

The Foundations of Word Recognition, Vocabulary, and Fluency

Chapter Two

- I. Improving Word Recognition
- II. Building Vocabulary
- III. Fluency: The Bridge from Decoding to Comprehension

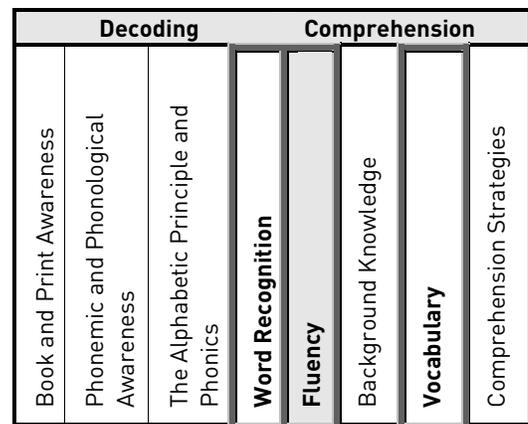
Introduction

High school biology students stumbling over the pronunciation of the word cytoplasm.

Social studies students decoding the words “anarchy” and “theocracy” yet not understanding the words’ meanings.

English students reading a passage in a short story so haltingly that they can’t engage in a group discussion afterwards.

As discussed in Chapter One, since most secondary students have certainly mastered book and print awareness and often progressed past the basics of phonemic and phonological awareness, the alphabetic principle, and basic phonics, the above anecdotes represent some of the challenges that you may face with your secondary students, in a content area classroom or in an English classroom. Each scenario illustrates one of the foundational reading skills with which our secondary students typically struggle: word recognition, vocabulary, and fluency. In this chapter, we’ll expand our understanding of these important areas of reading and share strategies for building students’ proficiency in these skills in both a secondary English class and other content area classes.



I. Improving Word Recognition

The strand of word recognition builds on the ability to sound out words, given knowledge of the sound-symbol correspondence and spelling patterns (i.e., the alphabetic principle and phonics). Word recognition involves breaking up a multisyllabic word into components and using meaningful word parts, such as *un-*, *anti-*, *hydro*, and *-ment* to decipher the word. The ultimate goal of word recognition is “automaticity,” or recognizing the majority of words automatically. By the end of third grade, the majority of students should have mastered the key sound-symbol relationships of phonics instruction.

The *majority* of middle and high school students across the country do not struggle with reading at the phonics level of decoding—even students in our classrooms. If students do struggle with reading common single syllable words, given that they should have mastered those skills between Kindergarten and third grade, they either received poor instruction in elementary school or they may have a reading disability. If you teach students with this level of deficiency, you will need to reach out to a special

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educator or other expert in reading disabilities. As a starting point, you might also want to access the *Elementary Literacy* text, specifically chapter three, which outlines the background knowledge and teaching strategies you would need to effectively individualize your instruction for students whose decoding skills are dramatically below grade level. Since many of our students will struggle with word recognition, specifically breaking down multisyllabic words, using meaningful word parts, and recognizing words with automaticity, we should expect to integrate strategies that will build student's word recognition skills.

Strategies that Improve Word Recognition

Cajoling students to “just sound it out,” or reading the word for the student when he stumbles with the pronunciation, substitutes another word, or skips over it entirely, proves an either ineffective or short-term solution to poor word recognition. Below we discuss four strategies for improving students' word recognition skills that secondary teachers of any content area could implement.²⁸ All of these strategies reinforce the important concept that words are made up of several components, a point could be a bit of an epiphany for your struggling readers.

1. Prompt students to get their mouths ready.²⁹

A common phrase in an elementary classroom, secondary students can also benefit from being encouraged to “get their mouths ready” for a word that stops them in their tracks. Rather than prompting students to “just sound it out,” you will help students to focus on producing the initial sounds of the word, which the vast majority of secondary students will be able to do given their understanding of sound-symbol correspondence. “Reminding students to ‘get your mouth ready’ forces students who normally sit and stare at an unknown word to actually do something...often they can recognize the first syllable of a word. As they read the sentence up to the word that is unknown and then read the first few letters of the word, often they can predict what the entire word should be as they combine semantics (what the sentence is about) with graphophonics (letter-sound relationship).”³⁰ Consider the following classroom example:

As Conner read the sentences, “He was huddled into a corner. He was too afraid to move,” he paused at *huddled*. He just stared at it and then looked at me. Prior experience told him that if he waited long enough, the teacher would tell him the word.

Instead, I said, “Get your mouth ready to say those first few letters.”

He looked back at the page. He whisper read /hud/ and then he started reading again: “He was hu...” He stopped and looked at me. I asked him to cover up the hud part of the word and to get his mouth ready to say the rest of it. He looked at it and said “dl.” I asked him what the end sound would be and to move his mouth to that sound. He made the /d/ sound and then said, “dled.” I told him to read the sentence again, trying the entire word. He read, “He was hud-dled,” and then said, “Oh *huddled*, he was huddled.” He finished the selection, and then I asked him to reflect on how he figured out the word. “Well, you know, I just kept trying to make my mouth like say the sounds. Usually, I just look at the word, but looking doesn't really help you hear the sounds.”³¹

²⁸ Section modified from Beers, Kylene. *When Kids Can't Read: What Teachers Can Do*. Portsmouth, NH: Heinemann, 2003, and Blevins, Wiley. *Teaching Phonics & Word Study in the Intermediate Grades*. New York: Scholastic Professional Books, 2001.

²⁹ Beers, Kylene. *When Kids Can't Read: What Teachers Can Do*. Portsmouth, NH: Heinemann, 2003, p. 239.

³⁰ Ibid p. 240.

³¹ Ibid p. 241.

2. Teach common rime and syllable patterns to help students break words up into chunks.

Teaching students to break words up into recognizable syllable and rime chunks is increasingly important in secondary classrooms where students encounter multisyllabic words. As you'll recall from chapter one, a "rime" is the vowel and following consonants in a syllable, for example, the *-eat* in *meat* or the *-unk* in *sunk* (the *m-* and the *s-* in those two words are called the "onset"). In elementary school, students were ideally taught about word families (meat, heat, seat) and learned to decode those words not as /m/ /ea/ /t/, but as /m/-/eat/, which is much faster to blend and ultimately more accurate.

The teaching of rime patterns is made somewhat easier given that 37 rimes make up 500 words, as shown in the adjacent chart.³² When a student has consistent trouble breaking down multisyllabic words, consider working individually with them on various rime patterns. You might show students words containing similar rime patterns (*chlorine*, *fluorine*, *bromine*) and asking them what is the same in each word. Then, you might encourage them to brainstorm other words that contain similar rime patterns. This process should help students see words as not one big overwhelming string of letters, a common perspective of students with weak word recognition, but as a composite of several recognizable chunks. The ultimate goal of this type of instruction is to help your secondary students transfer their rime recognition to the analysis of, for example, the rimes *-an*, *-ip*, and *-ate* within *manipulate*, and decode the word that way, rather than phoneme by phoneme.

Most Commonly Used Rime Patterns				
37 rimes make 500 words				
A	E	I	O	U
-ack	-eat	-ice	-ock	-uck
-ail	-ell	-ick	-oke	-ug
-ain	-est	-ide	-op	-ump
-ake		-ight	-or	-unk
-ale		-ill	-ore	
-ame		-in		
-an		-ine		
-ank		-ing		
-ap		-ink		
-ash		-ip		
-at				
-ate				
-aw				
-ay				

In addition to rimes, teaching common syllables helps students see the "trees" in the "forest" of a multisyllabic word that they will encounter in your content area. Studies have shown that "through systematic, focused instruction on...common syllable patterns, students' ability to read longer words can be improved."³³ Conveniently, there are charts of the most common syllables in the English language for you to consider when doing this type of targeted instruction with students. The first fifty most common syllables are below.³⁴

50 Most Common Syllables				
1. ing	11. e	21. en	31. pro	41. ma
2. er	12. con	22. an	32. ac	42. si
3. a	13. y	23. ty	33. ad	43. un
4. ly	14. ter	24. ry	34. ar	44. at
5. ed	15. ex	25. u	35. ers	45. dis
6. l	16. al	26. ti	36. ment	46. ca
7. es	17. de	27. ri	37. or	47. cal
8. re	18. com	28. be	38. tions	48. man
9. tion	19. o	29. per	39. ble	49. ap
10. in	20. di	30. to	40. der	50. po

³² Ibid p. 234 (modified).

