

Draft Vocabulary video

Robert Savage:

A very warm welcome again, colleagues, to this fifth of this series of seven professional development videos focused on strand B of the revised Ontario Language Curriculum 2023. This video focuses specifically on vocabulary in reading and spelling. It should be understood in close relation to the preceding videos 1, 2, and 3 and in close relation to video 4 that considered the role of morphology in reading and spelling. This video takes about 45-50 minutes to complete the content. As now familiar there are then reflection points for you to consider after that. Again, there are also follow-up videos and material you may find useful to help you understand the research and practice of teaching reading.

This session will cover 10 key points about teaching with vocabulary:

- 1. What is vocabulary?**
- 2. What does the evidence-based research tell us about the role of vocabulary in reading and spelling that I should I know about as a teacher?**
- 3. Does the use of vocabulary in reading and spelling develop on its own, or do I have to teach it?**
- 4. Practicalities – How do I teach reading and spelling with vocabulary using evidence-based research?**
- 5. Practicalities - When do I teach vocabulary in reading and spelling?**
- 6. Practicalities - To whom and how much vocabulary do I teach?**
- 7. How do I assess my teaching has been successful?**
- 8. How do I use this teaching to prevent difficulties?**
- 9. How does teaching of vocabulary for reading and spelling fit with my teaching of reading for meaning?**
- 10. How does teaching vocabulary for reading and spelling fit to my wider curriculum?**

By the end of this fifth session, you should have much of the essential information you need to be able to plan and deliver a strong word reading and spelling foundation using

what we know of the role of vocabulary that can impact many young people who otherwise struggle to reach reading and spelling accuracy and fluency.

1. What is vocabulary?

Vocabulary is the knowledge of the meaning of individual words such as 'happy'. Vocabulary knowledge refers to the oral (spoken) form of a word and 'reading vocabulary' to the ability to read and understand individual words. Vocabulary is the building block for understanding meanings of related words such as 'unhappy', 'happiness', that we met when we considered morphology in the previous video. Morphemes are the smallest unit of meaning in a language, and morphology speaks to the use of these units.

Learning vocabulary is not as simple as learning a set of individual meanings of words. Many words in English are '*polysemous*' - they have multiple meanings. For example ...the word 'run' has some 20 or so different meanings in different contexts – such as to run a race, run a tap, run for office, to score 'runs' (or 'home run'), have a run of cards or colds (with a runny nose!), or have a run of good luck or see a salmon run. These variable meanings often reflect the specific contexts they are used in (for example, 'I spilt the cocoa, so I got a broom' versus 'I spilt the cocoa, so I got a mop'). English has many synonyms (words that have identical meanings), but also has many words that express related but subtly different shared meanings such as the concepts 'poor', 'needy', 'deprived', 'underprivileged', and 'disadvantaged'. Quite often these multiple meanings reflect the many languages (Anglo-Saxon, Latin, French and later worldwide sources) English has drawn from over centuries e.g. in synonym words like 'think', 'ponder', or 'cogitate'. Further contextual complexity comes from the way words are used in idioms such as 'flash in the pan' 'raining cats and dogs' or 'last ditch effort'. Only some idioms are readily decodable if unfamiliar. Finally, in English, there are also many homophonic words that sound the same and have different meanings and spellings (such as sale / sail, there / their) [ON SCREEN: the words sale/sail appear on screen spelled as s-a-l-e and s-a-i-l respectively. The words there/their appear on screen spelled as t-h-e-r-e and t-h-e-i-r respectively]. For all these reasons, language researchers (and the revised Ontario language curriculum), thus speak of the need not just for vocabulary *breadth* (wide or large vocabulary), but also vocabulary *depth* (a rich and highly nuanced understanding of a range of word meanings in and out of varying contexts).

