THE IMPORTANCE OF VOCABULARY TO LITERACY

1. An exercise to establish connection between vocabulary and reading comprehension.

Read this passage (excerpted from Leander and Rowe, 2006):

“Fourth, rhizomes are characterized by asignifying rupture. Rhizomes may break off or be discontinuous, but they will begin again, like ants that ‘rebound’ with new trails when their old ones are destroyed. Asignifying ruptures work against the ‘oversignifying breaks’ that structure, organize, and bound identities. Two kinds of lines need to be described in this relation: lines of segmentarity and lines of flight. Every rhizome contains (oversignifying) lines of segmentarity, according to which it is stratified, territorialized, organized, and signified. Lines of segmentarity . . . produce stasis, rules of organization, and center-periphery relations.”

Do you understand this passage? If not, why not?

How would you describe the kinds of words that predominate in this passage?

NOTE: It is impossible to comprehend a passage such as this one unless most of the individual word meanings are known. One of the oldest findings of educational research is that reading comprehension and vocabulary knowledge are highly correlated with one another, and that knowledge of individual word meanings accounts for as much as 50–60 percent of the variance in reading comprehension (Stahl & Nagy, 2006). Vocabulary is the most important single factor, once children have learned the alphabetic code. Understanding the language of this text depends on knowledge of low-frequency words, Greek and Latin roots, multiple-meaning words, abstract words, and academic (tier 2) & domain-specific (tier 3) words.

2. Two graphics related to word recognition and reading development.

The Four-Part Processing Model for Word Recognition

Model of Reading Development

<table>
<thead>
<tr>
<th>Content Processor</th>
<th>Meaning Processor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phonological*</td>
<td>Phonics</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Language output</th>
<th>Language input</th>
<th>Writing output</th>
<th>Reading input</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Language Comprehension</th>
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<tbody>
<tr>
<td>Background Knowledge</td>
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<tr>
<td>Vocabulary</td>
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<tr>
<th>Language Structures</th>
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<tbody>
<tr>
<td>Verbal Reasoning</td>
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<td>Literacy Knowledge</td>
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<thead>
<tr>
<th>Skilled Reading</th>
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<tbody>
<tr>
<td>Word Recognition</td>
</tr>
<tr>
<td>Phonological Awareness*</td>
</tr>
<tr>
<td>Decoding</td>
</tr>
<tr>
<td>Sight Recognition</td>
</tr>
</tbody>
</table>

*Phonology-rule system within a language by which phonemes can be sequenced, combined, and pronounced to make words.
“MINDING THE GAPS”

1. WORD-RICH VS WORD-POOR DICHOTOMY

General estimates of word-learning are interesting, but of most concern to teachers will be the obvious gap between “language-rich” and “language-poor” students. Stanovich (1986; Cunningham & Stanovich, 1998) first described the cascading consequences of poor reading skills on vocabulary and language development. Labeling this phenomenon the “Matthew Effect” after a quote from the Bible that “the rich get richer and poor get poorer,” Stanovich showed that children who get off to a poor start in reading are exposed to far fewer words as time goes on. Limited exposure to printed words results in limited opportunities to acquire background knowledge, understanding of academic language, and knowledge of specific word meanings. Those problems, in turn, make reading more difficult. Some children start school word-impoverished from the very beginning; they may know 1,000 words less than the typical 4-year-old by the time they enter preschool. That gap may widen because their rate of word-learning is slower than typically developing children. A child with a vocabulary deficit as a 4-year old may learn about 1.6 root words a day, whereas an average student is learning 2.4 root words per day. Biemiller (1999, 2005), whose estimates of the number of root words known by children are considered conservative in the research community, estimates that a verbally impoverished eighth-grader probably knows as many word meanings as an average fourth-grader. Addressing the ever-widening language gap means accelerating the word-learning rate of the children who are behind. That is difficult to do because children who are already more advanced in word-learning will learn words more quickly and easily than children who are less verbally adept.

2. SHALLOW VS DEEP KNOWLEDGE OF WORD MEANINGS

We can know a word at different levels. Here are two semantic maps to illustrate this point.

