

Trabajo Fin de Grado

The teaching of reading and writing, with an
emphasis on Synthetic Phonics

Autor/es

Guayén Reig Cadenas

Director/es

María Fanlo Piniés

Facultad de Ciencias Humanas y de la Educación. Campus de Huesca.

2015-2016

Table of contents

| | |
|--|----|
| 1. Introduction | 3 |
| 2. The alphabetic method | 5 |
| 3. Phonics approach..... | 7 |
| 4. Whole word method | 9 |
| 5. Reading and politics | 11 |
| 5.1 Public Debate: <i>Phonics Approach vs. Whole Word Method</i> | 11 |
| 5.2 The Bullock Report: <i>A Language for Life</i> | 14 |
| 5.3 The National Literacy Strategy | 18 |
| 5.4 The National Reading Panel: <i>Teaching Children to Read</i> | 20 |
| 5.5 The Johnston and Watson Clackmannanshire Research..... | 21 |
| Analytic Phonics versus Synthetic Phonics | 22 |
| 5.6 The Independent Review of the Teaching of Early Reading..... | 23 |
| 6. Synthetic phonics..... | 25 |
| 6.1 Teaching synthetic phonics..... | 27 |
| 6.2 Phonemic awareness | 30 |
| 6.3 Grapheme-phoneme correspondence..... | 31 |
| 6.4 Blending and segmenting skills | 33 |
| 6.5 Tricky words | 35 |
| 7. A synthetic phonics lesson in a British Primary School..... | 36 |
| 7.1 Improving synthetic phonics lessons | 40 |
| 8. Conclusion..... | 42 |
| 9. References | 43 |
| Appendix I | 47 |
| Appendix II..... | 48 |
| Appendix III | 52 |
| Appendix IV | 53 |

The teaching of reading and writing, with an emphasis on Synthetic Phonics

- Elaborado por Guayén Reig Cadenas.
- Dirigido por María Fanlo Piniés.
- Presentado para su defensa en la convocatoria de Septiembre del año 2015.

Abstract

Synthetic phonics is the method used in British schools to teach reading and writing. Throughout the centuries different methodologies have appeared with the purpose of finding the best way for teaching to read and write in English. This research provides a general view of the different approaches and it is focused on Synthetic phonics, its theoretical framework and practical application.

Synthetic phonics es el método utilizado en los colegios británicos para enseñar a leer y escribir. A lo largo de los siglos, han aparecido muchas metodologías con el único propósito de encontrar la mejor forma de enseñar a leer y escribir en inglés. Esta investigación ofrece una visión general de los diferentes enfoques y se centra en synthetic phonics, su marco teórico y aplicación práctica.

Keywords

Synthetic phonics; literacy skills; teaching reading; writing

1. INTRODUCTION

Learning to read is one of the most important acts of learning for a child. No wonder, then, the teaching of reading has been a focus of debate through the years. One of the main goals of education in the United Kingdom is to teach how to read fluently and encourage students to read for pleasure. Reading enables pupils both to acquire knowledge and to build on what they already know.

Reading is a complex activity, we read in order to understand written language in the same way as we listen to understand spoken language. Thus, educators have always wondered what is the best way to learn to read. Nowadays, synthetic phonics approach is believed to be the best method to teach students to read and write in English.

Synthetic phonics is a method for teaching reading and writing in English where students are taught the sounds of the language, these are called phonemes, and their correspondences with the written form of the language, these are called graphemes. This method was implemented in British schools in 2006 and there are several programmes which follow the premises of its teaching. It works with students in early stages and allows them to start reading since the beginning of the instruction. It is a very effective method in English speaking countries and that is why many European countries are introducing this method in their bilingual schools.

The present paper is a study of the history of teaching to read and write in English and an analysis of the different methods and approaches that appeared throughout the years until today. New approaches to reading and writing appeared from the need to improve children's education, there were three different approaches to the teaching of reading: the alphabetic method, the phonic method and the whole word method. The first one refers to the oldest tradition, it was popular until the 1820s, and the following ones were used from the 19th century onwards.

Phonics type of instruction teaches reading and writing skills separately. On the other hand, the whole word method considers both reading and writing skills as a whole and teaches students to recognise words by their visual appearance, so that children learn words just by looking at them.

There was a back and forth between both methods mostly endorsed by authors' publications and public's opinion judging the educational system. It was not until the late 1990s when phonics approach was established in English schools. Authors' research divided phonics approach into two types of phonics: analytic and synthetic phonics. The first one, analytic phonics introduces words as a whole and children have to find letter-sound relationships and to recognise patterns to be able to read new words. Synthetic phonics introduces the letter sounds first and teaches children to blend them together to form words.

Since 2006, the Department for Education in England imposes the teaching of synthetic phonics on its National Curriculum for early years and primary schools. Even though every synthetic phonics programme shares common features, the government of the United Kingdom presents some of them on its website and National Schools are free to choose which one they would like to implement on their curriculum. Those common features have been described on this paper through the observation of a synthetic phonics lessons in a Year One class from a British Primary School.

The structure of this paper starts by introducing the prior methods that appeared throughout the years until Synthetic phonics was implemented in British schools. It starts with the alphabetic method, used until the 19th century by ABC schools to teach the foundations of spelling and reading. Then, it follows with the phonics approach. Around 1850s, the phonics approach appeared for the first time but in the mid-20th century a new method gained popularity and became extensively used in Primary School, the whole word method. After introducing both methods, this paper presents the reports and politics that made the British educational system change from one method to the other. To finish, synthetic phonics and its elements are described in detail as well as a synthetic phonics lesson in a British Primary School.

2. THE ALPHABETIC METHOD

From the Middle Ages to the sixteenth century, Latin grammar was the main subject of formal schooling and the alphabet was taught as an introduction to the Latin language. However, with the growing use of the English vernacular, new schools where children were taught the elements of spelling and reading appeared, these were called the ABC schools because they used the alphabetic method, also known as the ABC method. These were typically one-room classrooms where students were called abecedarians or ABCdarians (Barry, 2008).

The alphabetic method, used until about the 1820s, is a method of reading instruction in which children first learn the name of the letters in alphabetical order and then letter combinations or syllables from the syllabary¹ or syllabarium, which is a table or listing of syllables. The focus of the method is to teach children to recognize and name the letters of the alphabet, both capital and lower case, in alphabetical order; this is achieved through spelling out and saying the words. The instruction was typically made through the *Hornbook*, which Bailey (2003) described as:

Single-sided tablets distinctively covered in a thin sheet of animal horn, giving them their name *hornbook*, were the later versions of the wooden alphabet tablets in use in England and the Continent from the thirteenth century. Hornbooks were usually made of a printed sheet attached to a wooden board with a small handle at its base suitable for being held by a young student or in the hand of an elder teacher. (2003, p. 5)

The Hornbooks displayed the alphabet, the syllabary, the invocation, and the Lord's Prayer. The letters of the alphabet were taught with an oral, spelling approach. Children learned spelling and pronunciation, and their use in words, with an increasing number of syllables in words. When using the hornbooks, they spelled aloud the syllables and then recited each word of the printed prayer. Children taught by this principle learned the letter names, to discriminate and recognize their shapes, and the sounds commonly represented by letters in words.

¹ The syllables were taught by naming the letters: ay, bee, ab-ee, etc.

| | |
|----------------|----------------|
| a e i o u | a e i o u |
| ab eb ib ob ub | ba be bi bo bu |
| ac ec ic oc uc | ca ce ci co cu |
| ad ed id od ud | da de di do du |

The ABC method had a double purpose, to teach the alphabet and the Christian religion through the prayers in the Hornbooks, thus children would be able to join the services of the Church. They were the first books a child was given and they contained everything they considered a child needed to know at that time (Watson, 1908).

Around the time of the American Revolution (1760), the Hornbooks were no longer considered appropriate to use as reading materials. Noah Webster (1758-1843)² published *American Spelling Book* in 1783, also known as *Speller*, designed to teach reading, spelling, religion and morality, in a similar fashion as the Hornbooks. Webster's book is divided into three parts; the first part of the *Speller* (1783) uses the alphabet method with an extensive syllabary. Then, the second part is called "Lessons" and it shows lists of words with increasing numbers of syllables where the longer ones have eight syllables, and it also contained a selection of sentences and moral messages. The third part of Webster's *Speller* is designed for children that can already read and it includes speeches and political texts, not likely to appeal young readers. Webster's book was very popular and it did reinforce the instructional methods that it contained (Barry, 2008).

This method was popular in America until 1880s, and it was thought to be the best to teach children to read, but the inconsistent spelling of English words caused confusion and lead to students to failure. In the early 1800s, a group of educators began to promote that letters made sounds and readers should be taught those sounds not just their names. They advocated for a way to teach reading by using one-to-one correspondences between sounds and letters, as "This would avoid the confusion created by multiple spellings for one sound, such as the many possible spellings for the long /a/ sound [as in apron, snake, pray or aid]" (Barry, 2008, p.38).

The alphabetic method began to be replaced around 1850 when a phonics approach gained popularity in both England and America. In England, during the 1840s, the Battersea Training College, a teachers' training school, introduced a phonics approach in their training programme. The new phonics approach became very popular and it was used in England between the late 19th and the early 20th centuries.

² Noah Webster (1758-1843) was an American lexicographer and author, better known for his *American Spelling Book* (1783) and his *American Dictionary of the English Language*, 2 vol. (1828; 2nd ed., 1840). He made useful contributions to the teaching of English language.

3. PHONICS APPROACH

In England, the phonics approach became popular in the 19th century; it is “a method of instruction that teaches students correspondences between graphemes in written language and phonemes in spoken language and how to use these correspondences to read and spell words” (Ehri, 2003, p. 3). This means that it teaches the sounds of the language instead of the letter names and how to use them. Behind this approach was “the conviction that the vast majority of words could be decoded if children were taught the sounds represented by letters and how to sound and blend those sounds in order to identify words” (Mongaghan & Barry, 1999, p. 20).

The pioneers of the phonics movement were Isaac Pitman³, A. J. Ellis, and Nellie Dale⁴, and they worked together to develop the *Dale's programme* (1898). The method “was highly systematic and, in essence, involved a range of pre-reading perceptual activities, introduction of letters and the fusion of separate sounds into words” (Lewis & Ellis, 2006, p. 107). *Dale's programme* was based on Walter Ripman's (1869-1947) work, a renowned phonetician who described phonology in terms of pronunciation of the sounds by the placement of the tongue, teeth and lips. Dale's was the first successful linguistic-phonics programme, it focused the attention on the parts of the mouth, tongue, and vocal cords that produce each phoneme to make it easier to hear and identify them, and consequently the learning was faster (McGuinness, 2006).

As a systematic phonics instruction, the letter-sound correspondences are taught following a scope and sequence that enables children to read words and form their own. First, children learn the letters and their sounds using pictures; next, to sound out and blend words as soon as they know a few letter-sounds; and then, to read sentences and stories containing words with the letter sounds they have learnt.

