



FAST PHONICS



White Paper

APRIL 2020

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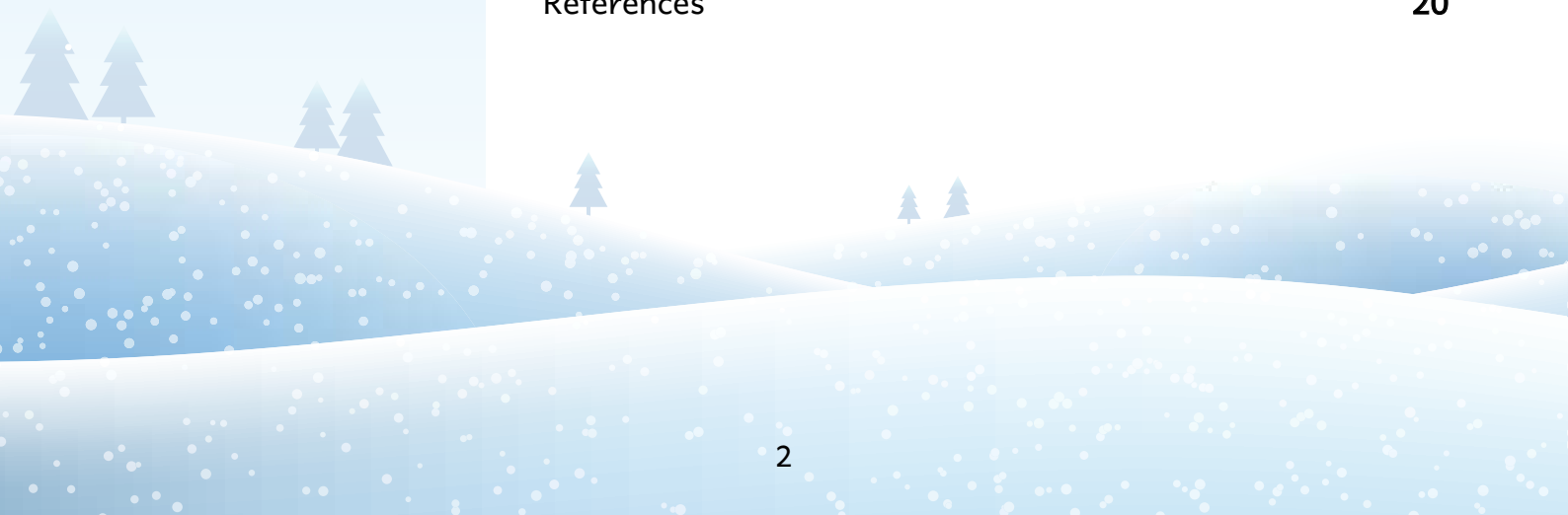
WITH KATY PIKE
AND SARA LEMAN





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Fast Phonics White Paper

Fast Phonics is an online systematic, synthetic phonics programme designed for emergent and early readers, as well as older pupils with gaps in their core reading knowledge. The *Fast Phonics* programme teaches core phonics skills, including letter-sound correspondence, segmenting and blending, syllable manipulation and spelling skills. Based on best practice reading instruction, it fully aligns with key curriculum initiatives to boost reading success. The many rewarding elements of the programme keep children motivated to learn, laugh and see what's next.



Phonics: The Essential Element For Reading Success

Decades of psychological science research and comprehensive government reviews in the United Kingdom, United States and Australia have revealed a strong consensus around the importance of systematic phonics instruction during the initial stages of learning to read (Castles, Rastle and Nation, 2018; National Reading Panel, 2000; Rowe, 2005; Rose, 2006).

The complex orthography of the English language makes understanding the connection between sounds and written letters (the alphabetic principle) particularly difficult (Castles, Rastle and Nation, 2018). Phonics is the process of learning to connect phonemes with their written graphemes. A systematic phonics programme provides planned learning experiences that give learners the tools to decode words.

It has been noted that ‘for *most* children, it is highly worthwhile and appropriate to *begin* a systematic programme of phonic work by the age of five, if not before for some children’ (Rose, 2006:29). Moreover, brain imaging studies suggest children continue to refine their phonics skills into adolescence (Froyen et al., 2008).

There are two main phonics teaching methods: analytic and synthetic phonics. Analytic phonics focuses on whole words first and introduces blending and sounds later in the sequence. Synthetic phonics involves identifying sets of letters and sounds; blending the sounds all the way though the word; and then segmenting sounds to spell each word.

