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LESLLA aims to support adults who are learning to read and write for the first time in their lives in a new language. We promote, on a worldwide, multidisciplinary basis, the sharing of research findings, effective pedagogical practices, and information on policy.

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PHONOLOGICAL AWARENESS ACROSS LANGUAGES

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LESLLA-related research has demonstrated the crucial role of phonological awareness in the development of the ability to read and write in an additional language. This body of research has clearly demonstrated the role of alphabetic language organisation in the development of phonological awareness in both the first language and any subsequent language. The issues that remain are associated with the conflict between principles of effective bilingual development and principles of effective literacy development for alphabetic languages when the first language is either oral or has a non-alphabetic script. In this paper I explore a framework that might assist in guiding decisions about how to reconcile the conflict between otherwise sound principles.

Introduction¹

In this paper I explore a complex ambiguity, potentially a tension in our understanding of how to approach the development of a 'first' literacy in a 'second' language. The ambiguity has three aspects, which together render problematic both the understanding of what is involved in 'second language literacy' and how to frame pedagogic responses

¹ I am grateful for feedback from two reviewers and from Donna Starks. Their comments have helped me to clarify the issues presented in this paper. They are not responsible for any remaining problems.

for people without an established literacy in an additional language environment. I conclude by outlining a framework for addressing some aspects of that ambiguity.

In responding to the needs of learners who already speak at least one language, but do not yet read/write any language with any degree of control, one of the key issues is knowing which of their languages offers the best basis for developing a first literacy. A fundamental tenet of bilingual education is that starting with the most familiar (i.e., the language over which the learner has most control) offers the best chances of success. However, if there is little to nothing in common between the reading (and writing) of two languages because of e.g., differences in scripts, then there is a strong temptation to plunge straight into working with the new (by definition less controlled) language. Pragmatic circumstances such as lack of resources and the teacher not knowing the language(s) of the students usually dictate a solution focussing on the additional language. However, in both theory and practice in relation to the delayed development of literacy, this is an unresolved dilemma and research does not yet offer teachers clear guidelines for desirable solutions.

The first aspect of addressing the ambiguity is clarifying what is meant by 'literacy' and particularly how language-specific literacy is.

Tarone, Bigelow & Hansen distinguish "print" literacy from other forms of literacy and restrict the scope of "print" to writing with alphabetic scripts:

We will use the term "print literacy" to refer to the focus of interest of this book, and define it as the ability to encode and decode oral language units with an alphabetic script. (2009, p.1)

This use reflects the difficulties in knowing how to distinguish print literacy from other literacies (e.g., health literacy, information literacy, digital literacy), but this equation of print and alphabetic literacy is problematic since languages

can be printed in many different scripts. Alphabetic scripts are just one cluster among at least six script types (see Daniels, 1996). While there is extended debate about how best to classify the different systems and the relationships between them (Joyce & Borgwaldt, 2011), one way of doing this is as follows: Abjads (consonant-based systems) such as Arabic and Hebrew; Alphabets such as English, Cyrillic; Abugidas (syllabic systems) such as Khmer or Thai; Syllabaries such as Hiragana and Katakana in Japanese; Semanto-phonetic writing systems (character-based systems) such as in Chinese or Japanese and systems that are not yet fully understood, from ancient languages without current speakers.

(<http://www.omniglot.com/writing/types.htm>) [accessed January 28, 2012].

So, to the extent that literacy is language- or at least script-specific, there is a need to consider carefully the multiple possible literacy relationships between different languages. Further, while alphabetic scripts appear to have specific properties that are highly relevant for language learning purposes (see Tarone et al, 2009), the existence of abjads and abugidas demonstrates that there is not a binary divide between alphabetic and non-alphabetic languages (see also Abdelhadi, Ibrahim & Eviatar, 2011). Further, the debate about whether languages such as Hebrew and Arabic have alphabets or abjads indicates that the boundaries and criteria are open to discussion. The existence of languages such as Japanese, with at least three different writing systems also shows that there is no one-to-one relationship between languages and writing systems.

A second aspect of the ambiguity is the relationship between what proficient readers/writers do and how such proficiency is developed. What proficient readers/writers do is NOT a model of how they learn to do that – even if part of the process of becoming proficient is practising proficient behaviours. Learning to recognise parts and their relation-

ships to wholes as well as the shapes that wholes take is part of the process of learning to read. Once these relationships are established, proficient reading can occur, but they must first be learned.