How might we make sense of this complexity as a teacher? One way is to think of three 'tiers' of vocabulary words. Firstly, there exist a relatively small number of high frequency words used in everyday spoken language, (this is a perhaps surprisingly small 2-3 thousand words). These have been called 'tier 1' words. Beyond that there is a set of words

that occur reasonable often in books (including ‘academic’ words such as ‘compare’ ‘discuss’ ‘examine’ ‘describe’ ‘identify’, ‘explain’, etc. as well as many more formal forms and adjectives). These words have been termed ‘tier 2’ words. Beyond that there are rarer and often more ‘technical’ words that often have a specific meaning in a specific context (words such as ‘photosynthesis’ ‘pentameter’, ‘ampere’, and ‘libel’). These words have sometimes been labelled ‘tier 3’ words.

2. What does the evidence-based research tell us about the role of vocabulary in reading and spelling that I should I know about as a teacher?

We are now familiar from previous videos with the idea of evidence-based practice and the way that it has informed the development of the revised Ontario language curriculum. Evidence-based vocabulary instruction is encouraged in Strand B of the revised language curriculum.

Furthermore, in previous videos we have already met the understanding that all reading systems represent both phonology (speech sounds) and semantics (meanings). Reading vocabulary is one important way that English represents word meanings. Finally, in previous we have also already considered some of the roles of vocabulary in reading spelling and in closely related phonological processes in previous videos. We will revisit and extend some of these understandings below.

Let’s briefly recap logical models of the likely processes in using vocabulary in reading English.

First, we have met in video 1 the idea that vocabulary may help in the early development of phonological awareness.

Videos 2 and 3 demonstrated how using phonics, on meeting the word ‘sheep,’ for example, a student with foundational skills can: [ON SCREEN: an image appears on screen representing the process of how students use phonics to read using the word ‘sheep’]

1. identify the relevant graphemes
(sh – ee - p)
2. translate each grapheme to its corresponding phonemes:
grapheme to phoneme (in IPA format)
sh to / sh/
ee to / ee/
p to /p/

3. blend these phonemes to produce the spoken word /sheep/
4. Identify the word pronunciation and a stored word meaning ‘farm animal covered in wool’

For irregular words that do not follow phonic rules, we learned that a strategy of mental flexibility (set-for-variability) may help. Such an approach required linking phonic decoding to likely word meanings through flexibly adjusting the phonic rules used (especially variable vowels in English).

In both of these examples above, the essential vocabulary knowledge **was simply assumed**, but in the real world of classrooms this knowledge of specific word meanings will often have to (first) be taught for students to experience success on these words. Vocabulary is clearly an integral part of word reading. We met analogous vocabulary-dependent morphology processes in reading polysyllabic words in video 4.

Let’s briefly recap logical models of the likely processes in using vocabulary in spelling English words.

In video 2 we explore the processes in spelling words, as below:

On meeting the spoken word ‘sheep’ for example, a student with sufficient language skills will orally access ‘farm animal covered in wool’ at the start, and with foundational reading skills will:

1. Segment the spoken word to identify the relevant phonemes
(/sh/ – / ee/ – / p/)
2. translate each phoneme to its corresponding written graphemes:
phoneme to grapheme
/sh / to sh
/ ee/ to ee
/p/ to p
3. Write or type graphemes to produce the printed word ‘sheep’
4. Access the printed word representation if available and link print and pronunciation to the word meaning.
5. Verify the spelling and reading representation are identical. For regular words they generally will, unless there are equally frequent variants of PGCs such as ‘ea’ for ‘ee’. In such cases the incorrect choice for spelling (‘e.g. sheap’) may be noticed as incorrect once written using reading-based print knowledge.

For the spelling of irregular words such as ‘sign’ or ‘react’ that do not follow standard phonic rules, we learned that either a degree of mental flexibility in adjusting phoneme-to-grapheme rules or the consultation of wider morphemic family knowledge (e.g. ‘re’ and ‘act’ family words) is necessary to spell accurately. Both require vocabulary knowledge for success. Similar issues apply to the spelling of polymorphemic words.

