj} /$
- AW /s:/ as in yawn - usually mispronounced as / $\mathrm{\wedge}$ // or even / $\mathrm{Af} /$
- AU / $\mathbf{\Omega}$ / as in autumn - usually mispronounced as /ao/
- OW /au/ as in town - usually mispronounced as /pv/ or even /pf/
- OU /ao/ as in mouse - usually mispronounce as /ov/
- WH /w/ as in whale - usually mispronounce as /vh/ or even /wh/
- PH /f/ as in dolphin - usually mispronounced as /ph/

With the list of the sounds prepared we can take a closer look at the conditions for the prepared test. It was designed specifically using a certain amount of the sounds. As many sounds and sound combinations listed above as were possible were used. However, sometimes it was not possible to use just these sounds and using vowels or the rest of the consonants to build up the words we wanted to check was needed. For example (considering three sound words only):
a) WET $-1 / 3$ sounds in the word is tested and it is $/ \mathrm{w} /$
b) SHEEP $\quad-2 / 3$ sounds in the word are tested and they are $/ \mathrm{J} /$ and $/ \mathrm{i}: /$
c) CHURCH $-3 / 3$ sounds in the word are tested and they are $/ \mathrm{t} \mathrm{f} /$ twice and /3:(r)/

As we can see in a word CHURCH, there is $/ \mathrm{t} /$ / sound not only once, but twice. We took this into a consideration and found out about the actual number of the words testes in
our research. This means we counted how many times we used which sound and which words it was in. We analysed the first and the third part of the test first, because these two were linked together. They tested existing words, rather than non existing words.

This means that in total (exercise 1 and 3), there were forty-six different kinds of sounds and graphemes ( $/ \mathrm{v} /$ is not to be found in the above list) tested in the one hundred and one words that were used. However, there were one hundred and fifty-seven examples of sounds and graphemes in the whole amount of one hundred and one words.

In terms of exercise 2 which dealt with testing children's ability to pronounce non existing words (non-words), we used forty-five different varieties of sounds and graphemes (/3:(r)/ was left out) and they were tested in forty-six words. However, we could find sixty-nine examples of the forty-five sounds and graphemes in the whole list of forty-six words

### 12.3 The Word Building

The words were built systematically. Not only by trying to use the tested sounds more than once, but also to try to include lesser known words. By doing this it was hoped to eliminate students' sight guessing from the context or using only the first or the last sounds to guess and read the rest. We built up a certain amount of words first from which a list of graded words was made. The shift from easier words to the more difficult ones was very important, as it first helped children to spark their motivation by knowing the words and their pronunciation. Second it helped the researcher to spot the parts of the test where students started to experience problems.

## Activity I

The first reading exercise consisted of sixty words. They were built up from one hundred and ninety-one sounds. However, the amount of the sounds we took into account was ninety-four. The words were sorted from the easier (and shorter) ones to the more challenging words. The shortest three-letter word included two sounds (e.g. fur), the longest seven-letter word then consisted of five sounds (p-ai-n-t-er). Most of the sounds were three-sound words (44). There was a puzzle as reward for children when they finished this activity, as we can see in the pictures in Appendix IX - Activity I. The
complete list of the words is presented below. It was originally printed in black. However, we highlighted some letters now to point out the ones that we tested.

Table 2: The words and tested sounds and graphemes

| ANT | VET | FOG | CUP | SAND | CLOCK |
| :--- | :--- | :--- | :--- | :--- | :--- |
| WET | GEM | JIG | GROW | KICK | JACKET |
| CLICK | JAM | QUEEN | WING | SHED | CHURCH |
| THEN | CHRIS | TRAY | SHEEP | THROW | CHAIN |
| SEED | THIS | SEAL | TIE | JEEP | THUMB |
| NIGHT | DRY | ELBOW | CLUE | BOWL | CORK |
| TERM | JAR | STORM | DIRT | FUR | PAINTER |
| BIRTH | NURSE | SKY | PHOTO | LIGHT | BOIL |
| YAWN | HOOK | LOUD | WHEAT | TOY | CLOUD |
| YES | WHEEL | WOOD | PAUL | STRAW | SPHINX |

## Activity II

The second exercise dealt with non-words and their pronouncing. It discovered whether the children were able to read words that do not exist in English. They were supposed to use the same rules to read them as they normally do with English. However, in this case, they could not rely on the possibility to guess from the context or from the first or the last sounds in the word. There were one hundred and forty sounds in forty-six words that were tested, but only sixty-nine sounds were being researched. Again, as in the previous exercise, the most difficult words were at the end of this activity and it started with the easier words. The non-words we used consisted at least two sounds and the words were three-lettered (e.g. m-e-c). The longest word was six-letters and consisted of either five (h-u-m-b-er) or three (wh-ee-sh) sounds. The non-words used in our test are not available already ("known" from the Internet or other sources), but the researcher came up with new original ones. The first word that was tested was the Alien's name, ZUSH. This was used deliberately. The first reason was to show children they were about to learn and speak a different language. Secondly, we chose letters to draw students' attention to three possibilities of letter and sounds they were going to come across in the activity.
a) $\mathbf{Z} / \mathbf{z} / \quad$ - pronunciation is the same in English /z/ as well as in Czech /z/
b) $\mathbf{U} / \mathbf{I} / \quad$ - pronunciation is different in English $/ \Lambda /$ than in Czech $/ v /$
c) $\mathbf{S H} / \mathbf{/} / \quad$ - unlike Czech, two (or more) letters can make one sound in

## English ///

(Note: we are aware of Czech letter $\mathrm{CH} / \mathrm{x} /$, but as it is the only letter in the Czech alphabet, combination of two or more letters in English words could cause mispronunciation.)

In Table 3 that follows, we can see the list of the non-words that we tested. As in the previous exercise, it was originally printed in black, however, we wanted to highlight to show which sounds and graphemes we tested.

Table 3: The non-words and tested sounds and graphemes

| TAS | GOSS | GISS | MEC | NUCK |
| :--- | :--- | :--- | :--- | :--- |
| HUP | RES | JEEM | VOS | WEAT |
| DOX | YUSH | QUEAM | YING | CHOOT |
| SHOM | THUN | NAIM | HRAY | FEEP |
| NEAP | RIE | PIGHT | CLY | LOAB |
| BOWN | PLUE | FEWP | ZOONG | FLAR |
| JORK | HUMBER | DIRS | MURF | DOY |
| DOIN | LAWM | SAUL | KLOUM | WHEAN |
| PHISH | NOICK | WHEESH | MAUCK | SPHUN |

Most of the words (41) were three-sound words. As you can see in the table above, we used two or three-letter combinations more than one-letter per sound combinations and it was done deliberately to make the test more challenging. As we mentioned previously, some letter combinations such as $\mathrm{CH}, \mathrm{TH}, \mathrm{OO}, \mathrm{OW}$ or EW can be pronounced in more than one way. In this reading exercise we allowed children to chose their preferable way of pronouncing the words and if the produced sound was one of the possibilities, we considered is as correct.

This part of the exercise also tested the reading of high-frequency words. In such words pronunciation undergoes Phonics rules only sometimes. Therefore, these words can be found to be tricky (we call them tricky, camera or sight words too). Students cannot pronounce them by using the decoding abilities presented by Phonics programmes. Sight words need to be learnt by looking at, memorizing and remembering them. We
estimate some problems in this part of the test, as children whose English lessons or courses include Phonics instructions may read these words automatically relying on its rules and being unaware of the mistakes.

When students' finished one out of four set of non-words, they were asked whether they can understand any of the words they read and could give us an English translation. Later on, they were given a "proper" translation which was a set of high-frequency words. This was inspired by Jolly Phonics Reading Levels (http://jollylearning.co.uk/2010/11/01/tricky-words/) and some tricky words from each reading level were selected. There are four reading levels according to the Jolly Phonics reading programme. Each group has a specific colour which we have also retained in the test. It is red, orange, green and blue - from beginners to more advanced learners. There were only forty-five words tested in this activity, but you can find the complete list of all high-frequency words in Appendix X.

Table 4: High-frequency word testing

| I | THE | HE | SHE | ME |
| :--- | :--- | :--- | :--- | :--- |
| WE | WAS | DO | ARE | ALL |
| YOU | YOUR | COME | SOME | HIERE |
| THERE | THEY | GO | NO | MY |
| ONE | ONLY | OLD | LIKE | HAVE |
| LIVE | GIVE | LITTLE | DOWN | WHAT |
| WHEN | WHY | WHERE | WHO | WHICH |
| MANY | WERE | WANT | PUT | RIGHT |
| TWO | FOUR | GOES | DOES | THEIR |

## Activity III

The last exercise presented a story from Zush's planet. The Alien's language was fictional along with the story. The words which were used in the tale were part of the list from the first activity. This meant the story needed to be made up a certain amount of the actual words that could not be changed. The overall number of sounds that were tested relied on this. There were forty-one words used and they carried one hundred and
thirty-four sounds. However, the sounds we were concerned about were sixty-three. The shortest words that appeared in the text were two-sound words, but we excluded the indefinite article "a". The longest word was a compound word FARMYARD which is sounded out in six sounds (f-ar-m-y-ar-d). Again, as in the first activity, the highest number (25) was for words having three sounds. There were also twelve sight words included in the story. As all of the words were now mixed together, not sorted from the easier ones to more difficult, we wanted to discover whether children understood what they were reading about. So reading comprehension was tested, but we also wanted to find out whether and to what extent suprasegmental features such as intonation, rhythm or stress are mastered. The original story was printed off in black. There is however a copy of the story where the tested words and sight words are highlighted. (When words were in the text more than once, we highlighted only one word.)

## THE BLUE MOON ZOO

THIERE IS THE ZOO ON THE BLUE MOON. IT IS A BIG FARMYARD AND ITS NAME IS YORK. LOTS OF ANIMALS LIVE HERE. LOOK! THERE IS:

- A GOAT WITH A SCARF ON ITS HORNS
- A FOX WITH A JUG IN ITS PAWS
- A COW CHEWING GUM
- AN OWL WITH GERMS ON ITS BEAK
- A TOAD WITH CHICKEN POX ON ITS CHIN
- A DOLPHIN WITH SOME GLUE AND A QUILL, IT LIKES SNAIL MAIL
- A YAK WITH CLAY ON ITS HOOFS, IT EATS A SOY PIE WITH NO SPOON. YUCK!

IT FROWNS, BUT DO NOT HUG THE YAK! RUN, QUICK...! OH, IT WAS JUST A BAD DREAM...

## 13 The Research Findings

The following part of the thesis will show and present the research findings and information gained. Each group of subjects (schools and Phonics course) will be considered individually first. There will then be a closer look into what difficulties children experienced, as well as what was not problematic for them. The whole test will be discussed giving examples to show the findings. In terms of each group, children's overall results depending on sex will be compared. All tested groups will then be compared and contrasted and common mistakes that appeared will be highlighted. This will help to prove or disprove our hypotheses. First however, the group of subjects we tested will be examined.

## Students participating in the test

In has already been mentioned that the research was conducted in four different schools in Prague to test children who learn Phonics. Except for one group of children, all students undertook explicit Phonics instructions to some extent, but with varying amounts of time spent on such lessons. In our research sixty children in total took part in the reading test across all schools. There were sixteen Year 2 children from Prague British School (PBS), nineteen third-grade Angel Primary School (APS) pupils, eight Phonics.cz Educational Programme (PEP) learners who attended the second grade and finally, seventeen Slovenská Primary School (SPS) students. The number of boys and girls were equal. It was thirty boys and thirty girls who were tested. In the following graphs, we can see how many girls and how many boys took part in our reading test from each school.

## Graph 3: Tested children according to sex






Source: researcher's own data findings

### 13.1 Prague British School - Students' Performances

Most of the children (12) were seven year olds, but some pupils were six, eight, or even nine. The year 2 class is a class where all children are either bilingual from mixed marriages, or foreigners who have come to the Czech Republic recently. Although, we tested two boys whose parents were Czechs. Students' parents came from Slovakia, Russia, England, Italy, Holland, China, Vietnam, Korea, Taiwan, South Africa, Afghanistan or Turkey. None of the children's first language was English, apart from one. Children spoke at least two languages, and were starting to learn Czech. A closer look will now be taken at some of the reading difficulties children experienced and to see how well they read.