Synthetic phonics as best practice

Academic research and government policy agree about the effectiveness of synthetic phonics instruction (Hempenstall, 2016). Synthetic phonics teaches letter-sound relationships in an **explicit and systematic** sequence. This ‘first and fast’ approach to reading instruction introduces children to individual phonemes and letter sounds, so that they can rapidly decode words and read independently.

Synthetic phonics instruction is grounded in research. Most notably, a longitudinal research project in Clackmannanshire, Scotland, linked synthetic phonics instruction to remarkable gains in pupils’ reading abilities. The Clackmannanshire studies were seminal to establishing the pre-eminence of synthetic phonics for emergent and early readers (see **Appendix A** for details).

Following the Clackmannanshire studies, the UK Government tasked Sir Jim Rose, then Her Majesty’s Chief Inspector of Primary Education, with conducting the *Independent review of the teaching of early reading*. The review examined the most effective method of systematic phonics instruction. The resultant ‘Rose Report’ concluded that ‘the case for systematic phonic work is overwhelming and much strengthened by a synthetic approach’ (Rose, 2006:20; See **Appendix B** for details about the development, implementation and success of synthetic phonics in the United Kingdom).



The 26 graphemes in the English alphabet make 44 phonemes, with many ways of spelling these sounds.

In the United States, the National Reading Panel found that systematic phonics programmes produce greater growth in reading than other reading programmes, and that synthetic phonics is especially effective for younger, at-risk readers (National Reading Panel, 2000). In addition, a large-scale study conducted by Barbara Foorman at the University of Houston found that systematic synthetic phonics was by far the most effective reading instruction method (Hempenstall, 2016 quoting Foorman et al., 1997).

In Australia, research established that systematic synthetic phonics had substantial advantages over analytic phonics for the reading and spelling skills of students in their second year of school (Christensen and Bowey, 2005). Research on high-performing primary schools in Western Australia found that all of these schools used synthetic phonics programmes in the early years (Louden, 2015). In 2005, the National Inquiry into Teaching Literacy in Australia recommended that teachers provide systematic, direct and explicit phonics instruction to ensure that children master the essential alphabetic code-breaking skills required for foundational reading proficiency (Rowe, 2005).

Key curriculum initiatives and outcomes

Following the release of the Rose Report in 2006, synthetic phonics instruction was made mandatory in the National Curriculum and was embedded in the Teachers' Standards in England (Glazzard, 2017).

The Department for Education and Skills created *Letters and Sounds*, a pack of synthetic phonics instruction materials for practitioners and teachers that promoted speaking and listening skills, phonological awareness and oral blending (Department for Education and Skills, 2007). The department also developed criteria for systematic synthetic phonics teaching materials (Department for Education, 2010).

Since 2012, eligible Year 1 pupils in England have undertaken a phonics screening check that consists of 40 words and pseudo-words. Only 58% of pupils met the expected standard in 2012, this increased to 82% students in 2019 (Department for Education, 2019).





Peak 1 introduces pupils to the letter /s/ and the sound /ssss/ in a fun mnemonic animation.



Successfully identifying letter-sound correspondence sees the cheeky Furballs go flying in *Flying Furballs*.



Four Square helps children identify letter-sound correspondence.



Pupils have fun identifying letter-sound correspondence in *Snowballs*.



Mountain Climb helps children to identify the location of sounds in words.

Letter – sound correspondence

Letter-sound correspondence is the foundation of phonics instruction. Children's knowledge of letter names and sounds is the best predictor of future reading and spelling ability (Piasta and Wagner 2010 quoting Hammill, 2004; Scarborough, 1998; Schatschneider et al., 2004).

Fast Phonics teaches children to identify letter-sound correspondence in short, snappy sessions. Each peak uses animations to explain either a reading strategy or introduce a letter, phoneme, digraph, trigraph or split digraph.

Next, pupils commence activities that reinforce their new knowledge. For example, in *Flying Furballs* children identify which of the three Furballs makes the phoneme that corresponds with the onscreen grapheme.

Four Square also explicitly teaches letter-sound correspondence. Pupils hear a phoneme at the beginning of the activity and must tap the square that includes the grapheme that the phoneme represents.

Similarly, in *Snowballs*, pupils match the marked snowball to the letter that appears at the top of the screen. Children tap on the letter to hear the sound that it makes.