Therefore, phonics teaches children the sounds of spoken language and the letter or group of letters that represent them. For example, the sound /k/ can be represented by the spellings “c, k, ck, or ch”. Children need to develop two skills, introduced as reversible, to be proficient at phonics, which are blending and segmenting. Blending is

³ Sir Isaac Pitman (1813-1897) was an English educator and inventor of the *Stenographic Soundhand* (1837), a system for rapid writing that uses symbols or abbreviations for letters, words, or phrases.

⁴ Ellen “Nellie” Dale (1865-1967) was an English school teacher and author. Dale published several books on teaching reading such as *On the Teaching of English Reading* (1898), *The Walter Crane Readers* (1899) and the series *The Dale Readers*.

used for reading and it is the ability of synthesizing individual phonemes into a word, and segmenting is the skill of sounding out the individual phonemes of a word.

For example, when children are taught the phonemes /s/, /i/, /t/, they learn to recognise them and hear them inside words. Segmenting, also known as decoding, means that when a child sees a written word, they recognise the grapheme correspondences and they are able to pronounce the individual sounds. Once they are able to pronounce these sounds individually, they practise blending or synthetizing, saying them together so when a child sees the written word “sit”, they are able to read it: /s/i/t/.

They use segmenting skills for reading words sounding out the phonemes that compound them and blending them together into a word. For writing, they have to sound out the individual phonemes and write their grapheme representations. Using the same word as example, they sound out carefully each phoneme of the word /s/-/i/-/t/, and then, they are able to write down the grapheme representations of those phonemes: sit.

Children are taught to hear the individual phonemes inside words in spoken language what is called phonological awareness. Thus, phonological awareness is “the ability to perceive, recall and manipulate sounds” (Jolliffe & Waugh, 2012, p. 2) and it is the foundation of phonics and an essential skill children need to acquire to be able to associate the sounds with the letters. Chall⁵ (1967) referred to phonics teaching as a method, whose emphasis is set on the code. A code-emphasis approach refers to a view of reading where reading comprehension comes from decoding the sounds and blending them together.

Despite the efforts of the 19th century authors to promote phonics instruction, this method was highly criticized by the secretary of the Massachusetts Board of Education Horace Mann. Mann (1796-1859) was convinced about the superiority of the phonics method over the alphabetic method but he claimed that “children should be taught to recognize whole words before being taught the letters of which they are composed” (Robinson, 1977, p. 5). He believed that they were in need of a new approach to reading

⁵ Jeanne Chall (1921-1999) was a Harvard Graduate School of Education psychologist, writer, and reading researcher. Her book *Learning to Read: the Great Debate* (1967) emphasized the use of direct, systematic instruction to teach reading.

instruction better than the phonics approach being used at the time. This led to the development of a new method to teach reading, named “whole word method”, which became popular in the mid-20th century (Wicker, 2007).

4. WHOLE WORD METHOD

In the 1920s and 1930s, the whole word method, also known as the look-and-say method appeared. It was introduced into American schools by psychologists and educators such as John Dewey⁶, Edward Huey, Arthur Gates (1890-1972), and William Gray⁷ (Albert, 1993). This method teaches children to recognise whole words by sight; instead of recognising the individual phonemes of words, they have to look at them as if they were a picture rather than a word (Turner & Burkard, 1996). This method was popularised through the Gray and Foresman’s books *Dick and Jane*, which follow the whole word method principles: use of repetitive and simple words children would recognise by sight and predictable story lines (Wicker, 2007).

In the whole word method, or look-and-say, the whole sound of the word is associated with the word’s visual appearance. Children learn words just by looking at them, but this type of instruction does not give the necessary skills to pronounce unknown words by themselves. This method aims to slowly introduce new words to a child through repetition and exercises to gradually build his vocabulary. This is done through flashcards and memorization of word families such as “mat, cat, hat, and bat”, which can be used extensively to ease the task of memorization by finding patterns.

This approach was based on the finding that skilled readers were able to recognize words as a whole without conscious phonetic decoding. This approach to reading is often referred as whole language approach; the term “whole language approach” became popular in 1990s and follows the same principle: “learning to speak and learning to read are entirely comparable instances of language development” (Lieberman

⁶ John Dewey (1859-1952) was an American psychologist, philosopher, educator, social critic, and political activist. He was the founder of the philosophical movement pragmatism, a pioneer in functional psychology, and a leader of the progressive movement in education in the United States.

⁷ Dr. William S. Gray (1885-1960) was an American professor of Education at the University of Chicago and the author of many *Dick and Jane* books. He was one of the leading reading acquisition theorists of his time.

& Liberman, 1991) which means that learning to read should be as effortless as learning to speak and the emphasis should not be on the code but on the meaning.

This approach constantly faced a lack of consensus on its definition until Bergeron (1990) provided one:

Whole language is a concept that embodies both a philosophy of language development as well as the instructional approaches embedded within, and supportive of, that philosophy. This concept includes the use of real literature and writing in the context of meaningful, functional, and cooperative experiences in order to develop a student's motivation and interest in the process of learning. (1990, p.319)

The whole language approach is based on the premise that every word has a meaning and we need to know it in order to be able to read. Both reading and writing are taught as a whole and any skill is taught separately or using different activities. According to Goodman⁸ (1986), phonics approach misses how readers construct meaning from language and emphasizes the need for making the tasks meaningful for children, as they will only be good at reading when they can find a purpose to it (Liberman & Liberman, 1991).

In the 1980s, the whole language approach was based on the principle that children learn to read given proper motivation, access to good literature, many reading opportunities, focus on meaning, and instruction to help students use meaning clues to determine the pronunciation of unknown words. When teaching whole language, teachers are expected to provide rich environments using culturally diverse literature with high quality vocabulary. They do not teach spelling, vocabulary, and grammar as isolated features of the language but as contextualized functions of the language (Brooks & Brooks, 2005).

⁸ Kenneth S. Goodman (1927-) is a Professor Emeritus at the University of Arizona. He is known for developing the basis theory behind the whole language approach movement to teaching to read.

5. READING AND POLITICS

From the 1950s, several authors have published their opinions on the different methods for teaching literacy in English. As a consequence, opposing opinions generated a debate for what it is considered to be the best method to teach reading and writing. This led to an enormous amount of research and different reports were commissioned by the United Kingdom government to determine the most effective method. This section describes and analyses those reports and their consequences on the British educational system.

5.1 Public Debate: *Phonics Approach vs. Whole Word Method*

In 1950s, Rudolph Flesch (1911-1986), an American author and editor at the Saturday Evening Post, attacked the whole word method in favour of the phonics approach. His book *Why Johnny Can't Read: And What Can You Do About It* (1955) was written in form of a letter from a mother of a child who found reading difficult. Flesch's questioned the look-and-say method accusing reading experts of treating English as if it were Chinese, he even called the method the "Chinese approach", pointing out that they tried to teach a phonetic language as if it were a picture language, like Chinese. Picture languages, or non-phonetic languages, are those in which the alphabet represents a series of pictographic symbols that correspond to specific meanings of words and these symbols do not tell anything about its pronunciation. On the contrary, in a phonetic language there is a direct relationship between the sounds and spellings. When you look at the written form of a word in a phonetic language, you know how to pronounce it and when you hear a word, you know how to spell it. Flesch (1955) defended in his book that English, as the phonetic language that it is, has to be taught with phonetic methods instead of word recognition methods.

Flesch publication caused a great debate; his message was directed to parents, teachers, and the general public. Community concern was intensified in the context of the cold war causing America to look critically at their educational system. However, Flesch's book had limited effect on the education organisation, which refused to change its current whole word method towards a phonics approach. But despite their decisions, the credibility of the whole language approach suffered a progressive deterioration until the end of the 20th century. The situation in the United States strengthened the public

interest in England regarding the development of a strong educational system in the post-War period (Monaghan, 1997).

In 1967, Jeanne Chall, a professor at Harvard Graduate School of Education, published a book entitled *Learning to Read: The Great Debate*, in which she reports the results of her own research on early reading instruction and suggests that a change to a code-emphasis approach would produce superior results. “Jeanne identified and studied the crucial issues in education, her work included examinations of schooling and instruction, of the relationship of poverty and disability to reading difficulties and school achievement, and of the interdisciplinary nature of learning to read” (Harvard Gazette Archives, 1999).

Chall’s research consisted on interviewing teachers, inspecting basal texts and reviewing earlier research on early reading education at schools. The focus of her investigation was an assessment of the effectiveness of three different instructional approaches: the look-and-say method, the systematic synthetic phonics programme, and the intrinsic phonics programme. These three approaches can be placed on a continuum from an instruction emphasizing code (systematic synthetic phonics) to emphasizing meaning (look-and-say) with an in-between approach (intrinsic phonics). The intrinsic phonics programme teaches children how to learn the sounds of letters by analysing sight words (words that children need to memorise as a whole and recognise automatically), stressing sight-word reading and promoting the use of context and pictures on texts to identify words and their meaning (Kim, 2008).

Chall found that an early code emphasis produced better word recognition outcomes in the early grades and helped children read with better comprehension up to fourth grade, relative to the dominant look-say method of reading instruction, in which little phonics was taught and emphasis was placed on reading whole words and sentences. A code-emphasis also produced larger benefits for less-skilled readers and children from low-income families. (Kim, 2008, p. 92)

Due to Chall’s good reputation on the professional reading community, her findings did have consequences and other members of the reading profession were interested in the changes she proposed. The phonics approach was considered once again as the best way of teaching reading, and new programmes and books appeared in the following

years. However, the psycholinguistics Kenneth S. Goodman and Frank Smith⁹ soon challenged Chall's findings.

In 1967, Goodman claimed that reading involved perception and identification of letters, words, spelling patterns and language units. In his article *Reading: A Psycholinguistic Guessing Game* (1967) he identifies good readers as those who can select "the fewest, most productive cues necessary to produce guesses which are right the first time" (p. 127). Good readers have to be able to identify the context and background information to predict, confirm and guess an unfamiliar word rather than making a precise identification of letter-sound relationships. Two years later, in 1969, Goodman wrote the article *Reading Research Quarterly* where he made a critic on Chall's attempts to promote code-emphasis approach. For reading, Goodman considers syntax (the grammatical structure of language) and semantics (the interpretation of the meaning) as important as recognising letter-sound correspondences (Kim, 2008). Goodman's ideas were echoed in Smith's writings, in his research *Understanding Reading* (1971) he stated that reading was as natural as speaking therefore good readers can use their knowledge of oral language and meaning contexts to recognize words in sentences. Smith also said that the phonics method was not helping readers because its rules were too complex and with too many exceptions.

The debate about whether children should be taught to read through a phonics approach or whole word methods went on for several years and it is still the core of the discussion when talking about teaching literacy to young children. In one form or the other, the debate has always been about the emphasis during formal reading instruction in early stages of education, either focusing the teacher on the code (phonics approach) or on the meaning (whole word methods). On one hand, promoters of meaning-emphasis approach believed that learning to read and write should be as natural as learning to speak. On the other hand, code-emphasis advocates considered that spoken language is natural and effortless only because it is managed by a biological specialization. Children learn to speak without being aware of how words are formed and they need to be taught this awareness to understand the units of language and be able to read and write.