In describing what proficient readers do, Dehaene (2009, p. 20-21) points out that in alphabetic environments “global word shape does not play any role in reading” – if the word is not particularly long. However, the reading process involves a very rapid decision about whether a particular series of marks on a page/screen is something that can be recognised as a word in order to work out how to access the meaning, a so-called multi-pathway model. Dehaene points out that within a multi-pathway model of reading, proficient readers are rapidly able to decide whether they can recognise a word sufficiently to directly access its meaning or whether grapho-phonetic analysis will be required in order to access meaning, such that:

In adult expert readers, the time to read a word is essentially independent of its length. As long as a word does not have more than six or seven letters, its recognition takes an approximately constant amount of time regardless of length. (2009, p. 46)

This interpretation means that the reading process involves some rapid scanning for sight (or possible) vocabulary and a subsequent slower analysis of written stimuli that are not part of that vocabulary. Therefore, reading involves BOTH a sense of the whole and a sense of the parts in a dynamic relationship with each other. It is clearly NEITHER a process of letter-by-letter sounding out and NOR is it a process of only attending to the shape of an individual word.

Both Dehaene (2009), based on detailed psycholinguistic studies, and Kabuto (2011), based on her detailed ethnography of her daughter’s emerging biliteracy in Japanese and English, recognise both macro- and micro-level analyses in the processes of learning to read and write. At the micro-

level, Dehaene (2009, p.137) makes reference to “... a generic ‘alphabet’ of shapes that are essential to the parsing of the visual scene” as part of what underpins the reading process. An element associated with this sense of shape is a range of “proto-letters” (p. 137-140). The generic ‘alphabet’ is not an innate list, but one that is developed as a result of experience – it underpins a list of possible shapes that can be found in letters in alphabets and potentially in other writing systems.

Dehaene’s notion of proto-letters is a construct that is designed to accommodate some of the shared features of symbols (directionality, relationships, relative size) across languages and writing systems. This notion suggests that there is the potential for shared processes in reading across widely-different writing systems. If there is a generic repertoire of shapes that we call on in reading, then the development of literacy in any particular language should have benefits for any subsequent literacy learning. This suggestion appears to be in stark contrast to the claims for the unique consequences of alphabetic literacy and raises issues about how to interpret understandings about relationships between different written literacies.

In a radically different style of study that nevertheless suggests something similar, Kabuto documented her bilingual daughter’s development of biliteracy and commented:

While Emma linked writing and drawing attributes together, she defined writing and drawing by actively generating attributes to redefine, or differentiate, writing and drawing forms. ... After writing ‘Mommy’ and ‘Emma,’ on the bottom-left corner, she wrote an ‘O’ inside another ‘O’. After she completed the sign, Emma said that an ‘O’ inside another ‘O’ looks like a doughnut. (2011, p. 47)

Kabuto’s analysis revealed both elements of ‘whole’ and elements of abstract ‘parts’ intertwined in her daughter’s analysis and control of the writing systems of English and Japanese. This learning involved the recognition of shapes

across the modalities of 'writing' and 'drawing'. As part of learning to write each of her two languages, Emma went through a process that involved learning to recognise shapes and their similarities regardless of whether they were part of 'writing' or 'drawing' or 'life' (the letter 'O', a circle shape and a doughnut). She then had to learn what constrained the particular shapes in each specific context. For example, she would have had to learn to distinguish a 'doughnut' from a 'sticky bun ring', a lower case 'o' from an upper case 'O' and a circle from an oval.

So a proficient reader has access to a range of both sight vocabulary items and words up to six or seven letters in length (for e.g. alphabetic languages) that can be rapidly recognised, but also a range of other visual literacy skills such as recognising shapes, size and perspective. When a set of marks does not correspond to the repertoire of sight or potential vocabulary items, it is referred to a more explicit analytic process. In order to become able to read fluently, someone learning to read has to learn to distinguish and systematically relate disparate cues into their own cohesive and distinct systems.