³³ Blevins, Wiley. *Teaching Phonics & Word Study in the Intermediate Grades*. New York: Scholastic Professional Books, 2001, p. 187.

³⁴ Ibid p. 196.

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To see how these threads of instruction merge to build a students' word recognition, consider a transcript of an eighth grade student breaking down a word. Note how the student relies on her understanding of rimes and syllables to chunk the word into smaller parts:

Jasmine: [Looking at *meaningful*]. Boy, this one is long. Um. /m/. No wait, there's -f-u-l and that says /ful/. Right. And, there's -i-n-g and that's, you know, /ing/. So this part here [puts her index fingers around the letters *ingful*] says /ingful/. So that just leaves this [moves index fingers to border *mean*]. Well, e-a-n, that's like in bean-see right up there on the wall [points to rime wall that has words arrange by onset-rime]. So, /m-ean/. Oh, *mean*. /Mean-ing-ful/. Meaningful.

Teacher: That's good, Jasmine. Meaningful. How'd you figure that word out?

Jasmine: Well, at first I was getting lost. It's so long. But then I saw some parts I already knew, and then I looked at this part here and recognized it. So I was, I guess, you know what we called chunking. Yeah, I was like chunking it.

Teacher: What would you have done last year, before you had learned about chunking?

Jasmine: You know, other teachers, you know my reading, it's not too good, because all the words, you know, they are like so long. And other teachers they are always like going "sound it out" and so you just try to go through all the letters, but sometimes then the word, it isn't like making any sense. So, mostly, I was just stopping. Just stop. If you stop, someone will tell you the words.

Teacher: What about this year?

Jasmine: Well, now, you know, now it's like I've got some other ways, you know, like I can chunk or find parts that I know. Now it's like big words are really just a lot of like small parts put together.³⁵

The best way to teach students to chunk their words is to follow the same steps you would use to teach any other skill: introduce the chunking skill, model the skill, practice the skill with students, and have students practice the skill on their own. As the above vignette illustrates, the skills of recognizing rimes, recognizing syllables, and chunking the word are synergistic, and would need to be taught simultaneously to be most effective.

3. Teach prefixes, suffixes, and root words.

The strategy of teaching prefixes, suffixes (collectively called affixes), and root words could be included in this section on improving students' word recognition, or it could be included in part II below on building students' vocabulary. Learning affixes and roots involves both being able to identify them in a word and pronounce them (which leads to better word recognition), and knowing how they change the meaning of the root word (which increases vocabulary). Here, we'll talk about what affixes and root words to teach. In part II on vocabulary, we'll talk specifically about strategies to help students apply the *meanings* of affixes and roots to build vocabulary knowledge.

³⁵ Beers, Kylene. *When Kids Can't Read: What Teachers Can Do*. Portsmouth, NH: Heinemann, 2003, p. 236.

As you are probably aware, a prefix is a group of letters added to the beginning of a base word that changes the word's meaning. For example, *un-*, the most common prefix in the English language, means either *not* (as in *unstable*, a term a chemistry teacher may refer to frequently) or *do the opposite of* (as in *unearth*, a term perhaps heard in a social studies classroom). A suffix is a group of letters added to the end of the base word that changes the base word's meaning. For example, the *-or* in *senator* indicates that the word means a person related to the senate.

I teach the 20 most common prefixes and the 20 most common suffixes. I also teach roots. I teach the students that the prefix is like the engine of a train, the root is like the train car, and the suffix is the caboose. I cut out engines, train cars, and cabooses from thick paper and write a different prefix, root, or suffix on each one. The students practice mixing and matching the word parts to make new 'trains' and new words.

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The following table provides an overview of the twenty most common prefixes and their meanings.³⁶

The Twenty Most Frequent Prefixes			
Prefix	Words with the Prefix	Prefix	Words with the Prefix
un- (not, opposite of)	782	pre- (before)	79
Re- (again)	401	inter- (between, among)	77
in-, im-, ir-, il- (not)	313	fore- (before)	76
dis- (not, opposite of)	216	de- (opposite of)	71
en-, em- (cause to)	132	trans- (across)	47
non- (not)	126	super- (above)	43
in-, im- (in or into)	105	semi- (half)	39
over- (too much)	98	anti- (against)	33
mis- (wrongly)	83	mid- (middle)	33
sub- (under)	80	under- (too little)	25

The table below shares the twenty most common suffixes and their meanings.³⁷

The Twenty Most Frequent Suffixes			
Suffix	Words with the Suffix	Suffix	Words with the Suffix
-s, -es (plurals)	31%	-ity, -ty (state of)	1%
-ed (past-tense verbs)	20%	-ment (action or process)	1%
-ing (verb form/present participle)	14%	-ic (having characteristics of)	1%
-ly (characteristic of)	7%	-ous, -eous, -ious (possessing the qualities of)	1%
-er, -or (person connected with)	4%	-en (made of)	1%
-ion, -tion, -ation, -ition (act, process)	4%	-er (comparative)	1%
-ible, -able (can be done)	2%	-ive, -ative, -itive (adjective form of a noun)	1%
-al, -ial (having characteristics of)	1%	-ful (full of)	1%
-y (characterized by)	1%	-less (without)	1%
-ness (state of, condition of)	1%	-est (comparative)	1%

³⁶ Modified from Beers, Kylee. *When Kids Can't Read: What Teachers Can Do*. Portsmouth, NH: Heinemann, 2003, and Blevins, Wiley. *Teaching Phonics & Word Study in the Intermediate Grades*. New York: Scholastic Professional Books, 2001, p. 206.

³⁷ Modified from Blevins, Wiley. *Teaching Phonics & Word Study in the Intermediate Grades*. New York: Scholastic Professional Books, 2001, p. 215.

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Secondary English teachers should probably focus on teaching these most common prefixes and suffixes in order to help students break apart words into manageable chunks, with content area teachers focusing on the less pervasive but still content-area-critical Greek and Latin affixes and roots, such as *-phobia*, *-logy/logist*, *-therm-*, *tri-*, *centi-*, *circum-*, etc.

Common Latin Roots ³⁸		
Audi	<i>Hear</i>	Audience, auditorium, audible, inaudible, audition
Dict	<i>Speak</i>	Dictate, predict, contradict, verdict, diction
Port	<i>Carry</i>	Import, export, portable, porter, transport
Rupt	<i>Break</i>	Abrupt, bankrupt, erupt, interrupt, rupture
Scrib/script	<i>Write</i>	Describe, inscribe, prescribe, scribe, describe, script, transcript, prescription
Spect	<i>See</i>	Inspect, respect, spectacles, spectator, suspect, perspective
Struct	<i>Build</i>	Construct, destruct, destruction, instruct, structure
Tract	<i>Pull, drag</i>	Attract, detract, contract, subtract, traction, tractor
Vis	<i>See</i>	Visible, supervise, vision, visionary
Common Greek Roots		
Auto	<i>Self</i>	Automobile, automatic, autograph, autotrophy, autobiography
Bio	<i>Life</i>	Biography, biology, biodegradable, biome, biopsy, antibiotic,
Graph	<i>Written or drawn</i>	Graph, graphic, graphite, seismograph
Hydro	<i>Water</i>	Dehydrate, hydrogen, hydrant, hydrodynamic, hydraulic, hydrophobic
Meter	<i>Measure</i>	Barometer, centimeter, diameter, thermometer
Ology	<i>Study of</i>	Geology, biology, hydrology
Photo	<i>Light</i>	Photograph, photocopy, photogenic, photosynthesis, photoelectric
Scope	<i>See</i>	Microscope, periscope, stethoscope, telescope
Tele	<i>Far, distant</i>	Telephone, telescope, telecast, telegram
Therm	<i>Heat</i>	Thermometer, thermos, thermal, thermosphere