⁹ Frank Smith is a British psycholinguist, researcher of educational systems and the nature of learning. Smith and Goodman are considered the creators of the theory behind the whole language approach to teach reading.

Even though the public debate was shifting from code-emphasis to meaning-emphasis, both methodologies and materials were predominately code-based because of the powerful influence of Jeanne Chall's research and the damaged reputation of meaning-based approaches to the public eye. Code-emphasis programmes for teaching to read select words made up of letters and letter combinations representing the same sound in different words. The consistency between letters and sound values allows children to read many different words by joining the sounds together. In contrast, meaning-emphasis programmes, select frequently used words regardless of their letter-sound irregularity. The belief of this type of instruction is that frequently appearing words are familiar and easier to learn for students (Carnine, Silbert, Kame'enui, Tarver, 2004).

Chall's research inspired other authors to propose different varieties of these methods or approaches. All this was taking place during the post-War period in England and, as it has been already mentioned, a better educational system was trying to be developed. In order to do that, Margaret Thatcher (1925-2013), at that time the Secretary of the State for Education and Science, appointed in 1972 one of the main reports concerning education in England, the Bullock Report.

5.2 The Bullock Report: *A Language for Life*

The Committee of Inquiry, set up by the government of the United Kingdom, published in 1975 the report *A Language for Life*, better known as the Bullock Report. It was the product of two years of work and it contains more than 600 pages of narrative, tables and recommendations. Despite its size, teachers in England had to, at least, be aware of the report and be familiar with some of its recommendations.

[The Committee was asked] to consider in relation to schools:

- (a) all aspects of teaching the use of English including reading, writing, and speech;
- (b) how present practice might be improved and the role that initial and in-service training might play;
- (c) to what extent arrangements for monitoring the general level of attainment in these skills can be introduced or improved; and to make recommendations.

(Bullock, 1975, p. xxxi)

The Bullock Report followed the principle that “reading must be seen as part of a child’s general language development and not as a discrete skill which can be considered in isolation from it” (Bullock, 1975, p. xxxi). The Committee summarized the most popular attitudes towards the teaching of English; it recommended “Language across the curriculum” enhancing the importance of the role of language in other areas of the curriculum and so that every teacher would come to understand the “linguistic processes by which their pupils acquire information and understanding, and the implications for the teacher’s own use of language (...), reading demands of their own subjects, and ways pupils can be helped to meet them” (Bullock, 1975, p. 529). It also called for a major investment in training and development, as both linguistic skills and linguistic awareness needed improvement. The Report encourages language experiences in which reading, writing, talking and listening are taught as a unit. This balanced approach inspired a new literacy theory and the following years teaching practice shifted into whole language techniques again (Brunetti, 1977).

Holdaway (1930-2004), in his book *The foundations of literacy* (1979), makes a personal synthesis of his experiences as a teacher, clinician, programme developer, and researcher in language learning and examines the teaching of literacy at schools. He discusses the ‘Great Debate’, and expresses his disagreement with code-emphasis methods that Chall defends in her work. He agrees with the Bullock Report and points out “the language experience approach as the first real attempt to satisfy children’s natural aspirations to use the symbols of print to encode personal meanings” (Holdaway, 1979, p. 108). To Holdaway, it is essential to understand the meaning and to have experiences with reading programmes that consider reading as a whole to be able to understand the code of the written language for reading and writing. He supports Halliday’s sociolinguistic view of language teaching and quotes one of his central theories: “language learning is learning how to mean” (Halliday, 1975). Halliday developed the systemic functional linguistic model of language, an approach to linguistics where language is considered as a resource for meaning instead of a system of signs. Holdaway’s influence, supported by the also influential Bullock Report (1975), made education in England and the United States move towards meaning-emphasis methods as code-emphasis methods lost credibility and the debate remained a feature of the teaching practice during the 1980s and early 1990s.

Research on phonological and phonemic awareness

In the late 1980s and early 1990s, research by psychologists on phonemic and phonological awareness appeared and had a great impact on policy and practice of teaching reading. Professor Peter Bryant from Oxford University studied children's perceptual and logical abilities. Bryant began to work on children learning to read around the 1970s together with Lynette Bradley and they carried out studies on the effect of phonological awareness on children's reading and spelling. In 1990, Bryant and Goswami, a professor at University of Cambridge, published the book *Phonological Skills and Learning to Read* to explain the relationship between children phonological skills and reading. Their research brought a watershed in the treatment of the phonics methodology, they pointed out the importance that phonological and phonemic awareness has in children's literacy development.

According to Bryant and Goswami (1990), phonemic awareness and phonics teaching facilitates the development of word reading and spelling; we could say these are the beginning points for teaching reading. Only when we have a thorough knowledge of the spelling system of a language, we are ready to focus on the written representation. To understand the importance of children's ability to discriminate between sounds it is important to understand the development of phonological awareness and the differences between phonological and phonemic awareness.

When children learn to talk, their interest naturally is in the meaning of the words that they speak and hear. The fact that these words can be analysed in a different way – that each word consists of a unique sequence of identifiable sounds – is of little importance to them. They want to know the meaning of what someone else is saying (...) however, these children have to learn to read and write words as well as to speak them, and that may mean that the component sounds in these words take on a new significance. (Bryant and Goswami, 1990, p. 1)

The individual alphabetic letters represent sounds and “the ability to perceive, recall and manipulate” (Jolliffe and Waugh, 2012, p.2) them is called phonological awareness. Bryant and Goswami (1990) defined three possible types of phonological awareness influenced by the different ways of breaking up a word into sounds:

Syllables. Probably the most common way of breaking up a word is into syllables. Yet, many words are monosyllabic and especially the ones which children first learn to

read. Therefore, syllabic awareness is not relevant to the constitution of words by its sounds. For example, the word “cat” has one syllable.

Phonemes. A phoneme is “the smallest unit of sound that can change the meaning of a word” (p.2). The skill of perceiving and manipulating the individual phonemes is called phonemic awareness. The letters of the alphabet represent different phonemes and words are made of phonemes represented by a sequence of alphabetic letters. The child has to be able to recognise the phonemes that form a word and needs to be aware of the letters that represent those phonemes in order to understand its meaning. The relationship between letters and phonemes is called the grapheme-phoneme correspondences. Using the same example, the word “cat” is formed by three phonemes /c/-/a/-/t/.

Intra-syllabic Units – Onset and Rime. “Words can also be divided up into units that are larger than the single phoneme – units which themselves consist of two or more phonemes – but smaller than the syllable” (1990, p.3). A syllable can be divided into two parts, the onset or opening unit, and the rime or end unit. For example, in a word such as “spring”, the onset is “spr” and the rime is “ing”. In monosyllabic words, the first unit is the onset and the next units are the rime, using the previous example, in the word “cat” the first unit, “c” is the onset and “at” is the rime, “c-at”. The second unit is called rime because it is the one we use to create rhymes; children are taught rhymes since they are very little so they are a significant part of their lives. For Bryant and Goswami, the rhyme is important when it comes to phonological awareness, “a child who recognises that two words rhyme and therefore have a sound in common must possess a degree of phonological awareness” (1990, p.3).

Bryant and Goswami said that “the discovery of a strong relationship between children’s phonological awareness and their progress in learning to read is one of the great successes of modern psychology” (Liberman & Liberman, 1991, p. 188). Thus, we could consider phonological awareness as the best predictor of reading achievement. On their research, Bryant and Goswami found that phonological awareness training causes children to make better and faster progress when they are learning to read and to spell. Therefore, finding methods of reading instruction that raise standards of literacy by teaching phonological and phonemic awareness was a priority.

5.3 The National Literacy Strategy

The *National Literacy Strategy* (NLS) was presented in 1997 by the new government of the United Kingdom to raise standards of literacy in English primary schools. The Shadow Secretary of State for Education and Employment in 1996, David Blunkett, set up a Literacy Task Force that elaborated the report setting out the details of a “steady, consistent strategy” to be made the central priority of the education service. The focus was set on three dimensions of literacy: word level work (phonics, spelling, vocabulary and handwriting), sentence level work (grammar and punctuation), and text level work (comprehension and composition). The *National Literacy Strategy* was introduced to all primary schools in England in 1998 (DfEE, 1998).

The National Literacy Strategy promotes the teaching of reading in its broadest sense from the beginning of a child's education. This includes decoding, comprehension, grammatical understanding and a more general experience of different books and texts. In the NLS scheme, none of these aspects is given priority at any particular time in a child's acquisition of reading. For example, when a child learning to read encounters a word he or she does not know, the child is encouraged to 'work out' the word either by inferring from narrative context or syntax, by sounding out the word or by recognising the shape of the word from a previous encounter. (Education and Skills Committee, 2005, p.13)

The NLS (1997) is committed to early phonics instruction; it gives priority to teaching phonemic awareness and the knowledge of the sound-spelling relationships making a strong emphasis on the systematic teaching of phonics. Section 1 of the Framework sets out the principles that pupils should be taught to in Key Stage One¹⁰:

- (1) discriminate between separate sounds in words;
- (2) learn the letters and letter combinations most commonly used to represent these sounds;
- (3) read words by sounding out and blending the separate phonemes;
- (4) spell words by segmenting the phonemes and using their knowledge of letter-sound correspondences to represent the phonemes.

¹⁰ See appendix I on page 47

Under the influence of the *National Literacy Strategy*, phonics became widely practised. The NLS promoted the use of phonics methods, which children would use to read texts in shared reading, when students share the reading of a book; in guided reading, when children read a book with the guidance of an adult; in activities practising words with the same phonemic structures; and in contexts of writing when children need to build words using spelling strategies (Education and Skills Committee, 2005).

The *National Literacy Strategy* (1998) had a beneficial impact on the quality of teaching phonics because it offered a detailed guidance and training to help teachers implement the learning objectives proposed on the report encouraging “schools and teachers in England and Wales to incorporate phonological awareness training into the early reading curriculum” (Stuart, 1999, p. 588). Following a thorough review of research and successful practices, the programme *Progression in phonics* (1999) was published.

Progression in phonics (1999) consists of a book of teaching materials and a training pack for teachers with a training CD-ROM to use independently. The programme sets out four fundamental principles of the phonemic system:

- sounds/phonemes are represented by letters;
- a phoneme can be represented by one or more letters;
- the same phoneme can be represented/spelled in more than one way;
- the same spelling may represent more than one sound.