A third aspect of the ambiguity for additional languages such as English is the potential tension between what appears to be a requirement to engage with alphabetic literacy in order to develop phonological awareness and a more humanistic view that, in order to empower minority group members, educational efforts should seek to develop the 'first' language in order to establish a foundation upon which to build the additional language (Garcia et al., 2009). If the writing systems of two languages are radically different, the process of building appropriate literacy awareness from one language to another is uncertain. Indeed the findings of de Gelder, Vroomen and Bertelson (1993) for literate users of Chinese whose alphabetic literacy learning was in Dutch suggest that seeking to work between or across languages is unnecessary.

The uncertainty about which language to begin with is increased if the learner has no literacy experiences in their

first language and that language has a different writing system. As a consequence of this ambiguity, a theoretical challenge is balancing the attention that needs to be devoted to learning about what is involved in 'first' language literacy development (of children, in a variety of languages) with the question of how specific to the context of additional language learning 'second' language literacy development is. If developing literacy in any language can contribute to phonological awareness, then it will be possible to combine the humanistic endeavour of empowering minority members with development of skills and strategies useful for alphabetic literacy and phonological awareness. If phonological awareness only develops through engagement with alphabetic languages, the arguments for focussing on literacy learning in the 'second' language will have greater weight.

Framing a response

Literacy in any language involves some level of grapho-phonetic analysis – because all written systems must be 'translated' into something that has sounds (words) via a process of recognising how the sounds and the written symbols are related. It doesn't matter whether those sounds are actually vocalised. The issue of which pedagogical approach to take for the development of literacy in an additional language is particularly problematic if the learner is a speaker of a language with a character-based writing system, who is not literate in that language since in such languages the role of grapho-phonetic analysis is particularly unclear and the issue of which language to start with is highly problematic, particularly if the learner is an adolescent or adult.

Kabuto argues, "Writing is an act of discovery that requires perceptual rearrangements and physical representations and [is] always embedded in social and cultural contexts" (2011, p. 53). This description makes the act of writing sound like an unstructured process of exploration and experimentation and therefore equally accessible to everyone.

On the surface, this appears to contradict Dehaene's claim that

... without explicit teaching of the alphabetic code, conscious manipulation of phonemes does not emerge. (2009, p. 203)

However, it is not inconsistent with his other point (p. 94-5)

That neurons respond in the same way to the shapes 'g' and 'G' cannot be attributed to an innate organization of vision. It necessarily results from a learning process that has incorporated cultural practices into the appropriate brain networks.

In different ways, both views recognise the interaction between cultural experiences and shape-analysis. Dehaene's focus is more on the neural dimensions of the skilled reader's analysis of the code and how such skilful analysis is mediated by cognitive mechanisms. Kabuto's attention is directed more to the process of gaining that level of skill and how that process is mediated by social experiences. Based on his analysis of skilled reading across a range of languages, Dehaene concludes that

The two reading routes [straight to meaning or via sound to meaning] exist in all cultures and reside in similar areas of the brain. The only difference consists in the way that each language makes use of the routes. (2009, p. 118)

So there are features of the reading process that are specific to particular languages, but the particular language seems to act more as a filter on common cognitive structures. If this is the case, then there is space to look for relationships in literacy awareness across different writing systems.

As Koda argues in her Transfer Facilitation Model: "... second-language competencies evolve from continuous interplay between transferred first-language competencies

and second-language print input" (2008, p. 79). Key to this model is the capacity to access language input, requiring a more detailed understanding of aspects of language awareness (Kuo & Anderson, 2008) such as outlined in the table below. The table shows two broad categories of phonological and morphological awareness in the left column. The 'Sound' awareness column contains the sub-components of phonological awareness (there are none for morphological awareness) and the 'Sound-writing' awareness column labels the relationships between the phonological, morphological and writing system awareness.

Focus of awareness	'Sound' awareness	'Sound-writing' awareness
Phonological awareness	Syllable awareness	Graphophonological awareness (involving all three aspects of 'sound')
	Onset-rime awareness	
	Phoneme awareness	
Morphological awareness		Graphomorphological awareness

Table 1: Aspects of 'word-level' language awareness related to literacy

The above table does not contain all elements of language awareness. For example, Kuo and Anderson (2008) also identify semantic and syntactic awareness and Tarone et al (2009) extend the list. However, the components in the table above specifically relate to the relationship between parts and wholes in relation to dimensions of sound and shape in writing systems. In thinking about how to read and write, these elements are crucial. However, even with the list identi-

fied above, there are issues about how much specific items apply to non-alphabetic languages. As Fang, Tzeng and Alva concluded some thirty years ago: “We simply cannot, or should not, lump data of different types of bilingual subjects together and attempt to come up with a general statement about the processing mechanism” (1981, p. 616).

