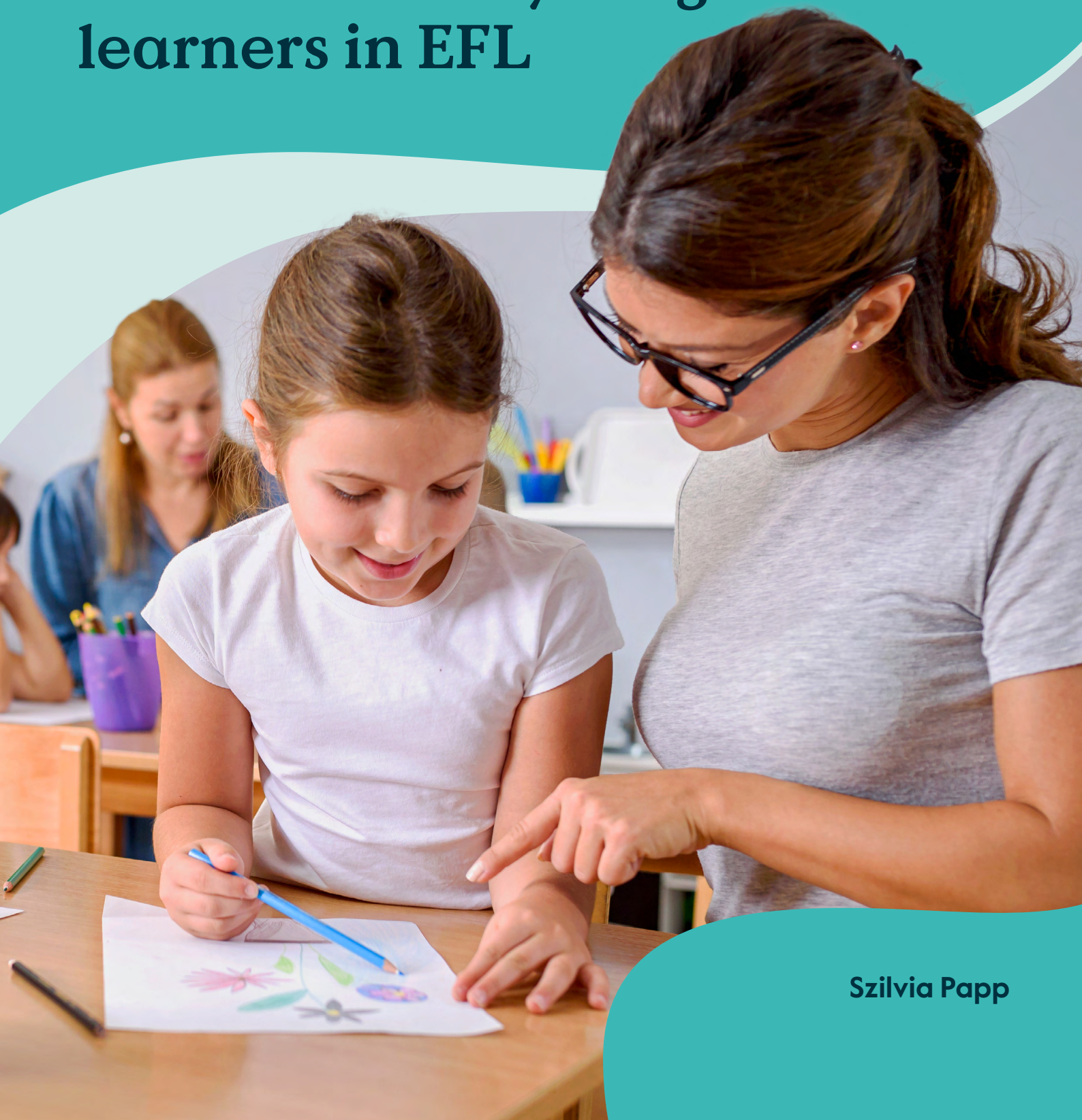
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Phonics and Literacy instruction for young learners in EFL



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Introduction

This White Paper discusses the usefulness of teaching phonics at the initial stages of literacy development among young learners in EFL classrooms. A summary of theory and research shows that phonics instruction can improve decoding, spelling, text comprehension, and reading accuracy among emergent readers in their first language (L1), and is particularly beneficial for struggling readers and children whose first language is not English (Castles, Rastle and Nation, 2018; Machin, McNally and Viarengo, 2016). This paper argues that adapting L1 phonics instruction in the early years and primary English as a foreign language (EFL) classroom may be beneficial, if used systematically and as part of a rich, meaning-focused pedagogy towards reading and writing development where comprehension and communication of meaning is the ultimate aim. This paper offers teachers and school leaders ideas on practical application on how to implement phonological based instruction into their EFL classroom practice.



Young learners

In this White Paper, the term 'very young learners' is used to refer to children aged between 4 to 6 in pre-school/early years settings and 'young learners' is used in reference to children aged between 7 and 12 in primary education.

Emergent literacy

Current thinking on children's literacy considers it as emergent and part of a developmental continuum rather than marked by clear shifts in maturation and reading/writing readiness. The term *emergent literacy* is defined as those skills, knowledge, and attitudes that are presumed to be developmental precursors to conventional forms of reading and writing and the environments that support those developments (e.g. shared book reading) (Whitehurst and Lonigan, 1998).

For added clarity, the term 'emergent literacy' here is used to contrast with 'early literacy' to note that pre-literacy involves more awareness-raising and introduction to the world of written language without a direct focus on 'learning to read and write'.

Phonics is a method for teaching reading and writing of the English language by developing learners' phonological/phonemic awareness — the ability to hear, identify, and manipulate sounds — in order to teach the correspondence between sounds (phonemes) and the spelling patterns (graphemes) that represent them. (https://en.wikipedia.org/wiki/Phonics)

While phonics (phonemic awareness) is but one element of phonological awareness, the latest view is that it remains an important one; nonetheless the two terms are often confused or placed as synonyms, as seen in the wikipedia definition above. Within the field of phonics-based teaching it is phonemic awareness, a subset of phonological awareness that is most saliently involved.

The definitions provided in the glossary on pages 24-25 are meant to help distinguish these and other terms used in this White Paper.

Sociocultural view of reading

While one of the universal aims of primary schooling is to develop basic literacy among children, it is important to recognise that early literacy outcomes are not universally sought with pre-schoolers. There are differences in cultural expectations about the purposes of early years education, some focusing on formal early literacy instruction, others choosing to provide rich oral input first. However, all seem to have comparable literacy outcomes by the end of primary school.

There are also culturally-influenced differences in the type of instruction that beginning readers are given once schooling begins. The norm in many teaching cultures is a teacher-fronted, non-interactive presentation in which the chances are very limited for beginning readers to find support in their individual cognitive development to decode and in particular to comprehend texts (Papp and Rixon, 2018). Relatively resource-rich contexts such as the USA, UK, Canada, New Zealand, or Australia, on the other hand, have long placed emphasis on the cognitive benefits as well as the sense of security provided for children by carefully scaffolded reading experiences, either one-to-one or in skilful management of larger groups or whole classes, as in **shared reading** (IRA and NAEYC, 1998; Neuman, Copple and Bredekamp, 2000).

Critical pre-literacy skills

The ability to predict future reading ability among L1 English speaking children is approximately as strong from kindergarten onwards as it is from year to year once formal reading instruction has begun (Scarborough, 2003). This implies that the key cognitive and linguistic precursors central in learning to read are already in place before primary school. Children who arrive at school with weaker verbal ability and early literacy knowledge are more likely than their peers to experience reading difficulties and require immediate support (Goswami, 2015).

Emergent literacy is thought to comprise two independent sub-domains: **oral language** and **code-related** skills which predict how well and how easily children will learn to read once exposed to formal reading instruction (Storch and Whitehurst, 2002; Goswami, 2003; Lonigan, 2006; National Early Literacy Panel (NELP), 2005; Scarborough, 2003).