## The Sounds

Sounding out the letter sounds was something the students from the group of Prague British School had in common. Some of them sounded out by whispering, some pointed with their fingers in silence, blending it together and reading aloud afterwards. It can be concluded that the children's understanding of spoken word, vocabulary or speaking
performance was well above average compared to those attending the Czech schooling system. Most of the children were reading fluently, with no or minimal problems. However, sometimes, even though, they knew how to pronounce some words (CHIN, OWL) they were not able to read them correctly. Some children were able to produce individual sounds, but when they needed to blend them together in a correct order, they failed. It means that VET became /evt/ etc. In some cases young learners read the first and the last letter, (or a letter cluster) and filled the middle of the word randomly. In terms of the sounds that children found problematic, they are: EE and EA produced as /I/ or $/ \mathfrak{x} /$, E as $/ \mathrm{i}: /$, SH as $/ \mathrm{s} /$, S as $/ \mathrm{f} /$, Y as $/ \mathrm{d} 3 /$ or C as $/ \mathrm{t} / \mathrm{f}$. Some children were influenced by their mother tongue. In Czech students for example, we could hear J pronounced as $/ \mathrm{j} /$, AU as $/ \mathrm{av} /$, OU as / $/ \mathrm{\jmath} /$ and OA as $/ \mathrm{oa} /$ or even $/ æ /$. However, on the other hand, some children were able to read non-words with no difficulties and could even consider two possibilities of pronunciation in them. In terms of CH sound, one child, when reading CHEWING, he considered both, $/ \mathrm{t} \mathrm{f} /$ as well as $/ \mathrm{k} /$ and was able to choose the correct one. It is clear that the word was not learnt by heart, as in the next exercise the child did the same when reading one of the non-words CHOOT. It proved he knows the sounds C and H make together. High-frequency words were sometimes read according to Phonics rules, (e.g. ONLY /pnli/ or WANT /wænt/, but children were able to correct themselves easily. The difference between $/ \mathrm{v} /$ and $/ \mathrm{w} /, / \theta /$ and $/ \delta /$ or $/ \Lambda /$ and $/ æ /$ was obvious in most of the cases and caused no major problems.

When the number of children who were able to pronounce a non-word ZUSH was analysed, it was found that it was almost half of the students (7). Some children (5) pronounced this word as /zuf/. The rest of the class (4) produced the word as /dzos/, /zis/, /zpf/ or /sas/.

## Prague British School - The Results

The differences between girls and boys and their performances will now be analysed. Although testing time varied a lot depending on children's answers to the researcher's questions and we need to be aware of it, the shortest performance was $6: 16$ minutes long and was a girl. The longest performance was $39: 57$ minutes long and was a boy.

However, on average, boys performed better, finishing in 17 minutes whereas on average girls needed 18 minutes.

Each part of the test will now be looked at in more detail. The table below shows, on average, boys performed better than girls in two out of the three exercises. They scored higher than girls in reading words and sight words. However, girls' results were superior to those of boys in the reading non-words. It is difficult to conclude however, whether the children who read above average scored better decoding.

Graph 4: Prague British School students - performances on average


Source: researcher's own data findings

In the first activity it was a girl who performed best, she scored sixty out of sixty words listed. The worst score however was Twelve out of sixty, and was a boy's reading. In terms of pronouncing non-words successfully there were two children (a boy and a girl) whose score was the highest with a score of thirty-seven words out of forty-five. The last activity tested children's ability to read sight words. There were two children, again a boy and a girl, were able to read all of the words (45) correctly. One boy and a girl performed the weakest with only half the possible correct answers, twenty out of forty. However, in any of the groups tested, it cannot be confirmed, whether the children who did not read above average also scored below average producing individual sounds. The
reason for this being that sometimes they could produce all the sounds in the word correctly, but did not put them in a correct order or omitted the sound that was not tested. This then changed the word meaning and the word was marked as incorrect. For example, one girl was able to read only eighteen out of sixty words in the first exercise. However, the total amount of correct sounds she could recognise in words was more than a half, with fifty out of ninety four tested sounds. This research however, focused on the final product of reading as well, and so we took into an account only words read correctly as a whole.

### 13.2 Angel Primary School - Students' Performances

In the third grade of the Angel Primary School, most of the children (17) we tested were nine years old. One child however was eight and one was ten years old. This class is bilingual, which means, apart from having Extra English lessons, students here have part of their Czech lessons taught in English whilst also having workshops. Children's parents were usually both Czech (in 13 cases), mixed marriages with Slovaks (3), both Slovaks (1), both Ukraine (1) and mixed marriage with American (1). Only one out of nineteen children was using and speaking English on a daily basis, but it does not mean that other mixed marriages for example, or even monolingual Czech marriages have no influence at all. Firstly, children from mixed marriages (even though we can understand both languages very well as there are no major differences), they could influence children's foreign language perception. Such children may be more sensitive to a variability of foreign languages and could learn them more easily. However, on the other hand, they could apply the rules of their mother tongue/s on for example English pronunciation and its language structure rules. These children may be also motivated to learn extra languages on top of those which they already know or are learning. We attempted to find out and asked them. To our surprise children would like to learn a variety of languages including German (6), French (4), Spanish (2), Chinese (2), Russian (1), Greek (1), "the language they speak in the Seychelles", or even Egyptian hieroglyphs. One child then wanted to "learn English more". The findings were quite surprising, as children seemed to be highly motivated to learn another language. The results from our findings are presented below.

## The Sounds

Children were able to understand the instructions without major difficulties. They also switched into English quite easily and answered our questions in English automatically. In terms of their reading comprehension, we did not need to use the pictures for most of the words, but some pupils wanted to know and asked what the word they did not know means. Intonation was in some children almost native like.

Students were no longer sounding out, with most of them reading quite fluently, or if they were not, they slowed down and read words in silence. What we found that many children had a certain "play" with the sounds. For example when a child gave himself/herself some pronunciations possibilities and decided which of them was better. Sometimes there were two or even three possibilities. We could start with DOLPHIN, where letter O was first $/ \Lambda /$, then $/ \mathrm{e} /$ and finally corrected as $/ \mathrm{p} /$. CHURCH was pronounced as /xurtf/ and partly corrected into /tfa:rtf/. Or even a non-word MEC pronunciation that came progressed in five steps like this: /mec/, /met $5 /$, /mec/, /mek/ and ended up as /nek/.

In many cases students followed Phonics rules. However, in some words they relied on "this-sounds-better" option. We cannot say that children always found or chose the correct sound, but it was obvious they are aware of the fact that English does have sounds that Czech does not and that some letters or groups of letters make completely different sounds in English than in Czech. As an example, we could present a letter combination CH and its sounds it makes. A child read it first as $/ \mathrm{k} /$ which was fine, but later he corrected himself and pronounced CHRIS as /tfris/. Another word TIE was pronounced alright first, but changed into /ti:/.

When children needed to read dental fricatives $/ \theta /$ and $/ \delta /$, they usually pronounced them clearly, but some children transformed them into /t/, /d/, /f/, /v/, /s/ or /z/ which is typical for Czech students. However, some children produced words containing fricatives in a slightly different way than usual. It was a sign they actually know that e.g. sounds $/ \theta /$ and $/ t /$ in THROW, are different. They seem to know that is not "plain" /t/, but something close to that.

One child deliberately corrected herself when pronouncing /r/ sound in a hard Czech way. She softened the sound making it sound more like proper English, which was rare and happened only once. Another girl did not know some words from Activity I, but she went through them slowly, trying to pronounce them and she could read more than a half of the words she was not sure about.

Students also proved their Phonics knowledge when they could pronounce non-words, here are some examples: letter U in HUP was changed from /v/ (that is obvious Czech language interference) into correct $/ \Lambda /$, CH in a word CHOOT went from $/ \mathrm{J} /$ and then $/ \mathrm{x} /$ to a correct / $\mathrm{t} /$ / Last, but not least, we would like to mention UR letter combination in CHURCH which is mainly produced as /vr/ and only rarely pronounced as /a:(r)/. However, one child was able to correct herself and pronounced the word properly.

When we analyzed the possibilities of names the Alien was given, it was only two. Eight children pronounced ZUSH as /zvf/, the rest of the class and it was more than a half, pronounced the word correctly, eleven children in total. In addition, one girl gave him a completely different name first and it was Tadeáš.

## Angel Primary School - The Results

We will now discover who performed better, whether it was boys or girls and in which activities. First let's start with the timing children needed to complete the reading test. With this group of students we need to take into consideration that children knew the researcher from her school placement being done in this class. It could influence children positively with them not being stressed, but on the other hand they could see the test as only a game. We, however, tried to encourage their concentration and set the same testing criteria as for the other groups. We found out that the shortest testing time was needed by a boy who finished the test in 7:38 minutes whereas it was a girl whose test completion required $25: 05$ minutes and performed the slowest. It cannot be concluded however whether this was the worst. On average, boys needed only 11 minutes, whereas girls needed approximately 14 minutes.

The children's performance on average depending on their sex will now be examined. The table below indicates that in Activity I, boys' performance equals those of girls. Both groups scored forty-four words out of sixty possible, which is more than four
sixths. However, in the second and third exercise girls were less successful in word completion than boys. In reading non-words it was four more words on average for boys, but in terms of reading sight words, it was only one more word for boys.

Graph 5: Angel Primary School students - performances on average


Source: researcher's own data findings

None of the students managed a perfect score, but the best performance was close with fifty-nine words by a boy. Contrary to this it was a girl who read only twenty-seven words correctly, which was slightly below half of the total score. Our research indicates that it was the boys again performing better and reaching thirty-nine successfully read non-words in Activity II. Girls performed less well again scoring only twelve words out of forty-five. The last exercise which was testing high-frequency word reading showed that girls again performed worse than boys with the poorest result of twenty-six read words. However, it was a girl who scored best in this activity who successfully pronounced all forty-five words.

### 13.3 Phonicz.cz Educational Programme - Students' Performances

The Phonics.cz group of children was the smallest group we tested. Most of the children (7) we tested were eight years old, although one child was already nine. We
know that the students we examined were not from the same class. Phonics.cz courses are available for the general public and are open to every child. This fact, however, makes it more difficult to find the balance among children's level of English skills. Each child comes from a different background and is exposed to a different amount of English input in terms of quality, as well as quantity. Most of the children were second graders. It means that they had fewer English lessons per week at school, if any. As this is an educational programme, it is part of an extra education parents might want for their children, and is not compulsory. Children can, therefore, be sent to such courses to either, broaden their English language skills and enhance their foreign language acquisition, or to catch up on what they struggle to learn in schools. Whatever their intentions are, this should also be taken into consideration.

Seven out of eight pupils' parents were Czech, with only one child from a mixed marriage. One of her parents was American. All children listed preferable languages or languages they speak as Czech and English. However, one child listed Spanish to be the same level as his English and he would like to learn Chinese in the future. One child knew Russian and another knew Turkish a bit. They both were girls.

The research findings were surprising in this group of subjects which will be discussed further.

## The Sounds

It was rather complicated for children to understand the language of instruction. Therefore, English was spoken first and then translated into Czech after to avoid possible misunderstandings. The children's speaking skills were weaker than those of other tested groups. After reading the story pictures were used to help them to understand the meaning and the story line. In some cases pupils' comprehension skills were very poor, so it helped children to know what they were reading about and translated the words they did not have in their passive vocabulary. Although even if children performed significantly poorly compared to the other tested groups of students, their intonation was very good and was similar to the one English speaking people use. There was a tendency in some children to take a long time before they read or even started to pronounce a single word. At the first sight it may seem as if they were not
able to do so and therefore remained silent. However, there were children from other groups, who rushed through the words at a great pace, but their final score was not satisfactory, and even below average. This brings us to the fact, that brisk reading does not necessarily mean satisfactory results. In England when they test young learners there is a time limit children are given to be able to read a word. If they cannot manage before the time is up, their try is evaluated as unsatisfactory.

In this test the children had no time limits, but when it was obvious children struggled or did not know how to read it, we encouraged them to move on or to leave the word out if they wanted. A couple of children were encouraged to do so in this group and to our surprise they left out an incredible amount of words (compared to the other tested groups). However, once again, even if it looks like children were not able to use Phonics rules to pronounce a certain amount of words based on its instruction it did not mean they did not know how Phonics worked. One girl left out forty-seven out of sixty words. However, there were seven words she made an attempt to read and even though they were not correct in their whole, she knew some of the sounds they carried. She also read six words with no mistakes. The second child, a boy, performed even worse leaving out forty-nine out of sixty words, trying to pronounce six of them and successful finishing only five. This could mean that the children may have not felt ready to read words in which they did not know all the sounds they were made of, because in this course special emphasis is placed on this skill. Hence, children knew they were supposed to pronounce words in a different way, but did not know how yet. Some language pronouncing features we came across with this group of young learners will now be presented.