(DfES, 1999, p.5)

The *Progression in phonics* programme made an important contribution to the teaching of phonics, the training programme showed games and activities through which teachers can teach phonics, especially useful with young children. The programme, promotes a type of phonics instruction called “analytic phonics”. Analytic phonics refers to an approach in which phonemes are not pronounced in isolation. “Children are initially taught phonological awareness, that is, they are trained to hear rhymes and phonemes in spoken words. Following this, they are taught letter sounds at the beginning of words, then at the end, and then in the middle” (Johnston, McGeown, Watson, 2012, p. 1371)

Children start identifying phonemes in whole words by sight using picture and letter cues and context information to guess the meaning. It uses repetitive and predictable sentences and texts to establish an initial sight vocabulary. Then, they are taught one letter sound, or phoneme, per week. They start identifying the initial sound on words, for example, they would have to identify the initial phoneme /k/ in words such as “car, cat, candle, cake, castle”. Then it introduces the middle sounds, for example in “cat, bag, rag” children have to recognise the middle phoneme /a/. And then, they are taught the final sounds, like the phoneme /p/ in “nap, cup, lip”. Once they have learnt the initial, middle and final 26 letter sounds, they are introduced to initial and final consonant blends, which is a group of two or more consonants that make a distinct sound such as “bl, cr, sp” in “blue, create, spin” or “nt, ng, st” in “agent, wing, last”. And finally, they are taught vowel and consonant digraphs, which is the representation of a single phoneme by two letters, like “ee, oo, sh” in words like “keep, book, shoe” (DfEE, 1998).

Analytic phonics introduces gradually the alphabet names and sounds and children have to analyse similar characteristics in words and recognize word families and patterns that will help them to develop their self-teaching strategies. This means that once they can recognise the phonemes in known words, they have to be able to apply the rule to unknown words and use of the context to guess the meaning. Analytic phonics is further explained on the following pages (see page 22).

5.4 The National Reading Panel: *Teaching Children to Read*

In 2000, the United States Congress set up the *National Reading Panel* to “assess the status of research-based knowledge, including the effectiveness of various approaches to teaching children to read” (NICHD, 2000, p. 4). The results showed that the best approach to reading instruction is the one which incorporates explicit instruction in phonemic awareness, systematic phonics instruction, methods to improve fluency and ways to enhance comprehension (NRP, 2000). These findings were highlighted in President George W. Bush’s *No Child Left Behind* legislation for improving education signed in 2001.

The report summarized research in eight areas relating to literacy instruction: phonemic awareness instruction, phonics instruction, fluency instruction, vocabulary

instruction, text comprehension instruction, independent reading, computer assisted instruction, and teacher professional development. The *National Reading Panel* (1997) studies revealed the positive and significant effect of systematic synthetic phonics and showed that

Teaching children to manipulate phonemes in words was highly effective under a variety of teaching conditions with a variety of learners across a range of grade and age levels and that teaching phonemic awareness to children significantly improves their reading more than instruction that lacks any attention to PA [phonemic awareness]. (NICHD, 2000, p. 7)

A similar review undertaken in Australia, the *National Inquiry into the Teaching of Literacy*, entitled *Teaching Reading: Report and Recommendations*, recommends the use of systematic synthetic phonics method for the teaching of reading and writing in the early years of schooling and calls for higher standards of literacy (DEST, 2005).

5.5 The Johnston and Watson Clackmannanshire Research

In 2006, the United Kingdom Department for Education and Skills commissioned to Torgerson, Brooks and Hall the *Systematic Review of the Research Literature on the Use of Phonics in the Teaching of Reading and Spelling*, also known as the *Torgerson Review* to the Universities of York and Sheffield to investigate on the use of phonics instruction in the teaching of reading and spelling.

The *Torgerson Review* (2006) evaluated the effects of a seven-year longitudinal study that “addressed the academic debates among psychologists about how young children set about learning the connections between letters and sounds, the knowledge and skills that are needed, the optimum pace and the sequence of letter/sounds” (Ellis, 2002, p. 40). Johnston and Watson carried out the research *The effects of synthetic phonics teaching on reading and spelling attainment: A Seven Year Longitudinal Study* in 1994 in Clackmannanshire, Scotland, on around 300 children to evaluate the effectiveness of a synthetic phonics programme in Primary Schools. The research confirmed that “systematic phonics instruction within a broad literacy curriculum was found to have a statically significant positive effect on reading accuracy” (DfES, p. 8). This time, the debate was not about what type of method should be used to teach children reading but which phonics approach was more effective.

The Scottish study in Clackmannanshire compared the performance of a synthetic phonics programme with a typical analytic phonics programme, and also with performance on a similar programme that included phonological awareness training and concluded that synthetic phonics instruction is “by far the most effective in developing literacy skills” (Johnston and Watson, 2005, p.1). Thus, synthetic phonics programmes were proved better than analytic phonics programmes, previously promoted by the *National Literacy Strategy*. The key findings of the Clackmannanshire Study were:

- Children who had been taught analytic phonics were reading one month behind their chronological age and spelling two to three months behind their chronological age
- Children who had been taught synthetic phonics were reading seven months ahead of their chronological age and spelling seven months ahead of their chronological age;
- For children from disadvantaged homes, analytic phonics teaching produced the highest level of underachievement while synthetic phonics produced the lowest portion of underachievement;
- In classes where synthetic phonics is used, there are fewer underachieving children and, as a result, teachers were able to spend more time with those making a slow start in reading.

(Burkard, 1999, p. 18-19)

Analytic Phonics versus Synthetic Phonics

Analytic phonics has formed part of school’s reading programmes for many years. Teaching starts at the whole word level, and then involves teaching children patterns in the English spelling system. It is taught with graded reading books, introduced using the look-and-say method. In analytic phonics, children are taught the sounds of letters and letter combinations first and then the combination of those sounds to form words. Children look at the whole word and then break it down to compare parts of the word to letter-sound relationships, they recognise patterns in known words to figure out unknown words.

Synthetic phonics teaches children to identify the letter sounds first and then blend the sounds together to form words. Children are taught small groups of letters and they

are shown how letter sounds can be co-articulated to pronounce unfamiliar words. They are taught the individual sounds and the combination of letters used to represent each sound. Synthetic phonics teaches children to sound and blend after only a few sounds have been taught, the first block of letter sounds taught in synthetic phonics programmes is typically ‘s, a, t, i, p, n’, which make up more three-letter words than any other six letters. Children are shown many of the words these letters make (e.g. ‘sat’, ‘tin’, ‘pin’).

In analytic phonics children identify the word and then analyse the letter sounds, whereas in synthetic phonics, they blend together the individual sounds to discover the word. The consonant blends (such as “bl, gr, st”), in analytic phonics are taught as units but in synthetic phonics they blend the individual phonemes together to determine the sound. Children, in analytic phonics determine the sound by referring to a known word, for example, if they see the word “joy”, they will recognise the /oy/ sound from a known word, e.g. “boy”. When they are taught synthetic phonics, the process is directly from print to sound, this means that when they see the word “joy”, they know that the letter combination “oy” makes the /oi/ sound.

The synthetic phonics experiment in Clackmannanshire, Scotland had a significant impact on literacy policy in England. The Westminster Select Committee Enquiry into *Teaching Children to Read* (2005) concluded, “in view of the evidence from the Clackmannanshire study (...) we recommend that the Government should undertake an immediate review of the National Literacy Strategy” (p. 23). The outcome of the review was the *Rose Review* commissioned by the government of the United Kingdom in 2006.

5.6 The Independent Review of the Teaching of Early Reading

In 2006, the government of the United Kingdom commissioned to Rose¹¹ the *Independent Review of the Teaching of Early Reading*, better known as the *Rose review*, which makes recommendations for teaching literacy and set a landmark that led to a renewed focus on phonics. Rose was asked to conduct a review into the way children in England are taught to read and write following the previous results of the Clackmannanshire study, previously explained (see page 21). The review “highlights

¹¹ Sir Jim Rose (1939-) is a British educationalist and former director of inspection at the Office for Standards in Education, Children’s Services and Skills (Ofsted), a non-ministerial department of the United Kingdom government.

(...) the importance of training at all levels” (Rose, 2006, p.5) and recommends to local authorities, with the support of Department for Children, Schools and Families (DCSF), to ensure that regular, high quality training is offered to schools to ensure that the staff’s skills, knowledge and understanding continue to be developed. Rose’s research concluded that the role of phonics in schools should be more relevant and more systematic and that phonics teaching should be enforced in the National Curriculum.

The *Rose review* (2006) evaluated the use of phonics systematic approach by observing the teaching practice of 20 primary schools in England; they also gathered information from 43 more schools through an emailed questionnaire. The *Rose review* (2006) emphasizes the use of synthetic phonics as the best approach to teach children to become proficient readers and writers and stresses the importance of including systematic phonics instruction in early reading programmes.

Because our writing system is alphabetic, beginner readers must be taught how the letters of the alphabet singly or in combination, represent the sounds of spoken language (letter-sound correspondences) and how to blend (synthesise) the sounds to read words, and break up (segment) the sounds in words to spell. They must learn to process all the letters in words and ‘read words in and out of text’. Phonics work should teach these skills and knowledge in a well-defined and systematic sequence. (Rose, 2006, p. 18)

Thus, the *Rose review* recommended that synthetic phonics should be taught as the prime approach and provided guidelines for ‘high quality phonics’ teaching. The *Independent Review of the Teaching of Early Reading* (2006) had a great impact on the educational system in England. All these principles supporting synthetic phonics teaching were incorporated into the National Curriculum to impose synthetic phonics on the Early Years and Primary Education.

6. SYNTHETIC PHONICS

The Department for Education developed in 2013 the National Curriculum in England, a document setting out the framework for Education state-funded schools in England. “The school curriculum comprises all learning and other experiences that each school plans for its pupils. The national curriculum forms part of the school curriculum” (DfE, 2013, p. 5). The Secretary of State for Education publishes programmes of study for each national curriculum subject, and schools are free to choose as long as the content of the National Curriculum is taught. For the teaching of English, they propose systematic synthetic programmes to achieve the objectives defined on the national curriculum for this subject.

The government of the United Kingdom, on its website (www.gov.uk), presents some of the synthetic phonics programmes proposed for the teaching of English in schools such as *Oxford Reading Tree Floppy’s Phonics Sounds and Letters* and *Phonics International* by D. Hepplewhite; *Jolly Phonics* by Sue Lloyd; *Letterland Phonics* by L. Wendon; *Phonics Bug* by J. Watson & R. Johnston; *Read Write Inc* by R. Miskin; *Sound Discovery®* by Ridgehill Publishing; *Sounds-Write* and *Tap Tap Bat System* by the Department of Education; and *Letters and Sounds* by the Department of Education and Skills.

Even though there are many different programmes to teach synthetic phonics, they all share common features. A typical synthetic phonics programme follows a progression to teach the alphabetic code but the pace at which phonemes are taught may vary from one programme to the other. The alphabetic code¹², or principle, is the understanding that letters represent the speech sounds of language and letter sounds, or phonemes, can be represented by one or more letters. Teaching the alphabetic code systematically is the core of a synthetic phonics programme as well as the three core phonics skills¹³: first sounding out and blending (for decoding and reading), then segmenting (for encoding and spelling), and finally handwriting all letter shapes. These programmes provide an increasing number of words, or word banks, to exemplify particular phonemes or grapheme-phoneme correspondences, plain sentences and texts, and decodable reading books to apply the phonics knowledge and skills and to increase

¹² For full Alphabetic Code see appendix II on page 48

¹³ For further explanation see page 27 onwards.

vocabulary, to develop language comprehension. Teaching of word recognition has to include sight words, syllabication (breaking words into syllables), and morphology (breaking words into meaningful parts). Grammar is also required but it is not introduced until the last phases of the phonics programmes.