Oral language skills reflect more general language ability to support comprehension, and include:

- vocabulary knowledge
- semantic knowledge
- syntactic knowledge
- conceptual knowledge
- knowledge of narrative discourse.

Improving young children's oral language development should be a central goal during the pre-school years.

Code-related skills include:

1. *phonological awareness*, that is, the ability to discriminate and manipulate the sound structure of language, including an awareness of rhyming and alliteration, identifying/breaking apart syllables, picking out initial sounds in words, blending phonemes together, segmenting words into their speech sounds, manipulating (exchanging/deleting) sounds in words.

2. knowledge of *conventions of print*, beginning forms of writing, knowledge of graphemes (letters in the alphabet) and

3. **phonological decoding** skills: knowledge of grapheme-phoneme correspondence rules (the relationship between spelling and sound).

TEACHING TIPS

Language play and creative use of language should be an essential part of pedagogy in the early years EFL classroom. Teachers should encourage oral language development by exposing learners to a wealth of listening activities:

- noticing sounds and sound effects, tuning into sounds, remembering sounds,
- using songs, chants, rhythm games, rhymes, poetry, stories
- giving information about the meanings of old and new words to expand oral vocabulary.

Literacy-related behaviours in pre-school are considered important aspects of early literacy development and are viewed as having a significant impact on individual differences in later reading skill (Kennedy et al., 2012).

TEACHING TIPS

Apart from phonological awareness-raising and vocabulary-building activities, it is also beneficial to do orthographic awareness-raising activities to foster literacy-related skills in very young learners of English:

Print-related knowledge and skills

- recognition of letters of the alphabet
- recognition of the direction of writing
- drawing horizontal, vertical, oblique lines, curves
- orthographic awareness raising, e.g. using magnetic letters/letter combinations, or picture cards with colour-coded phonemes, syllables, on an elastic string, etc.[1]

The aim of early literacy instruction should be to 'turn listeners into readers' and ultimately, to enable children to read independently. All activities need to foster a positive attitude towards literacy and encourage engagement with spoken and printed text. Engagement can be achieved by establishing joint attention, imitation, repetition, and allowing choice to cater for children's individual preferences. Reading routines and pretend reading help convey important information about reading and conventions of print (left to right, turning the page, role of illustrations, identifying key features of a book such as title, author, illustrator, headings, font size, bold print, use of upper case, etc.). Very young children enjoy pre-reading activities such as looking at books and devising narrative from pictures or retelling a favourite story from memory. Children greatly enjoy shared reading activities and turn-taking with an adult. Alphabetic knowledge has great flexibility for incorporation into game-like tasks and activities. Classroom signs, labels, illustrated words, posters, etc. help young children understand the relationship of printed word to message.

1 For phonological and orthographic awareness raising activities, see techniques used with dyslexic EFL students in the video at https://www.futurelearn.com/courses/dyslexia/0/steps/6774

Models of reading development

In English, there is no one-to-one mapping between letters and sounds. The high degree of inconsistency between spelling and sounds makes English hard to learn to decode and spell for both L1 and L2 learners.

In English, there is far less transparency between sound and symbol than in most other alphabetic languages. The **extreme orthographic depth** (Katz and Frost, 1992) and **complex syllable structure** of English cause a problem to novice readers. This has led to different views of the best ways to teach how to read and write English (Chall, 1967, 1983/1996; Marsh, Friedman, Welch and Desberg, 1981; Frith, 1985; Ehri, 1995, 1998, 1999, 2002, 2017). The models that have been proposed to account for the development of native-English-speaking children's reading skills are sometimes portrayed as competing with each other (Castles et al., 2018).

One theory suggests that reading development starts from the level of the phoneme, and is built up from that, so represents the so-called *phonological, sub-lexical route*. In contrast, another theory suggests that initial reading ability relies on long-term memory of the visual appearance of words as whole symbols, the so-called *visual, lexical, logographic route* (see Table 1). These two theories representing the Phonics versus the Whole Word or 'Look and Say' teaching approaches have led to what is termed the 'reading wars' among theorists and practitioners (Meadows, 2006; Wyse and Jones, 2008).

Phonographic approach	Sight word approach
Involves the teaching of sound - sound picture relationships in a certain order	Involves the teaching of commonly used high frequency words that young children are encouraged to memorize as a whole by sight
Believes that key skills are reversible and deals with encoding and decoding at the same time	Believes that children will automatically recognize these words in print without having to use any strategies to decode
May be complemented with sight word reading for early access to meaning in texts	Adopts a whole word / look and say method

Table 1. Comparison of phonographic versus sight word approach

Much of the controversy about children's early literacy development concerns the timing, the roles and appropriate sequencing of focus on micro-processes in English literacy instruction. Policy makers and materials writers translate models into recommended sequences for teaching focus and thus there is variation in the pace at which whole nations (and various generations within nations) go through the stages (Chall, 1983/1996).

Chall (1983/1996) described six qualitatively distinct phases for L1 reading development, presented as strictly chronologically sequenced and 'natural' stages of development. However, learners can go through them at different pace (faster or slower). Chall's first three stages relevant to young children are displayed in Table 2 with hypothesised approximate ages.

Stage	Age	Features
0 Prereading	Birth to 6	Accumulation of knowledge about letters, words, books, signs. Guessing, predicting, 'pretend' reading. Phonological awareness.
1 Decoding	6 - 7	Learning of sound-to-letter relations, identifying words. Reading of short, simple, and predictable texts. Understanding connected text. Discovery (flash of insight) of what reading is for: meaning.
2 Confirmation and Fluency	7 - 8	Recognition of words of increasingly complex elements using semantic and syntactic information and context. Reading more complex texts with more complex plots. Fluency through practice: wide extensive reading of different texts and/or repeated readings of the same texts. Reading aloud becomes more fluent and expressive, indicating comprehension of what is read.

Table 2. Chall's (1983/1996: 9) stages of reading development

Another influential model, developed by Ehri, proposed four stages of reading development, as seen in Table 3.

Stage	Age	Features
Pre-Alphabetic	Pre-K	Reading is top-down, limited to using environmental and contextual cues, meaning-based, and relies on long-term memory of the visual appearance of words as whole symbols (the *visual / lexical / logographic route*)
Partial Alphabetic	Kinder garten	Readers start recognizing the correspondences between graphemes and phonemes, but the insight is not fully developed, may begin to detect letters in words, match some letters to their sounds (*b, d, f, j*), identify initial and final sounds in words, but have difficulty with medial sounds in words, still heavy reliance on context, mistake similarly spelled words
Full Alphabetic	Age 6/7	Letter-sound knowledge develops, strategy for sounding out common words, building of sight word vocabularies, readers have a good knowledge of the probabilities and contingencies that allow accurate and automatic reading.
Consolidated Alphabetic	Age 7/8)	After more exposure to print, readers use their extensive knowledge of grapheme-phoneme correspondences, as well as onsets (*p-, sp-, spl-*), rime (*-ip, -op, -ash*), affixal morphemes (*-tion, -ness, pre-*) and syllables (*at, in, ten*), to apply a strategy based on reasoning by analogy to known spelling patterns

Table 3. Ehri's (1995, 1998, 1999, 2002, 2017) stages of reading development

Teaching reading in L1 English contexts

In this section, we review the strategies of teaching reading to native English-speaking children to see how they might apply to L2 reading.

The 'reading wars' have resulted in a situation where there is no one system of teaching L1 users to read English. Teachers tend to use a mixture of approaches. L1 readers learn to decode English by relating graphemes to phonemes, identifying common syllables, looking at *onsets and rimes* (sounds before and after the nucleus of a syllable), identifying morphemes, and using various processing strategies.

The UK government's Department for Education[2] has made a phonics-based approach mandatory[3]. The Whole Word or 'Look and Say' approach is not officially favoured, although some teachers continue to use it to complement the phonics approach. For the 200 or so frequent but 'tricky' words (such as *one, two, eight, laugh, enough, who*) that cannot be decoded readily using regular symbol-sound relationships, rapid visual recognition is the only recourse from the start.