As we'll discuss in more depth the second part of this chapter, you should teach students the meanings of these roots in categories. For example, if an earth science teacher were teaching about geothermal vents, she might take a few minutes to break down the word "geothermal" and discuss the meaning of its two Greek roots: *geo* (relating to the earth), and *thermal* (of, relating to, using, producing, or caused by heat). The teacher could then ask students to brainstorm other words with similar roots and consider their meanings. For *geo*, students might come up with *geography*, *geology*, *geologist*, and *geometry*. The last word, *geometry*, might stump students in terms of its relation to the earth. However, our example teacher, who might have anticipated this response and therefore looked it up ahead of time, could explain that early uses of the word *geometry* described the measurement (*-metry*) of land (*geo-*). A similar quick brainstorming exercise could be done with *thermal*, with students offering the words *thermometer*, *thermos*, and *thermostat*. Either the teacher or the students could draw out the meaning of *therm*: heat. This mini-lesson will help students interact with the word *geothermal* meaningfully—one of the key principles of vocabulary instruction, as you'll read—and firmly imbed the meaning of the word (heat from the earth) in students' minds for later application. Clearly, some

I teach my students 1 Latin root a week (such as pre or ex). Their vocabulary for that week consists of 5-8 words that are based on that Latin root (explore, explode, etc.). By learning 1 Latin root and a handful of words that get their meaning from that root, students recognize more unfamiliar words as they read, and can figure out difficult words that might otherwise make them put their book down.

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measurement (*-metry*) of land (*geo-*). A similar quick brainstorming exercise could be done with *thermal*, with students offering the words *thermometer*, *thermos*, and *thermostat*. Either the teacher or the students could draw out the meaning of *therm*: heat. This mini-lesson will help students interact with the word *geothermal* meaningfully—one of the key principles of vocabulary instruction, as you'll read—and firmly imbed the meaning of the word (heat from the earth) in students' minds for later application. Clearly, some

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aspects of instruction in word recognition, in particular what we are modeling here, steps over the line to vocabulary instruction, the focus of the part II below.

4. Use word walls to teach and reinforce the high-frequency words of your content area.

One best practice for building students' word recognition is to provide them with a constant visual reminder of the frequently encountered words in your content area and/or current unit in the form of a "word wall." For example, an earth science teacher might post on the wall an alphabetized list of the key words for a unit on phenomena that alter the surface of the earth, such as *weathering, glaciation, crustal deformation, volcanoes*, etc. A seventh grade English teacher whose class is reading the novel *Scorpions* by Walter Dean Myers might post the words *innocence, appeal, and temptation*, among others. In all cases, your word wall should be organized alphabetically and in font large enough for students to easily read from their seats. Students can have their own personal word "walls" as well, either on a single sheet of paper or as a collection of flash cards. These personal word walls should contain words they struggle in recognizing. An example of a personal word wall is in the **Secondary Literacy Toolkit** (p. 8), which can be found online at the Resource Exchange on TFA.Net. ✖

The word wall is not something you should have filled in for the unit's introductory lesson; rather, you should build it with your students over time, constantly adding words that students find challenging to identify with automaticity in the current area of study. For the word wall to truly improve word recognition, you'll need to refer to it whenever an already posted word occurs in your reading, and encourage students to refer to it when incorporating those words into their writing.

Use of word walls, while one strategy for building students' rapid recognition of words, also provides students with multiple exposures to words, one of the principles of effective vocabulary instruction discussed below.

II. Building Vocabulary

Teaching the new words you and your students will undoubtedly encounter in your content area is central to meeting the content-specific goals of your long-term plan, as increased vocabulary development leads to increased reading comprehension—a crucial skill when much of your content-specific information will come from texts.

While we all find ourselves in a position to teach vocabulary, not all teachers recognize the challenge of effective vocabulary instruction. **Unfortunately, perhaps the most obvious (if not most common) approaches to vocabulary instruction are also the least effective.** All of us probably remember having to look words up in the dictionary and memorize their meanings, or being presented with a list of ten or more unrelated words to be learned each week. Consider the reflections of Janet Allen, high school English teacher and author of *Words, Words, Words*, on these conventional teaching practices:

When I began teaching, I 'taught' vocabulary the same way my teachers had taught me: I assigned lists of words; asked students to look them up in the dictionary and write them in sentences; and gave weekly vocabulary tests. Those exercises then gave way to programmed vocabulary books. My students and I worked our way through levels A-F, but it didn't take long for me to realize that these exercises didn't increase their speaking, reading, and writing language any more than looking words up in the dictionary had. Students seldom (never) gained enough in-depth word knowledge from this practice to integrate the words into their spoken or written language. These exercises did, however, keep them quiet for long periods, and I was doing what all veteran teachers I

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knew were doing, so I truly wanted to believe that students were learning from this activity.³⁹

These familiar approaches to teaching new words are all but useless as instructional methods, as researchers attest:

The most frequently used inappropriate technique is that of giving students a list of words out of context and telling them to look up their meanings in the dictionary. Three facts argue against this. First, most words have several meanings and many shades of meaning. Taken out of context, there is no way for students to decide which dictionary definition is most nearly appropriate. Second, unless a learner has some knowledge of a word and its meaning already, dictionary definitions are often inadequate. In general, dictionaries are more useful for students to use in checking the meaning of a totally unfamiliar word. Finally, asking students to do something does not constitute instruction.⁴⁰

So, what are we to do? Researchers generally agree that students can learn some new words (perhaps 3 to 15 new words out of 100 unfamiliar words) by reading them and determining their meaning from context.⁴¹ This slow progress of learning words in context is most likely due to the fact that discerning the meaning of a word through the oft-espoused “context clues” is surprisingly challenging, especially for struggling readers. Using context clues requires active engagement with the text (something struggling readers do not do, as will be discussed in chapter three). Specifically, using context clues demands the ability to make connections to background knowledge and make inferences within the passage, often beyond the surrounding few sentences. Next time you come across an unfamiliar word in a text, try to track the cognitive circumvolutions you use to determine the meaning from the context clues.⁴² It isn’t always easy. And for struggling readers, it is often an impossible task.

As opposed to relying *solely* on students learning new vocabulary words from context clues while reading independently, researchers promote systematic and explicit vocabulary instruction, especially for struggling readers and students with weak vocabularies. When engaging in this explicit vocabulary instruction, the most effective approaches require that the teacher:

- 1. Carefully choose a limited number of words and provide a direct, student-friendly explanation of their meanings.**
- 2. Create meaningful interactions with the words in a variety of formats and contexts.**
- 3. Ensure the students have multiple exposures to the new words.**

Let’s look at each of these three points in turn to see how we can help students learn, use, and remember the vocabulary words we teach them.

³⁹ Allen, Janet. *Words, Words, Words*. Portland, ME: Stenhouse Publishers, 1999, pp. 2 and 10.

⁴⁰ Ryder, Randall and Michael Graves. *Reading and Learning in the Content Areas, 2nd edition*. Wiley Text Books, 2002.

⁴¹ Baumann, James and Edward Kame’enui. *Vocabulary Instruction: Research to Practice*. New York: The Guildford Press, 2004, p. 15.

⁴² If you didn’t automatically know the meaning of circumvolution, you probably first thought about the context in which it was used: to describe the challenging mental steps people go through to determine a word’s meaning. Then, you looked at the prefix, *circum*, and knew that meant “around.” *Volution* might have posed more of a problem, but you know other words with that root, such as “revolution,” and so probably deduced that it had to do with turning. You pretty much got it: Circumvolution, *noun*. The act of turning, winding or folding around a central axis. Whew.

1. Carefully choose a limited number of words and provide a direct, student-friendly explanation of their meanings.

Ask a struggling reader to choose her own vocabulary words to study—an approach filled with the good intention of giving her ownership of the words—and she will probably come up with an overwhelming list. If you went through an upcoming chapter in a textbook or short story and identified all the words that you anticipated students not knowing, you would probably come up with an overwhelming list as well. As teachers, we need to know how to narrow our focus for the number of words we teach our students. How do we do that? First, consider how researchers Margaret McKeown and Isabel Beck have grouped an individual’s vocabulary into three tiers:⁴³

Tier one: the most basic words, such as *water, picture, girl, money*, that rarely require explicit instruction in school, as their meanings are acquired through day-to-day conversation.