However, if languages can be grouped (e.g. because their writing systems share the characteristic of being alphabetic), some level of consolidation can be achieved. As Anthony & Francis argue in relation to the process and sequence of development of phonological awareness in monolingual children across multiple (alphabetic) languages,

Although phonological awareness development from large units of sound to small units of sound is universal across languages, the rate that populations of speakers of different languages progress through the sequence and the proficiency they achieve at each level vary. (2005, p. 256)

Similarly ‘lumping’ data, there appears to be a significant role for phonological awareness and potentially also phonemic awareness in reading different languages. Bialystok, McBride-Chang and Luk (2005) have demonstrated that the development of phonological awareness reflects exposure to and experience with alphabetic writing systems and leads to greater ability to analyse those systems. In consequence, for languages with a shared alphabetic writing system, there is likely to be transfer of phonological awareness from one language to another. However, actual recognition of written words is a reflection of vocabulary size in the language. To the extent that writing systems are not shared, Bialystok et al indicated that the ability to establish relationships between literacies is also varied.

For phonological awareness, progress depends mostly on the structure of the language; for reading, progress depends mostly on proficiency in that language. (2005, p. 589)

Proficiency in a language is multi-faceted and what influences its development is similarly diverse. In reporting on influences on alphabetic reading in a first language and the relationships between diverse aspects of phonological awareness, Foy & Mann pointed out that after controlling for the potential influence of age, knowledge of words and of letters

... speech perception was closely associated with rhyme awareness measures ... and that children with a less developed sense of rhyme also had a less mature pattern of articulation ... (2003, p. 60)

In contrast, age, vocabulary and letter knowledge largely explained the relationships between phoneme awareness on the one hand and both phonological perception and production on the other.

In interrogating the nature of phonological awareness and influences on how it develops, Foy and Mann also point out:

... rhyme and syllable awareness are more likely to develop spontaneously, in contrast to phoneme awareness, which most often depends upon formal reading instruction (for rhyme, see Dale, Crain-Thoreson, & Robinson, 1995; Johnston, Anderson, & Holligan, 1996; Smith et al., 1998; for syllables, see Mann & Liberman, 1984; Morais, 1991; Morais et al., 1979). (p. 61)

These findings suggest that there are different influences on the development of phonological awareness and that not all parts of phonological awareness require either explicit instruction or insight into the internal structure of words. In particular, rhyming behaviour and recognising syllable boundaries are skills that can emerge without explicit (schooled) instruction. Identifying another influence, Foy and Mann reinforce the role of vocabulary (see also Metsala, 1999). It has been estimated that in first language development for alphabetic languages such as English a vocabulary of some 2,000 words is available at the time that aspects of

phonological awareness begin to consolidate and perhaps a further 2,000 – 3,000 words by the time that formal schooling commences (Biemiller, 2003). As Foy & Mann (2003) point out,

... in our previous study (Foy & Mann, 2001) we found vocabulary to be a primary associate of phoneme awareness, which overwhelmed any direct effects of phonological perception and production. (p. 64)

However, in their 2003 study, as a result of path analysis that accounted for interactions between home literacy practices, age and phoneme awareness in monolingual preschool children, they downplayed the independent role of vocabulary knowledge. In Foy and Mann's (2003) study, the measure of vocabulary knowledge was a productive measure rather than the receptive measures used in studies that have claimed a stronger relationship between vocabulary and phoneme awareness. Vocabulary size was not an independent variable, its nature (receptive or productive) varied and its influence was constrained by a range of other variables, both cognitive and social.

Thus, in support of an argument that the development of different aspects of phonological awareness is supported by different experiences, they conclude (p. 83) that

Where the aspects of the home literacy environment that appear to develop phoneme awareness build primarily upon the child's vocabulary and letter knowledge, those that develop rhyme awareness build more strongly upon speech discrimination.