Some children tended to use the pronunciation of the letters name rather than the sound. It means that e.g. letter A is not pronounced as $/ \mathfrak{\not r} /$, but as $/ \mathrm{e} /$ instead, which we found surprising, because the Phonics method tries to eliminate this. It was encouraging to see that children loved playing with sounds. One girl stated: "when NO turns into ON, it is like $O N$ and $O F F$ ". This "playing" with sounds is actually useful and helps children to read words they do not know. To give an example, a non-word WEAT was first pronounced as /wart/, then /wert/ and ended up as /wi:t/ which was correct. In contrast with other groups it was obvious in these children that they could feel the difference between $/ \mathrm{v} /$ and $/ \mathrm{w} /$ pronunciation or between U and A letter sounds. In some cases
children interpreted letter E in words as /i:/ and EE stayed /I/. CH in CHRIS was then read as $/ \mathrm{t} \mathrm{f} /$. There was a great amount of words that were pronounced "half" correct. So what happens when JUST turns into /dzust/ and is not pronounced $100 \%$ correct? Do the children really fail here? The researcher thinks that this is actually the first step towards better reading. Children no longer relied on Czech sounds in English at least in some cases, and made an attempt to read words by using sounds that are to be found in English sound system. There were children who pronounced words correctly, but failed when they tried to change their answers, e.g. a very complicated word FROWNS was first read right, but finished as /fru:n/. Lots of children also kept correcting themselves. First they made an attempt, they then realised that they had made a mistake and corrected themselves. For example, DO was /dəu/, but was corrected into /du:/. There was also a sound shift from $/ \mathrm{s} /$ into $/ \mathrm{J} /$ in SH letter combination in one of the non-words, WHEESH.

Finally, we examine children's attempts to read ZUSH'S name. Four children said /zuf/, one child /zux/, another one /suf/ and the rest of the students (2) pronounced the word correctly.

## Phonics.cz Educational Programme - The Results

Again, we shall now discover whether it was boys or girls who scored better and in what activities. In this chapter, as in the preceding chapters, we will compare the results depending on students' sex only. However, first there are some details of times children needed to complete the test. Both, the shortest and the longest time in this group were needed by girls. It was either 11:22 minutes, or 31:34 minutes. On average girls needed 20 minutes and boys only 15 minutes to complete the task.

In the table below we can see how the students performed according to their sex. It is obvious that these children performed the worst of all tested groups so far, but we must consider their age and the fact that they are not bilingual then we can see the results in a different light.

Graph 6: Phonics.cz Educational Programme students - performances on average


Source: researcher's own data findings

We can see that the boys performed better than girls in two out of the three exercises. Activity I and reading sight words was easier for them. It was girls' reading scores that were better than those of boys in terms of non- word reading. It was only one word on average, but it is interesting that the girls even though they were not as good as boys, performed better in the exercise that focused on Phonics skills. On the other hand, for the first time one girl was not able to produce even one of the words and scored zero successfully read words in exercise two. However, it was a girl again who in this exercise scored the best and could read twenty-seven non-words. A girl had the best reading in Activity I, she was able to read thirty-five words, in contrast to this it was a boy who scored only five words out of sixty. Lastly, high-frequency word reading was easier for boys who scored twenty-seven words. On the other hand, girls performed the worst gaining only six out of forty-five words. However, what we found quite interesting was the fact that all these children (boys and girls on average) ended up with approximately same results. It could indicate the fact that the group of students were the weaker ones, or it could be a sign that children have not learnt all the sounds yet and their English language learning was not far enough along to keep up with English learners from the other groups. To find out more, we would need to research these students again, gaining detailed information about their English learning background.

### 13.4 Slovenská Primary School - Students' Performances

This group of children was, after the Angel Primary School, the second largest group we examined. All students (17) were 10 years old and attended the fourth grade, which made this group the oldest out of all of them. The amount of English lessons per week differs. It starts with two lessons in the first and the second grade, continues with three lessons in the third grade and there are even four English lessons in the fourth and the fifth grade. Even though the number of English lessons is high, this group of children was chosen on purpose, believing to have none, or almost no Phonics skills. The class was also not bilingual and even though there were some voluntary English classes that pupils could enter, there were no explicit, systematic Phonics courses available for them. This group was, therefore, estimated to perform the worst. However, again, the results were more than surprising, as we shall see in the section below.

As in the preceding groups, we will first look at how many children were born to parents with different nationalities, since this could be an influential factor. The highest number of children (12) was for both parents originally from Czech. Then there were mixed marriages having one of the parents Czech and the other either Slovak, Polish, English or French. And last but not least, one child had Slovak and Dutch parents. In this group we wanted to find out what languages students are learning and already know. Eleven children listed only two languages, in preferable order as follows, Czech and English. Some students named Czech, English and Spanish (2) or Czech English and German. One preferred Polish over English - Czech, Polish and English and the other equalled Czech and French putting English as the last. Only one child listed more than three languages, Czech, Slovak, Dutch and English as the last language again.

Children were also asked whether they have any relatives or friends abroad and need to use English outside the school, or if they have attended any language courses or had private English lessons. Only two children said that they have no relatives or extra English lessons outside the classroom, which was surprising. Many of the children have relatives living abroad and therefore need to use English occasionally. Two students were living in an English speaking country for about a year and many of them attend language schools or studios or undergo private English lessons. We, therefore, cannot
be sure whether the children have ever come across Phonics instructions, or at least some of the rules it presents. In the following paragraphs we will have a closer look at some aspects of the children's readings.

## The Sounds

Most students had no major problems understanding the instructions that were given in English, although some children did not understand them and we needed to translate into Czech. Children's comprehending of spoken word was average. However, it could be said that the differences among children and their perceiving were of the greatest difference. They either could understand very well, or performed weaker than their counterparts from the other groups tested. Also the need to use the pictures to understand the written part of the reading test was dependant on children's English knowledge, so was the reading pace, intonation and rhythm that, in some cases, was above average for this age group.

In this group students were reading more or less fluently with no sounding out technique or pronouncing individual sounds in isolation. They either read the whole word correctly, or were not successful. When they realised they are not correct, they read the whole word once more. Sometimes children corrected themselves, e.g. the word TOAD was read /tu:d/ and corrected into /təud/, or YAK was mispronounced as /dzek/ and corrected into /jæk/. It was the same with OWL which, before corrected version, was mispronounced as /pvl/. Also the word GERMS, one of the hardest, was corrected, but mispronounced as /g3:rms/. Although some of the children were able to correct themselves, the others could either not spot their mistakes or changed their already correct answers. Here are some examples: SHED was correct, but reread as /fi:t/. The other example was the word GEM which progressed in a few steps:/ge/, /ge/, /dzem/, but ended up as /gem/, which is an obvious influence of the child's mother tongue. In contrast, some children were able to overcome their mother tongue interference and correct themselves, such as in one boy's reading when CHRIS was pronounced as /xris/, but immediately replaced it with its correct option.

Dental fricative pronunciation had surprising results. There are usually both sounds that are mispronounced, but in one child's case, it was only/ð/ as in THEN or THIS that was
problematic, so the words sounded as /den/ and /dis/. However, on the other hand, the words such as THROW, THUMB and BIRTH which contain $/ \theta /$, caused no major difficulties and were produced correctly by this child. This is unusual as usually either both or none of the sounds were pronounced correctly. It was obvious even during the testing that many children must have been aware of some Phonics rules, or at least considered that English letters or letter combinations were pronounced differently than in the Czech language. As an example, we could list letter Y which was pronounced first as /d3/ and corrected afterwards, or letter combination PH that was read as /f/ and later mispronounced as the Czech $/ \mathrm{ph} /$. Even if it was mispronounced, we could see the child taking into consideration more than one sound and choosing the right option. Noticing this fact, children were asked at the end of each testing (approximately 3-5 minutes), whether they knew about any rules in English that could help them with reading or writing words correctly. We were amazed by our findings that almost all children knew about certain rules in English reading and writing system. These are examined in the next section along with the way children perceive them.

To make sure all the children understand, an example word SHEEP that was found in the first exercise was used the students were asked how it was pronounced and why. They were also asked if they could explain and clarify their answers and support them with finding more words or giving their own examples. We were surprised that children were able to give a lot of examples of their own letter combinations and words, not relying on only those listed in Activity I. They usually started with SH and EE letter combinations and automatically listed some more giving their own examples. Now we will present children's answers. We left them in direct speech on purpose, as it gives us an insight into how children feel about sounds in English:

- SH letter combination: "SH sounds as /f/. Well, it is obvious." "S is /f/."
- EE letter combination: "EE is $/ i: /$ "
"One E is not read there." The child probably thought
about letter names (there is /i:/ for letter E) rather than
letter sounds.
"If there are, for example two Es, as in sheep or queen, it
is read a bit differently."
- EA letter combination: "I can't do it off the top of my head. I need to have an example, then I might try. We gave the girl an example word LEAP and after a while being silent she answers: "/leip/, /ei/?"
- letter J:
"Sometimes $J$ is read as /d3/."
- Y and J letters:
"Y is /j/, but J is /d $3 /$."
- C and U letters:
- letter A:
"C is $/ k /$ and $U$ is $/ \mathrm{a} /$."
"It is like lel."
"It is sort of like le/." (The child reads le/ a bit longer, trying to make it sound as /æ/.)
- letter I:
"I is /a/ as in NIGHT."
- AI letter combination: "AI is $/ j /$."
- CH letter combination: "It can either be $/ t / /$ or $/ k /$ as in Christmas. However,
there is $/ x /$ sound left in it too." (In fact, it is aspiration.)
"/x/, like C, H is /k/ as Chris."
- CK letter combination: "It is usually read as $/ k /$ only."
"It is read "together" as $/ k /$."
" $K$ is not read there and $C$ is read as $/ k /$."
- OO letter combination:
- TH letter combination: "We do not read $/ h /$ and instead of $T$ we read $/ d /$."

The last example shows that even if children could not give us the correct answer, they still knew that some letters are produced in a different way in English than they are in Czech as indicated with dental fricatives in the letter combination TH this time. This is the kind of mistake that is usual for Czech students and is made quite often. However, there was some knowledge that the pronunciation is different from Czech, which is a positive, because some children may still pronounce TH letter combination as /th/ only. Although some of the children were relying on letter names rather than letter sounds, most of them knew about certain rules the English language has.

Some children tried to explain the English pronunciation rules in their own language:
Boy 4: "Oh, and where there is e.g. letter I and it has one letter following it (IT, for example), so it is /aI/ and when there are two Ts, it is sort of /it/, because e.g. SWIM, if it was SWIMMING with one M, (SWIMING) - so it would be /swaiming/ and then it is /swimiy/."

Boy 3: "WOOD, for example, if there was only one $O$, it would be read as /wavd/, and where there are two OOs, it is read as /v/."

We cannot say for sure, but when we consider the transcription the boys gave us, it seems that the first boy we mentioned, could in fact be talking about IT(E) /art/ and SWIM(E) /swarm/. The second boy we quote was talking about WOD(E). What made them think about English in this way? And what English rules can we find?

DATE, HERE, PIPE, ROPE, CUTE - all these words have something in common. They all end with letter E. This letter is called Magic E. "Magic E is always to be found at the end of a word, it jumps over the letter (consonant) standing to the left of it (before it), hits a vowel (standing in the middle of the word) in its head making it sound long (as in the ABC song). A lot of practise needs to be done to grasp this concept" (Gacek 2014).

Last but not least, there were two children (a boy and a girl) who mentioned that there is a difference between $/ \mathrm{v} /$ and $/ \mathrm{w} /$ sounds even without us drawing their attention to it. The boy stated: "(In English) it is read e.g. /wi:l/, (in Czech) it would be read /vi:l/." And he continued: "It is a bit different than Czech language, it is more difficult." The girl said: "W is read as /w/, not as usual (Czech) /v/." Despite her saying that she does not know any Phonics rules, her pronunciation was clear and she could also pronounce some letters and sounds in isolation.

We found that there were only three children (including the girl mentioned earlier) who did not know about Phonics or any English reading and writing rules. One girl was only able to spell the words out, not sounding them out at all. However, to our surprise, after some time when we showed children some example words and their pronunciation, all three girls started to understand and in the end they were able to find some more examples of the words in the test or even give us their own examples of letters, letter combinations and their sounds, for example that EE gives /i:/, OO is $/ \mathrm{v} /$ or C is read as $/ \mathrm{k} /$. One girl started to even "play with words" using SHEEP and changing it into SHEET.

Finding out that only three children had not come across Phonics so far, the rest of the class was asked where they had learnt the rules. Most of the children answered that they learnt such rules at school or it was their (English) teacher who told them and that they also realised on their own (7). Some children were taught Phonics in a school in America, or in the kindergarten and some of them were told by their parents.