Mountain Climb teaches pupils how to identify sounds at the beginning, middle and end of a word. Children help Yeti climb a mountain by identifying the missing sound in a word. For example, the word 'might' is pronounced and appears on screen with a missing sound, such as 'm____t'. The child is given four possible solutions for the missing sound, including /p/, /ee/, /k/ and /igh/. When a learner successfully identifies the missing sound, Yeti climbs to the next step, where a similar question will be posed.

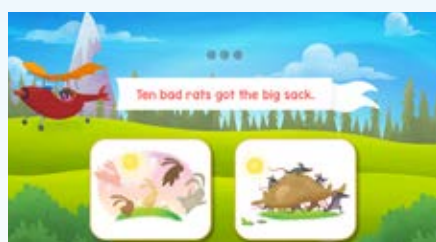




Stretch It Out is one of many *Fast Phonics* activities that teaches blending skills. Pupils identify individual sounds and then learn how to blend through a word.



Fly the Flag is used in Peak 1 and Peak 3 to develop pupils' segmenting skills. The activity also features in Peaks 4, 8 and 9 with increasing difficulty.



Send a Message hones pupils' spelling skills.

Blending

Blending is a key synthetic phonics skill. Unlike other types of phonics instruction, synthetic phonics teaches beginning readers to blend or 'synthesise' phonemes right from the outset, in order to develop word reading skills (Johnston and Watson, 2007).

Fast Phonics teaches pupils to blend phonemes in order, from left to right, 'all through the word' for reading. Initially, pupils are taught to identify and blend sounds to decode words with consonant-vowel-consonant patterns, before moving on to more difficult words. For example, the six animations and 13 activities in Peak 1 **quickly and explicitly** introduce the sounds /s/, /a/, /t/ and /p/. In Peak 1, *Stretch It Out* teaches pupils to identify individual phonemes and then to blend all the way through the word to decode *tap*, *sap*, *pat* and *sap*.

Segmenting and spelling

Synthetic phonics teaches children to simultaneously spell words by segmenting them into phonemes while teaching blending to decode. Moreover, they learn that segmenting is the reverse of blending (Glazzard, 2017).

Fast Phonics animations and activities teach pupils how to spell words by segmenting them into their constituent phonemes. For example, in *Fly the Flag* pupils assemble phoneme blocks to make the correct word and help Yeti catch the Furballs.

Pupils learn spelling skills in *Send a Message*. In this activity children type a dictated message to Yeti using recently learned words. For example, in Peak 6 pupils are asked to type the message, 'Ten bad rats got the big sack'. When shown two images, children match the image to the message to demonstrate that they comprehend what they have written.

Full Circle teaches children to spell various words using letter tiles. For example, in Peak 2 pupils use /m/, /a/, /p/, /t/ and /s/ to spell *map*, *mat*, *sat*, *sit*, *pip*, *sip* and *sap*.



In Peak 2, pupils spell CVC words using letter tiles in *Full Circle*.



Silly Bulls teaches syllable manipulation and blending through the word.

Syllable manipulation

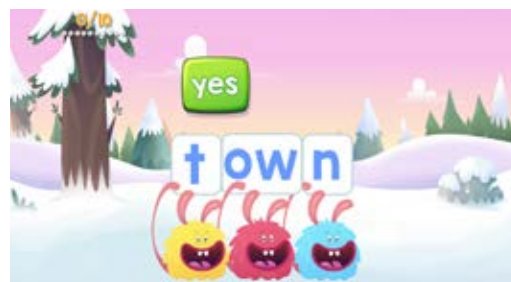
Research indicates that the more attuned a child is to the phonological structure of words, such as syllables and phonemes, the more successful a decoder and reader he or she will become (Ritter, Park, Saxon and Colson, 2013 quoting Lewis et al., 2006; Otaiba, Puranik, Ziolkowski and Montgomery, 2009). Consequently, it is important to teach learners how to identify and manipulate syllables.

Fast Phonics includes syllable manipulation animations and activities from Peak 4 onwards. The *Silly Bulls* activity begins by introducing a new word, such as 'rabbit'. As most syllables contain a vowel (particularly in short words), the activity initially helps pupils identify the vowels in a word. It then explains that words can be broken up into syllables. To demonstrate this visually, the animation splits the word. Children read the syllables individually and then blend them together. They are then shown two images and must match the image to the word to demonstrate that the word has been read correctly.

