



The Importance of Vocabulary in Teaching Children to Write

WHY AND HOW TO TEACH VOCABULARY

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Why Vocabulary?

In order to write effectively, children need a strong background in vocabulary. If you've ever heard a young child relate a story verbally, you know that they're capable of getting the point across though some points in the story are rockier than others. This is of course due to a lack of preexisting vocabulary. When speaking face to face, storytellers can rely on nonverbal cues, including facial expressions, hand gestures, sound effects, and so on. In the written word, the author must provide enough information via text for the reader to understand key details and follow the plotline.

Teaching vocabulary is a crucial step because writing is necessarily limited by the number and quality of words writers know. Consider for instance the following from the late, famed physicist Richard Feynman:

Aeronautical science is important in the analysis of the eddies, vortices, and whirlpools formed in the atmosphere behind the aircraft...

Now let's break up the sentence into three parts:

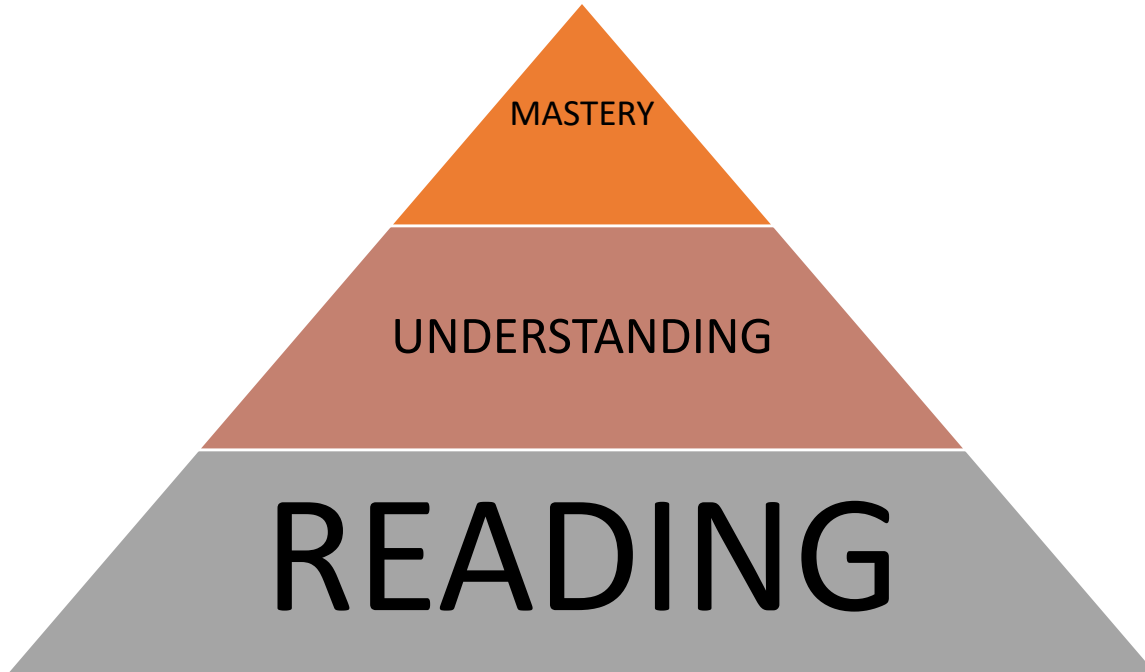
1. *Aeronautical science is important...*
2. *...in the analysis of the eddies, vortices, and whirlpools formed...*
3. *...in the atmosphere behind the aircraft...*

We start in 1 with a simple premise, that aeronautical science is important. Suppose you do not know the word "aeronautical." It is the key word in the sentence. If you do not know the word, you're left with the understanding that some type of science is important, but you are unable to discern (at least yet) what type.

In 2 we learn *why* aeronautical science is important – to understand eddies, vortices, and whirlpools. How many of the three items describing why aeronautical science is important do you know? Two? One? What if I told you that they're all synonyms? Feynman, ever the jokester, was playing a trick on the graders of one of his high school exams: he provided three, ostensibly important items, the analysis thereof providing a rationale as to why aeronautical science is important. But suppose you did not know that they were all synonyms and that you knew only the word whirlpools. You would nevertheless have a grasp of why aeronautical science is important.

Finally, in 3, we get our context clues. If we did not know the word "aeronautical" at the beginning of the sentence, by the end of it we would nevertheless understand that it involves the air and flying.