**Shallow** (Partially Known Word in the Mental Lexicon)

<table>
<thead>
<tr>
<th>Word Structure</th>
<th>Synonym</th>
<th>Examples</th>
<th>Common Contexts</th>
<th>Personal Associations</th>
<th>Descriptors</th>
<th>Multiple Meanings</th>
</tr>
</thead>
<tbody>
<tr>
<td>compound</td>
<td>railway</td>
<td>Amtrak, British Railways</td>
<td>railroad, ship by railroad, a railroad company</td>
<td>enjoyable, leisurely travel</td>
<td>a network of rails laid on ties, often covers long distances, a large company managing transport by rail</td>
<td>Underground Railroad, to rush something into place</td>
</tr>
</tbody>
</table>

**Deep** (Well-Known Word in Mental Lexicon)

RAILROAD= has tracks, makes loud noise, has rail cars

RAILROAD= has tracks, makes loud noise, has rail cars
HOW DO STUDENTS ACHIEVE KNOWLEDGE OF WORD MEANINGS?

1. Incidental encounters with words, most likely through reading and/or in a “rich language” environment
2. Direct, planned, explicit teaching of selected words
3. Fostering of word consciousness that enables students to learn word on their own.

Teachers have the power to affect student vocabulary acquisition the three areas listed above.

INCIDENTAL ENCOUNTERS
A. Using a “Rich Language” Environment
   When instructing, teachers should use “ten-dollar” words (i.e. precise, descriptive, unusual) in conjunction with “one-dollar” words (i.e. overused, common, boring).
   Ex. 1 What was your favorite part of the reading? (one-dollar)
   Which episode or event was pivotal in determining your emotional response to the passage? (ten-dollar)
   Ex. 2 Remember to raise your hand. (one-dollar)
   Elevate your right, upper extremity when you wish to vocalize your thoughts. (ten-dollar)
   Ex. 3 Who can give Richard a pencil that is not broken?
   Who has a non decimated puny instrument of graphomotor expression they can lend to Richard?

B. Read Alouds
   Books embody more uncommon and content-rich words that any other verbal medium. Academic word-learning requires exposure to the language of books. Teachers reading aloud should pause, engage listeners in conversations about new words and concepts, and relate those concepts to their own experiences. In addition to reading aloud during class time, teachers and other students can offer recorded books and/or reading times outside of the class, such as during a study hall or at lunch.

C. Independent Reading
   Reading nurtures verbal growth because new words can be deciphered more easily from context as vocabulary and verbal fluency increase. At present, students seem to have less time and fewer incentives to read on their own. Teachers can help by having classroom libraries, encouraging/assigning one independent novel per quarter, utilizing Lexile results to foster selections for reading, having reading contests, using programmatic reading goals, etc.
DIRECT, PLANNED, EXPLICIT INSTRUCTION

A. Choosing the Words for Direct Instruction of Words and Word Relationships (Word Study)

Choosing the best words for explicit instruction may be difficult because texts often include many new words. Teachers need a rationale for deciding which words are priorities and how many words should be taught. Rules of thumb have been developed by experts (e.g., Beck et al., 2002; Graves, 2006; Kamil, 2004; Stahl & Nagy, 2006) who advise purposeful teaching of well-selected words instead of using long lists of words with matching definitions.

- If choosing words from a text, select words that are critical for understanding the text at hand and that are likely to be found in other academic texts. Choose words that are difficult for a student to figure out independently. Select words that students may not be familiar with but will encounter often and can be applied to a variety of experiences. (Tier 2 Words)

- If choosing words from a vocabulary program or core vocabulary list of Tier 2 Words, researchers agree that only about 10 words can be taught in-depth per week.

- Choose words for which students have a concept and know another, more common word with which to define the chosen word.

- Choose Tier 3 Words when the need arises. They are low-occurrence, but may be critical to understanding a specific domain.

B. A Protocol for Oral Introduction of Words

1. Pronounce the word, write it, and read it.
2. Tell students what the new word means, using a student-friendly definition that includes terms and references that students will understand.
3. Say more about the word, and use it several times in examples of use.
4. Ask students questions about the word’s meaning.
5. Elicit word use by students.

C. Show Students the Value and Limitations of Dictionaries and Reference Materials (thesauruses, etymologies, etc).

- Students cannot learn to speak from memorizing definitions due to the lack of contextual examples.
- Most dictionaries use abbreviations that need explanation.
- Synonyms that are used to define words can be unknown to students.
- References lack the ability to show socially and academically accepted usage of the word defined.
- Dictionaries are better used as one tool for vocabulary and not the only tool. They can be successfully used by students to check their own suppositions of a word’s meaning.
DIRECT, PLANNED, EXPLICIT INSTRUCTION CONTINUED

D. Word Categories
Our lexicons or mental dictionaries are organized into many networks. Words are filed in our brains by links or associations; each word is connected to other words, ideas, images, etc. The richer the network of associations, the more easily we can retrieve and use the word. Since our brain classifies and categorizes new information, it is natural to teach new words with categories. We can do this by grouping words, or having students organize and review new words using their own categories.