In sum, for both word reading and word spelling, logic suggests vocabulary knowledge is intimately involved. We will go on to learn exactly how intimate that relationship is in later work. Finally, longitudinal research has confirmed the importance of early vocabulary. Cunningham and Stanovich (1997) found that the breadth of student’s vocabulary knowledge measured on a standardized assessment in first grade predicted their reading comprehension in grade 11. As we have found before in previous videos, strong foundations of learning in the early years again set the stage for building learning across school careers!

3. Does the use of vocabulary in reading and spelling develop on its own, or do I have to teach it?

What evidence is there that direct instruction by educators to teaching vocabulary aids student reading in elementary schools? One meta-analysis (a careful review) of all well-executed studies in this domain (Elleman et al., 2009) synthesized all the available evidence then available from vocabulary interventions (some 37 controlled studies that compared the sustained intentional teaching of vocabulary to some students with an alternative teaching approach for other comparable students). Elleman and colleagues found that vocabulary instruction was, overall, effective in helping children learn oral vocabulary but that effects were not strong when children were assessed on standardised tests of reading comprehension.

The individual studies in the Elleman review used a wide range of methods to teach vocabulary. There was not an obvious pattern as to which approach was more effective. However, some later reviews focusing on kindergarten found that the more explicit the teaching, the more effective it was in improving learning outcomes. This pattern was also found in some individual studies of early elementary students (e.g. Clarke et al., 2010). On balance, then, there is some evidence that explicit vocabulary instruction is more effective than more implicit instruction.

Rogde et al. (2016) provided 18 weeks of direct instruction in vocabulary, categorising and classifying words to second language learning kindergarten students. They also included instruction in wider listening skills, grammatical knowledge tasks, story structuring

(awareness and knowledge of story structures such as beginning middle and end) and story sequencing (e.g. organising beginning middle and ends of a narrative in the right order). They also included dialogic shared book reading – an approach whereby questioning techniques are used by teachers to help students develop more context-independent language and expand vocabulary while together sharing a book. The positive effects on taught vocabulary and on expressive vocabulary growth in second language learners mirrored similar positive effects of such approaches that have previously been found in reviews including first language learners (e.g., Marulis, & Neuman, 2010).

Research from experiments and our analysis above of reading and spelling processes both suggests that vocabulary and phonics may work together to support literacy development.

Here is just one example of experimental research on the importance of connecting vocabulary teaching and print knowledge:

The influential work of Linnea Ehri (e.g., 2005, 2017) has shown how important word spellings are to vocabulary learning. She starts with the important conceptual idea of *Orthographic Mapping*. Orthographic Mapping is the formation of letter-sound connections to bond word spellings pronunciations and meanings together. This strong connectivity of different sorts of information about a given word produces a ‘high quality’ representation of that word in the brains of the learner. This quality representation means reading and spelling accuracy and fluency for that word are enabled.

In her 2005 study with second graders, Ehri taught them new unfamiliar vocabulary words such as ‘sod’ (wet grass ground) or ‘pap’ (soft food for young children) using oral word pronunciations definitions, drawings and embedding words in oral sentences. In one condition of the study, word spellings were also introduced during the word learning phase. In the second ‘control’ condition of the study, all of the same oral supports were given but the word spellings were not shown during the word learning phase. Results showed a big impact of also providing spellings on later *oral* word vocabulary learning outcomes. This superior ability to connect spellings to word pronunciations seemed to mark out the stronger readers and the same patterns were also evident in grade 5 learners.

Finally, in the previous video 4 we met the idea that there may be as many as 70,000 individual words that children might usefully learn, if they are treated as isolated items. This requires us to think about how children can attain this task, and what strategies, experiences and teaching are likely needed to support vocabulary development (and which adds up to about 12 words a day from age 4 to learn – a challenging task indeed!).

Morphological families may be a way reducing the burden of learning vocabulary for students. Exposure to-, and teaching of-, such morphological families. We note however some caution in video 4 about how strong the research base really was here about morphology, the need for more work and the need to see evidence of clear transfer from taught words to new unfamiliar words.