This group of children was also asked to read the Alien's name. Students came up with six possibilities in total. The correct version of ZUSH's name occurred eight times, there was one child among them who corrected himself from /zuf/ into /znj/. Five students mispronounced his name as $/ \mathrm{zvj} /$, and the rest of the children misread the word as /zas/, /zus/, /dzus/ or /3us/.

## Slovenská Primary School - The Results

This chapter will look closer at the children performances. Students will again be analysed according to their sex. Before we start, however, we will give some brief information about the timing children needed to finish the reading task. We should also mention that this class knew the researcher from her school placement done as a part of her university course, which could also influence students' reading.

The shortest time that was needed was, surprisingly needed by both, a boy and a girl, who both finished the test in 8:48 minutes. On the other hand, 18:52 minutes was the longest time period that was needed by one of the girls to compete the task. Again, we need to point out that even if children needed more time to finish the reading, it does not necessarily mean that they performed the worst. When we compare boys and girls on average, boys needed 11 minutes and girls needed 13 minutes.

Now we will talk about the actual reading results. As we can see in the table below, there were boys who performed better in all three reading activities. In the Activity I the difference between boys and girls was fourteen words, and in the second activity which focused on reading non-words the difference between sexes with eleven words on average was also significant.

Graph 7: Slovenská Primary School students - performances on average


Source: researcher's own data findings

To present the children's highest and lowest scores in their readings, we shall start with the first activity which focused on reading individual words. There were no students who reached sixty out of sixty words, however one boy scored fifty-six words. Contrary to this result, it was a girl who successfully read only fourteen words out of sixty. In the second activity testing student's ability to read words that do not exist in English, but contain the sounds that occur in the language, boys again performed better. One of them was able to pronounce correctly forty out of forty-five non existing words. In contrast with this performance, the weakest reader scored only nine words and it was a girl again. It was also the last activity in which girls were not as successful as boys with the lowest number of words read correctly being twenty-two. However, there were two boys who scored the maximum possible score, and read all forty-five words without mistakes. There were five out of six boys who in the last exercise were able to read more than forty words out of forty five correctly. (See also Appendix XI)

### 13.4.1 Further findings

When we compared the children's performances and had looked deeper into each exercise once more, we found quite an interesting fact. After having a closer look into Activity II which was testing students' reading abilities in terms of non-words as well as high frequency words reading, we realised that it was Phonics.cz Educational Programme group of children that differed in their results. It was only in the Phonics.cz group, that there were students performing better in reading non-words. It was always sight words in which students did better in comparison to non-words reading. However, in the Phonics.cz group it was two children (a boy and a girl) who scored better in reading non-words than in reading high frequency words. This made us think more deeply about students' actual reading abilities.

The differences were counted between the number of non-words and sight words which were read correctly. So e.g. if the child successfully pronounced thirty-nine sight words and thirty-six non-words, the difference between them would be three words. We researched all groups comparing all children. We then selected the smallest $(\downarrow)$ and the biggest ( $\uparrow$ ) difference between the results of both groups of words (non-words and sight words) we tested. The overall results can be seen in the table below. (Phonics.cz children who performed better in reading non-words are not included in the table 9. We will talk about their results later.)

Table 5: The difference ( $\downarrow$ and $\uparrow$ ) - all schools/groups and both sexes

| School/Group | Sex | The difference ( $\downarrow$ and $\uparrow$ ) | Non-words | Sight words |
| :---: | :---: | :---: | :---: | :---: |
| PBS | 0 | $3 \downarrow$ | 36 | 39 |
|  | 0 | $26 \uparrow$ | 9 | 35 |
| APS | 0 | $4 \downarrow$ | 39 | 43 |
|  | 0 | $26 \uparrow$ | 16 | 42 |
| PEP | $\bigcirc$ | $1 \downarrow$ | 6 | 7 |
|  | $0 \times$ | $11 \uparrow$ | 16 | 27 |
|  | 0 | $11 \uparrow$ | 10 | 21 |
| SPS | 0 | $2 \downarrow$ | 40 | 42 |
|  | $\bigcirc$ | $25 \uparrow$ | 10 | 35 |

Source: researcher's own data findings

All the children, apart from two students attending Phonic.cz course, scored better in reading sight words than in sounding out non-words. We can see the results in two last columns that are in italics. The difference is then calculated and presented in the middle section of the table. The light section shows the smallest difference, the darker section being the bigger difference. There are also arrows indicating the results. We have already mentioned that all the students performed better in reading sight words. When we take closer look at the middle section showing the difference we can see that again, Phonics.cz group of children differs. There is only ten word difference between the smallest and the biggest number. However, in the three other groups of children, we can see that it is twenty-two or even twenty-three words (two times).

We also examined how high on average boys as well as girls performed in all the groups we tested. In the table below we can see and compare children's results - the differences on average in both, boys and girls.

Table 6: The difference on average - all schools/groups and both sexes

|  | The difference on average |  |
| :--- | :---: | :---: |
| School/Group | $O^{7}$ | Q |
| PBS | 16 | 7 |
| APS | 12 | 14 |
| PEP | 8 | 4 |
| SPS | 10 | 15 |

Source: researcher's own data findings

We can clearly see again that in Phonics.cz group students' difference on average in terms of correctly read words was the smallest. This fact puts them forward as the only group which scored below ten in both sexes.

It could mean PEP children's English skills in both, reading sight words as well as pronouncing non-words tend to equal and therefore might develop at once. We could see that these students were either poor or quite good at English. They did not perform above average, but there was never really significant difference between the results either. This may indicate the fact that these children developed their language skills in complex, not relying on sight words, but actually reading. You can find the pre-test information in Appendix XII.

## 14 Discussion

When the results of all groups we tested are analysed, they may seem to be invalid at first. This is because it is usually girls who outperform boys and score better in reading tests. In our research, however, there were only two occasions when girls' (PEP and PBS group) reading scores were higher. However, what we find most surprising was the fact that it was a non-word reading activity. Thus boys' reading results may be dependent on sight reading rather than the ability to pronounce words correctly using synthetic phonics rules.

When we compare Activity I - III within each group separately, it was the sight-word reading exercise where children scored better. However, PEP students had the least difference between individual scores as was examined in more detail in the preceding chapters.

Looking at the performances of children and the differences between both sexes within each group, it was SPS which had the widest spread between boys and girls in contrast to the PEP group that had very similar results in both sexes.

APS students' performances equaled (44) in Activity I reading English words. This did not occur in any of the other groups.

Activity III was testing fluency in reading and text comprehension. Some children were able to comprehend the text and understand its meaning; however many times the children only read the text. Their reading was fluent, but they seemed unsure about what they were reading about. This could suggest that Synthetic Phonics Instruction leads to decoding words or pronouncing them plainly, rather than being able to rationalise about written texts. Approximately $40 \%$ of children reacted to the text at some point, whilst the rest expressed no interest. This might have been influenced by the children's knowledge that it was only a "reading test". However no conclusions can be made. Furthermore some students had a very good intonation. Sentence stress, word stress, rhythm, intonation or connected speech were not primarily tested, but in some cases children performed above expectations.

## Letter-sound difficulties

The letter-sound correspondences we tested are presented again with the letter/letter combinations and their pronunciation that occurred repeatedly and in a very high rate highlighted. Brief comments are added where necessary.

- A /æ/ as in ant - usually mispronounced as $/ \mathrm{N} /$ or $/ \mathrm{e} /$
$\rightarrow$ very common mistake, occurring repeatedly
- G /dj/ as in gem - usually mispronounced only as /g/
$\rightarrow$ vast majority of children are unable to recognise GI or GE as /dJ/, occurring repeatedly
- $\mathbf{C} / \mathbf{k}$ / as in cat - usually mispronounced as /ts/
$\rightarrow$ C pronounced as $/ k /$ is known by many children as one of the rules English has
- $\mathbf{C K} / \mathbf{k} /$ as in kick - usually mispronounced as /tsk/
$\rightarrow$ CK pronounced as $/ k /$ was pronounced correctly most of the time
- $\mathbf{U} / \mathbf{N}$ as in but - usually mispronounced as $/ \mathrm{v} /$
$\rightarrow$ children know the rule, yet some of them keep mispronouncing it in context
- $\mathbf{R} / \mathbf{r}$ / as in run - usually mispronounced as hard $/ \mathrm{r} /$
$\rightarrow$ the majority of students mispronounces $R$ as hard $/ r /$
- J/d3/ as in jug - usually mispronounced as $/ \mathrm{j} /$
$\rightarrow$ mispronounced very often
- W/w/ as in wet - usually mispronounced as /v/
$\rightarrow$ vast majority of pupils are unaware of differences between $/ v /$ and $/ w /$, occurred repeatedly
- X /ks/ as in fox - usually not mispronounced, but could also be /iks/
- $\mathbf{Y} / \mathbf{j} /$ as in yes - usually mispronounced as $/ \mathrm{I} /$
$\rightarrow$ correct pronunciation depended on a word position, mispronounces also as $\left|d_{3}\right|$
- QU /kw/ as in quick - usually mispronounced as $/ \mathrm{kv} /$, but could also be /kv/
- NG/y/ as in king - usually mispronounced as $/ \mathrm{yk} /$, but could also be /nk/
$\rightarrow / k /$ sound was usually left in words
- $\mathbf{C H} / \mathbf{t} \mathbf{j}$ as in chin - usually mispronounced as $/ \mathrm{x} /$
- $\mathbf{C H} / \mathbf{k}$ / as in Chris - usually mispronounced as /x/
$\rightarrow$ in both $/ \mathrm{t} /$ and $/ \mathrm{k} /$ sounds students either mispronounced it as $/ \mathrm{x} /$ or were choosing between $/ \mathrm{t} / \mathrm{s} /$ and $/ \mathrm{k} /$ sounds
- SH / $\mathbf{j}$ as in shop - usually mispronounced as /sh/
$\rightarrow$ surprisingly known by many students
- TH / $\boldsymbol{\theta}$ / as in thin - usually mispronounced as /t/, /s/ or /f/ and also /th/
- TH/б/ as in this - usually mispronounced as $/ \mathrm{d} /, / \mathrm{z} /$ or $/ \mathrm{v} /$ and also /th/
$\rightarrow$ even though some students knew the difference between $/ \theta /$ and $/ \delta /$ the majority of them mispronounced words consisting of these sounds repeatedly
- AI/eI/ as in mail - usually mispronounced as /aj/ or /aı/
$\rightarrow$ occurred, but surprisingly not very often
- AY/ei/ as in tray - usually mispronounced as /aj/ or /aı/
$\rightarrow$ occurred quite often
- EE /i:/ as in tree - usually mispronounced as /e/ or long E
- EA/i:/ as in eat - usually mispronounced as /ea/
$\rightarrow$ children tend to make the sounds long, or used diphthongs
- IE /aI/ as in pie - usually mispronounced as /ie/
$\rightarrow$ mispronounced as /ie/ and sometimes even as /i:/
- IGH /aI/ as in right - usually mispronounced as $/ \mathrm{Ik} /$ or $/ \mathrm{ikx} /$
$\rightarrow$ appeared repeatedly
- Y as I/ai/ as in fly - usually mispronounced as /i/
$\rightarrow$ also mispronounced by children as ii:/
- OA /əo/ as in toad - usually mispronounced as /oa/
$\rightarrow$ also mispronounced by children as /u:/
- OW /av/ as in now - usually mispronounced as /pf/ or even /pv/
- UE /u:/ as in blue - usually mispronounced as /ve/
$\rightarrow$ being mispronounced mainly in unknown words
- EW/ju:/ as in stew - usually mispronounced as /ef/
- EW /u:/ as in chew - usually mispronounced as /ef/ or even /ev/
$\rightarrow$ both letter sound combination mispronounced repeatedly
- $\mathbf{O O} / \mathbf{u}: /$ as in moon - usually mispronounced as $/ \mathrm{p} /$ or long O
- $\mathbf{O O} / \boldsymbol{v} /$ as in book - usually mispronounced as $/ \mathrm{p} /$ or long O
$\rightarrow$ some of the children, however, were able to consider both possibilities and choose from them
- AR/a:(r)/ as in car - usually mispronounced with hard $/ \mathrm{r} /$ as $/ \Delta \mathrm{r} /$ or /a:r/
- OR/0:(r)/ as in fork - usually mispronounced with hard /r/ as /pr/ or ノ:r/
- ER/a(r)/ as in tiger - usually mispronounced with hard /r/ as /er/ or /r/
- ER/3:(r)/ as in term - usually mispronounced with hard /r/ as /er/
- IR /3:(r)/ as in girl - usually mispronounced with hard /r/ as /Ir/
- UR/3:(r)/ as in fur - usually mispronounced with hard /r/ as /ur/
$\rightarrow$ hard /r/ sound occurred repeatedly in most children performances
- OY / $\mathbf{I} /$ as in boy - usually mispronounced as $/ \mathrm{pj} /$
- OI/si/ as in boil - usually mispronounced as $/ \mathrm{pj} /$
- AW /s:/ as in yawn - usually mispronounced as / $\Lambda \mathrm{v} /$ or even / $\Lambda \mathrm{f} /$
- AU / $\mathbf{2}$ :/ as in autumn - usually mispronounced as /ao/
- OW /aol as in town - usually mispronounced as /pv/ or even /pf/
$\rightarrow$ some students mispronounced OW as 1001
- OU /av/ as in mouse - usually mispronounce as/oo/
- WH/w/ as in whale - usually mispronounce as $/ \mathrm{vh} /$ or even $/ \mathrm{wh} /$
$\rightarrow$ mispronounced by some students as $/ v /$ only
- PH /f/ as in dolphin - usually mispronounced as /ph/
(See also Appendix XIII)