This example illustrates a kind of pyramid of vocabulary knowledge. We'll call it the Language Mastery Pyramid (LMP).



In the bottom rung on our pyramid, reading, you can pronounce all the words in a sentence, but you do not understand their meaning. This is the level that many students are stuck at in our current education system which has relegated writing in schools to the dustbin. If you learn to read, particularly in guided reading in classrooms, you will learn how to pronounce words on a page, but you will not learn to understand their meaning.

In the second level of our pyramid, understanding, you know enough of the vocabulary to glean the meaning of the sentence. Readers will have different levels of understanding in reading texts. For example, if you only understand 1 and 3 in the prior division of Feynman's sentence: *Aeronautical science is important ... in the atmosphere behind the aircraft...* You will understand the author's point: some type of science, apparently dealing with air and flying, is important. If you know the word "whirlpool" from 2, you will be able to give a reason why: it allows us to examine atmospheric phenomena affecting air travel. But this is still just shy of mastery.

In the top level of the LMP pyramid, mastery, you understand the ulterior point of the sentence: fluffing up a text for the sake of appearances. Feynman himself referred to it as "running up the bull." Mastery of the sentence entails that even the most subtle themes in a text are at your command. If you knew all three objects in 2 "eddies, vortices, and whirlpools," you would know that they mean the same thing and that the author was attempting to get one over on the reader.

Of course, no one expects children in primary school to understand Feynman's sentence. In fact, it was deliberately chosen to exceed the vocabulary of educated adults to illustrate the point: children need vocabulary for mastery of texts. The ability to craft texts is exactly limited

by how much content you can put in. If you are unable to provide the most necessary details, your reader will not understand your point. If you are unable to provide supporting details, your reader might misunderstand your point. Yelling “The cat is running!” is helpful insofar as alerting you to the literal meaning that a cat is running. It would not be helpful in alerting you to the vicious dog provoking the run, which you may soon encounter and so have good reason to desire to avoid.

Although skilled readers automatically have mastery of an everyday sentence, it’s important to understand that most children are *not* skilled readers up through middle school. They unconsciously repeat the above process to understand unfamiliar territory. If upon reading the sentence there are words they do not know, they will attempt to use context clues to figure them out. If they are still unable to decipher the word, they will guess at the meaning, or worse, give up on it entirely.

Purposefully teaching vocabulary not only improves writing, it increases performance in all academic competences and betters the odds of success in life after school. Take reading for example. A strong base in vocabulary improves students’ odds of comprehending *all* sentences. To use the above example again, a lesson on rivers would have familiarized students with the word “whirlpools,” while a lesson on the water cycle would have taught them “atmosphere.” Thus, never having been formally taught on aeronautical science, a 5th grader would be able to tell you what was important and why, if she was properly taught vocabulary in her everyday lessons. Similarly, vocabulary can help decipher historical or social studies texts and the increasingly popular reading-based math problems.

How to Teach Vocabulary

Academic literature on the best methods by which to teach vocabulary are rich and numerous. One might expect that because successful teaching of vocabulary is easily quantifiable (Does the student know and understand the word? Do they maintain this knowledge and comprehension after three months? After six?), that it would be simple to locate the best approach to take. Still, each study manages to draw a different conclusion, many of which directly contradict as many studies as they reinforce. However, if one reads critically the literature on vocabulary instruction, it becomes apparent that one commonality spans across all strategies that show positive results: repetition. None of methods employed in these studies are “one and done”, as it were. They repeatedly engage the student in the desired experimental way.

Inculcation is undoubtedly the single most effective method of teaching vocabulary. Repeated exposure to complex words is the only proven method by which children are able to recall them at will. Of course, the *number* of iterations required for recall varies by age. The average incoming first grader is able to read between 100 and 500 “familiar words.” Incoming third graders improve that figure by more than an order of magnitude, having familiarity of 3,000 to 8,000 words.¹ These are the years in which children developmentally are most “sponge-like”

¹ David Kilpatrick, *Essentials of Assessing, Preventing, and Overcoming Reading Difficulties*, p. 34-5.

with regard to linguistic skills (and also why experts recommend these years for learning a foreign language). The number of times a child must be exposed to words to become familiar with them only increases after the third grade, on average. Still, these are merely words which are immediately familiar to children when *reading*.