Providing rich context over teaching words directly: While direct explicit vocabulary instruction is important if you want children to learn certain specific words important to their studies, another effective approach to teaching vocabulary words is through carefully controlling context. For example, when teaching the word 'spacious', you could present the word in the oral context of the sentence '*ted's back yard was too small, so he looked for one that was more spacious*'. Teachers can explicitly teach the strategy of using context to infer word meanings. Teachers should beware though that while this approach of using context works for *oral vocabulary language learning*, it does not help *word reading acquisition* very well at all, as we learned in video 3.

Book reading and its role as context: According to Cunningham & Stanovich (1998), grade 1 books contain 50% more low frequency tier 2 and 3 words than daytime television or undergraduate conversations! These words appear often in helpfully informative sentence and text contexts. Students undertaking wider reading as early as possible is clearly an important goal in itself of course but is also likely a resource in developing vocabulary. In developmental terms, it may be that while exposure to vocabulary in the early years helps early word reading abilities, these word reading abilities that allow students to access texts are in turn then a strong likely causal force in developing broad and wide vocabulary in later elementary years. However, we have to be careful here - not all texts are well written enough however to allow context to teach vocabulary! For both text-based and oral-context strategy use to work careful teacher planning and curriculum organisation to ensure the context given really supports the specific learning for specific students.

A more recent meta-analytic review by Cervetti et al. (2022) sounds some important cautions about both the evidence of impact from direct instruction and aspects of strategy-based approaches to vocabulary teaching (using context or morphology). They found across some nineteen studies involving 8,243 students that examined the impacts of direct instruction in word meaning, very modest effects on vocabulary breadth that were near zero overall. They then explored strategy -based approaches that included either:

1. Morphology (e.g. working with affixes and morphological problem-solving strategies)

2. Context clues strategies (e.g., learning to use surrounding information and syntax to figure out the meaning of unknown words)
3. Using ‘meta-linguistic’ (reflection) strategies (i.e., polysemy - words with multiple meanings like ‘run’, homonymy - words with different meanings but pronounced or spelled the same such as whether / weather and minute (in its time versus size forms), and ambiguity detection - e.g. ‘Rob and Allen spoke, he said....’) or comprehension monitoring – noticing and then doing something appropriate when you do not know a word meaning).

By contrast to the effects of direct instruction, Cervetti et al. found that ‘strategy-based’ instruction, considered as a whole, had significant positive effects on taught vocabulary learning and there was also at least some evidence that such approaches aided breadth of vocabulary learning. Cervetti et al note that while these results are suggestive, more research work is needed. They also caution that many studies of morphology for example taught multiple strategies, so it is not yet clear whether morphology teaching alone was helpful in improving vocabulary.

4. Practicalities – How do I teach reading and spelling with vocabulary using evidence-based research?

The school-based intervention research literature is again somewhat less advanced and less clear on guidance for **direct instruction** in vocabulary compared to what we know about phonology and phonics, as considered in previous videos 1 to 3. This may change with time as more quality research becomes completed and published. As it stands however, beyond the modest evidence on the overall effects of only directly teaching vocabulary above, we also have less research that gives us a clear picture of the maximally effective content – the ‘right’ words to teach and of teaching approaches to achieve this. Different programs teach in quite different ways, and no one approach has been found to produce larger reading or spelling improvements in any review. There is some evidence however to emphasize explicit instruction for specific words you might judge a child needs. If you want students to ‘analyse’ or ‘compare’ something you will need to very richly teach what ‘analysis’ or ‘comparison’ is. If you want them to identify the verb or adverb in a sentence they will need a clear vocabulary-level explanation of what a verb or adverb is, for example! Identify what words you want students to know (ones they really need to know to engage in the curriculum but don’t yet know) and then plan to teach using the Orthographic Mapping technique of sharing print and pronunciation as described above. Incorporate word writing and frequent use of the words in multiple contexts (ideally by the students themselves as well as you). Bear in mind that the curriculum emphasises that - tier 2 words

are found in written language as well as in oral language in the classroom and are useful across many different content areas. These words have high utility for students and should be the focus of explicit vocabulary instruction. Tier 1 words are those that frequently occur in spoken language, while Tier 3 words are generally specific to a particular content area and have less broad utility for students.