Pseudo-words

As discussed, the initial focus of synthetic phonics programmes is to teach children to identify, blend and segment phonemes. Consequently, it is considered appropriate to practise these skills on pseudo-words. The ability to decode real and pseudo-words is the basis of the phonics screening check.

Furball Fun asks whether a word that appears on screen is real, such as 'town', or not, like 'pas'. Once pupils make a selection, the individual sounds in the word are separately enunciated.

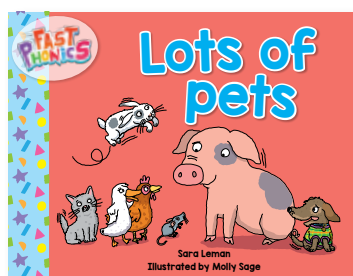


Furballs cheer on pupils who correctly identify words and pseudo-words in *Furball Fun*.





Fast Phonics includes a range of decodable books that reinforce pupils' knowledge. The end-of-book quizzes assess their knowledge and provide insightful data to inform your classroom practice.



Decodable books

Synthetic phonics uses decodable books to 'cement' new knowledge (Konza, 2011). Each *Fast Phonics* peak includes up to four decodable books and an accompanying end-of-book quiz. Pupils enjoy using the books to practise their new decoding skills. Additionally, being able to read books gives learners confidence, which is critical in the earliest stages of learning to read. Feeling successful helps motivate learners to practise. These components work together to hone phonics skills, as research demonstrates these are key for literacy success. Furthermore, the end-of-book quizzes are an opportunity to reinforce and assess pupils' decoding skills.



Assessment and reporting

The Department for Education requires synthetic phonics programmes to include high quality assessment and data (Department for Education, 2010). Embedded within the *Fast Phonics* programme is assessment and reporting of letter-sound correspondence; letter recognition; the ability to sound out phonemes; the ability to hear and blend phonemes; the reading of phonically regular words; and the reading of some irregular words.

Fast Phonics commences with a placement test. This test personalises a pupil's programme by identifying strengths and areas for improvement. It also ensures he or she begins on the most appropriate peak.

Each peak concludes with a narrated 10-question multiple choice quiz that reinforces and assesses phonics skills. Pupils immediately move to the next peak if they receive 80% or more on the quiz. Pupils who are unsuccessful can re-take the assessment.

As mentioned, each decodable book includes an end-of-book quiz that assesses pupils' comprehension. There are up to four decodable books in each peak.

Children can monitor their own progress in the *My Progress* area. For example, pupils can view their average score for end-of-peak quizzes, as well as the total number of sounds and words learnt, and books read.

Teachers can monitor pupils' progress via the Teacher Dashboard, where they can see what letter sounds their pupils know and which decodable books they have read.



The Placement Test ensures pupils start the programme at the most appropriate peak.



Learners monitor their achievements in the *My Progress* area.

Motivation

Motivation is the key to learning any new skill, and reading is no exception. It is crucial for reading instruction to encourage pupils' reading motivation and engagement (Wigfield, Gladstone and Turci, 2016). In large part, this is because motivation is a predictor of reading comprehension growth (Guthrie et al., 2007; Taboada, Tonks, Wigfield and Guthrie, 2009). Reading motivation is multidimensional; self-efficacy, and intrinsic (internal) and external motivation are the three most important factors.

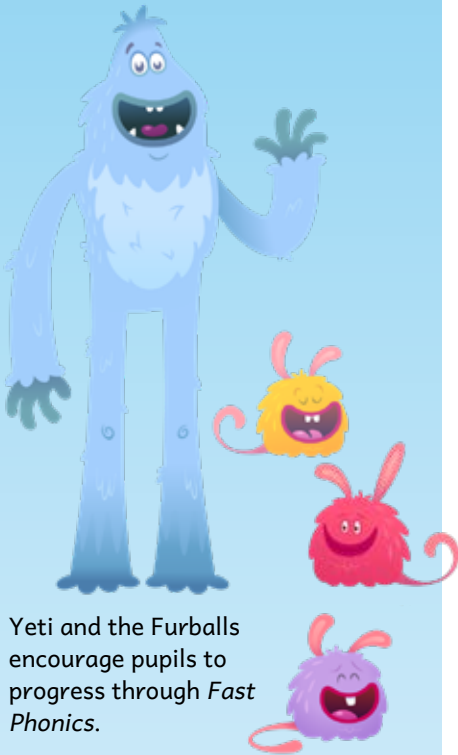
Self-efficacy refers to a child's belief in their ability to complete a task. It is based on a child's previous experience and the encouragement and feedback they receive from others (Wigfield, Guthrie, Tonks and Perencevich, 2004). Successfully completing a task provides a child with the confidence to undertake a similar activity. For example, reading a decodable book provides a child with the confidence to attempt a second book. Confidence is vital to academic success. Indeed, believing in oneself is more closely linked to achievement than any other motivation throughout school (Guthrie, 2013).