Synthetic phonics programmes start by teaching the alphabetic code, from the simple phonemes of one letter-sound correspondence, which is called a ‘graph’ and progressing to two letters-sound, called ‘digraphs’ (e.g. *sh* or *oo*), and three letters-sound, ‘trigraphs’ (e.g. *air* or *igh*). Children learn over 40 phonemes and their common representation based on English Received Pronunciation (RP). The knowledge of sound-symbol associations are vital for an accurate and fluent word recognition and, consequently, to become skilled readers. The alphabetic code is often referred as the teaching of grapheme-phoneme correspondences. After teaching a few grapheme-phoneme correspondences, blending of phonemes for reading and segmenting phonemes for spelling is taught. Phonics programmes introduce the most common spellings for sounds first and then they introduce alternative spellings for sounds (see page 28). (Jolliffe, Waugh, Carss, 2012).

English RP is considered as the Standard English accent in the United Kingdom, it is also known as “the Queen’s English”, “Oxford English” or “BBC English”. In school, we can find many different accents inside a classroom, and when it comes to synthetic phonics lesson this may be an issue. The best way to overcome this is to teach synthetic phonics using the Standard pronunciation of English phonemes instead of using their own. A useful resource to make children use the English RP accent is to ask them to put on their “Queen’s hat”, while they are wearing their imaginary hat they will say the words in the same way they think the Queen might speak.

All synthetic phonics programmes are designed to teach phonics systematically and their lessons are quick, lively and interactive. Lessons have to be adapted to the programme characteristics because even if they share common elements, every phonics programme has its own special features. For example, the *Letters and Sounds* programme is structured around four elements: *revisit and review*, *teach*, *practise* and *apply*.

6.1 Teaching synthetic phonics

Synthetic phonics, as it has already been mentioned before, is a method of teaching reading and writing based on teaching students the correspondences between graphemes and phonemes. Students are taught to identify the individual sounds and to synthesize, or blend, them together. The emphasis of the instruction is placed on the blending of the individual sounds to be able to read both known and unknown words. The teaching of phonics provides a broad and rich language experience for children through specific activities.

From the beginning, students are taught to understand the alphabetic code (see page 28) by learning to discriminate the individual phonemes in spoken language. They need to be taught clearly that letters have a *name* but make a *sound*. For some letters, the name and the sound are similar. For example, the letter “s” makes the sound /s/ as in “snake”, but for others, the name and the sound are different, the letter “c” makes the sound /k/ in “cake” and /s/ in “city”. This can be confusing and it has to be acknowledged rather than ignored.

Teachers must be very careful when teaching the sounds, or phonemes, because even though it is important to exaggerate the sound to help students, it is essential to avoid adding an extra sound, technically called “schwa” /ə/, to the consonant. Some adults tend to say “puh” (/pə/) rather than /p/ or “buh” (/bə/) instead of /b/, which will have a negative effect on children learning synthetic phonics. If a child is taught the wrong phoneme, they will find difficulties when practising their blending skills, as they will be pronouncing an inexistent extra sound (Lewis & Ellis, 2006).

Synthetic phonics develops phonological and phonemic awareness, key to the development of reading and writing. Both terms are often used interchangeably but there is slight distinction between them. Phonological awareness provides the foundation for phonics and it is the first step towards reading, understanding that the sounds of the speech and the written language are connected. Phonemic awareness is auditory and does not involve print letters; it is the understanding of how sounds function in words and it only works with one aspect of sound: phonemes.

To develop phonemic awareness, students have to be able to differentiate phonemes in words. This may be an issue for adults because often they are not aware of the

individual phonemes in words as their attention is drawn to the written word. In contrast, children who do not know the printed form of words are able to perceive the sounds without being conditioned by the spelling. As it has been pointed out in page 23, the phoneme sounds and their common representation taught in phonics are based on the Received Pronunciation (RP) to standardise the teaching of phonics in the whole country. As an example, when an adult with RP pronunciation is asked how many sounds are in a word like “scarf”, the common answer will be five /s/, /c/, /a/, /r/, /f/ but in fact it has four because the /ar/ is a blend of two different phonemes, called digraph, making one phoneme: /s/, /c/ /ar/, /f/ (Jolliffe & Waugh, 2012).

Once they know the simple code, also known as the key phonemes, students are taught “the complex code” which are all the spelling variations of the simple phonemes. For example, the phoneme /s/ is a simple code phoneme of one letter-sound but it can be represented by “s” as in snake, “-ss” as in glass, “-ce” as in palace, or “-se” as in house. To summarise, the simple code consists on learning one spelling choice for each phoneme or sound of the English language and the complex code involves understanding the multiple spellings for each phoneme.

At the same time that children are learning the alphabetic code, they are introduced to reading by blending the sounds they already know together into simple words. This is the reason why the alphabetic code follows a sequence, to allow students to read from the early stages of the synthetic phonics instruction. In reading, the individual phonemes are recognized from the grapheme, pronounced and blended together to create a word. When children develop their blending skills, they are able to read a word by putting together all the individual phonemes that compound it. For example, by blending the phonemes /s/, /a/, /t/, they can work out the word /sat/. The more sounds they learn, the larger the bank of words students are able to read is.

The alphabetic code for writing is also important and it is taught at the same time as reading. Children learn phoneme sounds and their most common representation at the same time. For writing, they recognise the phonemes in a word by sounding them out and then, they write them down. Sound out skill is as important as the blending skill for the teaching of phonics because it allows the child to spell out words, recognise the sound on it, and write them. For example, when they want to write the word /tap/ they say it aloud carefully paying attention at the sounds they can hear /t/-/a/-/p/, and they

have to recognise the individual phonemes and associate them with the graphemes that represent those sounds in order to write the word “tap”.

To check pupils progress in synthetic phonics, the government of the United Kingdom, in the National Curriculum, establishes an evaluation called “Phonics Screening Check” which is defined as a “quick and easy check of a child’s phonics knowledge and helps the school to confirm whether the child has made the expected progress” (DfE, 2013, p.2). Through these checks, schools evaluate the results of their teaching practice on synthetic phonics as well as being able to help those students who are not reaching the targets of the school curriculum. As the Department for Education states on its website (www.gov.uk): “The Phonics Screening Check is designed to confirm whether pupils have learnt phonic decoding to an appropriate standard. It will identify pupils who need extra help to improve their decoding skills”.

For the phonics screening, the teacher sits with a child individually and asks him to read 40 words aloud, depending on the progress some of them will have been read before and others will be completely new. There is no time limit and it is designed to avoid stress, if the child is struggling the teacher will stop the check and continue with it later. The phonics screening contains a mixture of real words and nonsense words¹⁴, which are made-up words without meaning, children know before being tested that they will have to read nonsense words that they have not seen before. The Standards & Testing Agency of the British Department of Education provides a scoring guidance with acceptable pronunciations and the phonemic representation of every word on the screening test. Synthetic phonics lessons include practice of reading nonsense words and children are already familiar with this. Including these kinds of words is important because children need to use their reading skills to decode words instead of just using their memory or vocabulary.

¹⁴ Nonsense word: words or part of words that do not exist in the language you are using (Cambridge Dictionary, 2015).
Some examples of nonsense words from the Phonics Screening Check are ‘fip’, ‘pon’, ‘hab’, ‘dack’ or ‘nurt’ (DfE, 2015).

6.2 Phonemic awareness

The process of reading and writing involves decoding, or transferring the letters into sounds, and breaking words into separate phonemes. In order to do this, children need to develop their phonemic awareness at the early stages of the synthetic phonics instruction. “Phonemic awareness is one of the best predictors of success in learning to read” (Cunningham & Cunningham, 2002, p. 92) and it is developed gradually through exposure to nursery rhymes, books promoting word play, or storytelling. Teachers can use several strategies to teach this but the most popular and, in my opinion, the most effective are the “phoneme frames” and the use of “phoneme fingers”.

The first one, phoneme frames, helps children to segment written words into the corresponding phonemes by placing them into separate boxes. They use squared laminated sheets with dry-wipe pens and when children are given a word, they place each phoneme into a different square. For example, the word “flash” will be divided into four phoneme frames and each phoneme will be placed inside a square:

| | | | |
|---|---|---|----|
| f | l | a | sh |
|---|---|---|----|

Phoneme fingers are also very useful, especially when practising phonics orally. The purpose is the same as the phoneme frames, to help students to segment words into phonemes. Here, children say the word aloud while counting the individual number of phonemes with their fingers as they say them. Then, they can count how many “phoneme fingers” THERE are in a word.

Another resource to help children segment words into phonemes in the written form are the “phoneme buttons”, these are dots placed underneath each phoneme of a word. Each individual sound is represented by a dot but when using phoneme buttons, digraphs are usually marked with longer dashes, as they are a single phoneme represented by two letters. This helps children to be aware of the phonemes and their representation as they write them paying attention to digraphs. For example, the word “fish” will look like this:

f i sh
 . . —

6.3 Grapheme-phoneme correspondence

As it was mentioned before (see page 25), an important feature of high quality synthetic phonics instruction is that it should be systematic, which means teaching the grapheme-phoneme correspondence in a defined sequence. The objective is to provide essential phonic knowledge and skills so children can progress towards independent reading and writing. Synthetic phonics programmes differ in other aspects but they all teach the letter-sound relations in a clearly defined sequence, the order may vary from one programme to the other. For example, the synthetic phonics programme *Jolly Phonics* teaches the main 42 sounds of English one sound everyday in seven phases that follow this order:

1. s, a, t, i, p, n
2. c, k, e, h, r, m, d
3. g, o, u, l, f, b
4. ai, j, oa, ie, ee, or
5. z, w, ng, v, oo, oo
6. y, x, ch, sh, th, th
7. qu, ou, oi, ue, er, ar

Each programme follows its own sequence but all of them aim the same goal, to teach the English alphabetic code. As it has been said before (see page 25), they start by teaching the simple code and progress toward the complex code and spelling variations.

When children are taught the grapheme-phoneme correspondences, they learn that words are constructed from phonemes and those phonemes are represented by graphemes. As they learn them, they can blend them together in reading and segmenting them to support spelling. Initially they start reading simple CVC (consonant-vowel-consonant) words and when they face an unfamiliar word, they can work out the sound for each letter and blend them to find its meaning.

English is an opaque language, orthography often represents sounds with more than one letter and only in a minority of cases we find a correspondence between grapheme and phoneme; these irregularities are the result of the language being made up of

several different languages, including Germanic languages, French and Latin. On the contrary, a transparent language is a language in which each grapheme corresponds to a phoneme. Finnish is considered the most transparent European language; Spanish and Italian are also transparent languages. (Seymour, Aro & Erskine, 2003). However, written English has regular spellings in 80 to 90% of its words, which makes possible to teach children letter-sound correspondences that will enable them to decode words successfully (Johnston & Watson, 2005).

