

Deanery Digests are short, plain language summaries of the Department of Education's research outputs. This Deanery Digest is based on the following two published research articles:

Booton, S. A., Hodgkiss, A., Mathers, S., & Murphy, V. A. (2022) Measuring knowledge of multiple word meanings in children with English as a first and an additional language and the relationship to reading comprehension. *Journal of Child Language*, 49, 1, 164-192.  
<https://doi.org/10.1017/S0305000921000052>

Booton, S. A., Wonnacott, E., Hodgkiss, A., Mathers, S., & Murphy, V. A. (2022) Children's knowledge of multiple word meanings: Which factors count and for whom? *Applied Linguistics*, 43, 2, 293–315.  
<https://doi.org/10.1093/applin/amab028>

## What do EAL Students Know About Homonyms?

### What is this research about and why is it important?

Many of the words students learn have multiple different meanings or senses – they are polysemous. For example, *train* can mean a mode of transport or to teach someone. Research suggests that acquiring a new meaning for a known word can be more challenging for both children and adults than learning an entirely new word. However, there are few good quality assessments of this kind of word knowledge, and we know little about how much children with English as an Additional Language (EAL) know about polysemous words. This research aimed to find out to what extent and why children may struggle to learn polysemous words.

### What did we do?

Participants were 174 Year 1 to Year 4 children (aged 5 to 9 years) from state primary schools in Oxfordshire, including children with EAL and those with English as a first language (EL1). Students were defined as having EAL only if English was *not* their first language (thus, children who spoke another language, but for whom English was their “mother tongue”, were *not* included in the EAL group). Students with EAL used many different languages, including Polish, Tetum, Arabic, and Albanian. The EAL sample varied in years of experience (0 to 7 years) although the majority had begun learning English at school entry age 4. All participants completed a new measure of receptive vocabulary for polysemous words which we created, in which they chose two images from six which showed two different meanings for 30 words (e.g., *groom*). They also completed tests of receptive vocabulary breadth, reading comprehension, and nonverbal intelligence.

For all of the polysemous words we assessed, we recorded information about them including: how easy they were to imagine (imageability), how often each of their meanings appeared in children's texts (dominance), how frequently each word was used as a noun (part of speech), how often the word - regardless of meaning - appeared in children's TV subtitles (frequency), how related the two meanings were (relatedness), how many different meanings the word had (senses), how many words with similar sounds exist (phonological density), and how many words with similar meanings exist (semantic density).

### What did we find?

- Younger children and those with EAL knew fewer polysemous words from our test. For those with EAL, this was true after considering their lower overall vocabulary breadth.
- The gap between EAL and EL1 students was present for Year 1 and Year 4 groups, and seemed to be of similar size.
- Students who knew more polysemous words also tended to have better reading comprehension. This was true even after controlling for children's age, language status, nonverbal intelligence, time reading in English, and breadth of vocabulary.
- Children were more likely to know words that appeared more frequently in children's TV subtitles.
- Children were also more likely to know specific word *meanings* which were more imageable (easier to imagine) and more dominant (appeared more often in children's texts).
- There was no evidence that other features of words (part of speech, relatedness, senses, phonological density and semantic density) played any additional role.
- Students with EAL and EL1 showed a similar pattern in the types of polysemous words they knew.

## What does it all mean anyway?

This research suggests that knowledge of the multiple meanings and senses of words is important partly because it predicts children's reading comprehension. Children with EAL particularly struggle with this aspect of vocabulary and this gap appears in different school years, suggesting that time spent in school did not affect it (although it should be noted that we did not compare the same children over time). It also suggests that more frequent words and dominant and imageable meanings are more likely to be recognised by children.

Therefore, it is advised that teachers explicitly discuss homonyms with students and put emphasis on learning the multiple different meanings of words, through repeated exposures and using supports (for example, audiovisuals, role play) to make more abstract meanings easier to imagine. Note that this study mainly sampled a specific subset of EAL students, that is those who are neither new arrivals nor first language speakers of English. We also cannot be certain whether learning polysemous words supports reading comprehension, or if instead that having better reading comprehension allows children to learn more polysemous words.

**Open access article:** Open access paper available from <https://doi.org/10.1093/applin/amab028>

**Data:** Data available from <https://osf.io/2ax7q/>

*This Deanery Digest has a [CC BY-NC-SA](#) license.*