Tier two: words that occur in the vocabulary of “mature language users” and are used in a variety of written and oral communication, such as *compromise, scrutinize, diligent, and typical*.

Tier three: words that are mostly unique to a particular domain of knowledge, such as *watershed, rhombus, amnesty, and colonnade*.

As a general rule of thumb, English teachers should focus on tier two words, perhaps the most critical for our students to master in order to have a broadly applicable vocabulary and enhanced reading and writing ability. Content area teachers should teach tier two words when necessary and appropriate, but are primarily responsible for teaching tier three vocabulary words, as those are most likely crucial to the understanding of the major concepts of the content area.

When choosing what tier two or tier three words to explicitly teach and reinforce with students, consider the following questions you might ask yourself:

- Which words are most important to understanding the text we are going to read and/or the concept we are about to study?
- Which words do students already have prior knowledge of?
- Which words can be figured out from the context?

Students can help you answer these questions if you provide them with charts that help them group words into the categories of (1) totally new/don’t know at all, (2) have seen or heard this word before, but don’t know the meaning, (3) think I know the meaning of this word, and (4) know the meaning of this word. A sample “Organizer for Diagnosing Word Knowledge” is in the **Secondary Literacy Toolkit** (p. 9); this Toolkit can be found online at the Resource Exchange on TFANet. ✕

When carefully choosing vocabulary words to teach explicitly, consider not only words that students will come across in various texts, but also the words you want students to use when talking about or writing in your content area. Teaching students the “academic” language of your content area will propel them forward in their ability to apply their knowledge in conversation and writing, both important to building confidence and deepening their comprehension. The two charts below share academic language you might consider weaving into your vocabulary instruction.

⁴³ Baumann, James and Edward Kame’enui. *Vocabulary Instruction: Research to Practice*. New York: The Guildford Press, 2004, p. 14.

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Academic Language for All Content Areas⁴⁴

Simple Academic Sentence Frames			
I think that...		Furthermore...	
I believe that...		In this report, I will...	
This report is divided into x sections.		This document reports...	
We intend our report to...		In my opinion...	
I hypothesize that...		In conclusion...	
We concluded that...		I disagree with x because...	
I discovered that...		This section contains...	
In addition, I think...		In order to understand...	
		The purpose of this paper...	
Academic Verbs			
Acquire	Create	Facilitate	Manipulate*
Allude to	Critique	Frame	Pursue
Analyze	Describe	Focus	Organize
Anticipate	Demonstrate	Generate	Realize
Associate	Determine	Hypothesize	Reconsider
Claim	Differentiate	Indicate	Respond
Collect	Discuss	Identify	Refer
Convince	Enhance	Inform	Relate
Communicate	Enable	Integrate	Represent
Compare	Evaluate	Introduce	Sequence
Contrast	Examine	Inquire	Synthesize
Contribute	Express	Investigate	Summarize
Connect	Extended	Justify	Symbolize
Conclude	Extract	Juxtapose	Trace

Academic Language for English/Language Arts⁴⁵

Words to Describe Plot		Words to Describe Characters	
Realistic	Unrealistic	Original	Stereotyped
Good pace from scene to scene	Plodding	Believable	Unbelievable
Suspenseful	Predictable	Well-rounded	Flat
Satisfying ending	Frustrating ending	Multi-dimensional	Static*
Subplots tied together well	Confusing subplots	Well-developed	Flawed
Well-developed ideas	Sketchy ideas		

Words to Describe the Theme		Words to Describe the Author's Writing Style	
Important message	Unimportant message	Descriptive, filled with metaphors	Boring, no imagery
Subtle*	Overbearing	Original	Filled with clichés
Unique	Overworked	Lively, full of action	Slow-moving
Powerful	Ineffective	Poetic or lyrical	Clodding, jumpy
Memorable	Forgettable		

⁴⁴ Lapp, Diane et al. *Teaching All the Children: Strategies for Developing Literacy in an Urban Setting*. New York: The Guilford Press, 2004, p.288

⁴⁵ Beers, Kylene. *When Kids Can't Read: What Teachers Can Do*. Portsmouth, NH: Heinemann, 2003, p. 277.

Now we know what we mean by *carefully* choosing the vocabulary words we teach. What do we mean by a *limited number*? Unfortunately, there is no hard and fast rule to how many words a secondary student should be presented with in a week or in a lesson, although most secondary teachers, in both English and other content areas, thoroughly teach between 5 and 10 new words a week.

After you have chosen a limited number of tier two or three words to teach your students, consider how you will introduce and explain those words. As you create student-friendly definitions, keep in mind two basic steps: (1) characterize the word and explain how it is used, and (2) explain the meaning of the word in simple, everyday language.⁴⁶ Think about how you use the word *most often* and avoid overloading your students with all of its multiple meanings. To facilitate student understanding, define new words by using everyday, student-friendly language; it's helpful to include the words *something*, *someone*, or *describes* in your explanations.⁴⁷

2. Create meaningful interactions with the words in a variety of formats and contexts.

None of us want to learn words by just looking up the definition in the dictionary. And, that strategy will rarely work for our students because the dictionary definition may contain vague language or multiple meanings. Even if the definition were clear enough for our students, simply reading the dictionary entry and moving on will not help our students grasp the meaning of a word and use it appropriately in the future:

Methods that provide only definitional information about each to-be-learned word did not produce a reliable effect on comprehension. Also, drill-and-practice methods, which involve multiple repetitions of the same type of information about a target word using only associative processing, did not appear to have reliable effectiveness on comprehension. The implication for teaching is strong: it takes more than definitional knowledge to know a word.⁴⁸

Providing student-friendly definitions of a few targeted vocabulary words is a significant step to help students to acquire new words. Here we will focus on a handful of strategies that will support students in meaningfully interacting with the words, each of which can be used in any content area. The five approaches we will consider are:

- (1) **Semantic Mapping**
- (2) **Using Word Parts (Morphemic Analysis)**
- (3) **Concept Definition Map**
- (4) **Frustration Model**
- (5) **Word/Concept Sorts**

Some Student-Friendly Definitions

- **Subtle** describes something that is difficult to see or detect.
- **To Manipulate** means to handle something in a way that gets the results you desire.
- **Static** describes something that is still and unchanging. (Tier 2 definition, taught in an English class)
- **Static** describes charges on an object or molecule that don't move. (Tier 3 definition, taught in a science class).

⁴⁶ Beck, Isabel et al. *Bringing Words to Life: Robust Vocabulary Instruction*. New York: The Guilford Press, 2002, p. 35.

⁴⁷ Ibid p. 39.

⁴⁸ Allen, Janet. *Words, Words, Words*. Portland, ME: Stenhouse Publishers, 1999, p. 8.