In England, children are first taught how to read and form single letters, e.g. *s, a, t, p, i, n,* then to recognize *digraphs and trigraphs* (graphemes composed of strings of two or three letters) such as *ck, qu, ch, sh, th, ng, ai, ee, igh, oa, oo, ar, or, ur, ow, oi,* and *ear, air, ure, er*. With this knowledge, they are encouraged to recognise and spell simple CVC words from the earliest stages onwards (chip, shop, thin, ring, pain, feet, night, boat, boot, look, farm, fork, burn, town, coin, dear, fair, sure). Currently in 2024 there is no one favoured programme to teach phonics. Instead, there are 45 commercial reading schemes on the UK government's list of validated programmes that schools can choose from[4]. Although following the same sequence of focus (e.g. single letters to di-/trigraphs), these present particular items in different orders and combinations. What they have in common is the **synthetic** approach to phonics (Wyse and Goswami, 2008), currently favoured by the UK government[5]. This means that children are taught to build up words from separate phonemes rather than to break down words that they already know and recognise their component parts and sound-correspondences. The latter approach, out of official favour during the first decades of the 21st century, is known as **analytic phonics**. Some L1 reading experts have argued that there is no particular evidence to support the superiority of synthetic phonics, while many teachers find the analytic approach more child-friendly and cognitively appropriate for native speaking children (Wyse and Styles, 2007; Wyse and Jones, 2008; Wyse and Goswami, 2008).

Synthetic approach	Children are taught to build up words from separate phonemes, e.g. pronounce a phoneme for each letter in turn /k, æ, t/, and blend the phonemes together to form the word *cat*
Analytic approach	Children are taught words by sight then to break down words that they already know and recognise their component parts and sound-correspondences, e.g. recognise how the following words are alike in the following groups: *pat/park/push/pen, cat/mat/bag/rag, nap/cup/tip*.

2 The UK government's Department for Education is responsible for education in England.

3 See Progression in Phonics (DfEE 1999), Playing with Sounds (DfES 2004), Letters and Sounds (DfES 2007), The Reading Framework (DfE 2023). https://www.gov.uk/government/publications/choosing-a-phonics-teaching-programme/list-of-phonics-teaching-programmes

4 since the Rose Report (DfES 2006)

The important point to note about both synthetic and analytic phonics is that neither system presents letters and sounds in <a-z> order, but rather in orders based on principles such as **frequency**, **similarity** in appearances of letters, or **generativeness** of different combinations (e.g. Aronoff and Koch 1996, Stanback 1992). For instance, the *s a t p i n* group of letters are generative of more real words than any other group of letters; *st sp* can occur both at the end and beginning of words, e.g. *st- op, lo –st,* but *br str wr* only occur at the start of words, not at the end.

By getting children to pay attention to letters and their combinations in a word, and by exposing them to a word several times in a range of semantic and syntactic contexts, children accumulate more general knowledge about orthographic regularities within the writing system. For example, the insight that in English, double letters such as "ll" tend to appear at the ends of words but not the beginnings. With repeated exposure to a word in extended reading experience, orthographic representations become more sharpened and stable. Research has found that reading experience affects fluent word reading, children need to see as many words as possible, as frequently as possible (Stanovich and West, 1989). However, the optimal number and complexity of phonics rules to be taught is still under discussion (Castles et al., 2018).

The difference between the appropriacy of reading instruction may very well lie in the particular age group they are applied to: 4-year-olds are at a developmental phase different from 6- or 7-year-olds and will need a different 'proper match' or challenge in instruction[5]. In addition, the learning style of groups of children in different contexts and cultures may be relevant, and fitness for purpose of instructional approaches may vary according to individual preferences among children. In actual practice a mix of methods and a range of approaches reinforcing each other may be the best practice with children (Porter, 2020). As can be seen from Tables 2 and 3 above, it requires years of instruction in L1 teaching contexts to establish the phonic links and get the children reading. In the UK, it typically takes at least an hour a day for at least a couple of years.

5 Wyse and Jones (2008: 40-42, 48) present tables for general expectations for English-speaking children's reading at ages 4, 7 and 11, and what teachers can do to reach those

Role of L1 literacy in L2 development

There has long been a debate whether and how the nature of the L1 writing script (orthography) and L1 phonological system (syllabic structure) and children's L1 literacy skills determine or influence the processes in learning to read and write in a foreign language. Typological differences relating to levels of phonological processing and orthographic depth will have an influence in the way a foreign language is learnt.



Young L2 learners possess several strengths related to phonological awareness:

- It appears that linguistic skills learnt in L1 transfer to the L2, especially phonological awareness (Cummins 1979; Chow, McBride-Chang and Burgess 2005; Lopez and Greenfield 2004).
- L2 learners do not appear disadvantaged in establishing concepts of print needed for learning to read; the L2 may actually support or enhance the extraction of these concepts (Bialystok, Shenfield and Codd 2000).
- Bilingual children acquiring two languages that foster different levels of phonological awareness may benefit by transferring metalinguistic understanding of one language to another, boosting literacy development (Bialystok 2007).
- There is some evidence that phonological transfer occurs even across typologically very different writing systems (e.g. alphabetic and ideographic) (Wang, Perfetti and Liu 2005).

Speech perception and phonotactics

L1 phonological and phonotactic rules (governing permissible syllable structures) influence the perception and production of L2 phonology (Bassetti & Atkinson, 2015; Escudero & Wanrooij, 2010; Nimz 2018). *Phonological working memory* skills are needed in sound discrimination and establishing phonotactic rules. These are particularly important for children at the beginning of the L2 acquisition process, contributing to the growth of listening ability and vocabulary learning (Service, 1992).

Phonological

Learners need to learn how to perceive and distinguish meaning-bearing sounds in English e.g. such as liquids/l/ from /r/: *write* from *light*, *grass* from *glass*, *rice* from *lice*; other minimal pairs between voiced /b/ or voiceless /p/, a phonemic distinction that distinguishes *pin/bin*, *pack/back*, *rib/rip* and *Lib/lip*, between vowels /æ/and /ɛ/, as in *bad/bed*, *pat/pet*, *cattle/kettle*, or word initial or final /s/ and /ʃ/, as in *sip/ship* and *lease/leash*.

Perceptual differences between L1 and L2 have implications for teaching learners from different L1 backgrounds. For example:

- **Italian** learners of English have difficulty discriminating /ɒ/ - /ʌ/, /ɛ/-/æ/, and /i/-/ɪ/ because they often identify both members of each contrast as instances of a single Italian vowel (*ship* vs. *sheep*, *full* vs. *fool*) (Flege and MacKay, 2004).
- Differences in speech perception abilities in **Japanese** learners of the English consonants /r/ and /l/ are due to age and length of exposure (Yamada, 1995; Aoyama et al., 2004). This difficulty is typical for Mandarin and Cantonese speakers as well.
- **Korean** child L2 learners between ages 4-7 find it difficult to discriminate /i/ from /ɪ/ and /u/ from /ʊ/ in English, as Korean does not make these distinctions.
- Errors committed by **Arab** learners of English at the phonological level are due to learners' difficulty in distinguishing the following pairs: /p/ and /b/, /f/ and /v/, and /ɪ/ and /e/ (leading to difficulty between *pack/back*, *pay/bay*, *push/bush*, *pull/bull*, *please*, *prefer*, as well as difficulty with *very/ferry*, *vast/fast*, *live/life*, *every*, *have*, *five*) (Tushyeh, 1996).
- **Japanese** and **Spanish** learners have difficulty with the contrast between /v/ and /b/, and might substitute them for each other (*very/berry*, *vest/best*, *avoid*, *available*, *every*, *even have*, *live*, *five*, *valley*, *about*, *a boy*, *able*, *ability*).
- **French** and **Portuguese** learners may pronounce /ʧ/ as /ʃ/ (cheap/sheep).
- **Chinese** has the /n/ sound but in some southern provinces, there is no distinction between /n/ and /l/. Learners might have difficulty particularly at the start of words, e.g. pronouncing *low* as *no* or *knife* as *life*.

