



Rationale for the Programme ‘Pip Learns to Read’
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Young Children Reading: A Context for New Technologies and Early Literacy

“A curriculum for learning in the digital age will...include concepts that will help each generation understand the world in which they live and the skills to participate in society” (Starkey, 2012, p.27).

Traditionally reading has culturally been perceived as relating purely to the skill of decoding printed text within the context of paper-based media. The nature of literacy in the 21st century is, however, changing (Bearne, 2003). The rapid rise of developments in technology means that digitised media in particular now permeate children’s literary reading experiences from a very young age, beginning with experiences in the home (Davidson, 2011). Many young children now enter their early years in education as competent and frequent users of digital technology; for example Bearne et al (2007, p.25) note that, “evidence from children as young as 5 shows sophisticated expertise in on-screen reading.” Levy’s (2009) research, undertaken with children aged between 3 and 6 years’ old, suggests that the medium of computer technology encourages young children to develop both understandings about texts and the skills needed to read them. Computer technology further impacts on children’s confidence when approaching print, confidence which she



argues diminishes upon school entry as they encounter so-called 'schooled' approaches to literacy.

Bearne (2004, p.16) suggests that texts are now available to young readers in a variety of modes and media "so that 'text' has come to include not only words-plus images but moving images, with their associated sound tracks too." This combination of words with photographic and moving image, sound and colour, particularly in the context of digital technology, has prompted traditional perspectives of reading to be challenged. Reading has now become a broad and complex skill extending far beyond the ability to decode printed text within paper-based media. The phrase 'digital literacy' can be applied in this context, defined as "the way in which young children develop strategies to access and read a variety of screen texts with fluency" Levy (2009, p.76). *Pip learns to read* is a digital literacy text that supports children learning to read through a 'phonics first' approach (an approach that presents high quality systematic, synthetic phonic work as the prime strategy for decoding print). Through accessing this text, children enter a realm of games embedded within a sequential series of scaffolded modules and units through which they learn and develop an increasingly complex set of phonic skills and understanding. In so doing they are learning to read in one sense of the word, i.e. through the phonics first approach; however they are doing so whilst simultaneously 'reading' the screen and all the images and sounds therein. Levy's (2009) study revealed that this is a perfectly plausible concept. All of the children in her study had already developed skills to utilise a variety of digital texts with independence, even before they had begun their formal education. She suggests that "the use of digital technology, and perhaps computer texts in particular, can provide territory for young



children to learn how to use and make sense of print, with in a context that is meaningful, motivating and free from issues of proficiency grading” (Levy, 2009, p.89).

Phonological Awareness and Learning to Read: Taking a ‘Phonics First’ Approach

Phonological awareness refers to a child’s ability to detect and manipulate the component sounds that comprise words. Discrete phonics teaching is necessary for children because their explicit awareness of the phonemic structure of words does not come about simply as they gain maturity and experience with spoken language; “most children need to have phoneme structure pointed out to them in order to make sense of the mappings between phoneme segments and corresponding letters” (Shankweiler and Fowler, 2004, p.489). Shankweiler and Fowler (2004) argue that children’s early awareness of the phonemic principle of alphabetic writing plays a central role in becoming a skilled reader of English (and other alphabetic systems); however, there are stages of phonological awareness that children must go through in relation to language development before they are ready to receive discrete phonics instruction.

Children develop an awareness of sound from birth. Babies listen to the intonations and sounds of the voices of their carers for example, thus tuning in to the subtleties of the sounds, rhythms and patterns of their native language. Linking this in with the current approach to teaching reading in England which specifies using a ‘phonics first’ approach, systematic synthetic phonics (SSP) programmes have been developed acknowledging the foundations of language that must first be in place for children to learn phonic skills successfully. An example of an SSP programme is



Letters and Sounds (DfES, 2007). Letters and Sounds is a progressive six phase programme, where children learn variously from simultaneous visual, auditory and kinaesthetic activities designed to secure their essential phonic knowledge and skills. Phase 1 focuses on establishing a strong foundation of awareness of sound. Seven aspects within the phase support this development:

Aspect 1: General sound discrimination – environmental sounds

Aspect 2: General sound discrimination – instrumental sounds

Aspect 3: General sound discrimination – body percussion

Aspect 4: Rhythm and rhyme

Aspect 5: Alliteration

Aspect 6: Voice sounds

Aspect 7: Oral blending and segmenting

Research by Bradley and Bryant (1978, 1983) revealed the importance of rhyme awareness for reading development. Their studies showed that rhyme awareness measured in pre-schoolers (children aged between 3 and 4 years old) was a significant predictor of later progress in reading and spelling. More recent research by Shankweiler and Fowler (2004) suggests that sensitivity to larger phonological units including words, rhymes and syllables, occurs earlier and probably more naturally than awareness of individual phonemes. Findings such as this corroborate the approach of SSP programmes in relation to the importance of early awareness of sound ahead of successful phonics instruction.