When we take into consideration the sounds students mispronounced, our prediction was correct most of the time. However, there were extra sound combinations students used (indicated in green). Some errors were repetitive, other depended on the individual attempts made by each student. The children's ability to think about English as about language system that is different from Czech and therefore their mother tongue language rules cannot be applied on English was interesting. Furthermore, some students were able to manipulate sounds in words very well knowing their correct pronunciation. Some children who were not sure about producing letter sounds (e.g. OO) correctly in words such as MOON and BOOK pronounced both words using short as well as the long sound and choosing the one they preferred. Even though they were not correct in some cases, we find this aspect of children's performance essential and crucial for further development, as it was a sign that students think about pronunciation and feel that there may be some rules that are different. This could answer one of our questions:
> Are EFL learners aware of pronunciation and spelling rules in English?

As we have shown EFL learners are aware of pronunciation and spelling rules in English. By manipulating sounds within words and through knowledge of the sounds (or letter-sound combination) that does not exist in Czech, they show their ability to distinguish between both languages. However, to enhance this knowledge, EFL students need to undergo some phonics instruction training to be able to clearly see the differences.

The fact that most of the children in SPS knew about phonics rules, some of them to the level that could be comparable with groups that undertake phonics training regularly was surprising. This could be a sign that pronunciation is a phenomena that is taken into consideration by some teachers who, apart other things, help children to crack the English code. The knowledge of "how" to do it is essential, because as has been shown, children see English as "more difficult than Czech", which is obvious as it is not their L1. However, other students claimed that some sounds are "obvious" and they were excellent readers. Other students used to manipulate sounds for quite a long time before they came up with an answer (and it was usually correct). They were also students trying different sounds for an individual letter. Some children were already fluent readers, some of them read slowly and in some cases they even had to sound out letters for themselves blending them together again forming correct words. This could answer our next question that was:

## > Does a Synthetic Phonics approach help EFL students in pronouncing words or not?

It can be concluded that yes, a Synthetic Phonics approach does help EFL students in pronouncing words. Disregarding how long it took, many students succeeded in pronouncing the words correctly. And if they were not, they at least showed clear evidence of knowledge of certain rules in English language by being able to manipulate sounds within words.

Our last question was as follows:

## $>$ Can Synthetic Phonics instruction affect pronunciation negatively?

A third yes, this time it is however, unfortunate. Activity II that was concerned with testing children's ability to read revealed that some children tended to apply phonics to words that are irregular. This issue was evident whilst analysing data from the exercise
that dealt with sight-word reading. Not all of the children, as many of them knew camera words by sight with no major difficulties, but some used letter-sound correspondences to read words. Here are some examples of students' pronunciation errors in high-frequency word reading the children made:

| WAS | /wæs/ | DO | /dv/ |
| :---: | :---: | :---: | :---: |
| ALL | /æ1/ | COME | /kəom/ |
| SOME | /səom/ | ONLY | /pnli/ |
| OLD | /vld/ | HAVE | /herf/ |
| LIVE | /laif/ | GIVE | /gaif/ |
| WHAT | /wæt/ | WERE | /wi:r/ |
| WANT | /wænt/ | PUT | /pst/ |

In conclusion, it is worth noting that the children's ages also need to be considered. This is because we tested children with an age range from six to ten years. This could therefore be one of the key factors influencing the children's reading results. Further information on students' additional English language courses or activities would be needed together with thorough information about students' family background (mixedmarriages, relatives abroad etc.) to conclude whether this is an influencing factor. Extra exposure to L2 can also influence children's results.

## 15 Conclusion

At the beginning of this diploma thesis the author expressed an interest in clear pronunciation and highlighted the importance of expert guidance in its teaching. By following English lessons from primary school through secondary schooling and the Lyceum course for teachers in Litomyšl, she described the contents of English lessons pointing out that there was no Phonics instruction included in her primary school English classes. During her university studies in Prague and in Derby, she began to question how pronunciation should be taught and the best way of presenting it to young learners. She visited Phonics lessons in England where the Synthetic Phonics method of teaching seems to be effective. She therefore wanted to find out more information about this method, how it works with young learners and whether there is any evidence that it was successful in also teaching EFL learners.

The theoretical part of the thesis therefore concentrated on the Synthetic Phonics method of teaching children to read. Synthetic Phonics research carried out on EFL students in various countries worldwide was investigated. As the Synthetic Phonics approach has not been the prevailing method of teaching throughout history, we returned back to the $15^{\text {th }}$ century and discovered how phonics teaching developed in a historical context. It was found that it was the Analytic Phonics method standing against the Synthetic approach most of the time. These two reading techniques were either used separately or educators tried to combine them to achieve the best literacy results. Thus Synthetic and Analytic Phonics in terms of their similarities and differences as well as advantages and disadvantages were examined. Synthetic Phonics seemed to be the winner. However, even reading specialists found some aspects that are not positively affecting a child's ability to read. Namely, these can be sheer pronouncing, not reading and comprehending written materials, or applying phonics rules to words that are irregular (sight words) and have to be learnt by sight.

Not only are Synthetic and Analytic Phonics available on the market today, there is a variety of methods that teach children to read. Some of them were discussed in addition to the two prevailing methods to see what aspects they have in common. Reading skill is a part of literacy and should be set within primary schooling. We therefore
highlighted the importance of schooling and access to education as it is also key to successful reading. Last but not least, data findings on how the brain processes reading and how it responds to being taught by different methods were presented. These findings indicate that even scientists favor the Synthetic Phonics approach, as it seems that the brain processes are much faster and more straightforward.

Wanting to conclude that Phonics works not only with native speakers but also with children learning English as a foreign language, research was carried out.

The research was quantitative in terms of finding out how many correct words are children able to read, but it also had a qualitative element, as the quality of pronunciation was also considered, whilst also concentrating on suprasegmental language features. Children were also asked about their opinion on how language learning appears to them and what languages they would like to study in the future.

There were sixty students (aged six to ten years) from either four different schools or the Phonics.cz educational program who took part. Most had at least some experience of phonics instruction. One control group having undertaken no phonics lessons at all was also included. The research however, showed that even those children were aware of certain rules the English language has and in some activities outperformed their counterparts. This could, however, be influenced by their family background or even their language teacher who, as was found from the children's answers, used phonics instruction in her lessons.

Findings from the research done with the PEP group were disappointing at first. The children, being the second youngest group, scored below average and were outperformed by most of their counterparts. However, when their results were further investigated it was found that their English word reading was almost equaled by nonword or sight-word recognition. This could be an indication that the children's language development grew at once, not relying on sight word reading, but using phonics practices. We could indeed say that these students used phonics rules, but they also applied them on high-frequency words, which was unfortunate.

The majority of children showed certain knowledge of phonics and the ability to use them whilst reading. Moreover students having no phonics knowledge were able to understand the rules of English when we provided them with some guidance. This
proved that the children were aware of some English rules and that they can benefit from them when they read. The third question also had a positive answer, but it had an unfortunate downside. It was found that children applied phonics rules not only to regular English pattern words, but also when they tried to read sight words as well. We can conclude that Synthetic Phonics can affect EFL learners’ reading abilities. However, whilst considering phonics favorability throughout history and the endless debates and reading wars even at present, we can only ask: Where will the winds of change take phonics next?

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17 Appendices

## Appendix I: The Five Pillars of Reading

The five pillars of reading are the essential reading elements that include phonemic awareness, phonics, fluency and vocabulary. When all parts are developed and taught successfully, they result in reading comprehension where students understand what are they reading about and can rationalise about written texts.

Source: The description and the picture by My teaching portfolio, 5 Essential Components of Reading, (Jones n.d.).

# The Five Essential Elements of Reading 



## I. Phonemic Awareness...

is the ability to hear, identify, and manipulate individual sounds (phonemes) in spoken words. It is important because it improves children's word reading (and reading comprehension) and it helps greatly assist in developing a child's ability to spell correctly.

## Appendix II: High Performance Learning Phonics Program

This program is designed for children and uses systematic, synthetic approach (colour-coding system) and expects pupils to be fluent readers by the end of key stage one, which is the end of Year 2. Even struggling adult readers can benefit from this method. Source: The description and the picture by High Performance Learning, Learn How to Read \& Spell Using Phonics, (High Performance Learning 2016).

| Colour | Function | Letters | = /Sounds / | Examplesused as Memo ry Aids |
| :---: | :---: | :---: | :---: | :---: |
| Colour Codes for Consonant Sounds |  |  |  |  |
| black | most common consonant sound | $\begin{aligned} & \mathrm{b}=/ \mathrm{b} /, \mathrm{c}=/ \mathrm{k} /, \mathrm{d}=/ \mathrm{d} /, \mathrm{f}=\mathrm{f} / \mathrm{g}=\mathrm{g} / \mathrm{g} / \mathrm{h}=/ \mathrm{h} / \mathrm{j}=/ \mathrm{j} / \\ & \mathrm{k}=/ \mathrm{k} / \mathrm{l}=/ 1 / \mathrm{m}=/ \mathrm{m} /, \mathrm{n}=/ \mathrm{n} / \mathrm{p}=/ \mathrm{p} /, \mathrm{r}=/ \mathrm{s} / \mathrm{s}=/ \mathrm{s} / \mathrm{t}=\mathrm{t} / \\ & \mathrm{v}=/ \mathrm{v} / \mathrm{w}=/ \mathrm{w} /, \mathrm{z}=/ \mathrm{z} / \mathrm{q}=/ \mathrm{k} / \mathrm{dj}=\mathrm{d} / \mathrm{j} / \mathrm{x}=/ \mathrm{sg} / \mathrm{z} / \end{aligned}$ |  | bat, cat, dog. fíh, goat, hi ppp; po ta mus, jet Fand: ga: roo, li'zard, man, nine, pig, rat, snake, ti. ger <br>  |
| purple | other consonant sounds |  |  | ```phone, cough me.di-cine ci.t.```  ```bees the bro thers for e.zam: \(D /\), chi.çgen, switch, pic•tuse pa.styy. risph, yak, mill ion, fail- usg. cal'cu la tor, o. ce3n, \(\Lambda\) dived : whole-grain bread ; quartz box of che: co. lates, twelve ; i.shn't``` |
| pink | other consonant sounds |  |  | ```king, skunk ahark, po\cdottyy: tigm, per\cdotcu'ssi9,m, man sign. chef, de-li-cig\mus cake, un con'scig\mus man, schwa Whate, queen, pen-quin 5%%.5.% van\cdotda\cdot11.s= three y:10 phone kicked``` |
| Colour Codes for Vowrel Sounds |  |  |  |  |
| black/ brown | short vowel sounds |  |  | ant, e. 1e. phand, in sects, 95; to pus, lyax um bre. 113 , book |
| red | $\begin{gathered} \text { long vowe1 } \\ \text { sounds } \end{gathered}$ |  |  | ape, e.mu, ice cream, my eye, o.va1 u-niccom, Es rope few spoon, blue ball, teu co. cyt, screws chair, ae ro plane, square, pa rents ear, deer, sphere, $79 . r 0$ <br>  |
| blue | the unstressed vowel sound | $\begin{aligned} & \hline \text { a, e, i, } 0, u, y, r, \quad \text { etc. } \quad=/ \sim / \quad \text { (also } / \theta /) \text { (most } \\ & \text { vowel combina tions can be pronounced } / \sim \text { ) } \end{aligned}$ |  |  pla; ty; pus, com.py.ter |
| brown | other vowe1 sounds |  |  | book, but1. W9: man <br> coin, boy <br> mouse, cow <br> car, fa thesr."s bath, gas lah, half <br> germs, bird, nurse, myr the, earth <br> horse, score, door, board, four <br>  walk, bald |
| purple | irregular patternsused in high frequency words |  |  | ```steak, rein deer, eight, they watch, what, qua dri la te fra! war drybs, wharf, quar ter word, whor 1 in'zy, rance, sure heart shoes ; group, you ; two : should, could, would``` |
| pink | irregular patterns used in high frequency words |  | $\begin{aligned} & =/ \mathrm{i} /-/ \mathrm{e} /(\text { (sound varies) } \\ & =/ \mathrm{ij} / \quad \text { ("age } \\ & =/ \mathrm{e} / \mathrm{words}) \\ & =/ \mathrm{air} / \\ & =/ \mathrm{w} / \end{aligned}$ |  |
| green | silent letters | a, b, c, d, e, f, g, h, , , j, , k, , m, n, o, p, q, r, s, , m, v, w, x, y, z |  |  |
| gold | irregular letters | a, b, c, d, e, f, g, h, j, j, k, , , m, n, o, p, q, r, s, t, u, v, w, x, y, z |  | $x, y, z \quad$ (may be irregular sitent) |

## Appendix III: Conceptualizing early literacy development

The figures below present early literacy development being conceptualised. Figure I shows a parallel-distributed processing (PDP) schematic of reading, Figure II presents a PDP view of semantic cognition of how the word CAT may be read (Adams 1990).