In their findings, rhyme awareness develops as a consequence of experience with speech that reflects language familiar to the child. Consistent with the table of components of phonological awareness above, there is a division between phonemic awareness on the one hand and syllabic awareness and onset-rime awareness on the other hand in the extent to

which explicit instruction is needed to develop the awareness. Phonemic awareness, which is the aspect of phonological awareness most discretely associated with literacy in alphabetic languages is the last to develop of the three and the one that appears to require the most explicit instruction. Other aspects of phonological awareness may not require the same kind of formal instruction to develop.

Does this mean, then, that children who learn to read in a non-alphabetic language (or a less alphabetic language such as Japanese) do not develop phonemic awareness and only develop other kinds of phonological awareness? The first answer appears to be "yes." Read, Zhang, Nie & Ding (1986) investigated the phonemic segmentation abilities of native speakers of Chinese whose literacy learning either did or did not involve experiences with the alphabetic pinyin script. They found a strong association between having learned pinyin and the ability to segment both words and non-words at syllable boundaries. Similar evidence was provided by de Gelder et al (1993), but this time based on evidence from Chinese speakers who had their experiences with alphabetic literacy in Dutch as an additional language. Nevertheless, more recent evidence seems to suggest that in the course of children learning to read and write non-alphabetic languages phonemic awareness also develops (though later and to a different extent).

Fletcher-Flinn, Thompson, Yamada and Naka (2011) have produced evidence that in L1 Japanese, children learning to read hiragana (the syllabary used for 'native' Japanese words) develop phonemic awareness as they learn to name the specific 'you-on' that mark the palatalisation of certain sounds – a phonemic element in what is otherwise a syllabic writing system.

Further, Yan, Bai, Zang, Bian, Cui, Qi, Rayner and Liversedge (2012) offer evidence of two things. First, reading Chinese characters by first language Chinese university students involves recognition of the internal structure (strokes) of the character with different strokes having different significance. Second,

the contributions of strokes to meaning parallel very closely the contributions of letters to meaning in alphabetic reading – a first letter and a beginning stroke are similarly significant with final strokes and letters less significant. Overall, different kinds of strokes (not location) also contribute to meaning differently. Third, the influence of stroke order was not a result of the stroke being either a semantic or a phonetic radical. Continuing the thread of sub-lexical (phonemic) awareness in non-alphabetic languages, Lin & Collins (2012) demonstrated that speakers of both Japanese and English reading Chinese as an additional language analysed the phonetic elements of characters. Even though learners with Japanese as L1 were overall more accurate, similar patterns of sub-lexical analysis applied whether learners had Japanese or English as their first language and these patterns resembled both those of readers with Chinese as a first language and those of first language readers of English.

Yan et al. (2012) show that for first language readers of Chinese, different elements within the character contribute in different ways to the readability of the character so that readers have to pay attention not only to the shape as a whole but also need to analyse the elements within the character. The general pattern of sensitivity to disruption of the characters was reported to be similar to the pattern in alphabetic languages, indicating that there are both differences and similarities in reading strategies.

Lin and Collins' (2012) findings show that there are effects of both the regularity (always having the character pronounced according to its phonetic element) and consistency (sharing the same pronunciation of a phonetic element across a group of characters) of Chinese characters on L2 readers of Chinese whether the learners were of Japanese or English speaking background.

Further, with growing evidence of the additional importance of morphological awareness to reading and also of its relationship to vocabulary (McBride-Chang, Tardif,

Cho, Shu, Fletcher, Stokes, Wong & Leung, 2008; Kieffer & Lesauz, 2012), insights into the relationships between growth in vocabulary and growth in language awareness of various kinds is emerging. Kieffer and Lesauz' (2012) identification of three dimensions of vocabulary knowledge: breadth, contextual sensitivity and morphological awareness suggest channels for some of these relationships.

These diverse studies seem to indicate the following:

1. Phonological awareness is a multi-faceted construct, in which different aspects contribute differently to overall literacy
2. Some features such as onset-rime appear to contribute less directly to subsequent reading ability and appear to develop independently of alphabetic print literacy
3. Vocabulary size is connected with at least morphological awareness
4. Phonological awareness influences subsequent literacy (and vocabulary size is important at the time of initial literacy acquisition)
5. Phonemic awareness is a central construct in the development of alphabetic literacy, but appears to also develop (at least in part) as a consequence of the acquisition of literacy in languages with other writing systems
6. Phonological awareness is paralleled by morphological awareness
7. Reading of different scripts calls on different types and sub-types of awareness
8. Even entirely logographic scripts are not entirely read as 'wholes', but involve some analysis of their component elements
9. Size of vocabulary and phonological awareness are connected with family literacy practices in first language literacy development
10. For languages with alphabetic scripts, phonological awareness transfers from the first to the second language