Fast Phonics fosters self-efficacy in emergent and early readers. The programme is specifically sequenced to build pupils' knowledge and confidence. Synthetic phonics instruction, such as that offered in *Fast Phonics*, quickly and deliberately teaches how to identify letter-sound correspondence and how to blend and segment sounds. The programme maintains its fidelity to synthetic phonics instruction as children progress to high-frequency words that do not conform completely to letter-sound correspondence rules. This structure gives pupils the confidence to continue through the programme.

Intrinsic motivation refers to a child's desire to complete a task for their own sake, such as reading out of curiosity or the desire to be challenged (Wigfield and Guthrie, 1997). External motivations are benefits that children receive for their efforts, such as rewards. While children respond positively to external rewards when learning to read, the key to ongoing reading success is intrinsic motivation (Cambria and Guthrie, 2010).

Fast Phonics understands this delicate balance and uses a range of external rewards to encourage pupils while simultaneously supporting the development of intrinsic motivations. For example, the playful characters, Yeti Coins, exciting upgrades and interactive rewards in *Fast Phonics* engage and motivate pupils to keep learning. At the same time, the programme's planned sequence of activities quickly builds and consolidates reading skills and confidence to ensure children move from decoders to master readers.

Peaks include carefully sequenced animations and activities to quickly introduce the concept of letter-sound correspondence, blending and segmenting. Consequently, pupils can independently read decodable books by the end of Peak 1.



Yeti and the Furballs encourage pupils to progress through *Fast Phonics*.



Gems and Yeti Coins motivate pupils to complete *Fast Phonics* activities.



Fun upgrades encourage pupils to stay on task.

Transforming learning through technology

Digital technology has transformed teaching and learning in classrooms across the globe. There are significant benefits to incorporating technology into reading instruction, including increasing pupils' motivation and personalising programmes to allow learners to learn at their own pace (Jamshidifarsani, Garbaya, Lim and Blazevic, 2019). British teachers believe technology can have a positive impact on children's literacy learning, particularly reluctant readers/writers, boys, and those who are less able to read (National Literacy Trust, 2019).

Experimental and quasi-experimental studies have shown that information and communication technologies use can positively affect children's literacy (Piquette, Savage and Abrami, 2014; Cheung and Slavin, 2012). For example, a study of kindergarten children in the United States (equivalent to Year 1 students in England) found that computer-assisted instruction to teach phonics, in addition to regular in-class teaching, can enhance pupils' reading skills, particularly for at-risk children (Macaruso and Walker, 2008). Similarly, a quasi-experimental study in Australia found that using a computer-based phonics programme improved pupils' phonological awareness compared to regular literacy instruction (Wolgemuth et al., 2011).

Blended learning — combining digital and pen-and-paper activities, and using data to provide a personalised education plan — is beneficial to developing phonological awareness, letter-sound knowledge, word identification skills and reading fluency (Prescott, Bundschuh, Kazakoff and Macaruso, 2017). Research conducted in the United States demonstrated that elementary school students, including children from low-SES backgrounds and English Language Learners, who use a blended learning programme make 'great progress' in English Language Arts and demonstrate 'significant growth on a standardised reading test' (Prescott, Bundschuh, Kazakoff and Macaruso, 2017:505).

A useful schema for discussing the potential impacts of various reading technologies is the QAIT model of effective classroom practice (Slavin, 1994, 2009). This framework posits that effective teaching is a product of four factors:

- Quality of instruction – the provision of clear, well-organised, interesting lessons
- Appropriate levels of instruction – content is appropriate and accords with pupils' prior knowledge, skills and learning rates
- Incentive – pupils are intrinsically and externally motivated to learn the material
- Time – the programme provides adequate instructional time (Cheung and Slavin, 2012).