Source: Description and figures by Beginning to read: Thinking and learning about print, (Adams 1990).

## Figure I



## Appendix IVa: Phonics activity file

This section provides readers with a set of activities created by the researcher. The activities aim to target particular aspects of the English language that vary from Czech language system and can therefore be misleading. These are for example, EE and EA letter combination, proper $/ \mathrm{w} /$ pronunciation, or $/ \theta /$ and the $/ \delta /$ sounds. In the final part a combination of "Czenglish Phonics" activities is included.

Activity I: EE vs. EA letter combination (easier)
THREE SHEEP EAT FREE MEALS AND DRINK SWEET GREEN TEA.

Activity II: EE vs. EA letter combination (more difficult)
THREE MEAN GREASY SHEEP SLEEP IN A WHEELBARROW BETWEEN TWO JEEPS. THEY LEAP WITH JOY WHEN THEY EAT FREE WHEAT MEALS AND DRINK SWEET CHEAP GREEN TEA, BUT THEY DO NOT LIKE CHEESY MEAT MEALS WITH LEEK.
THEY FEAR THIRTEEN EAGER EAGLES ON A LEAFY TREE BY THE SEASHORE. EAGLES SEE THEM! NO FEAR, IT WAS A DREAM...

Activity III: clear pronunciation - /w/ sound, /v/ sound detection
A WEAK WIERD WIZARD THE WEIGHLIFTER WITH WHISKARS AND A WEENY WHEEZING WITCH THE WIRLWIND WHO WANTED WHITE WATCHES WERE WISHFULLY WEEPING ON A WET WEEPING WILLOW EVERY WEEK.


THREE

The teacher could say:
" $T, F, S$ and TH differ in their pronunciation. If you count to three and replace THREE with TREE, FREE or even SRI, you say something like: jedna, dva, strom or jedna, dva, zdarma or even jedna, dva, Srí (Lanka). And that is not what you want, is it?"

Activity V: / $\boldsymbol{\theta}$ / and the / $\mathbf{\delta} /$ sounds word snakes (graded activity)


NOTHINGANOTHEROTHER WEATHERWITHOCITBROTHERFATHERMOTHER...

MONTHWITH THEY THIRSTY NOTHING THROW OTHERANOTHERTHIRTYMOUTHTHEWITH.

FATHERTHERETHETHESEBROTHERUVITHOUTTHENWITHBOTHTHIRSTYTHEMMOUTHTHIN.

Sounds are first presented in the beginning, in the end and then in the middle of the words. The second to last word snake is a mixture of all three groups of TH words. The last line is a word mixture as well, but it also uses all the colours from the previous snakes along with the different colours for T and H in TH . This makes it more challenging to find the borders of each word. The Student's objective is to make lines between individual words and count them. They can then use them in their sentences or stories.

Note: / $\theta /$ and the $/ \delta /$ activities have already been presented as a part of my Action research presentation at the Seminar on the final methodology project, Seminář k závěrečné práci, (O01301227), module leader: Mgr. Klára Uličná (Kostková), Ph.D. Academic year (2014/2015)

Activity VI: "Czenglish Phonics" (activity can also be reversible)

| VEESH | $\rightarrow$ | VÍŠ |
| :--- | :--- | :--- |
| YUMCKU | $\rightarrow$ | JAMKA |
| DOOLECK | $\rightarrow$ | DŮLEK |
| SHPEENU | $\rightarrow$ | ŠIÍNA |
| VEELET | $\rightarrow$ | VÝLET |
| HORU | $\rightarrow$ | HORA |
| ZDRUVEE | $\rightarrow$ | ZDRAVÍ |
| HLEENU | $\rightarrow$ | HLÍNA |
| YEESH | $\rightarrow$ | JÍŚS |
| LISHCKU | $\rightarrow$ | LIŠKA |
| VLCK | $\rightarrow$ | VLK |
| SHEEPECK | $\rightarrow$ | ŚÍPEK |
| VUTU | $\rightarrow$ | VATA |
| LEEPU | $\rightarrow$ | LÍPA |
| SHILHUT | $\rightarrow$ | SLLHAT |
| PHEACK | $\rightarrow$ | FÍK |
| SHEELENEE | $\rightarrow$ | ŚÍLENÝ |
| CNOPHLEECK | $\rightarrow$ | KNOFLÍK |
| SEECORCKU | $\rightarrow$ | SÝKORKA |
| LUCK | $\rightarrow$ | LAK |
| SHICKOVNEE | $\rightarrow$ | SHIKOVNÝ |

## Appendix IVb: Phonics activities

Teaching and learning phonics can be fun! However, sometimes, even though teachers want to make learning interesting, they lack inspiration. Some new ideas and inspiration are included that may help teachers. The set of easy to make multisensory activities presented below are only blending/segmenting activities and word family activities. The main purpose is to show that one/two language problems can be presented in many different ways, because no one is the same. What works for one child does not necessarily work for another. Picture sources: (Pinterest n.d.; I Can teach My Child 2006).


- Stretch it out letters: A perfect activity to teach children how words can be segmented (taken into individual parts) and blended back together.

You need: a rubber band and a set of letters

- Blending/segmenting: This activity is good for teaching blending and segmenting. When you cut out the pictures and leave children with just the letters (or even mix more words together), the activity gets harder.

You need: a set of flashcards

- Consonant-vowel plates: Children can play with words, building them up using sets of consonants and vowels on the left and right side of the plate.

You need: a plastic plate and a set of letters


- Toss a word: Shake a jar and make new words in every shake!

You need: plastic jar and a set of cubes with letters


- Band aid words: Phonics is not painful when you make it enjoyable! This is a great activity to teach and practice OU and OW words. The words as CLOUD and COW - you will soon have two handfuls of OU/OW words.

You need: a plaster and a list of words


- Peg phonics: An activity to teach letters and sounds or word families too, it depends on you and your creativity.
You need: pegs and wood sticks

- Phonics friends: Four limbs allow you to have four-word Phonics friends. Your set of word families stretches out when you craft out an octopus!
You need: word beads, a pipe cleaner and heads
...Now get inspired with our picture gallery to think up your own activities!




## Appendix V: Models of reading

The latest research shows that the old neurological model of reading needs to be replaced by the new "bushy" one. The left occipito-temporal "letterbox" recognises the visual form of the letters. The information is then distributed to numerous regions of the brain that are spread over the left hemisphere where word meaning, sound patter and articulation are encoded. (Orange and green regions are not specific to reading. They are primarily connected to speaking.) Children learning to read need to develop efficient interconnections between the language and visual areas. It is believed that cortical connectivity is probably much more complicated and richer than in the second figure in the picture below. Source: The description and the picture by, The Science and Evolution of a Human Invention, Reading in The Brain, The Brain's Letterbox, (Dehaene 2009-a).

The old neurological model of reading (After Déjerine, 1892; Geschwind, 1965)


A modern vision of the cortical networks for reading


## Appendix VI: The Burt Word Reading Test (1974 revision)

The test consisted of 10 groups of words and presents 110 words in total. The words are presented in an increasing order of difficulty. It tests students up to 12 years. However, it is not suitable for children who are younger than 6.4 years. Being developed in 1974 it has been revised and is also used today. You can see the test and age with related scores below:

Source: The description, the copy of the test and the test results by The SCRE Centre, Research in Education, The Burt Reading Test (1974 Revised), (SCRE 2007).
to is up he at
for my sun one of
big some his or an
went boys that girl water
just day wet pot things
no told love now sad

| nurse | carry | quickly | village | scramble |
| :--- | :---: | :---: | :---: | :---: |
| journey | terror | return | twisted | shelves |


| Test score |  |  |  |  |  |  | 27 | 28 | 29 | 30 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reading age |  |  |  |  |  |  | 6.4 * | 6.5 | 6.6 | 6.7 |
| Test score | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| Reading age | 6.8 | 6.9 | 6.10 | 6.10 | 6.11 | 7.0 | 7.1 | 7.1 | 7.2 | 7.3 |
| Test score | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| Reading age | 7.5 | 7.6 | 7.7 | 7.8 | 7.9 | 7.10 | 7.11 | 8.0 | 8.2 | 8.3 |
| Test score | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| Reading age | 8.4 | 8.5 | 8.6 | 8.7 | 8.9 | 8.10 | 8.11 | 9.0 | 9.1 | 9.2 |
| Test score | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| Reading age | 9.3 | 9.4 | 9.6 | 9.7 | 9.8 | 9.9 | 9.10 | 9.11 | 10.0 | 10.2 |
| Test score | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| Reading age | 10.3 | 10.4 | 10.5 | 10.6 | 10.7 | 10.9 | 10.10 | 10.11 | 11.0 | 11.1 |
| Test score | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| Reading age | 11.2 | 11.3 | 11.4 | 11.6 | 11.7 | 11.8 | 11.9 | 11.10 | 11.11 | 12.0 |

## Appendix VII: Learning to read - across language perspective

It has to be concluded that European languages are not equal when it comes to terms of reading acquisition. The research carried out in European countries shows significant differences among the languages that were tested.

The map: Languages with transparent spelling systems (Finnish, German, Greek, Austrian and Italian) were read accurately. English students, however, with their opaque language were able to read only one out of three words. We can see the percentage of errors in the map.

The graph: We can see the evolution of error rates in the pseudo-word (non-word) reading. Note: before an English child reaches the reading level of a French child, it needs one or even two additional years of schooling. Again the rule seems to be, the more transparent the spelling system of the language is, the easier reading is acquired. See the graph below.

Source: The description and the picture by, The Science and Evolution of a Human Invention, Reading in The Brain, Learning to Read, (Dehaene 2009-b).



## Appendix VIII: Language background

This language background section provides some additional information about the languages EFL students speak as their native language. The facts are not necessarily connected to English language attainment, but they can be used to help to picture the language, its use and background in a context of other languages and in terms of European or worldwide use.

## Spanish

Spanish is a major language in Spain, Latin America and the USA and has over four hundred million native speakers. It belongs to the Roman branch of the IndoEuropean language family. Spanish was developed from Vulgar Latin and brought to America, the Philippines, and parts of Oceania during the Spanish colonisation in the $16^{\text {th }}$ century. It is now spoken as a first language in thirty countries world-wide and is the fourth most spoken language in the world after Chinese, Hindi and English. It is also the most studied foreign language in schools and universities across the United States (Thompson 2015-a).