Considering the complexity of teaching English alphabetic code, there are several resources teachers can use to overcome this such as: using actions, using mnemonics and raps, or using rhymes and poems. The *Jolly Phonics* programme is well known for incorporating an effective scheme of actions to the teaching of synthetic phonics. Phonemes are taught in association with a brief song and an action provided by Jolly Phonics author, Sue Lloyd¹⁵

Mnemonics and raps are also useful to help children to remember new phonemes and these can be also accompanied by an action. Constant practice or repetition of a saying or rap will support them in remembering the phonemes and their most common spelling choices or graphemes. When teaching a saying, it is important to say the phoneme first, then say the mnemonic, the letter names, and maybe add an action. For example: “/ay/ay/, play with hay, a, y”.

And rhymes or poems, as in the previous examples, can also be helpful to support memorising phonemes or when exploring alternative spellings. An example of a poem that can be used to practise the /y/ sound:

I spy a little fly
Buzzing in the deep blue sky.
He'll be gone by and by.
I spy a little fly
Buzzing round, I don't know why.
He'll be gone by and by.
I spy a little fly
Buzzing 'round and looking sly.
He'll be gone by and by...

¹⁵ <http://jollylearning.co.uk/2010/11/03/jolly-phonics-actions/>

But not before he's made me cry.

6.4 Blending and segmenting skills

Blending and segmenting skills are interconnected and both are used for reading and spelling, usually blending is identified as a reading skill while segmenting is related to spelling but this is not really the case. McGuinness (2004) on its book *Early Reading Instruction: what science really tells us about how to teach reading* cites the following example:

Children see an unfamiliar word, e.g. sting. To read it a child sounds out each phoneme: /s/ /t/ /i/ /ng/. They blend it into a word and check the outcome. It is common for beginning readers to segment correctly and blend incorrectly: /s/ /t/ /i/ /ng/: sting. To spell the word sting, the children say the word, hear each segment in sequence and blend the segments into the word as they write. (2004, p.161)

According to this, there is an inter-relationship between blending and segmenting, and these are the skills that need to be taught and practised to enable children to read and spell on their own. In synthetic phonics instruction, blending and segmenting are taught as soon as phonemes are introduced.

When teaching blending, children start by reading simple words formed with the phonemes they have been taught and later on the instruction they can work out unknown words. It is important when teaching the grapheme-phoneme correspondences, to make sure that children are able to recognise consonant blends and digraphs, which are the combination of two letters that make a single sound in words like “fl-a-g” or “sh-o-p” (see page 28). As it has been mentioned before, some phonemes in English language have more than one possible spelling. At first children are taught the most common ones, e.g. /ai/ as in rain, and they should practise blending these spellings before alternatives are taught, for example the same sound /ai/ in words like “play”, where the spelling is the digraph “-ay”, or “lane” in which the spelling is the split digraph “a-e”. A split digraph is a phoneme formed by a two-vowel blend but separated by a consonant as in “came” (a-e) or “like” (i-e), this is also known as “magic e” or “silent e”.

Blending enables children to read within days of starting synthetic phonics instruction and they are given the strategies to work out unfamiliar words for

themselves, they do not need to look at the pictures, or trying to guess the meaning as they can recognise words from oral language when they read them. This is a positive advantage of synthetic phonics because they can focus on the meaning of the text rather than trying to work out what the words are.

As children learn the letter sounds they are taught how to write the letters. Most of schools in the United Kingdom teach cursive handwriting from early years education as handwriting is considered an essential skill for both children and adults.

The development of writing ability is not only important in building a child's self-esteem, but is considered an essential ingredient for success in school. Children spend 31 to 60% of their school day performing handwriting and other fine motor tasks, and difficulty in this area can interfere with academic achievement. Illegible handwriting can create a barrier to accomplishing other higher-order skills such as spelling and story composition. (Feder & Majnemer, 2007, p. 312)

Teaching handwriting begins with early scribbling and as the child develops their motor skills, it turns into intentional shapes. When teaching synthetic phonics, it is important to teach the letter shapes of the phonemes too. Instruction begins showing the letter and encouraging students to form it in the air with their fingers. Once they recognise the letter and its formation, they practise on paper or whiteboards.

The government of the United Kingdom promotes several programmes for teaching handwriting at schools; some of the most popular are *Writing From The Start*, *Handwriting Without Tears*, *Penpals for Handwriting* and *BBC Magic Pencil*. The latter, being the most popular since the early 1990s, consists on a programme designed by the BBC that shows a “magic” pencil, which teaches how to draw the shape of the letters on the screen. In *BBC Magic Pencil* cursive handwriting, every letter starts from the line and is done in one go, without raising the pencil from the paper, which allows children to write in a flowing, comfortable and joined way. For teachers, the programme provides instructions for teaching each letter, for example for the letter “a”, it says “kick up, rock over, all the way round, back down and flick”; these are easy instructions children can learn and remember and it helps them develop their handwriting skills¹⁶. The letter formation is explained as it starts on a line, which helps students make their

¹⁶ Magic pencil handwriting: see appendix III on page 52

letters regular and to practise their letters, they are given sheets with lines where they have to copy the model and try to make it neat and as close to the original as possible.

When children can hear all the individual phonemes of a word, and know how to write them, they can start writing independently. Initially we do not expect children to spell accurately but their work can be read when they can identify the sounds of the words correctly, for example, “I went hors riedin that wos fun”. But this is not wrong, this means that the child has developed his phonemic awareness but it is still learning the alphabetic code. Accurate spelling develops gradually from reading books, learning new phonemes during lessons and practising the variations of the alphabetic code of the English language.

However, there are some words in English that cannot always be worked out by blending and when they do, they give the wrong pronunciation. These words are known as “tricky words”, they are considered irregular and synthetic phonics programmes introduce them gradually and systematically through the phonics instruction.

6.5 Tricky words

Tricky words are sometimes called “key words” or “phonically irregular high-frequency words” but they used to be called “sight words” because children had to learn these words by sight, this term is no longer used in synthetic phonics. Many of the most commonly used words in written English contain unusual spellings which are hard to decode without a direct instruction, words such as “because”, “their”, “people” are included in every synthetic phonics programme. These programmes usually teach two or three tricky words a week and they need to be continually revised as children learn more of these words.

Teachers can use different strategies to teach tricky words, the most common ones are: *Look, Say, Cover, Write and Check*, *Say It As It Sounds*, and *Mnemonics*. In the first one, *Look, Say, Cover, Write and Check*, the teacher shows the children the tricky word on the board, reads it aloud and asks children to repeat it, then covers the word for the children who have to write it on their own whiteboards. Once they all have finished, the teacher uncovers the word again and asks students to check their writing. This method helps students to learn tricky words by memory and it is based on repetition and practice of the same words until they are able to always write it correctly. The second method,

Say It As It Sounds is as simple as mispronouncing the tricky words to help students remember the correct spelling, for example pronouncing the word “people” as /peeoaapl/. And *Mnemonics* method is based on making up shortcuts or phrases that children will memorize so they will remember the correct spellings of tricky words such as spelling acronyms in which the initial letter of the words spell out a tricky word, for example “**b**ig **e**lephants **c**an **a**lways **u**nderstand **s**mall **e**lephants” to spell the word “because”, or rhymes and catch up phrases like chanting the spelling of a word with the letter names, e.g. “any, any, any, a-n-y”.

Synthetic phonics programmes make great emphasis on the learning of tricky words and British Primary Schools are aware of the importance of learning these words properly, this is why children are tested on their spellings from Year 1 and until the end of their primary education, Year 6. Every week, they are given a short list of eight tricky words that they need to learn by heart, words that have already been practised in lessons. The day they are tested, the teacher reads the tricky words aloud and asks them to write them down on their notebooks individually. Different levels are taken into account and the teacher assistants test students who are slightly behind with a list of easier spellings on a separate group.

7. A SYNTHETIC PHONICS LESSON IN A BRITISH PRIMARY SCHOOL

During my teaching placement in a Primary School in the United Kingdom I had the opportunity to be involved and to observe the teaching of synthetic phonics in a real context. Many British schools follow the programme *Letters and Sounds* developed by the Department for Education and Skills (DfES) in line with the core criteria that define the key features of an effective systematic synthetic phonics-teaching programme.

The *Letters and Sounds* programme is a system for teaching children to read and develop their speaking and listening skills. The Department for Education and Skills published it in 2007 with the intention of helping children become fluent readers by the age of 7. The programme is divided into six overlapping phases, which are taught from the Foundation Stage to Key Stage One:

Phase One starts in reception classes, it focuses on the child's ability to listen, make, and talk about sounds; these skills are the foundation of the programme and should continue to be developed throughout the whole Key Stage One and Key Stage Two. *Phase Two* starts to focus on grapheme-phoneme activities to help children begin to recognise the link between sounds and written letters; these are taught by reading and constructing words from blending individual phonemes to make whole words. The grapheme-phoneme correspondences are introduced in a structured way¹⁷, as well as tricky words. During *Phase Three*, children continue to practice the grapheme-phoneme correspondences and they are introduced to new sets, which include consonant digraphs. *Phase Four* does not introduce any new grapheme-phoneme correspondences but it focuses on consolidating and reinforcing the knowledge developed in the previous phases as well as their blending and segmenting skills. *Phase Five* introduces a new set of more complex grapheme-phoneme correspondences and also new tricky words; children learn new graphemes for the phonemes they already know. And *Phase Six* reinforces what has been taught on previous phases and it goes throughout Year 2 and until the end of Primary Education working on blending and segmenting skills, introducing spelling rules and conventions like adding prefixes and suffixes. They are encouraged to build their own vocabulary and become fluent and confident readers.

Systematic synthetic phonics lessons always follow the structure proposed by the selected programme. Every programme has its own phases but all of them have similarities as well as particular differences. A typical synthetic phonics lesson following the *Letters and Sounds* programme in a Year 1 classroom lasts approximately from twenty to thirty minutes and it splits roughly into seven parts:

The synthetic phonic lesson start with a *warm up*, it begins with oral starter activities to get children attention and revise what they have been working on during past lessons. These activities are different each day to keep children motivated and interested, some of them are: identifying the wrong word of a list, singing the alphabet song, reading a short poem or riddle, or reading a short story. The first one, identifying the wrong word, is an effective activity that catches children attention, they are given a list of words that they have to read and then decide which one is the intruder. Singing the alphabet song is an easy and fun way to learn the name of the letters, even if in synthetic phonics

¹⁷ See appendix IV on page 51

children are taught the sounds of the letters, it is also important that they know the names. Using reading to start the lesson acts as a reminder of what children already know they practise their reading skills with short stories or poems that they can learn by heart. Moreover, riddles motivate students as they set a challenge they have to overcome. The warm up activities are always related to the phonemes of the lesson, which means that the words used for the activities, apart from the alphabet song, will contain the phonemes they will revise, and the ones they will learn.