This information can be sourced from the Pronunciation Planner from Cambridge University Press. This resource has been compiled to identify areas of difficulty with sounds for learners from twelve L1 backgrounds and therefore of high priority for teaching. Another aspect that is helpful is the indication of problematic words at different levels of the CEFR.

Phonotactics

Phonotactic regularities are those that define permissible *syllable* structures, consonant clusters and vowel sequences (Storkel, 2001). For instance, /pn/, /kn/ and /zd/ are not permissible syllable-initially in English, but are allowed between syllables: e.g. *happening* /hæpnɪn/, *acne* [ækni], *Azda* /æzdə/. L1 learners acquire phonotactic rules by the age of 7 or 8 (Owens, 1996). Since children accumulate this knowledge based on information on frequency of occurrence, learning is usage-based.

Different phonotactic constraints between the L1 and L2 can create learning problems. Consonant clusters are generally difficult for learners whose L1 does not allow them. For example:

- Perception studies have indicated that L1 **Brazilian Portuguese** EFL learners frequently perceive an illusory vowel [i] in English consonant clusters that are not allowed in their L1. Production studies with these learners suggest that, when faced with English consonant clusters that are impossible in their L1, the preferred strategy is likewise the insertion of a vowel [i]. This is done to break the cluster, so that the resulting sequence no longer violates L1 phonotactic constrains. For example, *study* would be pronounced as [is.tʌ.di].
- Similarly, **Spanish** learners of English find it difficult to produce [s]+stop word-initially, because in Spanish, words with s+consonant onsets cannot exist, and phonotactic constraints call for the addition of a vowel /e/ (e.g., *study/estudy*, *stable/estable*).
- **Spanish** does not permit consonant clusters at the end of words, and often native Spanish speakers reduce final consonant clusters when speaking English (e.g., *soun* for *sound*).
- On the other hand, **Vietnamese** speakers learning English often simplify consonant clusters through deletion so as to produce CVC syllables, as opposed to deleting the cluster altogether (e.g. fir[st] → fir[t]).
- **Chinese** learners of English often delete /r/, /l/, /t/, /d/, /f/ and /v/ in clusters in the middle of a word after a vowel (e.g. *silver* becomes *siver*).
- While **Spanish**, **Portuguese** and **Turkish** all have the /m/ sound, it is not used in quite the same way as in English. In all of these languages, when /m/ occurs at the end of a word (e.g. 'I come from...', 'some', 'them', etc.), it is often replaced with another sound or dropped entirely, which can lead to significant intelligibility problems (e.g. "I cun frun Mexico").
- **French** speakers 'misperceive' illegal word initial /dl/ and /tl/ clusters as legal /gl/ and /kl/ - in clusters that are both legal in Hebrew, mishearing Hebrew *tlalim* "dews" as *klalim* "rules" (Hallé and Best 2007).

The rules and probabilities applying to the sequencing of phonemes provide a rich source of information for learners. Knowledge of common phonotactic patterns may help, for instance, to decide whether the continuous stream of sounds should be segmented as *ice cream* or *I scream* in a particular context, or help distinguish between *a name* versus *an aim* as well as *that stuff* versus *that's tough*. Focusing young FL learners' attention to these features of the input may not only be fun, but also be beneficial.

Syllable, stress, intonation

L1 interference can also affect other aspects of the phonology, including syllable structure, stress patterns and intonation. There is ample evidence that adult L2 learners use their L1's phonemic and metrical segmentation strategies (the rhythmic alternation of strong and weakly stressed syllables) in the L2 (McQueen, 2005). For example:

- In **Japanese**, consonant-consonant clusters are not allowed. So, in the case of a non-word such as 'ebzo', Japanese speakers hear /u/ between /b/ and /z/, and their representation of it becomes 'ebuzo' (Dupoux et al., 1999, 2011).
- **Egyptian** learners of English commit certain phonological errors due to differences between English and Arabic stress and intonation systems (Wahba, 1998).

Since children's auditory discrimination skills and phonotactic patterns are established very early on in their L1 (Sebastian-Gallé and Kroll, 2003), young L2 learners may be similarly influenced by their L1's phonemic discrimination and metrical segmentation strategies as adults, at least initially, in the language learning process. Even though automatised cognitive language learning mechanisms are resistant to change (Mitchell, Myles and Marsden, 2019), what may distinguish children from adults is that, provided they receive adequate exposure to the target language, the majority of young learners do not stay constrained by their L1 features. Therefore, it is very positive to address these sounds specifically at a young age, as one of the key long-term benefits of an early start to English language learning is related to improved pronunciation (Lightbown & Spada, 2013).

Teaching phonics and reading to L2 learners

The research literature suggests that principles of teaching reading to L1 speakers could inform teaching of English as a foreign language (Huo and Wang 2017, Lee 2000, Kahn-Horwitz & Goldstein 2024). Studies have found that supporting phonological awareness can lead to improved literacy skills in young EFL/ESL readers (e.g. Kang, 2009; Sun, Zhou & Zhu, 2013; Al Tamimi & Rabab 'Ah, 2007). This is also supported by the National Reading Panel (2000) and Mourão & Ellis, 2020, among many other ELT writers and practitioners. Rixon (2011) has argued that analytic phonics, which operates only with words already known to the learners, is more suitable for use with foreign language learners. The reason is that they do not have a large already-established lexical repertoire that would allow them to recognise many of the words by synthetic phonics techniques. Cameron (2001) suggests that *analogy phonics* (teaching new words by analogy to phonograms – decodable chunks - in known words is the most effective type of phonics-based instruction for EFL learners.

On the other hand, in the whole language/ whole word approach, learners begin to learn to read through memorising the reading of known words by sight. This holistic approach helps children use contextual clues and focuses on meaning and understanding a text. It involves the active construction of meaning, is concept- and competence-based, and involves thinking processes. It is acknowledged that phonological awareness plays a part in whole language approach (see Monson & Pahl, 1991; Armstrong, 2019), although this is more than just the phonics aspect of PA as it involves the other areas of PA as well. In L1 literacy, the whole language approach is often viewed as particularly beneficial for some children with dyslexia (Armstrong, 2019), and it seems to mirror current thinking in terms of L2 learning theory, being context-based, holistic, meaning-focussed and constructivist.

In teaching and assessment both phonics-based and whole word approaches should be used. Teachers should promote key skills (segmenting, sounding out, blending) in young L2 learners while using a mixture of developmentally appropriate approaches to teaching L2 reading. This integrated and eclectic approach would allow teachers to differentiate in order to accommodate learners with different preferences or even those with reading difficulties (Monson & Pahl, 1991; Cameron, 2001; Armstrong, 2019). Phonics should be approached as a series of playful games and exercises, using authentic materials, such as songs, poems, chants. Non-words should not be used with young L2 learners of English in either teaching or assessment.

Children have a strong sense of fun, and thoroughly enjoy routine and repetition. Adult guided play-based learning (rather than rigid formal literacy instruction) is increasingly recognised as beneficial in early years curricula, and may positively impact on literacy outcomes (Han et al., 2010, McGuinness et al. 2014).

Songs and rhymes practise manipulation of sounds and build phonemic awareness. Use of songs, chants and poetry can also improve stress and rhythm awareness.

Rhythmic games (such as jazz chants, Graham, 1978; Craven, n.d., performance poetry, e.g. Julia Donaldson, 2013) support phonological processing skills and there is evidence that beginning readers draw on rhymes by analogy to support reading (Duncan, Seymour and Hill, 1997; Seymour Duncan and Bolik, 1999).

TEACHING TIPS

The use of songs, rhymes, chants, and poetry offer potential for fun and opportunities for interactive tasks as part of curriculum.