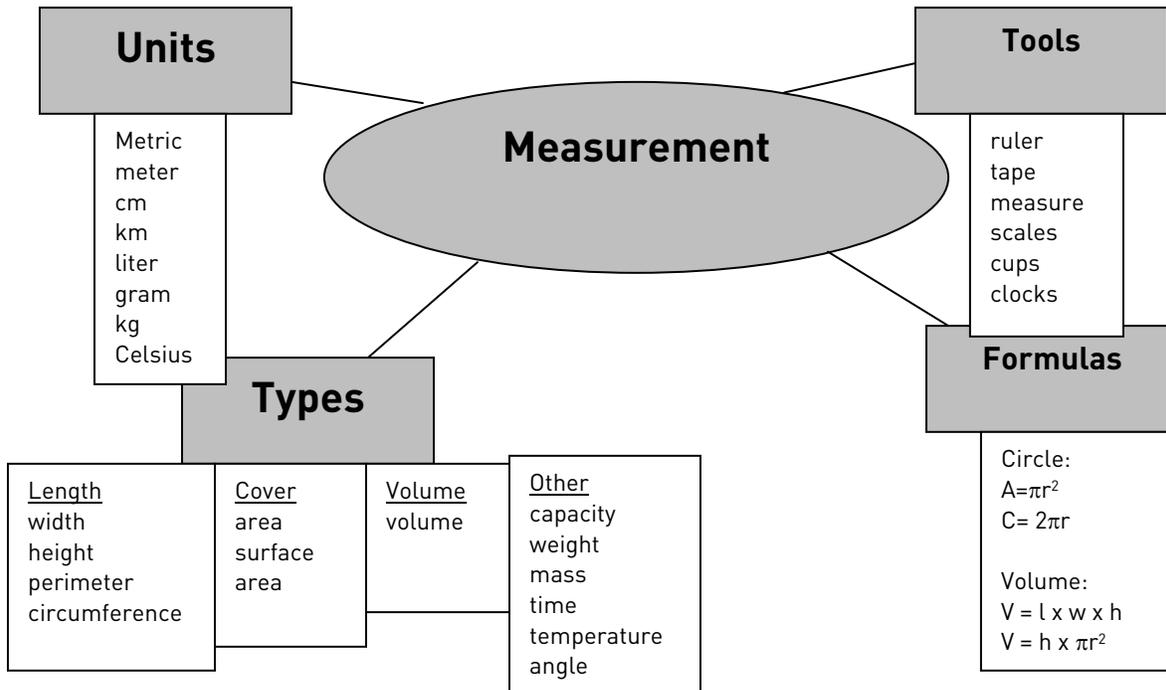
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(1) Semantic Mapping. This approach applies the graphic organizer concept to a set of vocabulary words, requiring students to make a map of the connections among the words they are studying. Not only is this an excellent way for students to build mental scaffolds for learning new words, but this process also offers a check on the teacher, as carefully chosen tier three vocabulary will usually have relationships conducive to this sort of semantic mapping. Effective vocabulary instruction using a semantic map has four parts, which would apply to classification of tier two words found in a class novel or tier three words found in a seventh grade math class.⁴⁹

- 1. Brainstorming.** The teacher and class brainstorm ideas having to do with a particular unit of study or theme. For example, a seventh grade class immersed in a unit on measurement might brainstorm vocabulary words related to measurement. Students might suggest *length, width, ruler, inch, meter*, and many other relevant terms. The teacher provides less obvious ideas such as *clock, circumference, and angle* and contributes additional ideas to the list.
- 2. Mapping.** The teacher guides the students to examine the list of ideas and create three or four categories in which to classify the words. In our seventh grade math example, students group the words into categories of *tools used to measure, units of measurement, and types of measurement*. The teacher and/or students draw a map to represent the categories and subset ideas.
- 3. Reading.** After drawing the map, the class reads an appropriate passage about the topic. For example, during a lesson on measuring the volume of liquids, students might read about metric units for capacity, the tools used to measure liquids, and formulas for determining volume. Depending on the reading abilities of the students, the selection might be read aloud, read in partners, or read individually.
- 4. Completing the map.** After reading the text, the teacher and students discuss new ideas they have learned and return to examine the map. Often, students will add a category to the map, as well as many ideas to the categories. After reading about measuring and calculating volume, students might realize they need to add a category for formula, as then now know $\text{Volume} = \text{length} \times \text{width} \times \text{height}$ or $V = \text{height} \times \pi r^2$. Especially in a content area classroom, steps three and four of this process could repeat any number of times as students build their word knowledge in a particular unit of study.

⁴⁹ Stahl and Stahl in Baumann, James and Edward Kame'enui. *Vocabulary Instruction: Research to Practice*. New York: The Guildford Press, 2004.

Consider the following semantic map produced by our seventh grade math students:



(2) Using Word Parts (Morphemic Analysis). Morphemes, or word parts, are the smallest meaningful units in the English language. These meaningful units are classified by type: *free morphemes* stand alone as a meaningful word (such as *man*, *blue*, *she*, and *under*) while *bound morphemes* (roots, prefixes, and suffixes) work as meaningful units only when combined with other morphemes (such as *revise*, *telephone*, *underline*, and *unknown*). Being familiar with various morphemes builds word recognition skills. Mounting research indicates that attention to morphemes—which at the secondary level should focus on prefixes, suffixes, and root words—also supports students’ vocabulary growth.⁵⁰ If you consider that knowing only 20 prefixes allows us to determine the meaning of nearly 3,000 words, the importance of morphology becomes clear.⁵¹

You’ll need to explain to your students why you are teaching them the meanings of small parts of words, and how breaking a word into meaningful parts, knowing the meanings of those parts, and putting them back together again will help them to determine the word’s meaning. When first introducing morphemes, it is helpful to illuminate the network of words students can read and understand by knowing only one word part. Consider the following snapshot of a fifth grade classroom in which the teacher shows his students how Latin word roots work within words:

“In thousands of words, there is a word part that is like a base word in that prefixes and suffixes attach to it. Unlike base words, however, this word part usually cannot stand by itself as a word. Still, it is the most important part of the word in which it occurs. We call it a *word root*. Let me show you one that’s in a couple of words you know quite well.”

⁵⁰ Templeton in Baumann, James and Edward Kame’enui. *Vocabulary Instruction: Research to Practice*. New York: The Guildford Press, 2004, p. 120.

⁵¹ Graves in Baumann, James and Edward Kame’enui. *Vocabulary Instruction: Research to Practice*. New York: The Guildford Press, 2004, p. 87.

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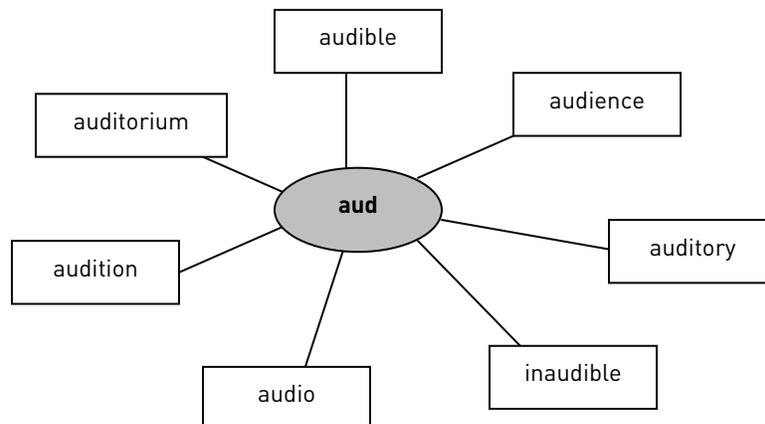
Mr. Ramirez then writes *fracture* and *fraction* on the board: “We know what these two words are and what they mean. What happens when you *fracture* your arm? [You break it.] What do you do when you divide something into *fractions*? [Mr. Ramirez elicits from the students that you break whole numbers down into fractions.] Good! Now, both of the words *fracture* and *fraction* have the word root *fract* in them. Is *fract* a word? [No.] It’s a very important part of the words *fracture* and *fraction*, however. We call *fract* a word root. It comes from a word in Latin that means ‘to break.’ Remember our discussion about the history of English and how so many words and word parts in English come from Greek and Latin languages? So, *fract* is a Latin word root and it lives on in the words *fracture* and *fraction*.”

“Word roots are everywhere! Let’s look at these words. [Mr. Ramirez writes *construct*, *construction*, and *structure* in a column on the board.] What’s the same in these three words? [Students point out *struct*.] Good! You’ve found the word root! Now, let’s think about what this word root might mean—think about what happens when construction workers construct a building or structure. [Students engage in a brief discussion in which the meaning “to build” emerges.] Right! *Construct* means ‘to build something’ and structure is another term we often use to refer to a building or something that has been built.”

Next, Mr. Ramirez adds the word *instruct* to the list and asks the students how the meaning of “build” might apply to the word. Through discussion, students come to the realization that *instruct* refers to how learning or knowledge is “built.”⁵²

Teachers often guide their students to use a graphic organizer such as a **root web** to help them sort and classify related words, or to determine a **definition by word part analysis**.⁵³ These graphic representations of relationships between words help students store and retrieve information from their memories, and also can be used for quick reference if they’re kept in a vocabulary notebook.