Fast Phonics meets these criteria. The programme has a clear, consistent lesson structure that is rigorously mapped to learning outcomes and uses



ICT use can positively effect children's literacy.

best practice education research to teach, support, reinforce and assess student knowledge. The extensive rewards and other motivational tools, such as upgrades and animations, encourage children to complete all activities and, ultimately, to complete the programme as proficient readers. The careful sequence of *Fast Phonics* peaks builds pupils' confidence as readers, helping them move from basic letter-sound correspondence to more advanced reading skills, including automaticity, fluency and comprehension. As a synthetic phonics programme, *Fast Phonics* deftly introduces concepts to pupils' existing decoding skills. Learners' progress through the programme at their own pace, and the interactive reading, spelling and comprehension activities are opportunities to practise and reinforce their skills.

Teacher quality is critical to ensuring that students use online reading programmes successfully (Duncan-Owens, 2009). The *Fast Phonics Teaching Guide* provides clear and detailed information to help teachers use the programme effectively. Teachers can also quickly and easily access pupils' end-of-peak assessment results in the Teacher Dashboard to monitor pupils' progress and inform classroom practice.

Conclusion

Research demonstrates that synthetic phonics instruction provides a strong foundation for reading skill and reading confidence in learners. Being able to efficiently decode new words gives learners the confidence to read more, setting them on a more successful school trajectory.

Fast Phonics is a rigorous synthetic phonics programme built on best practice research. The sequential program of 20 peaks introduces letter-sound correspondence systematically. By explicitly teaching segmenting and blending sounds early, *Fast Phonics* enables learners to make connections between letters, sounds and pronunciation to develop a strong alphabetic principle.

Each peak thoroughly covers one set of letter-sound correspondence using highly motivating and engaging animations, activities, interactives, books and quizzes. The teaching and strategy animations teach and reinforce systematic synthetic phonics. The multisensory interactive activities allow children to practise key phonics skills, including letter-sound recognition, blending all through the word, segmenting and spelling, pseudo-words, syllables, reading captions and extended text. The decodable books and end-of-book quizzes allow children to use and reinforce their reading skills. The end-of-peak quizzes are an opportunity to assess pupils' abilities and monitor their progress. *Fast Phonics* also has a bank of printable resources, including a teaching guide and printable worksheets to assist classroom practice.

Fast Phonics is rigorous but fun. This complete synthetic phonics programme is a dynamic mix of maps, upgrades and exciting learning activities where children can learn, laugh and see what's next.



Fast Phonics the systematic, synthetic phonics programme where children can learn, laugh and see what's next.

Appendix A

Clackmannanshire studies

The Clackmannanshire studies, as they are widely known, were conducted by Joyce Watson and Rhona Johnston on students in Primary 1 (the equivalent of Reception in England). The studies demonstrated the pre-eminence of synthetic phonics instruction for emergent readers.

Study 1 investigated which aspects of phonics teaching most effectively produced independent readers. The study was undertaken as part of a doctorate research in 1992–93 (before Clackmannanshire was formed) (Ellis, 2007). It tracked the reading and spelling development of Primary 1 students in 12 schools and concluded that the most effective method of reading instruction was to teach students to identify initial letter–sound correspondence quickly and to use a sounding and blending strategy (Watson, 1998).

Study 2 considered ‘whether synthetic phonics was more effective than analytic phonics merely because letter sounds were taught at an accelerated pace’ (Johnston and Watson, 2004: 343). In this study, 92 Primary 1 pupils were split into three groups and given two additional 15-minute tutorials over 10 weeks using either: synthetic phonics, analytic phonics, or sight vocabulary training only (i.e. no additional phonics tuition beyond that included in the normal class programme) (Ellis, 2007). Results demonstrated that synthetic phonics instruction, specifically the focus on teaching children to sound and blend letter sounds, led to better reading, spelling and phonemic awareness and was thus superior to analytic phonics (Johnston and Watson, 2004).

Study 3 involved approximately 300 pupils and was conducted from 1997–99. The study was conducted in two phases and considered which type of phonics instruction was most effective. **Phase 1** saw pupils in Primary 1 classes taught to read using either phonemic awareness, standard analytic phonics method, or synthetic phonics instruction over a 16-week period. The children’s reading and spelling was tested at the conclusion of the period. Unlike pupils in the other groups, the synthetic phonics groups were significantly ahead of chronological age for reading and spelling. These pupils also quickly began to read independently. **Phase 2** provided for pupils who had studied using the other phonics programs to complete the synthetic phonics programme by the end of Primary 1. The learners’ reading and spelling skills were re-tested towards the end of Primary 2 and it was found that all pupils’ reading and spelling skills were above chronological age. (Johnston and Watson, 2005).