The processes involved in writing – namely spontaneous recall – require a much deeper familiarity with words than the prompted recognition of the same words when shown on page. To write, the student must be deeply familiar with the words. They must be able not merely to assign a definition to a word when they see it on a page. They must put it on the page themselves. That means understanding the broader point they are attempting to make and then choosing word by word how to convey it. The only way to get this necessary deeper familiarity is to work with these words again and again.

But it is not enough to merely see the definition of the word repeatedly. Working only with the definition leads to what we refer to as “partial word knowledge,”² and as we know, our goal is a deep familiarity. That is why “working with the word” entails a deeper process. Deep familiarity necessitates knowledge of the word’s relationship with other words – synonyms, antonyms, and modifiers – as well as the context in which it is used most frequently. These relationships must be demonstrated and experienced. The type of instruction by which other words – usually ones which are already known – are associated with the targeted vocabulary words is popularly referred to as semantic mapping.

Semantic mapping and its contextual counterpart can be very powerful tools when incorporated into engaging lesson plans. Particularly in the 21st century, the advent of computer-based learning programs has made it possible to develop engaging educational plans. If you managed to download this PDF to read, you have all the skills you need to acquire a fun and educational vocabulary lesson plan.

A good lesson plan for vocabulary will have three main components. First, as we know, it will involve repetition and deep understanding (semantic and contextual). The student will need to see and work with the words again and again. Second, it will involve critical thinking. Engaging higher order thinking skills – that is, allowing children to arrive at the answer – will allow pathways to be built in the brain which make forgetting the words much more difficult than it would be with pure rote memorization. Finally, for obvious reasons the lesson must be fun and engaging.

Two examples of such a lesson plan are provided in the appendix at the end of this piece. Others are readily available online. Educators all over the country (and the world!) have eagerly constructed a veritable repository of lesson plans and activities which they have found to work well in their own classrooms. Some adaptation might be required (remember, not every activity is appropriately educational), but they are certainly worth the search query.

² William E. Nagy, “Vocabulary Instruction and Reading Comprehension” in Technical Report No. 431, 1988.

About the Author



Aiden serves as President and co-founder of the EAA. Both his mother and grandmother have been lifelong educators, instilling in him the value of education and the importance of instructional design. After graduating from the University of Pennsylvania, he started the Education Association of America to create the building blocks of a new educational design to give every student their best chance at success.

About the EAA

The EAA is a nonprofit corporation headquartered in Philadelphia, Pennsylvania. We make use of both programs and tools designed for educators as well as students to generate a holistic and comprehensive strategy to improve learning and set students on the path to success. **The EAA** leverages cutting edge cognitive science and empirical data to formulate our positions and develop resources for educators. Our platform is that American educators should always have access to the most up-to-date information on instructional design. Because our mission is to provide all educators with the right tools to do their jobs, all of our instructional plans are available free of charge. All of the data we use for our in-house reports will be easily accessible with perfectly transparent methodology, and all of our product endorsements will be based on empirical data provided upfront.

Works Cited

1. Nagy, William E. "Vocabulary Instruction and Reading Comprehension" in Technical Report No. 431 for the Center for the Study of Reading at the University of Illinois, Urbana-Champaign, August 1988.
2. Kilpatrick, David A. *Essentials of Assessing Preventing and Overcoming Reading Difficulties*. New Jersey: Wiley Publishers, 2015.



Appendix

Vocabulary Bingo

Materials:

- Bingo boards and spacers (to mark words)
- Vocabulary words (and definitions, context clues, synonyms, and/or any other variation of relationship to the words)
- Projector for displaying the clues (optional)

Information: This activity works best for words to which students have been exposed but with which they are still having difficulty. Usually these words are on the more advanced end of the spectrum for the grade level.

Procedure:

- The teacher will explain the regular rules of bingo
- The teacher calls out clues (definitions, synonyms, antonyms, context clues, etc.)
 - Optionally, the teacher may also project these clues onto the board to allow a visual cue to reinforce learning
- Students cover the space associated with the clue
- Repeat until a student claims bingo
- Teacher must verify results to ensure the student understood the vocabulary appropriately
- For best results, teacher should go over the clues after the game to allow students who might have made bingo to review

Vocabulary Jeopardy

Materials:

- <https://jeopardylabs.com/>ⁱ

Procedure:

- Build your own template based on your class's needs
- Split students into teams
- Go through the Jeopardy board
- Allow each team some time to coordinate on each successive question
- Award points as appropriate

ⁱ The EAA makes no claim to the intellectual property of JeopardyLabs. JeopardyLabs is independent of the EAA and no relationship exists between the two entities.