(at least when that awareness is well-established in the first language literacy)

But these are predominantly first language studies. Can the same mechanisms be assumed to apply in additional language reading? After all, the general SLA field has devoted tremendous energy to demonstrating that simplistic L1 transfer does not account for significant features of additional language development. As van Tubergen (2010) shows through statistical analysis of a survey of some 3,500 refugees in the Netherlands, there are features of some additional language populations, particularly refugee populations, which mark them as significantly different from those learning to read in their first language. Whereas for young children learning to read in their first language as well as for non-refugee migrants to the Netherlands in van Tubergen's study, where longer contact with the language is associated with higher reading skills, van Tubergen found

... that for every year that a refugee stays in a reception center in the Netherlands, the associated odds of speaking Dutch well decreases about 10 percent, and the odds of reading Dutch well diminishes by 8 percent. (2010, p. 529)

These findings suggest that some of environmental influences that would normally be considered to support reading development may not be present in non-literate refugee populations. Nevertheless, as with Ross' (2000) research with adult ESL learners in Australia, van Tubergen (2010) found a strong relationship between levels of first language education and overall additional language proficiency.

These two studies indicate that general aspects of experience contribute to some aspects of literacy development, and that general education is a significant element in those experiences. Literacy is, of course, both reading the world and reading the word (Freire & Macedo, 1987) so part of this contribution of prior experience will be understanding the

world as well as general understanding of the role and purpose of literacy and of how institutionalised learning is organised. The studies discussed above suggest that phonemic awareness is only likely to transfer if the writing systems of the two languages involved are the same (see also Comeau, Cormier, Grandmaison & Lacroix, 1999), but this is not the sum of how previous experiences with/in one language might contribute to literacy learning in an additional language.

There are two broad issues that need to be addressed. The first of these issues comes in the form of a pair of questions. Are the prerequisites for literacy development available to the learners? Can the learners make use of input and feedback that relates to literacy knowledge? Schild, Röder and Friedrich (2011) compared monolingual German pre-school (beginning to read and non-reading) and young school children (beginning readers) in an ERP (Event-related Potential) study in which brain activity in response to particular cues is assessed by a series of electrodes placed on the scalp. They documented that "the newly established processing route for written words directly interacts with representations at the lexical access pathway in spoken word recognition" (p. 171). This finding suggests that learning to read (an alphabetic language) influences the way in which speech in that language is perceived. This result supports the claim that adults without literacy in any language will perceive spoken input differently from those already literate (at least in an alphabetic language). A bias to focus on whole words in non-literate adults is reported by Serniclaes, Ventura, Morais & Kolinsky (2005).

So, the next issue is whether the required insight into literacy can be fostered in adults learning an additional language when they do not already have parallel experiences in their other language(s). Landgraf, Beyer, Hild, Schneider, Horn, Schaadt, Foth, Pannekamp & van der Meer (2012) explored this issue in a quasi-experimental study involving adult learners of German, non-literate adult speakers of

German and literate speakers of German. The 47 non-literate adults were involved in a one-year long literacy program with weekly classes. Neither the length of the weekly classes nor the specific nature of the teaching methodology used in the program were described in detail, but the approach seems to have reflected a ‘basic skills’ approach (see also Landgraf, Beyer, Pannekamp, Schaadt, Koch, Foth & van der Meer, 2011). Landgraf et al. (2012, p. S135) reported that, as with children, phoneme association (phonemic awareness) was more strongly associated with improvements on reading and writing tests than years of education. But for the adults in the training program, ability in syllable segmentation was also associated with improvement in writing skills. However, Landgraf et al. (2012) point out that the phonological skills do not directly predict the course outcomes as they are mediated by a number of other life experience variables. So, while the course was able to achieve improvements in both diverse aspects of phonological awareness and in reading and writing scores, the level of performance of the non-literate second language learners did not reach the level of the literate control group (in which 3 of the 41 participants were second language learners of German).