Module 1 of *Pip learns to read* builds on the equivalent of a secure Letters and Sounds Phase 1 foundation, incorporating elements such as rhyme and alliteration, particularly within its early content. The module supports established



language skills to scaffold and develop children's early oral blending and blending and segmenting (for reading) skills. Subsequent modules build on this important skill to gradually further develop knowledge and understanding. To this end, *Pip learns to read* remains true to both research-established understandings and government preferences in relation to children learning to read using a 'phonics-first' approach to decode text.

The Use of Decodable Texts

SSP programmes are usually supported by a set, or sets, of decodable texts. A decodable text is a type of text often used in beginning reading instruction, accessed as part of a schematic, incremental progression according to decoding ability and matched to the level of children's phonological awareness. An example of this is where a child could decode a phrase such as "Pat the fat rat" if they had been taught the letter-sound associations for each letter—that 'p' represents the sound /p/, 'a' for the sound /a/ and so on. Following this line of argument, repeated practice with the same small set of words developed from the same set of known phonemes is seen as the key to promoting decoding abilities. There is a strong argument however that using decodable texts in this way simply supports a skills-based approach to beginning reading instruction (Hoffmann, Sailors and Patterson, 2002). Shulman (1986) argues that this approach reflects a model of teaching and learning that makes superficial sense; what of other elements in learning to read such as reading for pleasure and enjoyment? The danger is that an extreme focus on decodability may cause us to lose sight of other factors that should be considered in the



development of text for beginning reading. To this end, Woods (2001, p.74-5) argues;

Reading can change your life, it can inform, motivate, inspire and elevate; but must be reading you do for yourself, at your own pace, in your own way, and that has a bearing on your background, interests, values, beliefs and aspirations. Reading that is forced on you in a mechanistic way and formally assessed may have the reverse effect, the major purpose becoming...passing tests, and a preoccupation with form rather than substance.

The proposed new National Curriculum for English, currently in draft form (DfE, 2012), purports to support children's development of a love of literature through widespread reading for enjoyment. It also argues that children need to develop the habit of reading widely and often for both pleasure and information. At the same time, there is an insistence on children learning to read in a way that divorces mechanics from meaning. Cremin (2006, p.170) argues that to "foster delight and pleasure in reading...increased attention needs to be paid to motivating readers and to the construction of creatively engaging environments which nurture children's personal encounters with literature and other texts." This is a strong precept of *Pip learns to read*, echoed within accompanying materials. *Pip learns to read* is supported by a set of decodable texts, however these have been creatively designed to give much greater scope for more interesting and natural stories, whilst at the same time exposing the child to new phonemes recently encountered. This creative approach aligns with the overall approach of the main digital programme, which is characterised by a range of multi-modal features designed to engage and motivate the child's learning, and ultimately their reading ability.

Teaching and Learning through Digital Technology



Phonics games played via the interactive whiteboard often form part of children's practice of their phonic skills within the classroom context of daily, discrete phonics teaching. Games played in this way, using a screen and button or other commands, and responding to a set of instructions, are not unfamiliar to the majority of children, most of whom, as has been established, experience a range of digital media at home. Computer games, drawing tools, word processing, desktop publishing and printing pictures are examples. For some parents digital experiences such as these are deliberately chosen because they are considered to be educational in content; some practices such as shared reading of CD-ROM storybooks and other electronic books are specifically intended to scaffold young children's language use and understanding (Kim, 2008), for example. Kamil, Intractor and Kim (2000) have concentrated their research on the effects of using multimedia that integrate text, image, animations and sound on literacy learning. Much of this work focuses on the cognitive aspects of literacy, such as how learners synthesise multimedia information, and what kinds of comprehension processes are involved. It has been argued that parents tend to underestimate the ways they support young children's use of technology (Plowman, McPake and Stephen, 2008), however the fact remains that children are arriving at school digitally literate, able to synthesise and comprehend both process and outcome.