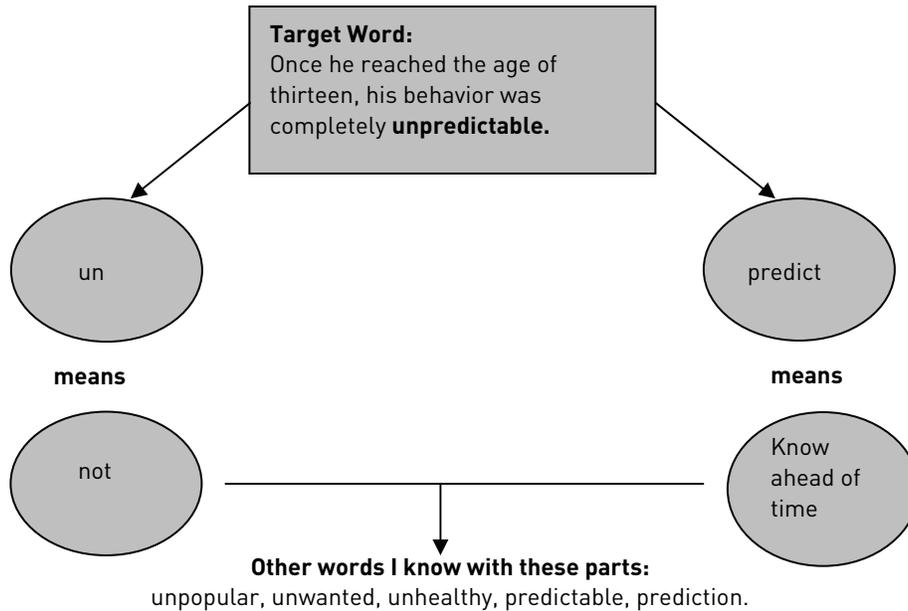
Root Web



⁵² Bear, Donald et al. *Words Their Way*, 3rd edition. Upper Saddle River, NJ: Prentice Hall, 2003, p. 258.

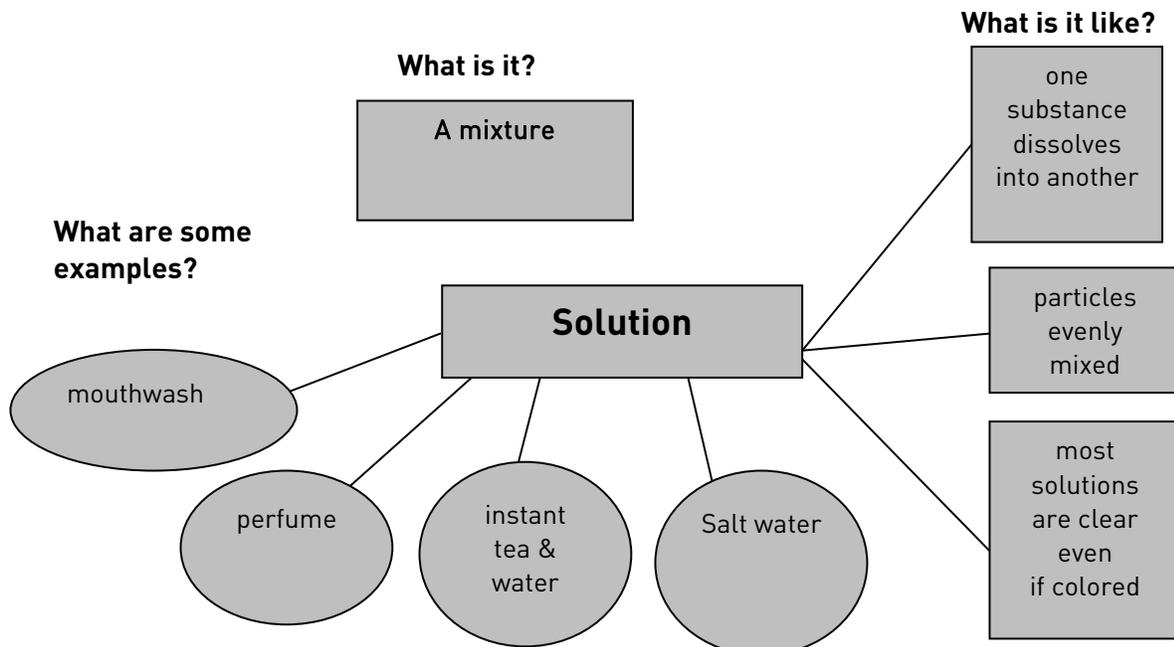
⁵³ Allen, Janet. *Words, Words, Words*. Portland, ME: Stenhouse Publishers, 1999, p. 55.

Definition by Word Part Analysis



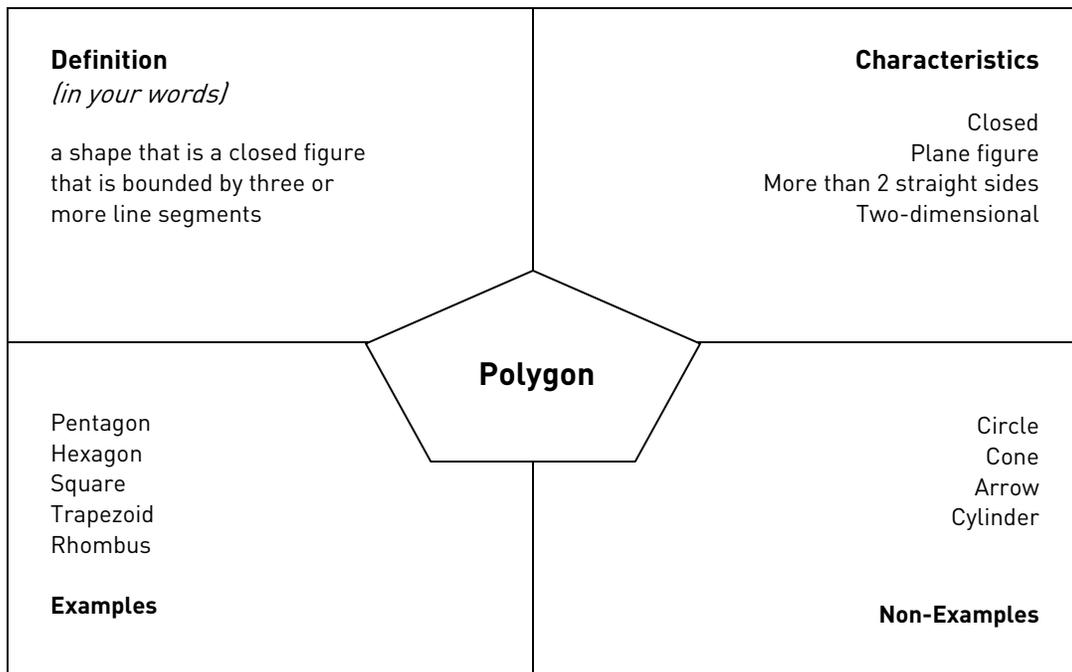
Definition by Analysis:
not able to guess or know ahead of time what he might do.

(3) Concept Definition Map. In this method, students are asked to complete a graphic organizer that ultimately creates an extensive definition of the word: What is it (a definition)? What is it like (some of its properties)? What are some examples of it (some common examples with which students will be familiar)? The teacher will need to be involved in this process, especially by suggesting examples of the word that will prompt students to provide more examples and allow students to fill in what the word is like. Consider the following example:



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(4) Frayer Model. This strategy requires students to explore a concept or word by looking at four attributes: Definition, Characteristics, Examples, and Non-Examples. The teacher should first model a sample Frayer Model using an easy word or one that the class has already learned. Students then work in pairs, small groups, or as individuals to complete their diagram for each word or concept. The teacher may need to prompt students with examples and non-examples, to which students can later add and draw out the characteristics. This example shows a student's Frayer Model for a polygon. The process of creating this model required the student to consider the concept of a polygon from a number of angles, thereby reinforcing internalization of the concept.