The evidence we have considered suggests that **strategy-based teaching should be a central** part of your instructional planning for vocabulary. Video 4 gives insight into ways morphological approaches can be used to assist learning vocabulary. The explicit creation of contexts by teachers that allow vocabulary words to be learned is important because in the real world of texts they do not always occur, but instead need to be supported. The content of many school textbooks in science and social sciences for example have been found to be not well written enough to allow students to activate background knowledge that could provide the context. Instead, teachers may need to do this for and with students and help them activate all relevant information they have *before* they read texts. As we noted already, for both text-based and oral-context strategy use to work as a vocabulary learning tool, careful teacher planning and resource and curriculum organisation is needed to ensure the contexts for words provided really support the specific learning of words for specific students you wish to achieve. Teachers will need to overtly model the strategy use to the class, reinforce this over time, and then evaluate that it is being used effectively by all learners. This is an intentional, planned, pedagogical approach for teachers – simply providing ‘context’ on its own will not ensure learning for diverse learning even in a language rich classroom environment.

Interest-based learning (e.g. word categorisations for example based on hobbies and interest such as hockey, cooking or lived experiences (indoor versus outdoor etc) may allow very elaborate networks of meanings to be explored. Even some very young students may have or be helped to have highly elaborate semantic networks for dinosaurs! Some studies have tried to create ‘microworlds’ – where vocabulary knowledge and expertise is carefully built up in a given domain such as animals and their ecosystems, with some success. Cross curricular themes of content and words (those tier 2 words of highest school utility like ‘analyse’ and ‘adverb’) are as useful in science and humanities as English Language Arts. Emotion words may be helpful to explore as feelings such as anxiety, anger, jealousy, confusion, disappointment, determination, pride, satisfaction, occur across learning contexts and likely need to be ‘regulated’. Identifying them through clear vocabulary work is likely helpful.

As ever ‘one size for all’ will not fit students as they vary widely in experience and knowledge of vocabulary on school arrival (as well as of phonology, Grapheme-Phoneme

Correspondences (GPCs) and decoding). Research with students who struggle with language and text comprehension will often be the same students who struggle to use narrative contexts to learn words or disambiguate sentences or to use morphological word families to problem solve word meanings. These students will likely need additional pedagogical support here to succeed. Nearly all students will need at least some highly differentiated support throughout elementary school grades to use a rich broad and deep vocabulary effectively.

As with morphology, some students who speak another language competently may be advantaged in their awareness of English vocabulary (i.e., their other language(s) are a cultural and cognitive *asset*), perhaps because they have had to think more about how spelling and vocabulary systems work more generally. Again, as with morphology, some vocabulary words might even be shared or at least similar across certain languages. There are many opportunities to surface these similarities (and differences) across Canada's two official languages: English and French through teaching.

These ideas considered here are all represented in expectations in the Strand B table "Vocabulary" presented below: [ON SCREEN: table: 'Vocabulary' appears on screen. It can be accessed through the [Ontario Curriculum and Resources website](#)]

5. Practicalities - When do I teach different aspects of vocabulary in word reading and spelling?

As we have theorized above, effective generalizable reading and spelling teaching likely builds on strong oral exposure to vocabulary first being established. In the pre-school phase children learn vocabulary from shared book reading, conversations, and from direct lived and learned experiences (a 'doggy' is quickly learned to describe this interesting playful ball of fur they meet). A mix of such strategies serve well even once they enter school. In addition, sorting and categorising words and development of meta-cognition (especially awareness of when a word is not known and a strategy of working it out or asking for more information supported) and contextual and morphological strategy work suitably differentiated can start early, as the Revised Ontario Language curriculum describes. Given the longitudinal data showing how kindergarten and grade 1 vocabulary has powerful predictive force (students with strong vocabularies in grade 1 do well up to grade 11 and probably beyond, students with weaker vocabularies in grade 1 are more likely to struggle through school), strong vocabulary work in the early years of kindergarten and grade 1 are key. Low vocabulary effects start showing up very clearly at Grade 3 and beyond as comprehension tasks get harder, thereby taxing weaker vocabularies more, it

has sometimes been noted. Again, strong preventative work supporting vocabulary learning in the K to grade 2 phase is suggested.