## Spanish and its sound system

Spanish uses the Latin alphabet and its sound system is relatively uncomplicated. There are nineteen to twenty consonants, the sounds that can differentiate word meaning. It also has got five pure vowels and 5 diphthongs. This contrasts with the English language which has twelve pure vowel sounds and eight diphthongs. Vowel sound length in English plays an important role in contrast to Spanish. The length of the vowel is not significant and does not play an important role in distinguishing between words. Spanish learners may have great difficulty perceiving and producing the various vowels in English. They can fail when recognising differences in words such as ship/sheep, taught/tot, foolffull or cart/cat/cut (Coe in Swan 2001; Shoebottom 2016-a). Compared to English, Spanish is not stress-timed (stressed syllables take up more time than the unstressed ones). The Spanish language system is syllable-timed (it means that every syllable takes up roughly the same amount of time). This in fact can lead to many problems. When non-native speakers transfer their mother tongue intonation patters into

English, it can sometimes be barely comprehensible to native English speakers. This is because stress, pitch and rhythm in a sentence are usually flattened by the Spanish learner. Another language aspect that can interfere with English is a strong correspondence between spelling and the sound of a word. There is no one-to-one correspondence in English. This fact may cause predictable problems when L2 learners write or pronounce an unfamiliar word. Double letters should be highlighted as a specific concern. There are only three double-letter combinations $c c, l l$ and $r r$ in Spanish. In comparison English has five times as many. Spanish learners often reduce double letters in English to only one. Also they often double single letters where it is not needed e.g. hope $\rightarrow$ hopping (Shoebottom 2016-a).

The English writing system itself causes no particular difficulties to Spanish students. However, the phonological system of this language is significantly different from English. Vowel sounds and sentence stress may also be problematic. These differences can be serious obstacles to Spanish learners (Thompson 2015-a).

Coe in Swan (2001: 91) says 'European Spanish speakers, in particular, probably find English pronunciation harder than speakers of any other European language.' Now the question arises: Where can the particular problems be found, what language aspects can interfere and what aspects are particularly difficult to master for Spanish English language learners? There are many aspects that can negatively influence L2 learners in a way that they may not be able to acquire L2 structure together with a native-Englishspeaker accent. Some of the examples are listed below:

- mistakes with the English vowels A, E and I when spelling - especially beginners
- the consonants H, J, R and Y have significantly different names in Spanish
- failing in an accurate pronunciation of the end consonant (e.g. cart/card, think/thing or bridgelbrish)
- the $/ \mathrm{v} /$ sound pronunciations (e.g. vowel or revive)
- unable to sufficiently distinguish some words (e.g. jeep/sheep/cheap)
- prefixing words that begin with a consonant cluster (e.g. school $\rightarrow$ eschool or strip $\rightarrow$ estrip)
- other consonant clusters and the sound swallowing (e.g. next $\rightarrow$ nes or instead $\rightarrow$ istead)
- /p/, /t/ and $/ \mathrm{k} /$ sounds are not aspirated, (they are produced without a puff of air)
- /b/ sound has two possible realisations as a voiced bilabial stop or as a voiced bilabial approximant [ $\beta$ ]
- /d/ also has two possible ways of pronunciation as a voiced dental stop and as a voiced inter dental fricative [ $ð$ ]
- / $\theta /$ sound does not occur in Latin American Spanish, it uses /s/ instead
- /l/ and /ll/ sounds are not the same - /l/ sounds the same as in English, but /ll/ sound is more similar to Czech / $\mathrm{d}^{ } /$or English /d $\mathrm{d}^{\prime} /$
- two /r/ phonemes are not produced in the same way - /r/ is an alveolar tap that sounds almost the same as the Czech /r/ sound, and Spanish /rr/ sound is an alveolar trill
- letter A is pronounced as $/ \Lambda /$ not as $/ æ /$
- letter G can be pronounced as $/ \mathrm{g} /$ or $/ \mathrm{x} /$
- letter H is a silent letter and therefore has no sound in Spanish
- letter J is pronounced as $/ \mathrm{x} /$ not as $/ \mathrm{d} / \mathrm{d}$
- letter U is pronounced as $/ v /$ not usually as $/ \Lambda /$
- letter V sounds like /b/
- letter W is very unique in Spanish and usually occurs only in foreign words
- letter X is produced as Czech /x/
- letter Y can be produced in two possible ways as $/ \mathrm{j} /$ or as something similar to /d3/
- letter Z sounds more like /s/


## German

German is one of the world's major languages with an estimated ninety-five million people speaking it as their first language. It is one of the twenty-four languages of the European Union is the official language of Germany, Austria and Switzerland. It used to be the lingua franca of central, eastern and northern Europe. After Spanish and French, German is the third most-commonly taught language in U.S. schools and universities (Thompson 2015-b).

## German and its sound system

English and German both belong to the Germanic branch of the Indo-European language family. Being very closely related, they share many features. The alphabet containing twenty-six letters and is the same for both German and English. It has got sixteen vowel phonemes (most of them can be either long or short) and twenty-one consonants. Most German native speakers learn English quickly and easily. There is however some language aspects that commonly interfere with English. They are listed below along with some example words:

- experiencing problems when spelling out words (e.g. when the teacher produces "E" or "R", the beginners write "I" or "A"
- the $/ \theta /$ and the $/ \delta /$ sounds do not exist in German
- /w/ sound is pronounced as $/ \mathrm{v}$ ( (e.g. wine $\rightarrow$ vine)
- /v/ sound is usually produced as /f/ (e.g. van $\rightarrow$ fan)
- word stress usually falls on the first syllable of the root
(Shoebottom 2016-b; Thompson 2015-b)


## Kannada

Kannada is spoken in Karnataka, (India). It is used as a first language by thirtyeight million people and is one of the Dravidian languages which consist of twenty-four languages. Written forms of this language are relatively uniform, while spoken Kannada has many different dialects that vary depending on the region (Thompson 2015-c).

## Kannada and its sound system

The language sound system is similar to other Dravidian languages meaning for example, Telugu has a lot in common with Kannada. It is almost perfectly phonetic
having fifteen vowel sounds that are more or less the same as in English and the alphabet consists of forty-nine characters. Some language features however, can influence the way English is learnt and produced. Here are two examples:

- plain and aspirated stops are in contrast
- one written symbol corresponds with one syllable (as opposed to one phoneme in English)
(Thompson 2015-c)


## Telugu

There are almost fifty million inhabitants and more than nine languages spoken in Andhra Pradesh, (India). This language is spoken in the city of Hyderabad where the JP research took place. Telugu is the second largest language spoken in India, therefore it is considered to be one of the main languages. Seventy-four million people speak it as their first language. It is used by over forty-five million people in Andhra Pradesh alone. It is also part of Dravidian language family (Thompson 2015-d).

## Telugu and its sound system

In Telugu, syllables are basic units of writing and there is a one-to-one correspondence. The overall language pattern consists of sixty symbols. There are sixteen vowels, three vowel modifiers, and forty-one consonants. All words in this language end with a vowel. This has led it to be known as "Italian of the East". In Telugu the characters represent syllables and they are combinations of consonants and vowels. There are a few sounds that are similar to English letters and sounds, but there are also many exceptions, such as:

- K is pronounced without aspiration
- T, D or TH are pronounced as $/ \mathrm{t} /$ or $/ \mathrm{d} /$
- R sound is flipped, but not rolled
- W or V has a flexible pronunciation

These are only a few examples of different sounds Telugu language has. They may negatively influence foreign language pronunciation, especially when learning English.

## Hindi

Hindi, a language unifying multilingual India, is spoken by more than two hundred and fifty-eight million people. It is known as the "link" language with people all over the country speaking it. However, it is used mainly in the Northern and central India and is usually spoken by the educated elite (Thompson 2015-e).

## Hindi and its sound system

In terms of the alphabet, there are ten vowels and forty consonants. Unlike English, its script is highly phonetic. Meaning that this language is pronounced as it is written. New words and their pronunciation is, therefore, quite predictable from their written form. This fact may result in Hindi learners struggling with English spelling. They can also mispronounce words that they first come across in written form (Thompson 2015-e; Shoebottom P, 2016-e).

When we compare English and Hindi Phonology, there are certain aspects which lead to several problems of pronunciation.

Some features that require special attention are:

- difficulty with distinguishing phonemes in words (e.g. said/sad, par/paw or vet/wet)
- unable to pronounce dental fricatives (e.g. this, think or months)
- missing (unknown) sounds that do not occur in Hindi (e.g. //3/ as in pleasure)
- consonant clusters at the beginning or end of words leading to pronunciation with errors (e.g. straight $\rightarrow$ istraight or film $\rightarrow$ filam)
- considerable difficulties with the irregular word stress in English (e.g. photograph/photographer), in Hindi stress falls on the penultimate syllable of a word not affecting word meaning
- in English heavier articulation is typical to show emphasis, although in Hindi it is accomplished by higher pitch (the sing-song effect on English native speakers)

Hindi, with its lexicon from Sanskrit, has a lot in common with Urdu. Urdu is a language characterised by numerous vocabulary borrowings from Arabic and Persian (spoken also in Iran, for example). As we can see, language influences reach far beyond India borders (Thompson 2015-e; Shoebottom P, 2016-e).

## Russian

Being spoken all over the world, Russian is one of the world's ten most spoken languages. It belongs to the Indo-European language family (the East Slavic group of the Slavic branch), which means that it is closely related to Czech or Polish. It is spoken as a mother tongue by about one hundred and fifty million people. There have been several language changes over the history. One of the biggest was the spelling reform in 1918. This reform gave Russian (written language) its modern appearance (Thompson 2015-f).

## Russian and its sound system

There are lots of important language aspects that are very different between Russian and English. It may be quite difficult for Russians to acquire pronunciation and intonation that is native-speaker-like. Among the five vowel sounds that are in the Russian language, there is no differentiation between short and long vowels. In comparison English has twelve vowels (five long and seven short, plus eight diphthongs), this contrasts a lot and may cause serious troubles. Russian is also written using the Cyrillic alphabet rather than the Latin one. (Only some of the letters are similar to the ones used in English.) Russian English language learners may have initial problems writing in English but these obstacles should decline, since after the fall of the Iron Curtain, English has become more of a part of their lives.

Compared to Russian where word order is fluid, English word order is fairly fixed. Stress patterns in this language are similar to the ones in English and are variable. Russian has a similar number of consonants as English, but they do not fully overlap. To illustrate more variations of the language systems, we could also highlight changes in the composition of words, such as the addition or inflection of prefixes and suffixes. Last but not least, Russian pronunciation can be predicted from its spelling and vice versa. Compared to English, Russian is largely phonetic. Learning English can be a serious challenge for Russians and students may easily become frustrated, therefore Russian L2 learners should be given proper language guidance. The language aspects that should not be overlooked are presented below:

- difficulties in words beginning with/w/ (e.g. were, work or worth)
- failure to distinguish between the sounds in words (e.g. set/sit/sat or seat)
- problems with the $/ \theta /$ and the $/ \delta /$ sound that do not exist in Russian (e.g. thin or this)
- troublesome sounds $/ \mathrm{w} /$ and $/ \mathrm{v} /$ (e.g. vest $\rightarrow$ west $)$
- NG letter combination at the end of words (e.g. $\operatorname{sing} \rightarrow \sin$ or thinking $\rightarrow$ thinkin)
- an alveolar tap /r/ sounds is almost the same as the Czech /r/ sound, therefore it may cause difficulties to produce typical soft English /r/ sound
- Russian /x/ sound (not existing in English) can lead to mispronunciation of some words that start with CH (e.g. Jesus Christ, Christmas or Chris)
(Thompson 2015-f; Shoebottom 2016-f)


## Chinese (Mandarin)

Mandarin is spoken as a first language in a vast area of China, northern and southwest mainland. Mandarin Chinese with almost eight hundred and fifty million people, who speak it, is by far the world's largest language. Mandarin pronunciation varies depending on geographical as well as social lines. Standard Mandarin consists of twenty-two consonants and seven vowels. However, the number of vowel phonemes is not universally agreed upon (Thompson 2015-g).

## Chinese (Mandarin) and its sound system

There are many significant differences between English and Chinese, since they belong to two different language families. Thus Chinese language learners may come across some difficulties when they acquire English. Several aspects can make English difficult to learn for Chinese students such as:

## Alphabet

In Chinese written language, there is no alphabet used. The system is logographic. It means that the words are represented by logographic system symbols. (Individual words are not compound of letters as in alphabetic systems.) This fundamental difference may cause great difficulty especially when Chinese learners attempt to read and spell words correctly (Shoebottom 2016-g).