A seven-year longitudinal study examining the effect of synthetic phonics instruction on the word reading, spelling and reading comprehension performance of pupils who participated in Study 3 was released in 2005. It reported remarkable results:

The Clackmannanshire studies demonstrated that synthetic phonics instruction has major and long-lasting effect on children’s reading and spelling.

At the end of Primary 7, word reading was 3 years 6 months ahead of chronological age, spelling was 1 year 8 months ahead, and reading comprehension was 3.5 months ahead (Johnston and Watson, 2005:8).

These scores were even more impressive as the pupils' initial receptive vocabulary knowledge scores indicated that they would be expected to perform below average chronological age on standardised tests:

However, as mean receptive vocabulary knowledge (an index of verbal ability where the average is 100) was 93 at the start of the study, this is a group of children for whom normal performance might be expected to be below average for chronological age on standardised tests. Therefore this may be an underestimate of the gains with this method (Johnston and Watson, 2005:8).

Significantly, the study found that synthetic phonics was particularly effective for teaching boys to read and spell, and that it helped pupils from less advantaged homes advance their reading and spelling skills, especially in the early years of primary school.

The study authors concluded that synthetic phonics instruction has a major and long-lasting effect on children's reading and spelling attainment (Johnston and Watson, 2005).

Appendix B

The success of synthetic phonics in England

Towards the end of the 20th century, there was significant concern about the declining reading standards of pupils in England. In 1998 the government implemented the National Literacy Strategy (NLS) to address this issue. The strategy promoted a ‘searchlights model’ for reading instruction, whereby ‘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’ (House of Commons, 2005:20). At the time, this model was considered best practice and supported phonics content and instruction, as well as a whole-language approach, as options for reading instruction (Rose, 2006).

Following its release, the NLS faced criticism for its lack of emphasis on phonics instruction. In response to concerns, additional materials, including *Progression in Phonics* (1999) and *Playing with Sounds* (2004), were developed by the Department for Education and Skills to enhance phonics instruction (Chew, 2018).

In 2005, the House of Commons Education and Skills Committee released its *Teaching children to read* report. The report placed significant emphasis on the findings of the Clackmannanshire study. The committee recommended that the government undertake an immediate review of the NLS and compare it with ‘phonics fast and first’ approaches, and, amongst other issues, investigate the effectiveness of synthetic and analytic phonics (House of Commons Education and Skills Committee, 2005).

The Rose Report

The government tasked Sir Jim Rose, formerly Her Majesty’s Chief Inspector of Primary Education and Director of Inspection for the Office for Standards in Education, with completing the review. Following the collation and analysis of an extensive array of evidence, including classroom visits, the *Independent review of the teaching of early reading* (the ‘Rose Report’) was released in 2006. The report emphasised the importance of teaching children to read using a systemic phonics approach, concluding that synthetic phonics is the best way to teach most children to become skilled readers and writers (Rose, 2006).

The Rose Report informed literacy policy in England and the content of initial teacher education courses. Following its release, synthetic phonics instruction was incorporated into the National Curriculum and embedded in the Teachers’ Standards to ensure that all teachers had access to knowledge of this method of instruction (Glazzard, 2017).

“Having considered a wide range of evidence, the review has concluded that the case for systemic phonic work is overwhelmingly and much strengthened by a synthetic approach.” Rose Report (2006:20)



“The initial effects [of synthetic phonics instruction] are large ... Most interestingly, there are long-term effects at age 11 for those with a high probability of starting their school education as struggling readers. The results for our study suggests that there is a persistent effect for those classified as non-native English speakers and economically disadvantaged ...”
London School of Economics
(2016:20)

London School of Economics study

In 2016, the London School of Economics released a large-scale study tracking the progress of more than 270 000 pupils who learnt to read using a synthetic phonics programme. The study concluded that a synthetic phonics programme has long-term benefits for children from poorer backgrounds and those who do not speak English as a first language. It also found that the teaching method has large, initial benefits for all pupils at age five and age seven (Machin, McNally and Viarengo, 2016).

Progress in International Reading Literacy Study (PIRLS)

PIRLS assesses the performance of students in their fourth year of schooling. It is conducted by the International Association for the Evaluation of Educational Achievement every five years in 50 countries. Results from the 2016 study demonstrated that synthetic phonics instruction improves pupils’ reading. Pupils from England who participated in the 2016 PIRLS were the first cohort to be taught to read using synthetic phonics exclusively (Turner, 2017), and the results were a marked improvement from the previous two tests (2011 and 2006).