6. Practicalities - To whom and how much vocabulary do I teach?

The Elleman review article mentioned earlier identified larger effects of vocabulary instruction in students with reading difficulties compared to more typical readers. Research by Clarke et al. (2010) deployed paraprofessionals (trained teaching assistants) to identify and focus on the weakest language comprehenders, and then taught them very explicitly in small groups about both vocabulary and phonological awareness, an approach that impacted reading comprehension. Dialogic shared book reading (shared reading with questions encouraging dialogue may also have some evidenced value in kindergarten). We do not yet have a lot of good research about effects of differentiated vocabulary support for students with different needs.

Cervetti et al. noted in their studies that the strategy instruction (direct teaching and modelling and further support for the use of context-based, morphology-based, and the meta-cognitive approaches) took up on average 16 hours in length. This was some 40% shorter than the instructional time in direct instruction studies that have sometimes stretched from an average of 40 hours to beyond 100 hours of instructional time. Both Cervetti et al. and Rodge note *negative* effects of overly extended time on direct vocabulary instruction (the more curricular time spent on direct vocabulary instruction *after* a healthy peak of 40 hours, the lower the student attainment tends to be). The research evidence does not yet give us more nuanced guidance whether concentrated or more distributed teaching delivery is more effective. In the absence of such clear guidance, teach, assess and differentiate as needed in your class, always observing progress very carefully and looking out for generalisation to previously unknown vocabulary words. Teachers need to be mindful of pedagogical efficiency for curricular time allocated to direct instruction in vocabulary words versus instruction in a vocabulary learning strategy, and in relation to other morphology- and phoneme-based elements of word-level teaching. It is likely that general effective approaches such as systematic review with careful ‘interleafing’ of old and new material over time, and revisiting and mastering previously taught material regularly, aiming for depth and breadth of vocabulary from the start may also help generalization of learning.

7. How do I assess my teaching has been successful?

As in previous sessions, assessment-teach-assess loops of practice are effective practice but ensure students are starting to *use* taught vocabulary words or learning strategies –

this latter approach is seen in successful attempts to understand new vocabulary words independently using taught strategies. These can be praised even where attempts are only partly successful to encourage their use.

Assess against the detailed curriculum expectations *in Strand B*. Use the evidenced description of practice above in the curriculum to then assess against the curriculum-based instruction.

If students are not progressing, consider needed changes. Assess the *teaching*: evaluate the quality of the vocabulary teaching approach you are using.

Does the approach:

1. Embody intentional vocabulary teaching (teaching tier 2 words they do not know but which are high utility across the curriculum)?
2. Provide a clear strategy or set of strategies for learning vocabulary via context, morphology, and /or meta-cognitive approaches all clearly modelled by teacher and supported and evaluated as being used effectively?
3. Links print-based phonics teaching and oral vocabulary to achieve ‘orthographic mapping’?
4. Have a progression that covers patterns in written and spoken English as in the revised Ontario language curriculum?
5. Link word-level vocabulary work to regular text reading opportunities?
6. Link writing and spelling to vocabulary?
7. Link words learned to wider communicative intent and purpose for comprehension across the curriculum alongside strategies for comprehension.
8. Provide motivation – interest-based word learning, engaging text choices, clear records of success over time shared with students?
9. Provide culturally appropriate content (in all senses) and opportunities for students to access resources from their full linguistic repertoires?
10. Have some independent evidence of its effectiveness?

If ‘no’ you may have your answer to why students are not learning as you hoped – you may need to modify or supplement your existing approach.