(5) Word/Concept Sorts. This is another vocabulary instruction method that allows students to meaningfully interact with words in a new context or format. Students copy words onto index cards, post-it notes, or slips of paper cut in 3x5 pieces, one word per card. For example, a middle school science teacher might provide the following words during a unit on the human body:

Spinal cord	Hemoglobin	Aorta	Brain stem
Small intestine	Neuron	Platelets	Esophagus
Oxygen/Carbon Dioxide	Erythrocytes	Salivary glands	Digestive enzymes

Individually, in pairs, or in groups, students sort the words into categories. Depending on the familiarity the students have with the material, it may be appropriate for the teacher to choose some or all of the categories. As they become more knowledgeable, encourage students to create categories of their own. Students might sort the above vocabulary the following ways:

- Corresponding body systems (*nervous* = spinal cord, neuron, brain stem; *digestive* = salivary glands, esophagus, digestive enzymes, small intestine; and *circulatory* = aorta, erythrocytes, hemoglobin, platelets, oxygen/carbon dioxide);
- Similar structures (elongated organs or organ parts = spinal cord, small intestine, esophagus, aorta, brain stem; cells = erythrocytes, platelets, neurons, salivary glands; molecules = hemoglobin, digestive enzymes, oxygen/carbon dioxide).

Like so many of these strategies, this approach requires students to engage the conceptual meaning of the word, transforming their understanding beyond rote and superficial memorization to an internalized, long-term base of knowledge.

3. Ensure students have multiple exposures to the new words.

Students need multiple exposures to and opportunities to use the new words—in an appropriate context, not in isolation—to have it become a part of their vocabulary. In fact, “words should be used in a meaningful context between ten and fifteen times.”⁵⁴ After teaching the vocabulary words of focus for an upcoming unit or novel, one practical strategy is to integrate those words into your speech whenever possible and praise students who do the same. While critical for all teachers, doing this could vary in difficulty depending on the content area; it might be rather challenging for a secondary math teacher (it takes a creative thinker to slip the word “vertex” into everyday conversation) yet relatively easy for a secondary English teacher. Consider the reflection of Janet Allen, author of *Words, Words, Words*, once she discovered the importance of using vocabulary words in her speech:

My students didn't use the words I assigned from a word list. They used the words they heard on television and radio; they used the words from the music they listened to; and they used the words I used with them...When students asked me for a pen or pencil, I had one of two responses: “sure you can. I seem to have a plethora of pencils today,” or “Sorry. I seem to have a dearth of pencils today.” Soon I heard students saying the same words with each other.⁵⁵

While a math teacher may not be able to easily integrate those “tier three” words into her speech, remember that word walls and other classroom print can serve as some of the many exposures students need to move a word to long-term memory. Rather than just posting the words, provide a visual representation of its meaning (for example, draw a parallelogram or mitochondria next to the words *parallelogram* or *mitochondria*) or post the student-friendly definitions of the word. Consider assigning students the task of identifying the words outside of class in a variety of print media (and post their results on the wall). Creating a highly verbal and print rich environment will go a long way in building the vocabulary of your students.

As occasions arise, also point out the shades of meaning that different words have in different contexts. As Oliver Wendell Holmes aptly stated, “a word is not a crystal, transparent and unchanged; it is the skin of a living thought and may vary greatly in color and content according to the circumstance and time in which it is used.” This applies to words as common as *run* (to *run* a mile, a *run* in a pair of stockings, a *run* on milk and bread before a storm, a *run* in baseball) and as rare as *lodestone* (a rock with magnetic properties in the science book, perhaps a character with a magnetic personality in a novel).⁵⁶

How do I assess vocabulary mastery?

The conditions in which students most thoroughly learn vocabulary words described above give us insight into the most effective means of assessing our students' mastery of vocabulary words. As you know, among the keys to student learning are varied exposures to new words and always ensuring a meaningful context for those exposures. Those principles also serve as guidelines for your assessments.

⁵⁴ Ibid p. 35.

⁵⁵ Ibid p. 3.

⁵⁶ Ibid p. 6.

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Vocabulary assessments, like vocabulary instruction, should not focus on rote memorization, but rather the layers involved in really knowing a word. Consider the following examples, all of which force students to think of the meaning of the word within a larger context:

- The opposite of _____ is *subtle*. What is the word? What does *subtle* mean?
- Explain the literal and figurative definitions of the word *virulent*. Give an example of each.
- Match the picture to the vocabulary word each picture best represents.
- Would it be possible to *assuage* a parking ticket? Why or why not?
- Identify something that is *arid*. Explain why it is so.
- Give an example of a *perfunctory* action. Explain why it is so.
- Ask students to place vocabulary on a continuum, and to explain their placement of the various words.⁵⁷

I created an in-class game called Thumbs Up. Anytime I would say a vocabulary word or read one in a book, they would give a "thumbs up." We would stop what we were doing and talk about the word. The highlight of my year was at an assembly with our principal: she said one of our words and about 70 thumbs went up. I later explained why that happened, and she was impressed.

Craig Brandenburg, Houston '01
5th Grade



By building our students' word recognition and vocabulary, we are setting them up to be more "fluent" readers, a crucial skill discussed in the next section.

III. Fluency: The Bridge from Decoding to Comprehension

Remember that fluency is defined as the ability to read a given text with appropriate accuracy, speed, and expression. The umbrella skill of **fluency** can be broken down into **automaticity** (rapid and automatic word recognition) and **prosody** (reading with engaging expression and recognition of punctuation). One way some teachers help students understand the concept of fluency, and reflect on whether or not they are fluent readers, is to ask, "did you read it like you talk?"

Fluency is one of the key indicators of a proficient reader, as it is necessary for true comprehension of a text. As explained earlier, if a student spends time sounding out words or stringing syllables together, her slowed pace prevents her from being able to focus on the overall meaning of what she is reading. Research shows that "since the average individual can hold only seven to ten bits of information in short-term memory, the disfluent reader expends cognitive energy primarily on figuring out words and pronunciations. This leaves little memory capacity to focus on comprehending the information."⁵⁸ When a reader's decoding skills are automatic, her cognitive energy can be spent on making meaning of the text.

⁵⁷ Ibid p. 52.

⁵⁸ Block, Cathy Collins and Michael Pressley. *Comprehension Instruction: Research-Based Best Practices*. New York: The Guilford Press, 2002.

Therefore, to help our students comprehend a text, we must focus on building automatic recognition of words and overall fluency. While fluency is the bridge between decoding and comprehension, the ability to simply decode words doesn't necessarily make a student fluent and therefore able to comprehend a passage; it is the *repeated exposure* to words they can decode that leads to automatic recognition and thus the beginnings of comprehension. The amount of exposure necessary to move a word into one's "automatic recognition bank" varies based on the level of reader:

For students who are quickly becoming independent readers, they may need to see a word about ten times before it moves into their bank of easily recognized words. However, our dependent readers who are struggling with word recognition may need to see this word as many as forty times...these students, more than any others, must have repeated and regular opportunities to read stories at their independent reading level.⁵⁹

Although we'll talk more about ways to build students' fluency in the next section, one general principle for increasing students' fluency is frequent and varied reading of selections at the independent reading level. In general, texts at the frustrational level should be avoided or used only when significant support in comprehension is provided, as discussed in chapters three and four.

Strategies to Increase Fluency

In an elementary classroom, strategies to increase students' fluency include (1) modeling appropriate fluency during teacher read-alouds, (2) choral reading (when the teacher and students read out loud together, therefore highlighting the pauses that happen for commas and periods), (3) building the number of words students can recognize on sight and read automatically and (4) giving students opportunities to read "just right" texts (texts that are on their independent level) either during sustained silent reading time or at home. Many of these same strategies, modified for secondary students, will help build your students' fluency as well.

Strategy #1: Model good fluency.

Because "students need to hear fluent reading in order to become fluent readers,"⁶⁰ one important but simple strategy is to read aloud to students, modeling appropriate expression, phrasing, and pacing. Fluency expert Timothy Rasinski, author of *The Fluent Reader*, notes:

When you draw attention to how you're reading, you help students see that meaning in reading is carried not only in the words, but also in the way the words are expressed. For example, you might contrast a fluent rendition of a passage with a disfluent, labored, and word-by-word reading of it, then ask the students which reading they preferred and why. Without a doubt, the students will pick the more fluent reading. This becomes an important lesson in how they should read orally when given the opportunity.⁶¹

My 7th grade science textbook happened to come with a CD of various voices reading each section of the text. I honestly didn't know at first why having the students listen to the CD while following along in the text helped their comprehension. But it did. And, my students quickly preferred listening to the clear smooth reading of the voices, rather than the more halting, quiet reading of their classmates. My students and I eventually realized—and discussed—that by listening to the CD, every student's brain could focus on understanding what they were hearing, thereby increasing comprehension.