Key results included:

- England moved to joint 8th place from joint 10th place in 2011 and 15th in 2006
- substantially reducing the gap between high and low performers, largely attributed to significant improvements in the performance of lower-performing pupils
- significantly improved scores for reading for literary experience, and reading for acquiring and using information (McGrane et al., 2017).

Oxford University research

Oxford researchers tracked the results of pupils who completed the first phonics screening check in 2012, against their results in Key Stage 1 assessment of reading and the PIRLS exam. The researchers were particularly interested in the progress of learners who had initially failed the phonics screening test and retook the assessment the following year. The results suggested that pupils who initially failed and then passed the check performed substantially better than learners who failed both the check and the reassessment, even after performance on the initial phonics check was controlled for. The relatively better performance of pupils who fail and then pass the check underscores the importance of intervention for those learners who are having problems with phonetic decoding, to increase their likelihood of success at reading comprehension in later schooling (Double, McGrane, Stiff and Hopfenback, 2019).

Appendix C

Fast Phonics supports phonemic awareness, vocabulary, comprehension and fluency

It is well-established that, in addition to phonics instruction, fluent readers must master:

- phonemic awareness — the ability to hear and manipulate the different sounds in words
- vocabulary — understanding the meaning of words, their definitions and context
- fluency — the ability to read aloud with speed, understanding and accuracy
- comprehension — understanding the meaning of text (Hempenstall, 2016).

Fast Phonics is a synthetic phonics programme; however it also incorporates these elements to support the development of successful readers.

Phonemic awareness is the ability to hear and manipulate phonemes (the smallest unit of sounds in spoken words). It is an aural/oral skill independent of print. Several *Fast Phonics* activities encourage learners to listen to and identify spoken sounds, and thus build phonemic awareness skills. For example, *Who's in the Tree* requires pupils to listen to a phoneme and then identify the correct grapheme, digraph, trigraph, etc. in later peaks.

Vocabulary knowledge is an important predictor of reading comprehension (Muter, Hulme, Snowling and Stevenson, 2004). In *Fast Phonics* pupils are systematically introduced to new words, many of which include visual support. The programme's engaging activities allow learners to practise their new words, and their knowledge is reinforced in the decodable books that accompany each lesson.

Reading fluency refers to efficient, effective word recognition skills that permit a reader to construct the meaning of text. Fluency is manifested in accurate, rapid and expressive oral reading and is applied during — and makes possible — silent reading comprehension (Pikulski and Chard, 2005). Hence, fluency bridges the skills of decoding and comprehension.

Fast Phonics activities build fluency and automaticity, including recall of **high frequency words** and vocabulary. For example, in *Build A Fire* pupils must correctly identify high frequency words, such as *the*, as they help Yeti build a fire. In *The Daily Dozen* learners have to read a word and match it to an image.

As previously mentioned, all peaks include decodable books. Initially these books are not narrated, which gives learners the opportunity to decode words and read independently. However, narrated text that models fluent reading is available if pupils do not pass the end-of-book quiz.



Children build their phonemic awareness skills in *Who's in the Tree*.



Build A Fire teaches and reinforces high frequency words.



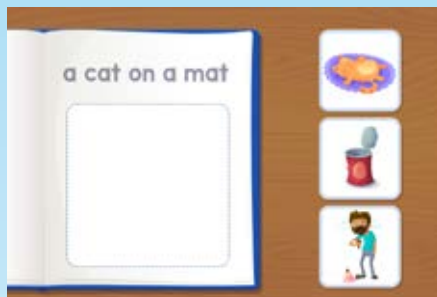
Practise decodable word reading in *The Daily Dozen*.



Reading comprehension is the process of engaging text for the purpose of extracting and constructing meaning (Snow, 2002). It is of paramount importance to academic success and future life outcomes (National Reading Panel, 2000; Snow, 2002).

The activities in *Fast Phonics* are specifically designed by education experts to teach skills that will allow children to read independently. For example, *Captions* requires pupils to read a caption and choose the best matching image. Similarly, *Yes or No* requires learners to read a question, such as 'Is the sun wet?' and determine the answer.

Comprehension skills are also required when learners access end-of-book quizzes. Each book includes 5–10 narrated comprehension questions and decodable answers.



Captions and *Yes/No* build comprehension skills.

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