Teaching implications

Taken together, the above studies suggest that while the learning of literacy is an urgent need, rushing into it for learners who have not yet experienced literacy may not be the best approach. Remembering that literacy has both the dimensions of reading the world and reading the word, there seems to be sufficient evidence that the acquisition of any literacy will develop enough initial capacity to read the world that is required to make a start in acquiring literacy in an additional language. However, when the first language writing system is not the same as that of the additional language, there will remain a need to provide explicit, focused instruction on the literate practices of the new writing system. For

alphabetic languages such as English, Dutch, German and French, a key component of that instruction will need to be phonemic awareness.

In this proposal, the fact that the teaching approach builds on established experiences with a literate world gives a basis for exploring the specific literate world of the new language, but it can hide the need for that life-based and experience-building to be a planned and coordinated element of the language learning program – after all, the literacy associated with the new language is part of a new cultural experience, one that can be both contrasted with previous cultural experiences and explicitly explored. This proposal assumes that learners with an established literacy already have *some* form of syllable awareness, onset-rime awareness and phonemic awareness since the first two have capacity to develop independently of literacy and the last one seems to develop to a limited extent in the later phases of literacy development with other writing systems.

However, for learners who have not yet had literacy experiences, there may be a need to build more linguistic resources prior to explicitly focusing on alphabetic literacy. The role of vocabulary in building both a basis for phonological awareness across all three levels and in sustaining the development of skilled reading is essential in effective literacy instruction, but nothing would be worse than interpreting this as advocacy for endless wordlists. Both phonological and morphological awareness imply seeing vocabulary as part of webs of meaning and webs of form. Since size of vocabulary seems to play an important role at the commencement of literacy instruction (for children learning to read for the first time), it may well play a similarly important role for adults learning to read for the first time. This implies that exploring syllabic awareness and onset-rime awareness may be important aspects of building vocabulary knowledge orally prior to beginning to engage with new literacy in the new language. In this phase of learning literacy, ‘reading the world’ can be

part of the knowledge that is brought into the classroom from earlier languages. Similarly, 'reading the word' practices from earlier languages at the level of rhyme, rhythm (songs and poetry) can also be brought into the additional language classroom and used to build connections between words (see Schmitt (2008) for an overview that builds on the work of, among others, Paul Nation and Paul Meara). A key feature of modern approaches to vocabulary teaching is the emphasis on depth and breadth of learning – part of a focus on establishing the web of connections between and around individual words. I will call these aspects of literacy 'pan-literacy' based on the argument that they can be seen to be features of all literate practices in all languages. The overlap between some of these aspects of graphophonic relationships and some alphabetic literacy skills is part of the pathway to a more specific and elaborated alphabetic literacy.

It may well be that a necessary preliminary step to building pan-literacy is building a new vocabulary and the

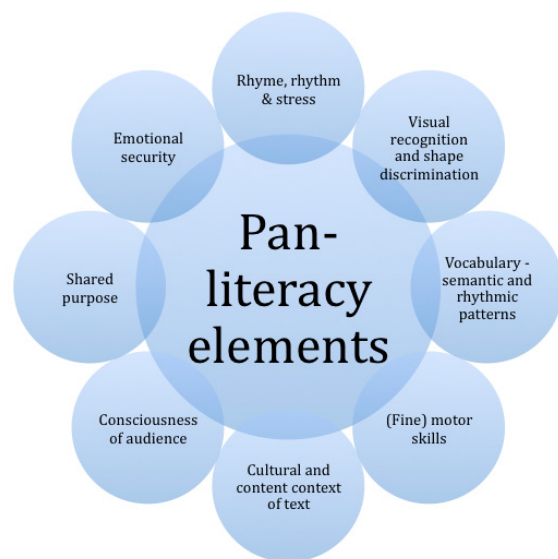


Figure 1: Elements of pan-literacy

explicit development of contrastive relations between the new language vocabulary and vocabulary from already established languages. This vocabulary widening should be seen as PART OF a wider approach that embeds vocabulary into wider (culturally-shaped) frameworks of use and interaction before the specific move into alphabetic literacy features and related awareness.

This acknowledgement of pan-literacy may be a way in which what we recognise from general principles of bilingual development can be reconciled with the quite specific aspects of alphabetic literacy that are required for effective reading and writing in languages such as English. The following appear to me to be elements of pan-literacy – many of them are not associated with language directly.