8. How do I use this teaching to prevent difficulties?

As we have found before, documenting and monitoring of the program and its quality delivery over time is a key step to making sense of reading progress students make. In some cases of slow progress, consider increasing the range and intensity of supports given, and even, if possible, consider sensitively delivered intensive tutoring or small group support for those making least progress. This will likely be needed for specific word learning through direct instruction and for the use of strategies for vocabulary acquisition.

9. How does teaching of vocabulary word reading fit with my teaching of reading for meaning?

The focus on vocabulary provides a strong direct link between word reading and distributed word meanings. Strong and rich oral language foundations of vocabulary built from the early years will really help and show up first in word reading and as children pass through the middle years of elementary school, as a powerful force for text comprehension. As with phonology and morphological approaches, vocabulary instruction can and should be delivered within a wider curriculum focus on quality language development. It is both ‘word-level’ and ‘text-level’ teaching and learning in meaningful contexts not just one or the other that will fit together to build strong reading comprehension.

10. How does teaching vocabulary reading fit to my wider curriculum delivery?

Effective deep and broad vocabulary use underpins much of the wider curriculum of course, and as such provides opportunities to practice specific skills taught during literacy / language arts time in a range of other content areas. This is particularly the case for overlearning ‘tier 2’ high utility words that appear as keywords across wider arts social studies and science curricula (consider key words ‘analyse’ and ‘adjective’). It is quite possible to identify a vocabulary of the week (e.g. ‘contrast’), met repeatedly and reinforced across the curriculum (intellectual contrasts in science and color contrasts in artwork for example). Some scholars have emphasised thematic learning across the curriculum and carefully built ‘micro-worlds’ – project based learning and concrete experience that build domain knowledge and provide a strong basis for deep and broad vocabulary learning.

Finally, and to reiterate again in closing, research evidence clearly does not say we should return to models of exclusive use of direct instruction, spelling tests, or heavy use of worksheets, or drill and rote learning, or endless homework. Indeed, while direct instruction is helpful, the teaching of productive strategies for word learning in stimulating

language context is at least equally necessary. Equally, interest and motivation and our students' unique experiences are also key features of best practice.

Some research-led suggestions on what will and will not be effective

Not effective	Effective
Teaching vocabulary words by sight or by rote	There may be a role for some sight word teaching, but vocabulary strategy instruction (along with phonics) potentially provides a way of deeper and broader vocabulary learning.
Treat all words as equivalently necessary to teach	Consider teaching tier 2 words - the set of words that occur reasonably often in books (including 'academic' words such as 'compare' 'discuss' 'examine' 'describe' 'identify', 'explain', etc. as well as many more formal forms and adjectives).
Teach vocabulary in isolation from text reading and without an explanation of why it is being taught.	Make sure to link vocabulary instruction to word spelling to text reading and word spelling opportunities.
Provide clear simple word definitions as your main vocabulary teaching strategy.	Incorporate spelling and handwriting often. Providing word definitions alone are among the lowest levels of explanations – research shows students quickly forget them, especially if they are met incidentally. Many words have multiple meanings so most often a simple definition identifies only one of multiple word meanings. Elaborate these meanings. Ask students to explain words back to you, to give several new

	examples, and link pronunciations to spellings and word images.
Assume one size fits all in teaching	<p>Assess through your teaching what students can do and teach at instructional level (at least 80% success)</p> <p>Differentiate e.g., some students especially those with weak text comprehension need more focus on directly instructed words to learn them and on the effective strategies for vocabulary acquisition, all at an 'instructional' level in any given inclusive lesson.</p> <p>Where possible make cross-language connections where your students speak another language or languages.</p>
Insist students struggling with vocabulary or with known semantic or articulation difficulties demonstrate vocabulary knowledge in 'public' spaces.	Consider the assessment needs of students with morphological and speech and language difficulties carefully and consider non-verbal responses where appropriate
Assume one articulation or 'accent' or meaning of given words is better than another - students' backgrounds and other languages may impact reading aloud.	Consider diversity and inclusion needs here very carefully
Teach vocabulary in an incidental or an 'as needed' way or on an occasional basis or in any other ways without	A systematic intentional planned sequential vocabulary program focused on printed and oral words delivered and reinforced regularly, with coverage of