Next, children *revise the phonemes* they already know by reading them aloud. Usually, one child acts as the teacher pointing at the graphemes displayed on the interactive board while the rest of the students make the corresponding phoneme. They do this all together, at the same time, in whole class group. The number of phonemes revised depends on the teacher and the purpose of the lesson or the timing, some days they practise all the phonemes they already know while other days they just do the ones corresponding to the current phase they are teaching.

Then, they *introduce a phoneme* by showing a word on the board and asking pupils to read it all together. Once they have identified the phoneme, they are asked to write on their whiteboards words rhyming with the one on the board, pupils have to think of words containing that phoneme, associate it with the grapheme representation and write it on their boards. This activity can be done only when children have learnt most of the spellings from the alphabetic code, which mean this cannot be done in reception when they are still learning to recognise the individual phonemes. After a few minutes, they share their work with the rest of the class and the teacher chooses some of the words that pupils have come up with to write them on the board and show the different spellings of the same phoneme.

The next step of the lesson is *comparing the different phonemes of the same grapheme*, which means that children are given two words containing the same grapheme or spelling but their pronunciation is different, they do not make the same sound, for example, “but” and “unit”, they both share the “u” grapheme but in the first word the phoneme is /u/ while in the second one is /yoo/. They read the words aloud and decide which phoneme sounds in each one and they repeat both of them several times until everybody is able to identify the difference. The teacher shows a list of words containing the same phonemes and asks children to write them on their

whiteboards and divide them into two columns placing together the ones with the same phoneme. When everybody has finished, a volunteer does it on the board with the help of the rest of his classmates. While they are doing it on the board, they can check their own work.

An essential part of the lesson is practising their *sounding out* skill. To do this, they are shown a list of words, some of them are real words and others are “nonsense words” also known as “alien” or made-up words, these words make no sense and prevents students to guess when they are sounding out because they need to do every sound of the word to be able to read it. They do it all together, at the same time, children have to identify each phoneme and they use their phoneme fingers to count how many sounds there are in a word, then they blend the sounds together to read the whole word. Made-up words appear on the board with a picture of an alien right beside them and children easily identify them because they make no sense when they read them.

With the *spelling practice*, children learn new tricky words or practise the ones they already know and also their *BBC Magic Pencil* handwriting. There is a list of tricky words on the board covered by different colour labels, children take turns to choose a colour and reveal the hidden word; the teacher reads the word aloud while showing it for five seconds and the covers it again. Pupils have to write the word on their whiteboards and when everyone has finished, they show it to the teacher who uncovers the word again for the children to autocorrect their work. They are encouraged to write the word as many times as they want during the time given for writing, they use *Look, Say, Cover, Write and Check* strategy for practising spellings during synthetic phonics lessons.

The last part of the synthetic phonics lesson is *reading and writing a caption*, this is only done from Key Stage one onwards, as before, during Foundation Stage, children lack knowledge of both the phonemes and writing skills to be able to do this. First, children are shown a picture on the board with a sentence underneath, or a caption, and they are asked to read it aloud all together. The sentence uses words practised during the lesson, both during phoneme and spelling practice. Children have to write the caption on their boards without looking at the board while the teacher says it as a dictation; they are encouraged to add some extra information to make the sentence more complex.

7.1 Improving synthetic phonics lessons

Even if the programme determines the lessons' structure, teachers can introduce their own strategies to teach phonics and they have a certain freedom to adapt their lessons to their students, to make them more effective and meaningful. Every student has different needs and, as teachers, we need to be aware of those needs and cover them to provide high quality education for children.

In my opinion it is useful to know more than one programme when teaching synthetic phonics, because in that way we can incorporate different elements that we consider beneficial for our lessons. For example, while some synthetic phonics programmes like *Jolly Phonics* provide teachers with a scheme of actions and songs associated to every phoneme, other programmes, like *Letters and Sounds*, do not incorporate any gestures or songs for the teaching of grapheme-phoneme correspondences. We could take advantage of this and even when following the programme *Letters and Sounds*, we could incorporate the songs and gestures from *Jolly Phonics* to make our lessons more dynamic as well as helping children to memorise through actions the phonemes. It is especially useful with kinaesthetic learners (children who learn best by moving their bodies, these are also known as "hands-on learners" or "doers"). For this type of learners it is also good to incorporate movement to the lessons. In a similar way, songs are a very useful resource as they help children to memorise, and they have positive effects on the teaching practice. There are different reasons to use songs in class, as they have the power to change students' moods, provide stimulation and entertainment and they also bring challenge and pleasure. Teachers can use songs "to introduce or reinforce grammatical structures, to provide the class with a relaxed atmosphere, to discuss about the topic of the song or to give practice with some sounds that appear in the songs, and to give ideas for a composition" (Lopera, 2003, p. 137). As a result, teachers can use songs to enhance reading, writing, speaking, and listening skills.

When we ask young children to be sitting for a long time, it is very likely that they will get distracted and lose interest in the lesson. Some synthetic phonics lessons can be tedious for those children who need movement or have been sitting for long hours at school, in order to avoid this, we can incorporate movement to the lessons. A strategy that works well with young children is to give them instructions to make them move

during the lesson. For example, start the lesson standing up while doing *warm up* activities, after *revising* ask them to stand up and follow simple instructions like “shake your hands, hop, turn around, sit down again”, by doing this kind of games we keep children active and interested and it helps them to keep their focus on the lesson. We can use gestures and movements when teaching the phonemes, and repeat the gesture associated every time that we talk about a phoneme.

Mnemonics are useful during synthetic phonics lessons as well; children have the chance to repeat several times a phrase that helps them remember a spelling or chanting the phonemes they are learning. When children have to repeat a sound, we can turn it into a game asking them to shout it to different people in the room, or say it while raising their hands, standing and sitting... The more creative the lesson is, the more engaged students will be.

8. CONCLUSION

The aim of my research was to provide a general view of the different approaches to the teaching of reading and writing in English throughout the years. Learning to read has been the focus of the debate on the education system for many years and educators have been researching the best way to teach to read and write in English.

It has been a long way from the very first method that appeared, called the Alphabetic method, to the one currently used in British Primary Schools, the Synthetic Phonics method. Every method has arguments in favour and against them and that is why the debate is still going on. In the 19th century, phonics approach became popular but it was replaced in the mid 20th century by a new method, whole word method, which was the opposite to the previous one.

I have focused on the Synthetic phonics approach, its theoretical framework and practical application. This method became popular around 2006 as the result of several reports that claimed that it was the most effective to teach reading and writing in English. The Department for Education imposed Synthetic Phonics principles into the National Curriculum, for all British schools.

Synthetic phonics approach is the best method to teach English literacy, it is an accelerated form of phonics and does not begin by teaching initial sight vocabulary. The teaching of phonics allows children to start reading at the early stages of the instruction and encourages students to develop their skills by using them not only during lessons, but also by reading graded books.

I believe Synthetic phonics is a very effective method to teach literacy in schools because of its fast pace, keeping students motivated. As soon as children are taught phonics skills such as blending and segmenting, they can read successfully. Moreover, they do not need to guess the meaning from pictures because they are able to read words and sentences. It teaches both reading and spelling, which boosts students to both read and write. Synthetic phonics is a method that goes from simple to complex. Students are encouraged to work hard on developing their phonics skills in an enjoyable way, as well as to love reading.

9. REFERENCES

- Albert, E. (1993). *Inquiry About Learning To Read*. (ERIC Document Reproduction Service No. ED 370 085).
- Bailey, M. L. (2013). Hornbooks *The Journal of the History of Childhood and Youth*, 6, 3-14.
- Barry, A. L. (2008). Reading the Past: Historical Antecedents to Contemporary Reading Methods and Materials. *Reading Horizons*, 49, 31-52.
- Bergeron, B.S. (1990). What does the term whole language mean? Constructing a definition from the literature. *Journal of Reading Behaviour*, 22, 301-329.
- Brunetti, G. J. (1977). *The Bullock Report: Some Implications for American Teachers & Parents*. New York City: Annual Meeting of the National Council Teachers of English. (ERIC Document Reproduction Service No. ED 146 614).
- Brooks, M. C. & Brooks, J. S. (2005). Whole language or phonics: Improving language instruction through general semantic. *Etc: A review of General Semantics*, 62, 271-280.
- Bullock, A. (1975). Bullock Report: A Language for Life. (May 30th 2015), Education in England: The history of our schools.
Website:
<http://www.educationengland.org.uk/documents/bullock/bullock1975.html>
- Burkard, T. (1999). *The End of Illiteracy? The Holy Grail of Clackmannanshire*. London: Centre for Policy Studies.
- Cunningham, P. M. & Cunningham, J. W. (2002). What We Know About How to Teach Phonics. *What Research Has to Say About Reading Instruction*, 3, 87-109.
- Department for Education and Employment. (1998). *The National Literacy Strategy: Framework for Teaching*. London: DfEE.
- Department for Education and Employment. (1999). *The National Literacy Strategy: Phonics. Progression in phonics: materials for whole-class teaching*. London: DfEE.
- Department for Education. (2013). *National Curriculum in England*. London: DfE.
- Department of Education, Science and Training. (2005). *National Inquiry into the Teaching of Literacy. Teaching Reading: Report and Recommendations*. DEST.
- Douglas, W. C., Silbert, J., Kame'enui, E. J. & Tarver, S. G. (2004). *Direct Instruction reading*. Columbus, OH: Pearson Education, Inc.

- Education and Skills Committee. (2005). *Teaching Children to Read: Eighth Report of Session 2004–5*. London: HMSO.
- Ehri, L.C. (2003). *Systematic Phonics Instruction: Findings of the National Reading Panel*. London, England: Standards and Effectiveness Unit, Department for Education and Skills, British Government. (ERIC Document Reproduction Service No. ED 479 646).
- Ellis, V. and LeCourt, D. (2002). 'Literacy in context: A transatlantic conversation about the future of writing across the curriculum in England'. *Language and Learning Across the Disciplines*, 5, 28 - 60.
- Feder, K. P. & Majnemer, A. (2007). Handwriting development, competency, and intervention. *Developmental Medicine and Child Neurology*, 49, 312-317.
- Goodman, K. S. (1967). Reading: A psycholinguistic game. *Journal of the Reading Specialist*, 4, 126-135.
- Goodman, K. S. (1989). Whole-language research: Foundations and development. *Elementary School Journal*, 90, 207-221.
- Goswami, U. & Bryant, P. (1989). The Interpretation of Studies Using The Reading Level Design. *Journal of Reading Behaviour*, (Vol. XXI), 413-424.
- Goswami, U. & Bryant, P. (1990). *Phonological skills and learning to read*. East Sussex: Erlbaum.
- Halliday, M.A.K. (1975). *Learning how to mean: Explorations in the development of language*. London: Edward Arnold.
- Holdaway, D. (1979). *The foundations of literacy*. New York: Scholastic.
- Johnston, R. S & Watson, J. E. (2005). *A Seven Year Study of the Effect of Synthetic Phonics Teaching on Reading and Spelling Attainment*. Edinburgh, Scotland: Scottish Education Department.
- Johnston, R. S., McGeown, S. Watson, J. E. (2012). Long-term effects of synthetic versus analytic phonics teaching on the reading and spelling ability of 10-year-old boys and girls. *Reading and Writing*, 25, 1365-1384.
- Jolliffe, W., Waugh, D. & Carss, A. (2012). *Teaching Systematic Synthetic Phonics in Primary Schools*. London, England: SAGE Publications.
- Kim, J. S. (2008). Research and the Reading Wars. *When Research Matters: How Scholarship Influences Education Policy*. Cambridge, MA: Harvard Education Press. pp. 89-111.