Materials should use audio-visual material that contain songs, rhymes, animated clips, activities and games involving language rhythm (music, poetry) and physical activity (clapping, dancing, stomping, jumping).

L2 literacy should not be taken for granted but explicitly taught. However, for very young L2 learners, seeing the English words on the page may not be facilitative at an early stage. Some experts advise caution against focusing on reading and writing with younger children at an early stage in their learning, since 'the written form of English creates [...] high cognitive and motor skill demands for pupils', as when confronted with written language, they 'have a huge decoding and sense-making job to do' (Cameron, 2003).

Another powerful reason for not including written language in materials for very young learners is that young beginners in the English language do not yet have a large lexical repertoire against which they may 'match' words on the page (Rixon, 2007). Using words on the page as facilitators of general language learning for young children is not well founded. Some published ELT materials show a strong focus on teaching letters in strict alphabetical order rather than grouping and prioritising letters (phonograms) in one of the ways discussed above. Teaching initial letters and phonemes is another tendency found. Both approaches only result in an incomplete coverage of the phoneme repertoire. The letters <a-z> in word-initial position can represent at most 23 of the 44 phonemes of British RP English. Materials which neglect to teach digraphs such as <th> or <sh> commonly used to represent certain phonemes have serious gaps in their coverage of English orthography (Rixon, 2011).

In addition, teaching materials for children in many contexts allow only reading aloud activities with regard to early reading (Rixon, 2011, 2023). More cognitively engaging pattern-finding or analogy-using activities would better suit the needs of beginning L2 readers.

Some phonographic approaches popular in L1 literacy instruction may be beneficial for young L2 learners' literacy development as follows:

Key skills: These skills are reversible: they work for both reading and spelling.

- Blending: Blend sound pictures (letters) to make words *h o t* *t r y*
- Segmenting: Segment words into sound pictures *th / a / t* *l / igh / t*
- Phoneme manipulation: manipulate sounds in and out of words *__ a p* *c a __*
- Awareness of overlap (*snow now*) and variation (*dog egg*)

TEACHING TIPS

Phonological awareness tasks should:

- teach children letters and letter combinations and sounds and the link between them
- relate graphemes to phonemes, looking at onsets and rimes (the initial consonant or consonant cluster and final vowel and consonant in a syllable), common syllables, and morphemes
- teach sound - sound picture relationships in a certain, principled, order
- teach encoding and decoding at the same time as key skills are reversible.

Following standard L1 phonics practice, L2 learners should at first learn each letter by its sound, not its name. For instance, the letter a should be called /æ/ (as in *ant*) not /eɪ/ (as in *aim*). Similarly, the letter n should be nn (as in *net*), not 'en' or 'nuh'. This will help in blending. The names of each letter can follow later, introduced by alphabet songs. The letters should not be introduced in alphabetical order, but in a principled way. For instance, as we have seen, the first group (*s,a,t,i,p,n*) has been chosen in some literacy schemes, because they make more simple three-letter words than any other six letters. Similar-looking letters (*b, d, p*) are sometimes introduced in different groups to avoid confusion, other times they are introduced together and contrasted to make children note the subtle differences between them. Sounds that have more than one way of being written are initially taught in one form only. For example, children are taught how to write the sound /eɪ/ through the

spelling -ai- (as in *train*), and then the alternative spelling -a-e (*gate*) and -ay (*day*) follow later[7]. Children need to be actively encouraged to notice that some graphemes in English have a different way of saying them: *f**i**n/f**i**nd h**o**t/c**o**ld **c**at/**c**ent **g**ot/**g**iant, b**u**t/p**u**t c**o**w/bl**o**w t**ie**/f**ie**ld **ea**t/br**ea**d.*

Sight words (words that cannot be decoded by knowledge of grapheme-phoneme correspondence rules and therefore need to be memorised, such as *the*, *come*, *have*, and *said*) should be displayed in thematic groups (for an example list see Table 4): pronouns, possessive articles, prepositions, demonstratives, adverbs, numbers, question words, quantifiers, connectives, auxiliary verbs, modal auxiliaries, articles, verbs, school-related nouns. Sight words need to be learnt by rote through repetition and feedback, so that children learn to recognize and name them fluently. These 'tricky' words are typically taught by flash cards with single words printed on them for children to name, or weekly word lists for children to take home. However, activity sheets involving the words might be more useful, such as the difference between *there/their*, *sail/sale*.

the	or	will	number
of	one	up	no
and	had	other	way
a	by	about	could
to	words	out	people
in	but	many	my
is	not	then	than
you	what	them	first
that	all	these	water
it	were	so	been
he	we	some	called
was	when	her	who
for	your	would	oil
on	can	make	sit
are	said	like	now
as	there	him	find
with	use	into	long
his	an	time	down
they	each	has	day
I	which	look	did
at	she	two	get
be	do	more	come
this	how	write	made
have	their	go	may
from	if	see	part

Table 4. The first 100 sight words ('tricky' words)

7 for a recommended list for which order to teach alternative spellings in, see for instance, *Letters and Sounds* (p.144 & 154-157)

TEACHING TIPS

Children learn best in context and through active discovery. They need hands-on activities. Teachers should:

- get children to follow stories being read (whole books)
- point out that print is all around them (environment words, names, labels)
- get learners into the habit of 'looking with intent' to recognise patterns in print, e.g. Can you find something that starts with a 'd' sound? What sound does this start with?
- encourage learners to take mental photos of words / hold the image in their mind / break it down into sounds and 'sound pictures' (letter patterns and spelling)
- take an interest in words as you come across them ('sounds like/looks like but') and talking about word families
- air-write words / write words on each other's back / use their body to act out letters
- keep it fast paced, let children have a go at things they are unsure about (capitals, tricky words), but if they are struggling – tell them quickly so that they don't get too disheartened.
- be multi-sensory: get children to experience words with all their senses: hear, look, say, touch, move, sound, write.

TEACHING TIPS

In addition, once children have acquired the basics of literacy, teachers should

- Offer choice, make reading materials easily accessible.
- Integrate reading with wider listening and speaking work, and include texts that encourage extensive reading. There is huge value in fostering a love of reading in children and a motivation to read independently (Arnold and Rixon 2014).
- Provide opportunities for children to read texts that they are interested in, that their friends are reading, such as comics, books of song lyrics, movie novelizations, sporting skill manuals
- Use shared book reading dialogically, with much language interaction between the reader and the child, combining it with language activities with explicit focus on decoding instruction.

Spelling and punctuation

The orthographic depth of English impacts its spelling system. In English, the letter <o> corresponds to at least 10 phonemes and the central vowel phoneme schwa /ə/ corresponds to at least 8 spellings (Cook and Bassetti, 2005). There is also the problem of homophones in English, that is, the different spellings for words such as /sent/ that can be spelt as *scent*, *sent* or *cent*, /tu:/ spelt *too* or *two*, /ju:/ written as *you* or *ewe*, and /weilz/ spelt as *Wales* or *whales*. These are just some of the reasons why in more phonologically transparent languages such as Italian, German, or Hungarian, spelling is easier and faster to learn than it is in English for L1 children. English children take longer and they are more erroneous in their spelling in the first years of literacy (Seymour, Aro and Erskine, 2003; Ellis et al., 2004). For a review of the development of spelling among L1 children see Treiman & Kessler (2014).

The dual route (phonological and visual) model that was suggested for L1 reading has also been proposed for L1 writing. Regular and/or infrequent words are spelt using the phonological route. On the other hand, the direct/visual/whole word route that relies on the orthographic lexicon is used with irregular and frequent words such as *eye*, *friend*, *yacht* or *Wednesday*.

