The importance of vocabulary for reading comprehension

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You're right! Reading's not just about phonics.

There are five keys to reading identified in the scientific evidence for effective teaching of reading: phonemic awareness, phonics, vocabulary, fluency and comprehension (National Reading Panel, 2000; Centre for Education Statistics and Evaluation, 2017). Of the five keys, phonics gets the most attention, and rightly so. Phonics is the area in which students are most in need of help upon entry to school and therefore special attention to phonics instruction needs to be made. Yet phonics is only one of the five keys to reading and a focus on phonics alone will not ensure reading success. One worth a heavy focus is vocabulary. Vocabulary is a very important piece of the puzzle yet gains very little attention.

The importance of vocabulary is well established; the link between vocabulary and the goal of reading comprehension is profound. The rationale for a focus on vocabulary is obvious: if you do not know the meaning of a decoded word, then you will not be able to make sense of what you read. Biemiller has this to say on its importance:

> "Teaching vocabulary will not guarantee success in reading, just as learning to read words will not guarantee success in reading. Lacking either adequate word identification skills or adequate vocabulary will ensure failure." (Biemiller 2005, cited by National Reading Technical Assistance Center 2010)

This claim is backed by a very interesting study by Spencer, Quinn, and Wagner (2014) who endeavoured to find out if there is any such thing as a specific reading comprehension disability. They found that when decoding and vocabulary were both sufficiently developed, only 1% of students presented with comprehension difficulties. The focus on phonics is well justified, but if you want them to read well, you had better focus on vocabulary too.

Consider the following example as a demonstration of just how crucial vocabulary is for reading comprehension. Words considered common in written language but not necessarily spoken language have been underlined. If a child moving through the grades who is an adequate decoder but does not learn these words, they have very little chance of comprehending the text.

> *Johnny Harrington was a kind master who treated his servants fairly. He was also a successful wool merchant, and his business required that he travel often. In his absence, his servants would tend to the fields and cattle and maintain the upkeep of his mansion. They performed their duties happily, for they felt fortunate to have such a benevolent and trusting master.* (from Beck, McKeown, & Kucan, 2002)

Given how vital vocabulary is, it is concerning that 20% of all students who enter Kindergarten (their first year of formal schooling in NSW) are deficient in the vocabulary domain. Even more concerning is how much deficiencies are weighted towards the disadvantaged. The level of deficiency reaches 30% in disadvantaged areas (Reilly et al., 2010).

I think it is reasonable to assume that the vast majority of students presenting with deficient vocabulary knowledge are either not detected or not provided with adequate assistance. Its systematic development is not a priority. All teachers will tell you they do focus on vocabulary, but this is likely to be in incidental fashion (book readings and spoken language). Kerry Hempenstall (2016) writes that this preference could have to do with a widely held belief that vocabulary development follows a natural developmental trajectory. This could well be the case. The belief that education should accommodate the natural development of a child is widespread and is a key driver behind the constructivist teaching philosophy.

What's more, academics who teach teachers often hold a belief that language must always be taught in context, which could also contribute to a more incidental vocabulary instruction model.

Nevertheless, vocabulary is important and teachers should take note of the research. It indicates vocabulary instruction should start early through a range of strategies (Sinatra, Zygouris-Coe, & Dasinger, 2011). Students can learn the meanings of many new words indirectly, through personal experiences, speech and being read to – the incidental teaching and learning common in schools. They can also learn new vocabulary through reading texts; however, teachers cannot rely on this route of vocabulary development because those who can read well tend to read more and therefore learn more vocabulary through reading. This reality is one of the key drivers behind the Matthew Effect (Stanovich, 1986). A logical way to overcome such a problem would be to teach students the code (the top priority of early instruction), but some will lag behind and even if all do learn the code to an acceptable level, some will still be restricted in their access to texts outside of school.

Learning indirectly does help, but students need to be taught vocabulary systematically through direct instruction. Direct instruction supports students to learn complex concepts and ideas that are uncommon in spoken language but perhaps more common in written texts. What words to teach directly is an important question. In *Bringing Words to Life*, Beck, McKeown, and Kucan (2002) break vocabulary down into three tiers:

- Tier 1 – high frequency in spoken language (table, slowly, write, horrible)
- Tier 2 – high frequency in written texts (gregarious, beneficial, required, maintain)
- Tier 3 – subject specific, academic language (osmosis, trigonometry, onomatopoeia)

Tier 1 vocabulary does not need to be taught because we can reasonably assume this set of vocabulary will be picked up incidentally. If students are presenting with serious deficiencies in Tier 1 vocabulary, then keywords may need to be addressed in class and most certainly in out-of-class intervention. Tier 3 vocabulary is subject-specific and should be addressed whenever the time arises. For example, trigonometry can be introduced when students first encounter it in maths class.

Tier 2 vocabulary is the vocabulary we should target directly because such words are frequent in written text but are less likely to be learned incidentally through spoken conversation. The words underlined in the example above (merchant, required, maintain etc.) are examples of Tier 2 vocabulary. Knowing the meanings of Tier 2 words like these will have a profound impact on reading comprehension.

If a primary school were to design a systematic approach to building vocabulary concentrating on a core pool of Tier 2 words, then the effects on reading comprehension could be substantial. Consider a child in Kindergarten who is directly taught 10 Tier 2 words a week (two words, 15 mins a day) every week for seven years of primary school. That child would learn roughly 2800 words that are high frequency in written text at a deep level. Support this learning with the study of synonyms, cumulative retrieval practice, incidental exposure through text reading and a knowledge-based curriculum (the importance of a knowledge curriculum for vocabulary development cannot be underestimated) and the impact could be very profound indeed, especially for the disadvantaged.

References

Beck, I., McKeown, M., & Kucan, L. (2002). Choosing words to teach. In *Bringing Words to Life: Robust vocabulary instruction* (15-30). New York, NY: Guilford Press.

Centre for Educational Statistics and Evaluation. (2017). *Effective reading instruction in the early years of school.* Retrieved from http://www.cese.nsw.gov.au//images/stories/PDF/Effective_Reading_Instruction_AA.pdf

Hempenstall, K. (2016). *Read about it: Scientific evidence for effective teaching of reading*.

National Reading Panel (US), National Institute of Child Health, & Human Development (US). (2000). T*eaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction.* National Institute of Child Health and Human Development, National Institutes of Health.

Reilly, S., Wake, M., Ukoumunne, O., Bavin., E, Prior, M., Cini, E., Conway, L., Eadie, P., & Bretherton, L. (2010). Predicting language outcomes at 4 years of age: findings from Early Language in Victoria study, *Pediatrics*, *126*(6), 1530-1537, doi: DOI: 10.1542/

Spencer, M., Quinn, J. M., & Wagner, R. K. (2014). Specific reading comprehension disability: Major problem, myth, or misnomer? *Learning Disabilities Research & Practice, 29*(1), 3-9.

Stanovich, K. E. (1986). Matthew effects in reading: Some consequences of individual differences in the acquisition of literacy. *Reading research quarterly, 21*, 360-407.

Sinatra, R., Zygouris-Coe, V., & Dasinger, S. B. (2012). Preventing a vocabulary lag: What lessons are learned from research. *Reading & Writing Quarterly, 28*(4), 333-357.

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