There is some evidence to suggest that learners with limited prior knowledge of a topic tend to learn better with multimedia than with conventional material, as do learners identified as 'visual' or 'auditory' in their learning styles (Kamil et al., 2000). Other research suggests that powerful visual displays such as animations and simulations are superior to static media for building mental models and



comprehending stories (Kamil et al., 2000; Bhojwani, Lord and Wilkes, 2003). This line of argument supports the potential of a digital programme such as *Pip learns to read* in facilitating the construction of mental models and augmenting learning outcomes in relation to the development of children's phonic knowledge. This observation relates to the progressive nature of any systematic synthetic phonics programme where children must start from simple phonic knowledge and skills, mastering these before moving to those which are increasingly complex.

There is also some evidence to suggest that technology increases motivation and interest, involvement in tasks and time-on-task, in literacy acquisition and practice. Kamil et al., (2000) cite several studies that support the view that "computer use by children can increase their involvement in and enjoyment of writing and reading, thereby improving the quality of what they produce" (p.778). This is important research to bear in mind when thinking about the potential for sustained, independent interest using a programme such as *Pip learns to read*. Children are active learners, full of enquiry about the world around them. They seek and choose to engage in meaningful, motivated ways. Another way of looking at this line of thinking therefore is in relation to both intrinsic and extrinsic motivation. From a psychological perspective a child's intrinsic motivation is stimulated through learning which involves "novelty, agency (...choice and control), an appropriate level of difficulty, and is relevant to the learner's interests (Starkey, 2012. p.68). Extrinsic motivation can provide a goal which engages the learner as they strive to achieve it (Ryan and Deci, 2000). *Pip learns to read*, with its carefully scaffolded, appealing tasks and activities will engage and motivate children to learn independently, simply because they want to.



Independent Learning through Digital Practices

Some might question the ability of children to work through the programme independently in terms of what concrete learning could potentially take place. There is evidence however to suggest that children do learn concrete outcomes through engagement with digital practices. Labbo and Kuhn (2000) for example used a distinction between ‘considerate’ and ‘inconsiderate’ CD-ROM stories in a study involving a five-year-old kindergarten child. Considerate CD-ROM stories were defined as those in which multimedia effects were integral and coherent with the story. Inconsiderate stories included incongruent or incidental effects. They found that considerate CD-ROMs supported the child’s understanding and retelling of the story and enlisted active meaning making responses. Inconsiderate CD-ROMs on the other hand impeded cohesive retellings and fostered passive viewing. Humble (2000) compared the effectiveness for enhancing reading fluency of silently reading a story whilst listening to it on a CD-ROM with reading aloud to an adult. The results were almost identical, prompting the conclusion that a CD-ROM picture book could provide an effective substitute for adults when none was available for helping to enhance reading fluency. Studies such as these support both the value and potential of the independent nature of *Pip learns to read* and the possibilities for concrete learning.

Teaching and Independent Learning: a Connectivist Approach

Connectivism (Siemens, 2004) aims to provide a theory that considers how people, organisations and technology can collaboratively construct knowledge. A



central idea is the continual expansion of knowledge which occurs as new and novel connections open the way for new interpretation and understandings to take place (Starkey, 2012). Starkey argues that “learning involves developing understanding of concepts or skills” (2012, p.24). Currently, the prime approach to teaching reading in England begins with the learning of phonics through daily discrete sessions in the classroom from Reception-age onwards. Within this context a prescribed set of knowledge and skills are taught. *Pip learns to read* supports, consolidates, and builds on what children encounter in the classroom through the interactive medium of digital technology. The programme gives children a place and the space to develop their knowledge and understanding; a place and space where they will connect information in new and appealing ways. In this scenario, teachers, parents and their children are the people; the school and/or classroom the organisation; *Pip learns to read* the technology. All elements collaborate beyond the classroom context to enable the construction of children’s reading knowledge. Connectivist learning theory further supports the notion of connections which can be made between ideas, concepts, knowledge or skills. The individual learner learns through making connections with what has already been experienced or is known. In this way, *Pip learns to read*, will enable independent learning to take place because of the connections the child can make with the systematic synthetic phonics programme encountered in the classroom context.

Summary

A rationale rooted in research literature has been outlined to support the credibility and viability of *Pip learns to read*. The programme is currently seeking the interest of



parents and teachers alike as a facilitating tool with which to support children in the early stages of learning to read. Attention to detail is inherent within both the content and design of the programme. Designed to be used alongside their phonics programme in school, *Pip learns to read* will support a child's reading and writing success through 6 carefully scaffolded modules, each one packed with exciting, engaging, multisensory games and activities. Games and activities are embedded within clear, meaningful and familiar contexts for learning. Set within the context of the current literacy curriculum, the programme is easy for a child to use independently, and combines the skills of blending for reading and segmenting for spelling, along with opportunities for developing comprehension skills.



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