Capitalizing on Categorizing Using Ready-Made Lists (See Lists and Programs Section)
- Lists with root, affix connections
- Lists with central idea connections
- Lists with discipline-specific connections
- Lists with Foreign-language connections

Capitalizing on Categorizing Using Hands-on Activities
1. Give each student a list of the words you want them to categorize. Some words will be the chosen vocabulary words, others will be words associated with them, and others will have a superordinate category (overall word category) on them. OR

Give each student a notecard with one of the words you want them to categorize. Some students will get the chosen vocabulary words, others will get words associated with the vocab words, and others students will have a superordinate category on their cards.
2. Without talking, have the students arrange the words (or themselves with their word) into superordinate and subordinate word categories.

E. Formal, Structured Definitions Should Have Two Parts
When asking a student for a definition to a word, it is important to teach students how to formulate a complete definition. There are two parts.

Part A: Denotes the category to which something belongs or provides a synonym for word
Part B: States or elaborates with word’s distinguishing features or attributes (e.g. granola is a cereal of rolled oats, wheat germ, and other grains that is considered a healthy whole food.)

F. Semantic and Semantic-Syntactic Properties
Students need a method for comparing attributes of words that overlap to some extent but are distinguished from one another. The better a student knows a word, the more he/she knows about its semantic properties or features. Content words, including nouns and verbs, contain grammatical properties that most speakers of a language know just by hearing the words in context. Part of teaching a word is explaining its part of speech and showing how it must be used in a sentence.

-Use feature analysis charts for distinguishing semantics.

<table>
<thead>
<tr>
<th>FEATURE</th>
<th>WORD 1</th>
<th>WORD 2</th>
<th>WORD 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>applies to people</td>
<td>×</td>
<td></td>
<td>×</td>
</tr>
</tbody>
</table>
- Teach features that determine how words can be used in sentences and which words can be combined.
  
  EX. Countable and non-countable nouns, verbs that take direct objects and those that can stand alone (transitive/intransitive properties), complementary and gradable (scaling) antonyms, etc.

**SAMPLE EXERCISE 1**
- In what way are all the members of the two groups of words (in each set) alike?
- In what way does the first group differ from the second group?
- In what ways do their semantic features overlap?

Sample Set 1: banter, caricature, harlequin vs jocose, facetious, ludicrous

**SAMPLE EXERCISE 2**
Check the antonym pairs as complementary (either/or) or gradable (opposite ends of a continuous scale), Then, take each of the gradable antonym pairs and fill out a scale from one extreme to the other with words that show degrees of meaning.

<table>
<thead>
<tr>
<th>COMPLEMENTARY</th>
<th>GRADABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>victor-foe</td>
<td>×</td>
</tr>
<tr>
<td>obese-emaciated</td>
<td>×</td>
</tr>
</tbody>
</table>

**G. Word Games**
Having fun while learning helps increase acquisition:) Using commercial games and ones of your own making can help build word-conscious students.

**FOSTERING STUDENTS’ ABILITY TO LEARN WORDS ON THEIR OWN**
Once learned, all explicit instruction of vocabulary can become intrinsic. Students will use dictionaries as tools, categorize words, define words with both parts, and become word-conscious. Two other standbys for leaning words are using context and morpheme analysis. Once students learn roots and affixes, they can recognize common morphemes in unknown words. Combining word part analysis with context, followed by a dictionary check is a very reliable independent strategy.

**Types of Morphemes in English** (3/4 of Anglo-Saxon compounds & Greek/Latin affixed words are recoverable from their parts)
See handout titled, “Vocabulary Strategies and Practices” for sixteen ways to meet the vocabulary requirements of the Common Core State Standards.

**SOME VOCABULARY MORPHEME LISTS**

**Greek Morphemes**
1. phobia  
2. phil/philo*  
3. mis*  
4. dys*  
5. eu*  
6. macro*  
7. micro*  
8. a/an  
9. mono/mon*  
10. poly*  
11. logy  
12. bio  
13. tomy/tom  
14. pod  
15. homo*  
16. hetero*  
17. hyper*  
18. hypo*  
19. endo*  
20. exo*  
21. archy  
22. geo  
23. path/patho/pathy  
24. morph  
25. peri  

*These words have opposites on the list: 2/3, 4/5, 6/7, 9/10, 15/16, 17/18, 19/20.