## Phonology

There are some English phonemes that do not exist in Mandarin, intonation or stress patterns also vary. Last but not least, Chinese is a tone language. This means that the
pitch of a phoneme sounds influences the word meaning compared to English when it is used to express emotion or to emphasise. Here is the list of possible difficulties Chinese students may face:

- English has more vowel sounds than Chinese (learners are unable to distinguish between e.g. ship/sheep or itleat and hear the differences)
- diphthongs are often shortened (e.g. now, deer)
- distinguishing between $\mathrm{L}, \mathrm{R}$ and N sounds (e.g. rake, rice $\rightarrow$ lake, lice)
- final consonants in English (consonant is either missing or there is an extra vowel added at the end of the word - e.g. hill can be pronounced without double $l$ or as rhyming with killer)
- individual word pronunciation and problems with intonation may result in a heavily accented English in Mandarin language learners
(Shoebottom 2016-g, Thompson 2015-g)


## Japanese

One hundred and twenty-two million people speak Japanese as their first language. This language belongs to the Japonic language family and is the official language of Japan. Pronunciation, grammar and vocabulary are different depending on the region. Standard versions of this language are spoken all over the country. However, people speak their local dialect in addition to Standard Japanese. Sentence structure in particular can be significantly difficult for Japanese English learners (Thompson 2015g).

## Japanese and its sound system

The Japanese alphabet uses three main scripts of which two are syllabic and one characters of Chinese origin. In addition, modern Japanese uses the Latin script. Traditionally, it was written in columns from top to bottom and its writing went from right to left. (Books started "at the back".) Nowadays, however Japanese is printed in the same order as English. Japanese Phonology has five pure (short or long) vowel sounds and there are approximately 15 consonant sounds. The syllable structure is simple, usually there is a vowel sound that is preceded by one of the consonants. We will now explore some of the possible difficulties Japanese English learners may encounter:

- complex consonant sound combinations that are not usual in Japanese, students tend to insert short vowels (e.g. strength $\rightarrow$ ste-rength)
- (having difficulty in correctly perceiving what they hear)
- failing to render the diphthongs (e.g. caught/coat or bought/boat)
- the different vowel sounds in minimal pairs (e.g. hat/hut)
- the inability to differentiate between the /l/ and /r/ sounds (e.g. lot/rot or glimmer/grimmer)
- unsurprising struggle with the dental fricatives, the $/ \theta /$ and the $/ \delta /$ sounds (e.g. thirteenth or this)
- the $/ \mathrm{v} /$ sound mispronounced as the $/ \mathrm{b} /$ sound (e.g. very/berry or van/ban)
- the intonation patterns (stress and pitch) works differently, but the learners who have had significant exposure to L2 and have become competent in it often acquire English much easier
- the Japanese /r/ sound (the most problematic of the consonants) sounds like something between the $/ \mathrm{l} /$ and the $/ \mathrm{d} /$ sound
- not all the consonants correspond with all the vowels (e.g. ra, re, ri, ro and $r u$ is possible, but there can only be $y a, y u$ and $y o$ )
(Shoebottom 2016-g, Thompson 2015-g)


## Appendix IX: Test Images

## Activity I



Activity II

| TAS | GOSS | GISS | MEC | NUCK | I | THE | HE | SHE | ME |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HUP | RES | JEEM | VOS | WEAT | WE | WAS | DO | ARE | ALL |
| DOX | YUSH | QUEAM | YING | CHOOT | YOU | YOUR | COME | SOME | HERE |
| SHOM | THUN | NAIM | HRAY | FEEP | THERE | THEY | GO | NO | MY |
| NEAP | RIE | PIGHT | CLY | LOAB | ONE | ONLY | OLD | LIKE | HAVE |
| BOWN | PLUE | FEWP | ZOONG | FLAR | LIVE | GIVE | LITTLE | DOWN | WHAT |
| JORK | HUMBER | DIRS | MURF | DOY | WHEN | WHY | WHERE | WHO | WHICH |
| DOIN | LAWM | SAUL | KLOUM | WHEAN | MANY | WERE | WANT | PUT | RIGHT |
| PHISH | NOICK | WHEESH | MAUCK | SPHUN | TWO | FOUR | GOES | DOES | THEIR |

Activity III


## Appendix X: Tricky Word List

Source: The copy by Jolly Learning, Handy Tricky Word List, (Jolly Learning 2015-c).

The Jolly Phonics Readers introduce the tricky words in groups, each level building on the words
learned in the previous level. Children should be taught the tricky words for each level betore they are asked to read the books.

```
Jolly Phonics Readers Red Level
```

$\square$ the
$\square$ me
$\square$ we
$\square$ to
$\square$ be
$\square$ of
$\square$ she
$\square$ was

Jolly Phonics Readers Yellow Level

| $\square$ are | $\square$ come | $\square$ there |
| :--- | :--- | :--- |
| $\square$ all | $\square$ some | $\square$ they |
| $\square$ you | $\square$ said |  |
| $\square$ your | $\square$ here |  |

Jolly Phonics Readers Green Level
$\square$ go
$\square$ no
$\square$ so
$\square$ my
$\square$ one
$\square$ by
$\square$ only
$\square$ old
$\square$ like
$\square$ have
$\square$ live
$\square$ give
$\square$ little
$\square$ down
$\square$ what
$\square$ when
$\square$ why
$\square$ where
$\square$ who
$\square$ which

Jolly Phonics Readers Blue Level
$\square$ any
$\square$ many
$\square$ more
$\square$ before
$\square$ other
$\square$ were
$\square$ because
$\square$ want
$\square$ saw
$\square$ put
$\square$ could
$\square$ should
$\square$ would
$\square$ right


## Appendix XI: Non-words - children's translations

At the end of the non-word reading activity we asked children whether they knew what any of the words meant. You can see some examples of the children's translation in the table below. Children were relying not only on sounds in the words, but on the written form of the language also.

| TAS <br> task, as, gas | GOSS <br> go, goose, God, <br> boss, cross | GISS <br> kiss, miss | MEC | NUCK <br> duck, nut, neck |
| :--- | :--- | :--- | :--- | :--- |
| HUP <br> jump, up, hop | RES <br> dress, red, | JEEM <br> jam, jeep, team | VOS <br> voice | WEAT <br> wheat, tweet |
| DOX <br> dogs, ducks, <br> box | YUSH <br> Zush, rush, <br> wash | QUEAM <br> quean | YING <br> king | CHOOT <br> shoot, foot |
| SHOM | THUN | NAIM <br> name | HRAY | FEEP |
| NEAP | RIE <br> pie | PIGHT <br> fight | CLY <br> fly, cry | LOAB |
| BOWN <br> brown | PLUE <br> blue, glue | FEWP | ZOONG | FLAR |
| JORK | HUMBER | DIRS | MURF | DOY <br> toy |
| DOIN <br> die, toy | LAWM | SAUL | KLOUM | WHEAN |
| PHISH <br> fish | NOICK | WHEESH <br> wheels | MAUCK | SPHUN |

## Appendix XIIa: The Pre-test

As a part of this research a pre-test that was done between June 2011 and February 2012 was carried out. It was conducted on the researcher's younger sister Julia, who was a first grade student at the time. During that time she received approximately 27 phonics sessions in total. We used the 44 Phoneme Chart. (See Appendix XIIb)

Presently she is in the first grade of the lower grammar school and enjoys learning English very much. She loves English games, her reading is fluent and she is able to distinguish between British and American English accents. In terms of suprasegmental language features her intonation is sometimes almost native-like and she recognises sentence stress and word stresses in words she does not know. Although she occasionally has extra English lessons with her older sister, she has not received any phonics sessions in particular since the pre-test times. You can find the results of the reading test she took part below. The reading test was the same as the one we gave to children participation in our research.

## ACTIVITY I - English words

Score: 58/60
Mispronounced words: YAWN and CLOUD

## ACTIVITY IIa - Non-words

Score: 42/45
Mispronounced words: GISS, MURF and MAUCK
ACTIVITY IIb - High-frequency words
Score: 44/45
Mispronounced word: PUT

## ACTIVITY III - The story

Mispronounced words: FARMYARD and GERMS
Translations: WEAT - wheat, QUEAM - cream, THUN - thumb, NAIM - name, HRAY - hurray, CLY - fly, cry, LOAB - Loap, BOWN - brown, PLUE - plum, blue, ZOONG - zoom, HUMBER - hunger, number, DIRS - dirty, DOY - joy, die, SAUL sail, KLOUM - clown, PHISH - fish, NOICK - oink, WHEESH - wish, SPHUN spoon

## Appendix XIIb：Charts

－Phonemic Chart

|  | monophthongs |  |  |  | diphthons |  |  | voicedunvoiced |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { i: } \\ & \text { shepep } \end{aligned}$ | $\underset{\text { ship }}{\text { I }}$ | $\underset{\text { good }}{v}$ | $\begin{aligned} & \text { ut } \\ & \text { shoot } \end{aligned}$ | Iə | el |  |  |
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Source：The chart by English Club，Phonemic Chart，（English Club，n．d．）．
－ 44 Phoneme Chart

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Source：The chart by Communication 4 All，Resources to Support Inclusion，Phonics，（Communication 4 All 2006）．

## Appendix XIII: Phonics is fun

Many researchers say that Phonics instruction is boring. Others however claim it can also be fun. However, this requires teachers to be able to make learning Phonics interesting. So do we have fun with or without Phonics? The author of this thesis believes we can have fun with Phonics. However, we are sad to say that we can have "fun" without Phonics too. Here are some examples that we came across when testing children that illustrate this.

Apart from the other things, FOG (in its spoken form) can turn into FROG (FOG $\rightarrow$ FROG), TOAD $\rightarrow$ TOOT, WHEEL $\rightarrow$ WHALE, LIGHT $\rightarrow$ LICK, WING $\rightarrow$ WIG, BEAK $\rightarrow$ BRAIN, SPOON $\rightarrow$ SOUP, BOIL $\rightarrow$ BALL, QUILL $\rightarrow$ QUILT, PAUL $\rightarrow$ POOL, TERM $\rightarrow$ TRAM or LIKE $\rightarrow$ LICK. Some children decided that there is only one possible way to pronounce some words. It means that we have for example words such as: JUG, YAK and YUCK that all sound the same as JACK. However, a "proper" YUCK sounds as JUG.

For others JUG sounds as JUNK (JUG $\rightarrow \mathrm{JUNK}$ ), GUM $\rightarrow$ GYM, THROW $\rightarrow$ TRUE, CHAIN $\rightarrow$ CHANT, FUR $\rightarrow$ FAR, SEAL $\rightarrow$ SAIL, WING $\rightarrow$ WIND, JEEP $\rightarrow$ CHEAP, SEED $\rightarrow$ SPEED, CLUE $\rightarrow$ QUEUE, HORNS $\rightarrow$ HEARTS, SCARF $\rightarrow$ STARVE, CHIN $\rightarrow$ CHICK, FROWNS $\rightarrow$ FRANCE, SKY $\rightarrow$ SICK, PHOTO $\rightarrow$ POTTER, or DOES $\rightarrow$ DAISY. And WHEAT could either be WET or WAIT.

Do you also know that BRIDE, BRIGHT, BIT, BITTER or BIRD are all transcribed exactly the same as BIRTH? THIS and TIE also happen to sound the same, sounding the same as TEEN. Obviously the English language has many examples of homophones - the words that sound the same. Unfortunately, they are not homophones in these cases... There were two possibilities for the word CORK. It either ended up as CROAK, or children who favoured Czech more than English pronounced it as a Czech word KROK (a step). The word STORM was also "translated" into Czech as STROM (a tree). Some children obviously liked legumes, because SOY PIE was read as SOY PEA or even SEA PEA. A BAD DREAM happened to be A BAD DRUM or something between A BEAD/BEAT DREAM. For other children there seemed to be no difference between CHICKEN POX, CHICKEN BOX and CHICKEN POT. And SNAIL MAIL magically turned into SNAIL MALL, SNAIL MILL, or even SANDAL MAIL.

And if anybody calls out: "RUN, QUACK!" or "RUN, QUIT!" both has one possible way to write this and it is: "RUN, QUICK!"

What was the title of the story children were reading about, by the way? We can choose from either, THE BLUE MOUSE ZOO, THE BULL MOON ZOO, THE BULL NOON ZOO or even THE BULLY MOON ZOO. Yes, you guessed it right, children were reading about THE BLUE MOON ZOO!

The researcher had also no intentions of using words ranging from the ones with double meanings, through informal, to slang or even taboo vocabulary. However, some children could find such words in the test. They twisted CHURCH into CRUTCH, the non-word JORK was read such as JERK, ITS was pronounced as TIT(S), and SHED was the same as SHIT.

So, in fact, it is not really having fun with or without Phonics, but it is something that we should be concerned about. It actually indicates that children were not able to pronounce words properly. This can lead to a misunderstanding of written texts and further more causes misunderstanding in communication among people. Even though this short essay is written in an easy and amusing way, it stresses the importance of children learning to read properly and provides readers with some real examples of mispronounced words.

We are not implying we could avoid all the mistakes that the children made by only teaching Phonics, but we should certainly be able to avoid at least some of them if children were learning to read systematically under explicit Phonics instruction.