In what follows, I will only elaborate on those elements that have not been considered in discussions above.

- *Rhyme, rhythm and stress - as part of shared activity*

Rhyme, rhythm and stress have been shown to be accessible to all speakers of all languages, but seeing them as part of a shared class activity helps to extend awareness of different language patterns and builds experiences of finding similarities and differences between languages. Further, the shared activity prevents the otherwise threatening focus on an individual. Such activities will be part of the shared experiences of songs, poetry and language play that speakers of any language will have.

- *Visual recognition and shape discrimination*

As the intertwined nature of recognition and discrimination of shapes, writing and drawing has indicated, understanding the written word (no matter in what language) is part of building up visual perception of shapes, elements in shapes and the space for variation within shapes. All cultures will have a repertoire of shapes and visual images that represent a non-verbal way of communicating.

- *Vocabulary – based in life experiences and as part of semantic and rhythmic patterns*

Words are not just lists of meanings – they have their own rhythmic patterns and these patterns help to create webs of form between words. Recognising rhythms is part of recognising syllable structures and provides insights into legitimate junctures in languages. As with rhyme and rhythm, words that can be linked by their rhythmic patterns are part of the poetic experiences of all cultures.

- *(Fine) motor skills*

Writing involves not only command of the vocabulary and grammar and text structure, but also control of the instruments of writing – either pens or keyboards. Control of both of these instruments requires the capacity to manipulate hands and fingers precisely within small spaces. These skills do not develop exclusively with writing but need to be honed in ways that will be relevant to the particular shapes that the new writing system will require. While not all aspects of fine motor skills will be evenly distributed (e.g. not everyone sews), there are practices in all cultures that involve fine control of motor movements.

- *Cultural and content context of texts*

In contrast to the element just discussed, reading and writing involves much more than motor skills – the wider understanding of what can be written and why is a vital element of becoming a literate member of society. Regardless of whether a language is spoken or written, there will be differences in the ways in which it is used (and what is communicated) in different situations. These practices will be accessible to all speakers of any language and form a basis for situating written texts.

- *Consciousness of audience for texts*

Linked to cultural purposes is an understanding of who may be reading text, what their expectations of different text types might be and what responsibility

the writer must take for any particular audience.

Experience of the difference between speaking to a child and speaking to an adult (or in some cultures speaking with a man or woman) forms a basis for moving beyond a view of written language as a set of abstract skills controlled by someone else to a view of writing as situated communication.

- *Shared purposes in literacy events*

Many of the above elements imply an understanding of how reading and writing are embedded in shared activities. For many people without literacy experiences, reading and writing are seen as things that other people do. However, there is an understanding that those activities connect people in particular ways. Similarly, experiences of song and poetry are also shared and so build a context for understanding that all language users can participate in shared uses of reading and writing.

- *Emotional security*

Learning to read and write cannot occur in contexts in which the learner experiences threat. Learning to read and write for the first time as an adult is both a liberating and an intensely threatening experience. For the experience to be successful, the learner must feel sufficiently secure to take what are perceived to be major risks where the evidence of ‘failure’ is recorded on an enduring basis. Previous experiences of success usually contribute to greater success in learning a second literacy.

These elements may provide a basis for the development of the ‘proto’ elements that both Dehaene (2009) and Kabuto (2011) referred to, while also acknowledging the intercultural learning that is an essential element of additional language acquisition and even more necessary for learners who have not yet experienced a key feature of the cultural organisation and meanings of societies who are

claiming to receive refugee learners.

The notion of pan-literacy addresses some of the ambiguities identified at the beginning of the paper. Those elements of pan-literacy can be seen as the elements that are in common between languages and form the linking element that enables literacy in an additional language to be fostered via activities in a first language as part of a humanistic endeavour of empowering minority groups. The elements of pan-literacy can also be seen as providing the basis for the further development of elements of phonological awareness specific to alphabetic literacy. This supports the argument that there are specific aspects of alphabetic literacy that require formal, language-specific instruction, but provides a basis for supporting this activity through the development of literacy in the learner's first language.

The above comments should not be taken to imply that beginning literacy development with reference only to the additional language will not be successful. However, they offer ways of bringing together both the challenges of such a pathway and opening up routes of supporting both learners and teachers by identifying repertoires that could be shared.

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