L1 orthography

L2 writing can be affected by the writing system of the L1. Whether the L1 writing system is based around phonemes, consonants, syllables, or morphemes will influence the way some learners think of speech as consisting of phonemes, morphemes, or syllables (Cook and Bassetti, 2005) and represent it in their L2 writing. Spelling in L2 can also be influenced by the L1 phonological system or the L1 phoneme-grapheme correspondence rules. L2 learners of English produce misspellings that are evidence of difficulties with double consonants, diphthongs, consonant clusters not present in their L1 (e.g. Kahn-Horwitz and Goldstein 2024).

L2 readers from diverse L1 backgrounds may use different procedures relying on the strategies developed to read their L1 writing system. When Chinese and Japanese learners read English words, they may rely more on sight word knowledge. Spanish learners of English may be slower at word recognition, because they tend to convert graphemes into phonemes rather than making an attempt to quickly identify whole words (Landerl, 2006). Readers of consonantal Arabic may rely more on consonants than on vowels in reading English and may believe that vowels represent unnecessary information (Birch, 2015). The directionality of the L1 writing system can also affect L2 reading: for instance, when English is written vertically, English native readers read more slowly, but Chinese readers of English are much less affected (Bassetti, n.d.).

Punctuation

Orthography, apart from spelling, also includes rules or conventions of punctuation (capitalisation, hyphenation, punctuation marks, etc.) (Cook and Bassetti, 2005). In L1,

- some **4-year-olds** may recognise some punctuation marks,
- around **age 7** punctuation is used for meaning and use of full stops becomes conventional.
- other basic punctuation is utilised only around **age 11**. (Wyse and Jones, 2008)

L2 learners can also be affected by their L1 punctuation, such as different use of brackets, double quotation marks, full stops, commas, spacing, as when Arabic learners of English use quotation marks as brackets, or add a space before punctuation marks.

Since the enabling skills of handwriting, spelling and punctuation are not automatised but controlled processes at the beginning of writing development, they take up much of the attentional resources and leave little working memory capacities to be devoted to monitoring, evaluation, and revision in young children.



TEACHING TIPS

- Teachers should regard handwriting instruction as an equally important means to improve literacy.
- They should focus primarily on the message rather than the spelling and punctuation.
- Marking YL writing should make allowances for the occasional lapse in punctuation.

Issues and challenges

Children must develop appropriate representations for print units (letters, syllables, tones, characters) for each language they are learning to read. Even languages written in the same alphabetic system will have different levels of orthographic transparency. Children may have very little spoken L2 knowledge when reading instruction begins, so L2 reading development may be affected by limited oral language knowledge (Grabe, 2010). Limited oral language knowledge may impact on key skills such as phonological awareness. Reading by word recognition, where phonological strategies are too effortful or have not been taught, may increase chances of errors. However, any delay for L2 learners, due to lack of spoken L2 knowledge may be brief, as L2 learners may acquire vocabulary more quickly the second time around due to cognitive maturity and their existing L1 lexicon to support insights into conceptual-lexical mappings (Paradis, 2007). Given the sheer amount of time in L1 teaching contexts devoted to emergent and early literacy, in L2 EFL contexts, the challenge is to devise an instructional scheme (and related assessment framework) based on principles of relevance, frequency, usefulness, generativeness of rules, and most of all, fun for child-friendliness.

Home and pre-school environments

There is growing interest of the impact of home and school environment on a range of child outcomes, including literacy development, cognitive progress as well as social and behavioural development.

Researchers and policy-makers at national and international levels are increasingly focusing on the effects of family and pre-school influences on literacy development, especially the quality of literacy exposure and instructional provision in the early years (Sylva et al., 2011). Ongoing research aims to highlight the role of parenting, teaching and curricula and their precise contribution to children's literacy development (de Haan Elbers and Leseman, 2014; Niklas and Schneider, 2017, Park 2020, OECD 2020). One of the strategies used is **dialogic shared book reading** which allows the use of **interactive strategies** with children which have been shown to contribute to their literacy development (Lonigan, Shanahan, Cunningham, 2008).

TEACHING TIPS

These types of interactive strategies could be achieved in the classroom through teachers reading and discussing a variety of texts with children, and having conversations of an inferential nature about texts, such as:

- predict future events in a story,
- describe relations between things pictured in the book
- ask textually implicit questions that require children to combine information across sentences,
- ask children to capture all essential facts in any text they read,
- explain how two pieces of information can imply another unstated piece of information to fill in missing gaps in the information provided explicitly,
- ask them to identify details of descriptions about how a character acts,
- focus on character intentions and feelings, ask children to make connections and inferences about characters' emotions by using details from the text and their observations, prior knowledge and experiences,
- get them to compare and contrast characters in different stories.

PARENT TIPS

Similarly, parents can support the use of such strategies by doing the following:

- have conversations that stay on a single topic if possible
- provide children opportunities to talk and extend their responses
- respond to each of their contributions, elaborate, expand on and evaluate positively what they say.

Young children construct knowledge in experiential, interactive, concrete, and hands-on ways. Language and cognitive development occur together in young learners, so any language teaching, either in L1 or L2, will contribute to the conceptual knowledge base and cognitive skills of children.

Assessment of oral language and emergent reading abilities

As we have seen, L2 literacy development is dependent on skills already developed as part of the L1 curriculum, and children's mastery of the L1 and L2 oral language. Ideally, information on the development of literacy in each of the children's language (L1 and L2) should be collected. There should be clear guidance on the range, quality, and complexity of what young learners may be expected to read and write, along with more conventional standards describing how well learners could be expected to read and write at each age group.

When designing language curricula and assessments for very young learners, it is essential to take full account of the theory and best practices in early childhood care and education[8]. In the general educational literature, the assessment of very young learners' development and the reporting of results is usually done for formative purposes and leads to a learner profile. The aim of assessment is usually to monitor a child's learning progress and anticipate their potential development. Pedagogical aims include identifying and building on their strengths in order to enable each individual child to reach their unique potential (Guddemi and Case, 2004).

In child L2 acquisition studies, young learners' oral and literacy development is measured by elicitation methods similar to those used in child L1 acquisition studies (e.g. elicited imitation and miscue analysis). However, these methods do not use language in interactive communication and therefore are not universally accepted.

Elicited imitation is useful to diagnose difficulties: "the types of errors and modifications that children make when imitating speech provide us with vital insight into the child's level of linguistic knowledge' (Karmiloff and Karmiloff-Smith, 2001).The literature o**n sentence repetition** as an elicitation method to gauge L2 proficiency argues that learners need to understand and parse the interlocutor's utterance in order to be able to echo it accurately and produce what looks like a formulaic response (e.g. Campfield, 2015; Campfield and Murphy, 2014). The understanding of the child does not have to be explicit – it can be approximate because elicited imitation is able to tap not only those structures that are firmly represented but also those that are in the process of being acquired (Naiman, 1974).

The other assessment technique is called **miscue analysis** of children's reading aloud using **running records**. In L1 literacy teaching, reading aloud with correct phrasing and expression to aid the development of reading fluency and comprehension is one of the aims in the National Literacy Strategy in England. It has also been advocated in L2 reading assessment (Hasselgreen et al., 2011). Miscue analysis, an early but contested framework for one-to-one scaffolded work in both teaching and classroom assessment, 'provides a descriptive,

8 See, for example, Donaldson (1987), Evangelou, Sylva, Wild, Glenny and Kyriacou (2009), Fisher (1995), Garvey (1982), Meadows (2006), Montessori (1983), Tizard and Hughes (1984), Wells (1987), and 'Listening to Stephen read' by Hall (2002), among others.

qualitative, account of a child's reading strategies. It is based on the idea that the errors, or miscues, that children make while reading aloud provide valuable information about the way they use various reading strategies to work out what the print says ...' (Goodman and Goodman, 1977).