<p>detailed attention to the evidence on effective practice.</p>	<p>appropriate vocabulary for English is likely most effective in teaching students in elementary classes to read.</p>
<p>Don't assess vocabulary</p>	<p>Use assessment systems including regular assessment against the revised Ontario language curriculum content guidance and the Strand B particulars.</p> <p>Assess word learning but also assess vocabulary acquisition strategy use and methods used to achieve both and adjust practice as needed.</p>
<p>Teach without consulting colleagues and evidence-based research</p>	<p>Think of school-wide structures here especially others who might help. Might evidence-based research such as those available on Onlit be consulted for example?</p> <p>Consider a whole school approach - ask consultants speech and language and educational psychology specialists for example who typically have had extra training in vocabulary and language).</p> <p>Are there cross-school opportunities e.g., for cross-curricular teaching of key tier 2 vocabulary words?</p>
<p>Teach reading and spelling as desk-based skill and drill with worksheets</p>	<p>Learning a deep and broad vocabulary is again a form of sustained problem solving. Direct instruction is also key but modelling of processes and opportunities to practice in texts and in 'real life' for the purpose of communication are needed. Aspire to creating self-teachers of your students!</p>

	As ever, motivation and success go together.
--	--

Summary and conclusion

We have considered

We have learned

1. What is vocabulary?	Vocabulary is the knowledge of the meanings of individual words. This knowledge is complex and cannot be reduced to a simple list.
2. What does the evidence-based research tell us about the role of vocabulary in reading and spelling that I should I know about as a teacher?	The evidence-based research provides theory and evidence on how students learn to read and spell that directly involves vocabulary knowledge.
3. Does the use of vocabulary in reading and spelling develop on its own, or do I have to teach it?	Evidence shows that the direct and intentional and systematic teaching of vocabulary sub-skills aids word and text reading and spelling. This must be balanced against the teaching of productive strategies for students learning vocabulary using context morphology and meta-cognition.
4. Practicalities – How do I teach reading and spelling with vocabulary using evidence-based research?	Teach common ‘tier 2’ words of greatest utility with orthographic mapping and related techniques. Teach by modelling of evidenced vocabulary learning strategy use to the class, reinforcing over time, and then evaluating use in an intentional, planned, pedagogical manner.

5. Practicalities - When do I teach vocabulary in reading and spelling?	As early as possible from kindergarten through the elementary grades and beyond in a sustained coordinated manner following the revised Ontario language curriculum.
6. Practicalities - To whom and how much vocabulary do I teach?	At least 16 hours of strategy instruction is suggested in some evidence reviews. Students at risk of poor comprehension may need more intensive support. Be mindful of possible negative impacts of direct instruction after 40 hours of instructional time some reviews suggest.
7. How do I assess my teaching has been successful?	Assessment is key: Assess student learning but also assess strategy use and your program and its mix of learning approaches.
8. How do I use this teaching to prevent difficulties?	Documenting and monitoring is key again. Consider higher intensity of support where students are still striving to learn vocabulary.
9. How does teaching of vocabulary for reading and spelling fit with my teaching of reading for meaning?	The teaching of vocabulary is the teaching of word meanings that in turn is one powerful force underpinning text comprehension.
10. How does teaching vocabulary for reading and spelling fit to my wider curriculum?	The wider curriculum provides rich opportunity to practice and extend vocabulary learning first met in language arts.

Reflection points

1. How can I use this information about vocabulary alongside what I know about phoneme awareness and GPCs and morphology together to shape my literacy practice?
2. How can we as a whole school (or early years group) work together on a really robust approach to early literacy development using this information and research?
3. How might we develop a community of practice here to develop together or work with my school board or other skilled professionals to advance practice?

In conjunction with the approaches we have considered in videos 1 to 4, you should now have all you need to plan and deliver a strong and highly impactful reading teaching experience for diverse learners.