- Lewis, M. & Ellis, S. J (2006). *Phonics: Practice, Research and Policy*. London, England: SAGE Publications.
- Liberman, I. Y. & Liberman, A. M. (1991) Whole Language vs, Code Emphasis: Underlying Assumptions and Their Implications for Reading Instruction. *Haskins Laboratories Status Report on Speech Research*, 108, 181-194.
- Lopera, S. (2003). Useful Ideas when Taking Songs to a Class. *Íkala, revista de language y cultura*, 8, 135-149.
- McGuinness, D. (2004). *Early Reading Instruction: What Science Really Tells Us about How to Teach Reading*. Cambridge, Massachusetts: The MIT Press.
- Monaghan, E. J. (1997). *Phonics and Whole Word/Whole Language Controversies, 1948-1998: An Introductory History*. American Reading Forum Conference.
- Monaghan, E. J. & Barry, A. L. (1999). *Writing the Past: Teaching Reading in Colonial America and the United States 1640-1940*. San Diego, California: International Reading Association
- National Institute of Child Health and Human Development. (2000). *Report of the National Reading Panel. Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction* Washington, DC: U.S. Government Printing Office.
- Torgerson, C. J., Brooks, G. & Hall, J. (2006). *A Systematic Review of the Research Literature on the Use of Phonics in the Teaching of Reading and Spelling*. Sheffield, England: DfES.
- Turner, M. & Burkard, T. (1996) *Reading Fever. Why phonics must come first*. London: Centre for Policy Studies.
- Potter, D. L. (2014). *Noah Webster's Spelling Book Method for Teaching Reading and Spelling*. Create Space.
- Robinson, H, A. (1977). *Reading & Writing Instruction in the United States: Historical Trends*. Washington D.C: National Institute of Education. (ERIC Document Reproduction Service No. ED 142 995).
- Rose, J. (2006). *Independent Review of the Teaching of Early Reading*. Nottingham, England: DfES
- Seymour, P. H. K., Aro, M., & Erskine, J. M. (2003). Foundation literacy acquisition in European orthographies. *British Journal of Psychology*, 94, 143-174.

Stuart, M. (1999). Getting ready for reading: Early phoneme awareness and phonics teaching improves reading and spelling in inner-city second language learners. *British Journal of Educational Psychology*, 69, 587-605.

Wicker, K. (2007). The effect of two reading programs on kindergarten student's reading readiness. (September 10th 2015). Walden University.

Website:

<http://gradworks.umi.com/32/74/3274995.html>

APPENDIX I

The structure of the British education system:

| Age | Year | Key Stage |
|-------|-----------|-------------|
| 3-4 | | Early Years |
| 4-5 | Reception | Early Years |
| 5-6 | Year 1 | KS 1 |
| 6-7 | Year 2 | KS 1 |
| 7-8 | Year 3 | KS 2 |
| 8-9 | Year 4 | KS 2 |
| 9-10 | Year 5 | KS 2 |
| 10-11 | Year 6 | KS 2 |
| 11-12 | Year 7 | KS 3 |
| 12-13 | Year 8 | KS 3 |
| 13-14 | Year 9 | KS 3 |
| 14-15 | Year 10 | KS 4 |
| 15-16 | Year 11 | KS 4 |

APPENDIX II

English Alphabetic Code Chart

| units of sound | simple code key words | complex code + keywords | | | | |
|-----------------------|--------------------------|--|-------------------|-----------------------|-------------------|------------------|
| | | graphemes or spelling alternatives which are code for the sounds | | | | |
| /a/ | a apple | | | | | |
| /e/ | e egg | -ea head | -ai said again | | | |
| /i/ | i insect | -y cymbals | | | | |
| /o/ | o octopus | wa watch | qua qualify | alt salt | | |
| /u/ | u umbrella | o son | -ou touch | -ough thoroughfare | | |
| /ai/ | ai first aid | -ay tray | a table | -ae sundae | a-e cakes | |
| | | -ey prey | -ea break | eigh eight | -aigh straight | |
| /ee/ | ee eel | ea eat | e emu | e-e concrete | | |
| | | -ey key | -ie chief | -ine sardines | | |
| between /i and ee/ | -y sunny | -ey monkey | -ie movie | | | |
| /igh/ | -igh night | -ie tie | i behind | -y fly | i-e bike | ei eider duck |
| /oa/ | oa oak tree | ow bow | o yo-yo | -oe oboe | o-e rope | |
| | | -ough dough | -eau plateau | | | |
| /y+oo/ | -ue barbecue | u unicorn | u-e tube | ew new | eu pneumatic | |
| short /oo/ | -oo book | -oul should | -u push | | | |
| long /oo/ | -oo moon | -ue blue | u-e flute | -ew crew | -ui fruit | |
| /oi/ | oi ointment | oy toy | | | | |

| | | | | | | |
|-----------------|---------------|----------------|------------------|-----------------|-------------------|-----------------|
| /ou/ | ou ouch! | ow owl | -ough plough | | | |
| /ar/ | ar artist | a father | alm palm | -alf half | -alves calves | |
| /or/ or /aw/ | or fork | oar oars | -oor door | ore snore | -our four | |
| | | aw dawn | au sauce | -al chalk | war wardrobe | quar quarter |
| | | augh caught | ough thought | | | |
| /ur/ or /er/ | er mermaid | ir birthday | ur nurse | ear earth | wor world | |
| ‘schwa /er/’ | -er mixer | -our humour | -re theatre | -ar collar | -or sailor | |
| /air/ | air hair | -are hare | -ear bear | -ere where | | |
| /eer/ | eer deer | ear ears | -ere adhere | -ire cashier | | |
| /oor/ | -oor poor | -ure sure | | | | |
| /y+oor/ | -ure pure | | | | | |
| /b/ | b bat | -bb rabbit | bu building | | | |
| /k/ | k kit | c cat | -ck duck | ch chameleon | qu bouquet | que plaque |
| /d/ | d dig | -dd puddle | -ed rained | | | |
| /f/ | f feathers | -ff cliff | ph photograph | -gh laugh | | |
| /g/ | g girl | -gg juggle | gu guitar | gh ghost | -gue catalogue | |
| /h/ | h hat | wh who | | | | |
| /j/ | j jug | -ge cabbage | ge gerbil | gi giraffe | gy gymnast | -dge fridge |
| /l/ | l ladder | -ll shell | | | | |
| /u+l/ | -le | -il | -al | -el | | |

The teaching of reading and writing, with an emphasis on Synthetic Phonics

| | | | | | | |
|------------------|---------------|----------------------|----------------|---------------------|-------------------|----------------|
| | kettle | pencil | hospital | camel | | |
| /m/ | m map | -mm hammer | -me welcome | -mb thumb | -mn columns | |
| /n/ | n net | -nn bonnet | kn knot | gn gnome | -ne engine | |
| /ng/ | -ng gong | -n jungle | | | | |
| /ng+k/ | -nk ink | -nc uncle | | | | |
| /p/ | p pan | -pp puppet | | | | |
| /k+w/ | qu queen | -kw awkward | | | | |
| /r/ | r rat | -rr arrow | wr write | rh rhinoceros | | |
| /s/ | s snake | -ss glass | -ce palace | ce cents | ci city | cy bicycle |
| | | -se house | sc scissors | -st- castle | ps pseudonym | |
| /t/ | t tent | -tt letter | -ed skipped | pt pterodactyl | -bt debt | |
| /v/ | v violin | -ve dove | | | | |
| /w/ | w web | wh wheel | -u penguin | | | |
| /k+s/ | -x fox | -ks plural:books | -cks ducks | -kes cakes | -cs picnics | |
| /g+z/ | -x exam | -gs plurals: pegs | -ggs eggs | -gues catalogues | | |
| /y/ | y yawn | | | | | |
| /z/ | z zebra | -zz jazz | -s fries | -se cheese | -ze breeze | x xylophone |
| /ch/ | ch chairs | -tch patch | | /ch+u/ picture | -ture picture | |
| /sh/ | sh sheep | ch chef | -ti station | -ci magician | -ssi admission | |
| unvoiced /th/ | th thistle | | | voiced /th/ | th there | |

The teaching of reading and writing, with an emphasis on Synthetic Phonics

| | | | | | | |
|------|-------------------|----------------|--------------------|----------------|----------------|--|
| /zh/ | -si television | -s treasure | -z azure (blue) | g courgette | -ge collage | |
|------|-------------------|----------------|--------------------|----------------|----------------|--|

APPENDIX III

BBC Magic Pencil cursive handwriting:

| Letters | Pattern |
|---------|---|
| a | Kick up, rock over, all the way round, back down and flick. |
| b | Kick up, up high, back down, back up halfway, over, go round and flick. |
| c | Kick up, rock over and go round. |
| d | Kick up, rock over, all the way round, up high, back down and flick. |
| e | Kick up and go round. |
| f | Kick up, slope up high, over, down low and loop. |
| g | Kick up, rock over, all the way round, back down low and loop. |
| h | Kick up, up high, back down, back up halfway, over, down and flick. |
| i | Kick up, down and flick. Pencil off, then dot. |
| j | Kick up, down low and loop. Pencil off, then dot. |
| k | Kick up, up high, back down, back up halfway, over, in, slope down and flick. |
| l | Kick up, up high, back down and flick. |
| m | Kick up, down, back up, over, down, back up, over, down and flick. |
| n | Kick up, down, back up, over, down and flick. |
| o | Kick up, rock over, all the way round and flick. |
| p | Kick up, down low, back up, over, go round to halfway up and flick. |
| q | Kick up, rock over, all the way round, back down low and flick. |
| r | Kick up, down, back up, over and flick. |
| s | Kick up, rock over, curl round, curl back and flick. |
| t | Kick up, up high, back down and flick. Pencil off, then across. |
| u | Kick up, down, curve, up, back down and flick. |
| v | Kick up, slope down, slope up and flick. |
| w | Kick up, slope down, slope up, slope down, slope up and flick. |
| x | Kick up, curl round and pencil off. Then curl round the other way. |
| y | Kick up, down, curve, up, back down low and loop. |
| z | Kick up, over, curl round, back, down low and loop. |

APPENDIX IV

On the Letters and Sounds programme, the grapheme-phoneme correspondences are introduced in a very structured way:

1. s, a, t, p
2. l, n, m, d
3. g, o, c, k
4. ck, e, u, r
5. h, b, f, ff, l, ll, s, ss
6. j, v, w, x
7. y, z, zz, qu