**Latin Prefixes**
1. a/ab  
2. ad  
3. ante  
4. bi  
5. circum  
6. con/col/com/cor  
7. contra  
8. de  
9. dis  
10. e/ex  
11. extra  
12. in/il/im/ir*  
13. in/il/im/ir*  
14. inter*  
15. intra*  
16. ob/op  
17. per  
18. post  
19. pre  
20. preter  
21. pro  
22. re  
23. retro  
24. se  
25. semi  
26. sub/sup  
27. super  
28. trans  
29. ultra  
30. vice  

*These words have close associations on the list: 12/13, 14/15.

**Latin Morphemes**
1. rupt  
2. cide  
3. string/strict  
4. vor  
5. viv  
6. tort/tors  
7. vict/vinc  
8. fract/frag  
9. omni  
10. flect/flex  
11. ten/tin/tent  
12. mon/monit  
13. mand/mandat  
14. cred/credit  
15. fid  
16. grat  
17. mor/mort  
18. corp  
19. duc/duct  
20. secur/sequ  
21. cur/curr/curs  
22. gress/grad  
23. ped  
24. tact/tang  
25. prehend/prehens  
26. ject  
27. vert/vers  
28. mis/miss/mit/mitt  
29. locut/loqu  
30. fer/ferous
Anglo-Saxon Prefixes
1. a-
2. with-
3. be-

Anglo-Saxon Suffixes and Combining Forms
1. -wise
2. -dom
3. -some
4. -ling
5. anent
6. anon
7. behest
8. beholden
9. behoove
10. betimes
11. health
12. wane
13. warlock
14. warp
15. wax
16. withal

SOME VOCABULARY PROGRAMS OR LISTS

Academic Word List @ http://www.victoria.ac.nz/lals/resources/academicwordlist

McGraw-Hill's 400 Essential SAT Words by Denise Pivarnik-Nova

Sadlier-Oxford Vocabulary Workshop by Jerome Shostack

SAT Vocabulary Words @ http://www.freevocabulary.com

SAT Word Lists @ http://www.majortests.com/sat/wordlist.php

Vocabulary Cartoons: SAT Word Power by New Monic Books, Inc.

Vocabulary for the College-Bound Student by Harold Levine, Norman Levine, Robert T. Levine

Vocabulary for the High School Student by Harold Levine, Norman Levine, Robert T. Levine

Vocabulary Lists @ http://www.vocabulary.com/lists/
VOCABULARY
Ohio's Learning Standards

VOCABULARY IS INCLUDED IN ALL FIVE STANDARD STRANDS AND ALL MAJOR SHIFTS

RL. & RI.9-12.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the cumulative impact of specific word choices on meaning and tone (RL & RI.9-10); analyze the impact of specific word choices on meaning and tone, including words with multiple meanings or language that is particularly fresh, engaging, or beautiful. (RL.11-12); analyze how an author uses and refines the meaning of a key term or terms over the course of a text (RI.11-12)

W.9-10.1c. Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.

W.11.12.1c. Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.

W.9-10.2d. Use precise language and domain-specific vocabulary to manage the complexity of the topic.

W.11-12.2d. Use precise language, domain-specific vocabulary, and techniques such as metaphor, simile, and analogy to manage the complexity of the topic.

W.9-12.3d. Use precise words and phrases, telling details, and sensory language to convey a vivid picture of the experiences, events, setting, and/or characters.

L.9-10.1b. Use various types of phrases (noun, verb, adjectival, adverbial, participial, prepositional, absolute) and clauses (independent, dependent; noun, relative, adverbial) to convey specific meanings and add variety and interest to writing or presentations

L.9-12.3 Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.

L.9-12.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grades 9-12 reading and content, choosing flexibly from a range of strategies. a. Use context (e.g., the overall meaning of a sentence, paragraph, or text; a word’s position or function in a sentence) as a clue to the meaning of a word or phrase. b. Identify and correctly use patterns of word changes that indicate different meanings or parts of speech. c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning, its part of speech, or its etymology. d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).

L.9-10.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. a. Interpret figures of speech in context and analyze their role in the text. b. Analyze nuances in the meaning of words with similar denotations.

L.9-12.6 Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.

SL.9-12.6 (Includes Language Standards 1 and 3)

-ODE Shift #8-Offer systematic instruction in vocabulary
-Student Achievement Partners (SAP) Shift #3-Provide regular practice with complex text and its academic vocabulary
-Engage NY Shift # 6-Academic Vocabulary