Margaret Cate, D.C. '98
Selection Associate, Teach For America

⁵⁹ Beers, Kylene. *When Kids Can't Read: What Teachers Can Do*. Portsmouth, NH: Heinemann, 2003, p. 205.

⁶⁰ Ibid, p. 215.

⁶¹ Rasinski, Timothy. *The Fluent Reader*. New York: Scholastic, 2003, pp. 26-27.

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This doesn't mean that you teach a whole lesson on fluent and choppy reading, or that you spend the class period reading the whole physics chapter to students. However, if many of your students struggle with fluency, you might read a section of the text out loud and point out that your voice rises at the end of sentences that are questions, that you take a breath between phrases, or that you emphasize the text inside dashes. For a secondary teacher, this sort of instruction should occur only when necessary and occur in a matter of minutes during a lesson. While students are listening to a passage being read aloud, they should follow along under the text with their pencil or pen. This highlights the phrasing and pauses for punctuation employed by good readers, as students' pencils should pause at the appropriate points too. This strategy has a side benefit as well: a quick glance up while you are reading will show you which students are on task and following along.

Having students read aloud together, what is commonly called "choral reading" and used frequently in elementary classrooms, also builds fluency. If your text includes a dialogue, you might assign different groups of students to chorally read the words of a particular character. By reading a conversation between two characters as a group, the voices of the more fluent readers in the room will guide students who are struggling with fluency.

Books on tape are also excellent tools for giving students an opportunity to hear a variety of voices read in a fluent manner. If books on tape or a textbook on CD aren't readily available, make your own. If you can, entice other teachers at your school to read a passage into a tape recorder – not only will students have the opportunity to hear a fluent reader, they'll get a kick out of hearing the math teacher or school secretary read to them! Consider the results produced by using a book on tape in the seventh grade science classroom of Aaron Pomis (North Carolina '02). Clearly, the effects went beyond increased fluency in his students:

Only one-third of my homeroom students had passed the sixth grade North Carolina End of Grade Reading Test the year before, and the rest of my 120 seventh grade students were not much better off. To combat this lack of reading proficiency, we began listening to *The Hot Zone* on tape during our human body unit. The book gives detailed accounts of Ebola outbreaks in Africa and the United States. Student spent time listening intently and then working in groups, where they practiced asking questions, making predictions, drawing connections, creating illustrations, and developing summaries. Students were assessed weekly on both the book's science content as well as their own comprehension skills. By listening to the book on tape, which allowed them increased practice in reading comprehension strategies because they weren't struggling with simply reading the words on the page, my students achieved the school's highest increase in reading scores on the seventh grade End of Grade Reading Test.

You may wonder if listening to the teacher read aloud, requiring students to follow along with their pen, "reading" a book on tape, or engaging in choral reading makes secondary students feel "dumb." Corps members report that when they are open and honest with students about the need to improve their reading skills, and ensure students are aware of the goal they are shooting for, students typically respond positively. Shannon Saunders (Rio Grande Valley '03) agrees: "You have to be real with your kids. Some strategies might seem babyish at first to middle or high school students, but when you're honest with them about their literacy levels, and they understand the end goal, then they will be much more invested."

Strategy #2: Use word walls to increase the number of words students recognize “automatically.”

Remember that instant recognition of words is one of the key ingredients of good fluency, which explains why this strategy, first introduced in the section on word recognition, is reiterated here. Word walls build the number of words students recognize automatically, which leads to improved fluency. To build fluency in reading your content area texts, your word wall should include the “tier three” words of your subject, words should be organized alphabetically, and words should be in font large enough for students to easily read from their seats. And remember, word walls lose their utility when they become mere wallpaper in your classroom; you should refer to your word wall frequently while reading, during lectures and demonstrations, and as students work on assignments. Quick work with vocabulary flash cards also leads to automatic word recognition.

We have a word wall in my room at the very front and it grows from 10 to 240 by the end of the year. We constantly refer to it while we're doing read-alouds to characterize tone, mood, and feelings as well as utilizing the words in our own writing.

Martin Winchester, RGV '95
Chief Schools Officer, IDEA Public Schools

Strategy #3: Foster independent fluency through prompting, not correction.⁶²

It's not an uncommon scene: the struggling reader pausing and looking up expectantly to the teacher to supply the word, or other classmates jumping in and providing the word as she struggles through it. In the long run, these crutches cause dependence on the teacher and classmates, rather than a growing ability to determine a word. Instead of correcting, it is better for the teacher to prompt the student with the following statements or questions:

- Can you divide the word into syllables and sound it out that way?
- Do you see a part of the word you recognize?
- Can you get your mouth ready to say the first few letters?
- What word would make sense at this point?

If prompting with these questions doesn't do the trick, provide the student with the correct pronunciation of the word and ask her to read the entire sentence again, reading the troublesome word independently this time (as opposed to providing her with the word and then allowing her to read on). Teach students to add words like this to the class or individual word wall if it is a high frequency word for your content area.

Strategy #4: Track students' fluency over time with repeated readings.

Research shows that one of the best ways to improve fluency is through re-reading of texts.⁶³ This could mean reading a passage through to students out loud and then asking them to read it independently, or encouraging English students to reread their favorite short stories or novels during sustained silent reading time or for homework. Of course, you need to insert yourself in this process in order to track students' fluency growth over time; you might meet periodically (three times a year) and conduct the one to five minute Timed Reading Exercise explained in chapter one, charting their change in fluency rates and levels over time. As with any academic skill,

I track words per minute with my students, and made them a bar graph that they color in every time they read for me. They know that the higher that bar gets, the closer they get to improving their reading level. Coloring in the bar graph motivates many of them. It becomes a competition: the older, less fluent version of themselves versus the improving, faster reading, trying-to-get-their-reading-level-up version.

Laura Brewer, D.C. '04
Senior Managing Director of Institute,
New York
Teach For America

⁶² Beers, Kylene. *When Kids Can't Read: What Teachers Can Do*. Portsmouth, NH: Heinemann, 2003, p. 217.

⁶³ Schoenbach, Ruth et al. *Reading For Understanding: A Guide to Improving Reading in Middle and High School Classrooms*. San Francisco: Jossey-Bass, 1999, p. 19.

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show a student her progress in that area and she will be more motivated to continue to work hard and improve. A sample “Chart for Tracking Students’ Oral Reading Rate” is included in the **Secondary Literacy Toolkit** (p. 10), which can be found online at the Resource Exchange on TFANet. ✖

Conclusion

This chapter has explored the most common areas of weakness in our secondary readers: word recognition, vocabulary, and fluency. As is hopefully now apparent, these three areas overlap significantly with one another. Word recognition, such as recognition of word parts, prefixes, and suffixes, will help with vocabulary. In order to have appropriate fluency, students’ must have strong word recognition skills. If fluency is strong, students are more likely to be able to focus on the meanings of the words and overall passage, which allows students to determine the meanings of unfamiliar vocabulary words through context clues. Strong word recognition, vocabulary knowledge, and appropriate fluency all lead to greater reading comprehension, the topic of the next chapter.

- Build word recognition by helping students break down words into manageable chunks, use meaningful word parts (affixes and roots) to decipher a word, and possess automatic recognition of words through use of word walls. Remember that cajoling students to “just sound it out,” or reading the word for the student when he stumbles with the pronunciation, proves an either ineffective or short-term solution to poor word recognition.
- Students’ vocabulary knowledge will increase if you abide by the following principles of effective vocabulary instruction: carefully choose a limited number of words and provide a direct, student-friendly explanation of their meanings, create meaningful interactions with the words in a variety of formats and contexts, and ensure the students have multiple exposures to the new words.
- Raise students’ fluency, the bridge between decoding and comprehension, by modeling good fluency, increasing the number of words students recognize automatically, prompting rather than correcting students when they stumble over a word, and tracking students’ fluency over time.