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Reading: Knowledge, Skills and Habits

Many writers (e.g. Gombert, 2003; Duncan, Seymour & Hill, 1997; Karmiloff-Smith, 1986) stress the importance of "explicit awareness of the abstract sound units in spoken words" (Savage, Blair, Rvachew, 2006, p. 184). But what function does this explicit awareness have in literacy acquisition? (Karmiloff-Smith, 1986) Gombert's model of metalinguistic development is based upon the distinction between *implicit knowledge* of a language and *explicit knowledge* of a language: "The type of development proposed in this model distinguishes between two levels of cognitive control over the individual's own linguistic knowledge. The first of these (epi-linguistic level) is the control automatically exerted on linguistic processing by the linguistic organizations present in memory. The second (metalinguistic level) is the control consciously chosen, decided on and applied by the individual" (2003, para. 14).

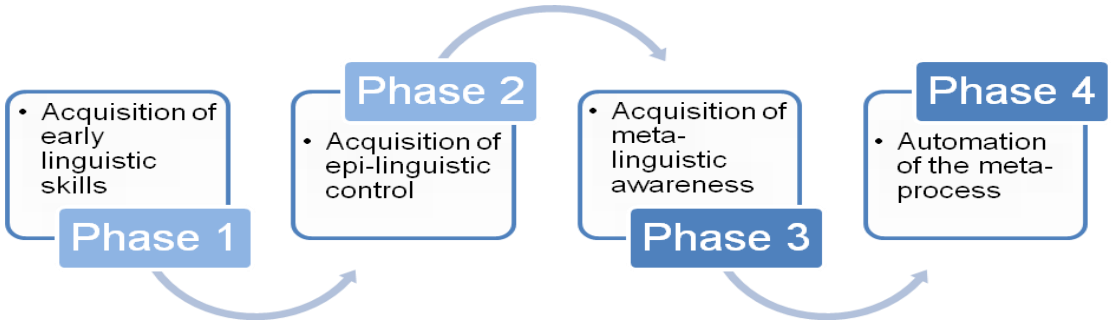


Figure 1: Gombert's model of metalinguistic development

In Figure 1 we can see the gap between phases 1 and 2 (the epilinguistic level) and phases 3 and 4 (the metalinguistic level). Saiegh-Haddad, who has done research work in Hebrew, describes this epilinguistic level as first and foremost "unconscious in nature... observed in spontaneous, intuitive phonological judgments and to be based on overall global similarities between words, as in sound recognition tasks that require similarity judgments or in rhyme-detection tasks" (2007, p. 385).

It is enlightening to consider some classic studies that looked at the phonological awareness of adults who had never learnt to read or write. In a classic study with speakers of Portuguese, Morais, Cary, Alegria & Bertelson (1979) showed that non-reading adults were markedly less able to delete or add an initial phoneme to words: 19% of them, compared to 72% of literate adults in the study. It's worth quoting a little from the article to give us an idea of exactly the adults were expected to do.

> The subjects were told that their task was to add (delete) one "sound" to the utterances produced by the experimenter. In the introductory trials, these utterances were non-words

> which became words by adding (deleting) the phone assigned to the subject. For instance "alhaco" became "palhaco" (clown) and "purso" became "urso" (bear) (Morais, Cary, Alegria & Bertelson, p. 326, 1979)

Adults who have not learnt to read have an experiential knowledge of speech, rather than words. This is illustrated by research that shows adult non-readers can be influenced to judge the length of words by: the size of the object named or the length of time it takes to utter the word (Kolinsky, Cary & Morais, 1987). Similarly, word boundaries are not often clear if you do not have explicit tuition in a language. The research with adults who have not learnt to read demonstrates how it is possible to be a fluent speaker but lack the type of knowledge needed to break words down in to smaller units. Such aspects of phonemic awareness do not emerge before learning to read "… because this awareness is not of the slightest utility outside of this very particular kind of language manipulation (which also includes spelling and some oral language games with sounds) and not because it cannot be taught outside of reading" (Gombert, 1994, p. 253). If such explicit awareness is to develop attention has to be paid to phonemes, which are themselves meaningless in isolation. In learning to speak our first language we do not need to know about phonemes, they are artificial constructs: 'Speech does not require phonemic awareness for the same reason that it does not produce it' (Liberman & Whalen, 2000, p.193; Gombert, 1994). Something needs to trigger the switch to intentional control of language for purposes other than speech; something needs to bridge the gap between implicit, epilinguistic knowledge and explicit (metalinguistic) awareness of the language we are using. Learning to read is one such trigger.