Assessment of oral language as well as emergent reading and writing development should not be restricted to these techniques. Teachers should use a range of assessment types, including narrative and story approaches (comprehension questions, conversations, oral retelling) and portfolio comprising children's drawings and written work. Assessment should be ongoing, task-based, interactive, with skills integrated. The results should be used for formative purposes to indicate strengths and areas of improvement in feedback that children and their parents understand. Techniques such as elicited imitation, running records and miscue analysis in reading aloud can be used to track progress and identify weaknesses. All tasks, for instruction and assessment, need to be realistic, relevant for children's interests and communicative needs, meaningful, offer the right amount of challenge but provide appropriate scaffolding and structure to be achievable. Tasks must be comfortably within the cognitive and motor skills range of learners and comprise words that they already recognise aurally. In summary:



TEACHING TIPS

- Teachers should expect and encourage children to read (aloud and to themselves) (parts of) texts differently according to the type of reading activity they are engaged in.
- For assessment, teachers should use narrative and story approaches (oral retelling, comprehension questions, conversations, and portfolio comprising children's drawings and written work).

Latest developments in early literacy assessment

To illustrate the issues discussed in this white paper, two recent developments in the assessment of emergent literacy skills are briefly reviewed:

- OECD (Organisation for Economic Co-operation and Development)'s International Early Learning for Child Well-being Study (IELS) with 5-year-old children some of whom in are pre-school and some in school contexts in L1 contexts, and
- Cambridge English Qualifications Digital for young learners tests developed for primary and elementary school aged children learning English as L2.

IELS

In the IELS study, it is recognised that in the early years, emergent literacy is predictive of children's later cognitive and social-emotional development. IELS has therefore focused on key components of L1 emergent literacy, including listening comprehension, vocabulary and phonological awareness. The first cycle of IELS assessed emergent literacy skills in three jurisdictions with three languages (English, Estonian and Russian), while the second cycle of IELS will include jurisdictions representing nine languages (Arabic, Azerbaijani, Cantonese Chinese, Dutch, English, Korean, Maltese, Portuguese and Russian). Since schooling stages and approaches to literacy instruction differ across the contexts, the focus on pre-literacy involves more awareness-raising and introduction to the world of written language without a direct focus on 'learning to read and write'

"In the early years, the most important components of emergent literacy are listening comprehension, vocabulary and phonological awareness. These are more predictive of children's later literacy skills than other literacy-related development, such as the level of reading and writing skills that children have developed at age 5.

Listening comprehension incorporates a range of early literacy skills, such as understanding the explicit and implied meaning of spoken language, including standalone sentences. The ability to infer information from an early age supports ongoing literacy development, including later reading comprehension.

Vocabulary knowledge is fundamental for comprehension and for successfully communicating with others, which further develops emergent literacy as well as social connectedness. Children who enter school with lower vocabulary tend to hear fewer words per interaction, hear more commands than prompts and questions, and have less interaction with adults. This contributes to the Matthew effect identified by Stanovich, as a downward spiral where early lags in literacy become magnified with reading development (Stanovich, 1986).

Phonological awareness is the ability to detect, manipulate and analyse the auditory aspects of spoken language. It enables children to separate words into sounds and blend sounds into words. Phonological awareness develops through hearing and differentiating words, which are the largest units of sound in a language. Children then progress to hearing units of sound within spoken words such as beginning and end sounds, segmenting words into syllables and recognising rhyming words." (Phair, 2021:32-33).

Cambridge English Qualifications Digital for young learners

The new digital assessment for young learners of English as a foreign language by Cambridge University Press and Assessment recognises that phonological awareness (including all its elements) is part of assessment of a wider range of skills, including emergent literacy skills. This approach supports the wider view of phonological awareness as being a productive as well as a receptive skill focussing on meaning in integrated tasks (listening, speaking, reading and writing/spelling) and on level and age appropriate vocabulary (i.e. very high frequency, grounded in children's experience, at A1/ Pre A1). Acknowledging that children are restricted in their L2 reading by their limited oral skills and their vocabulary (McKay, 2006, p.219), Cambridge's YLE Wordlists have been thoroughly revised for the digital test. For instance:

- some more simple CVC (consonant vowel consonant) words have been added to the PreA1 Starters Digital wordlist to extend the number of easily decodable words: bug, cap, fox, jug, pot and van.
- some words were moved down from the original YLE Movers and Flyers wordlists to PreA1 level: cheese, coat, cry, cup, drum, little, panda, party, pizza, pond, salad, and wash.
- a few long, complicated words which were on the original YLE Starters wordlist were moved up to Movers or Flyers, or in some cases removed entirely. These were words which historically candidates found difficult to spell or pronounce in YLE. Some examples of words in this category are pineapple, sausage and onion.

By incorporating test items assessing phonological skills as well as vocabulary, new assessments in both L1 and L2 contexts (such as in the direct assessment of emergent literacy in IELS and in Cambridge English Qualifications Digital for young learners) endorse and encourage the fundamentally principled, integrated, but eclectic teaching approaches promoted in this white paper.

Conclusion

This paper has argued that using phonological based instruction in the early years and primary English as a foreign language classroom may be beneficial for the development of listening, speaking as well as reading and writing skills of young English language learners. Helping L2 learners on the journey towards literacy in English requires age appropriate and sensitive instruction which does not stop at rudimentary adaptations of L1 phonics teaching but considers and builds on the L2 learners' oral language skills as well as their existing L1 literacy skills. Emergent literacy skills can be fostered by approaches that take current thinking into account on how children learn best within and outside the classroom. Instruction should view L2 literacy development as a complex set of skills, involving the improvement of oral skills (listening and speaking) and phonological awareness, using meaning-focused reading and writing activities, physical activity, and explicitly teaching handwriting. In addition, L2 literacy instruction should embrace playful learning and formative assessment methods and involve parents in the education of children.



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Glossary

affixal morphemes: morphemes that must be bound to a word, they can be prefixes, e.g. *un-*, *in-*, *pre-* or suffixes *-ly*, *-ed*, *-ing*, *-tion*, *-ness*

alphabetic/letter knowledge: recognising and producing lower case and upper case letters, teaching letter-sound correspondences

analytic phonics programs begin with whole words, and grapheme-phoneme correspondences are taught by breaking those words down into their component parts

blending: putting the sounds together to read a word

code-related skills are those skills that facilitate children's abilities to acquire the alphabetic principle successfully and become accurate and fluent decoders of text, including phonological awareness, letter knowledge

consonant clusters: combinations of consonants that are allowed in a language, e.g. in English at the beginning of words: ***sp**ot*, ***tr**ip*, ***cl**ap*, ***gr**een*, ***cl**own*, at the end of words: *te**nt***, *me**nd***, *da**mp***, *bu**rnt*** or at the beginning and end: ***trust***, ***spend***, ***twist***

CVC: stands for consonant, vowel, consonant in a syllable, here CVC words include simple words with 3 letters, the middle one being one of the 'vowel' letters <aeiou>, such as 'cat', as well as phonological (CC) CV(VV)C(CC) words containing 3 phonemes and a central vowel, which may have 4 or more letters such as 'chip' and 'shop'

decodable text: practicing decoding words in text which is only composed of simple, decodable words

dialogic reading: a form of shared book reading, in which the adult uses different scaffolding techniques (e.g., asking specific types of "wh-" and open-ended questions, modeling, using expansions and repetitions) to encourage children to talk about the pictures in the book and learn to "tell the story"

digraphs and trigraphs: graphemes composed of strings of two or three letters representing one sound when read

early literacy: a result of a direct focus on 'learning to read and write'

emergent literacy skills: pre-literacy skills promoted by awareness-raising and introduction to the world of written language, some are code related, and others are meaning related

extensive reading: involves learners reading texts for enjoyment and to develop general reading skills, it has been found to improve oral skills and vocabulary, reading and writing skills, extensive reading material can be anything, such as magazines, graded readers, novels, comic books

extreme orthographic depth means there is no one-to-one correspondence between letters and sounds. In the case of English, there are 26 letters in the English alphabet, but there are approximately 44 phonemes (24 consonants, 20 vowels) and around 52 consonant clusters used in English, English is considered to have a 'deep' orthography, as there are often different pronunciations for the same spelling patterns, e.g., *tough*, *though*, *through*, *bough*, *cough*, *thorough*, *hiccough*

grapheme-phoneme correspondence rules: the relationship between spelling and sound

grapheme: a written orthographic symbol (made up of a single letter or a combination of letters in alphabetic languages) that represents a sound (phoneme), such as p, ai, sh, igh, tch, ough etc. in English

guided reading: a teacher demonstrates word decoding when students encounter a difficult word during text reading

letter string: sometimes known as 'blends', single consonant phonemes that can be blended together, e.g. 'str' in 'string'

liquid: a liquid is a type of consonant sound involving movement of the tongue to control air flow. In English the liquids are /l/ and /r/. They are often some of the hardest sounds to learn.