Learning to read and learning to spell and learning to construct structured written texts create the need to develop a meta-language - a language that we use when we speak about what we are doing with parts of a language e.g. manipulating phonemes, adding suffixes, conjugating verbs and so on (Gombert, 1993). In other words learners need to learn to monitor how they are using language, what strategies they apply and be able to build up and break down words and texts in to all sorts of units. Unfortunately, these skills do not always arise during the course of early schooling: nor does movement through the phases that Gombert sets out proceed at the same pace for all learners. In the case of learners with dyslexia, movement through these phases might take longer for some language skills than is typical and sometimes progress will be either halted or incredibly slow if specialist tuition is not available. It is worth pausing to consider why this might be. One possible explanation would be that without being shown how to make the links between the written symbol and the sound unit explicit, within a meaningful context, the learner with dyslexia may not be able to make secure grapheme-to-phoneme links. We need to carefully consider what it is about explicit tuition that is helpful. Aspects to consider are:

- How explicit tuition channels attention and links the sound to the symbol within a meaningful context.

- How explicit, meaningful tuition supports memory (working memory) by placing the things to be learnt within a framework that supports consolidation and retention in memory
- How explicit frameworks can support the retrieval of information from memory.

The need for explicit awareness goes beyond symbol (grapheme)-to-sound (phoneme) links. Key terminology for analysing sentences is also essential to support those with memory difficulties when breaking down sentences to get meaning from them. So metalinguistic awareness (an explicit awareness of sounds, word classes, punctuation and its function) is an important thread that should run through all literacy tuition. Its inclusion will help to mend the sort of break in the chain that many learners with dyslexia experience (See Figure 2).

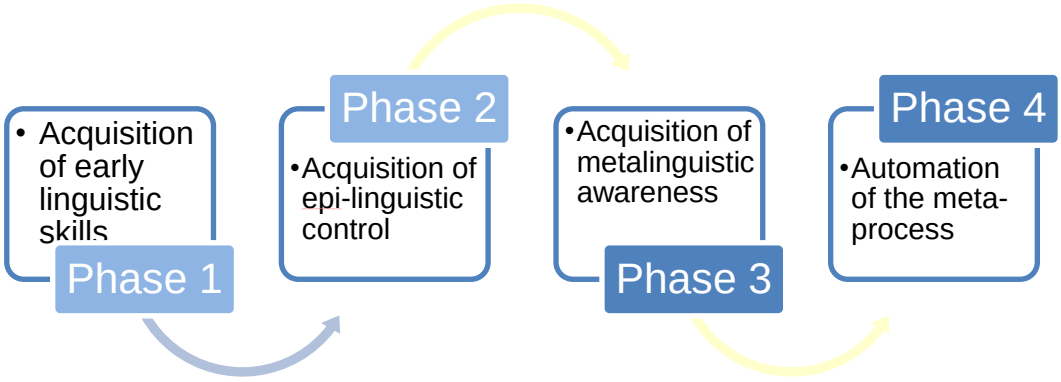


Figure 2: Breaks in the typical development of metalinguistic awareness

Those of us who can read and learnt to read without too much difficulty need to be very mindful of how fortunate we have been to acquire such a complex skill with a bit of practice alone. It can be tempting to consider that those struggling to read are just not trying hard enough. Usually, nothing can be further from the truth. The truth is usually that the learner is struggling because he or she does not have the 'toolbox' that they need and there may be further areas of difficulty of a visual nature that compound matters for them.

Summary:

When working to support those who are struggling to acquire reading skills:

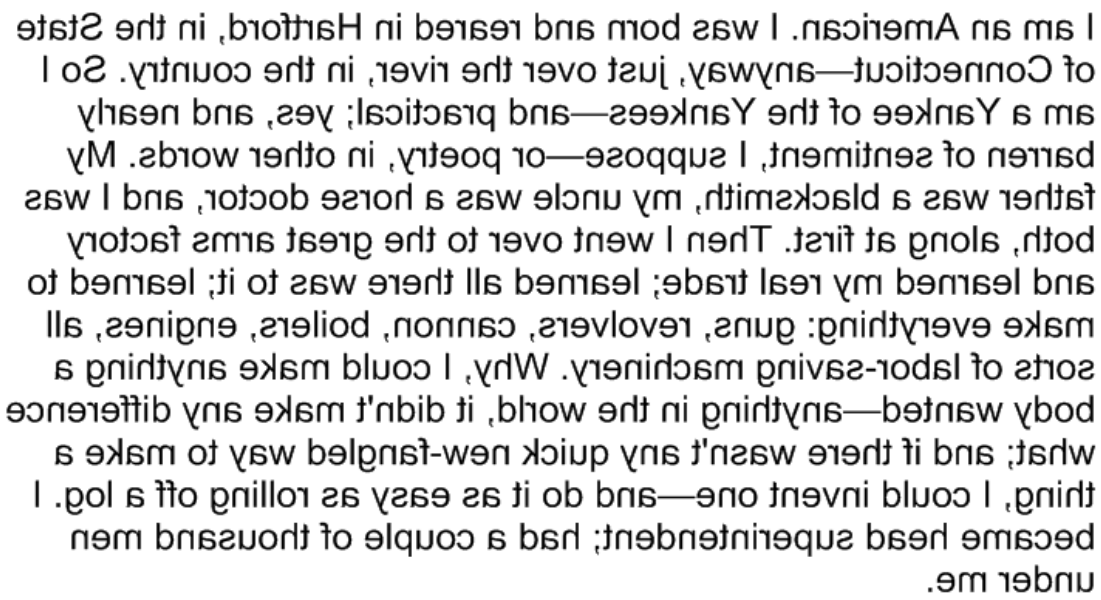
- Use methods that feature explicit tuition within a meaningful context (not simply rote learning)
- Give learners the meta-language they need (as appropriate to their age and understanding) to analyse and talk about written language ('noun', 'verb', 'suffix', 'syllable' etc.)
- Take time to carefully consider how difficult reading is – when reading you will be using a whole battery of strategies relating to the length of words, the word class, use of capital letters, the use of surrounding words to gain understanding of a tricky word etc.). You are likely not be to be aware of these strategies unless you are faced with a very challenging

text, because they have become ingrained reading habits. These 'habits' and strategies will often not be present in or available to struggling readers.

Activity: Flipped Text Reading

Have a go at reading this piece of flipped text. This activity is designed to get you thinking about the sort of 'reading habits' you have acquired to support your ability to draw meaning from text. You will be unaware of many of these until you are put in a situation where your reading skills are taxed. NB: You need to read from right-to-left, rather than left-to-right.

We won't tell you which book it is from, or who wrote the book, as this would give you contextual information that might help some of you to decode/read the passage faster. Think what barriers the text presents you with and what knowledge you use to overcome the barriers. Print off and use the table in the Appendix to record your interaction with the text and what you draw from it.


I am an American. I was born and reared in Hartford, in the State of Connecticut—anyway, just over the river, in the country. So I am a Yankee of the Yankees—and practical; yes, and nearly barren of sentiment, I suppose—or poetry, in other words. My father was a blacksmith, my uncle was a horse doctor, and I was both, along at first. Then I went over to the great arms factory and learned my real trade; learned all there was to it; learned to make everything: guns, revolvers, cannon, boilers, engines, all sorts of labor-saving machinery. Why, I could make anything a body wanted—anything in the world, it didn't make any difference what; and if there wasn't any quick new-fangled way to make a thing, I could invent one—and do it as easy as rolling off a log. I became head superintendent; had a couple of thousand men under me.

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APPENDIX

Aspect of decoding/comprehension to consider:	Describe your experience by answering the questions in the space below.
Did you use your knowledge of word classes (verbs, nouns, prepositions, adjectives, adverbs etc.) to assist you in the decoding?	
Did any letters cause you particular difficulty when decoding? Briefly explain what it was about them that was tricky.	
Were there any sequences of letters that were particularly difficult to decode? Explain why this was.	
Were any particular words difficult – analyse why this was.	
Did you use your knowledge of punctuation (capital letters, full-stops etc.) to help you when decoding?	

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How did your background knowledge help you to decode some of the less obvious words? Did you use your knowledge of geography/literature or any other pool of knowledge to help you decode tricky words?	

How does experiencing this 'flipped' text deepen your understanding of:

- The range of difficulties that can arise when learning to read?
- The supports that experienced readers can draw upon that may not be available to those learning to read?