meaning-related skills are those skills, primarily associated with language, that allow children to comprehend text once it is decoded, encouraged by practices such as dialogic reading or shared reading.

metrical segmentation: the rhythmic alternation of strong and weakly stressed syllables

morpheme: a meaningful morphological unit of a language that cannot be further divided, morphemes can be words and affixes (prefixes and suffixes), e.g. *in-*, *come*, *-ing*, forming *incoming*, another example is the relationship between words "heal" and "health" which the same spelling pattern because they are semantically related

onsets and rimes: sounds before and after the nucleus of a syllable, i.e. the initial consonant or consonant cluster and final vowel and consonant in a syllable

oral language skills: one of the ways to promote oral language skills is by some form of shared book reading, such as interactive shared book reading known as dialogic reading

orthographic depth/transparency: the *complexity*, *consistency*, or *transparency* of grapheme-phoneme correspondences in written alphabetic language, related to how complex print-to-sound correspondences are in a language and how unpredictable the pronunciations of words are on the basis of their orthography, a strong source of linguistic variability in alphabetic languages which has been found to affect the development of emergent reading abilities

orthography: the writing script in a language

phoneme: a sound that distinguishes one word from another in a language, for example the phoneme /k/ in English occurs in words such as *cat*, *kit*, *scat*, *skit*, another example is the separate phonemes *p*, *b*, *d*, and *t* in the English words *pad*, *pat*, *bad* and *bat*

phonemic awareness: the ability to delete, add, detect, segment, substitute individual sounds (phonemes) and blend them into spoken words

phonics-based instruction

- *analogy phonics* (teaching new words by analogy to phonograms – decodable chunks, see below – in known words.
- *analytic phonics* (analysis of letter-sound relations in known words)
- *embedded phonics* (integration of phonics into whole text reading, it is implicit and incidental and often viewed as the least effective by proponents of phonics-based approaches)
- *synthetic phonics* (explicit teaching of conversion of letters into sounds)

phonogram: a visual symbol used to represent a speech sound in writing, a picture of a sound. A phonogram is letter or combination of letters that represent a sound such as ck in *clock*. There are 26 single letters and 49 multi-letter phonograms in English, making up 75 basic phonograms, of which six (g, c, s, e, i, ow) have two sounds, six (a, o, u, ch, ea, oo) have three sounds, and one (ou) has four sounds

phonological awareness: the ability to discriminate and manipulate the sound structure of language (words and sentences), e.g. being able to identify words that rhyme, recognizing alliteration, segmenting a sentence into words, identifying the syllables in a word, and blending and segmenting onset-rimes. The most sophisticated — and last to develop — is called phonemic awareness.

phonological processing abilities: these abilities include phonological awareness, rapid automatized naming, phonological memory

phonological working memory: the ability to hold on to speech-based information in short-term memory, needed for reading and spelling; memorizing and reciting rhymes and songs improves phonological memory

phonological/sub-lexical route: a theory of reading development that suggests that reading development starts from the level of the phoneme, and is built up from that, usually referred to as the phonics, phonographic approach

phonotactic rules: rules governing permissible syllable structures in a language

print knowledge: knowledge about conventions of print, e.g. alphabet knowledge, concepts about print, name writing

rhyme detection: detecting, discriminating, and generating rhyming words

rhyme: words such as *fox*, *socks*, *box* rhyme

rhythm: the pattern of long and short or stressed and unstressed syllables in a line or verse, children can be asked to follow the rhythm and mark each beat by activities by clapping, stomping, jumping in sentences such as "The 'big brown 'bear ate 'ten white 'mice.". Another way is to get them to say all four sentences with the same rhythm: "One, two, three, four." / "One and two and three and four." / "One and a two and a three and a four." / "One and then a two and then a three and then a four."

segmenting: breaking up a word into its sounds

semantic: relating to the meanings of words

shared book reading: teachers and parents reading to children, in typical shared reading, the adult reads and the children listen

sight words: high-frequency, difficult-to-decode words, sometimes called 'tricky words' or 'common exceptions', i.e. words that cannot be decoded by knowledge of grapheme-phoneme correspondence rules and therefore need to be memorised, e.g. *the*, *come*, *have*, *said*

sound buttons: sh ar k, ch ips, ship, shop, fish, sh ir t, chop, cherry, bench, green, sh ee p, king, qu ee n, ring, wing, sweet

split vowel: two vowel letters that make one sound separated by a single consonant phoneme, e.g. spelling -a-e (*gate*)

stress-timed vs syllable-timed languages: in **stress-timed languages** such as English, there is a roughly equal amount of time between each stress in a sentence, compared with a **syllable-timed language** (such as French, Spanish, Turkish, Cantonese, West Indian English) in which syllables are produced at a steady rate which is unaffected by stress differences.

syntactic: relating to the grammatical structure of a language

synthetic phonics programs teach grapheme-phoneme correspondences individually and in a specified sequence, and children are taught early to blend (synthesize, hence the term synthetic) individual phonemes together to make words

tricky words: words that cannot be easily decoded using the phonics rules, irregular words in their letter-sound correspondence

visual/lexical/logographic route: a theory of reading development that suggests that initial reading ability relies on long-term memory of the visual appearance of words as whole symbols, usually referred to as the whole word/sight word, look and say approach

Author biography

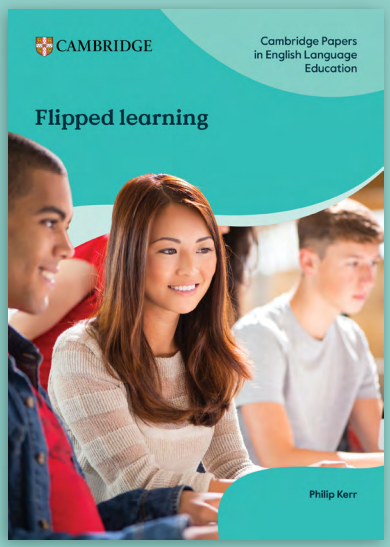
Szilvia Papp is a Senior Research Manager at Cambridge University Press & Assessment, and a consultant in educational assessment with special expertise in young learners. She has worked as Senior Lecturer in Applied Linguistics and TEFL at the University of Portsmouth and as Senior Research and Validation Manager at Cambridge Language Assessment where she worked on the Cambridge English Young Learners tests and Cambridge English's teaching awards (Delta, CELTA, TKT). She is the co-author (with Shelagh Rixon and John Field) of the volume in the *Studies in Language Testing* series on Examining Young Learners by Cambridge University Press.

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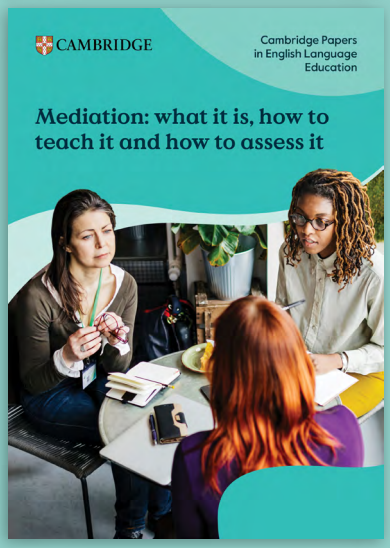
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