Teaching Big Words

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Quick and accurate word recognition is essential to the ultimate goal of reading: comprehension. As students move beyond reading simple texts, they will encounter more and more multisyllabic words. Being able to read those words quickly and accurately is important. To read big words, it helps if students have a strong understanding of how syllables and morphemes work in those words. It also helps to know about etymology, or the origin of words. Let's review these fundamental concepts.

A **syllable** is an important sound unit within the speech flow. Understanding syllable types can help students to accurately identify patterns in words. Knowledge of **syllable types** can serve as an organizational and visual tool for decoding unknown words. There are six types of syllables: closed, open, vowel-consonant-e, vowel team, r-controlled, and final stable.

Vowel sounds are directly affected by the type of syllable that they are in, so knowing the syllable type assists the reader in determining the vowel sound. It helps if the reader has the necessary **mental flexibility** to identify words when their decoding of the vowel sound doesn't exactly match the way the sound is pronounced in the word.

Speaking of vowel sounds, it's important for students to understand the concept of an **unstressed vowel** in a multisyllabic word. Unstressed vowels are often pronounced as **schwa** sounds. These are indistinct sounds, such as the first vowel in *again* or the second vowel in *mattress.* We'll talk more later about stress as it relates to reading big words.

To be able to quickly identify syllables in a written word, students need to know the most common **syllable division patterns**. When more than one pattern could apply, they also need to know which ones are the most common so they can try those first.

Morphemes are the smallest units of meaning within language. A free morpheme can stand alone as a word, while a bound morpheme must be connected to at least one other morpheme. **Inflectional morphemes** are the most common and do not change the part of speech of the base morpheme they are attached to. These include plural, the comparative, and the past forms. **Derivational morphemes** are defined as those that change the part of speech and meaning of the base morpheme, such as teach and teach-er, sad and sad-ness, excite and excite-ment.

English spellings seem particularly challenging to learn because English words have origins in multiple languages—mostly Anglo-Saxon, Latin, and Greek. This makes English orthography **opaque**, or difficult to understand or "see through." This is in contrast to languages such as Spanish, where words are mostly from Latin, which makes the orthography **transparent** or clear.

Understanding something about **etymology**, or word origins, helps students make sense of the spelling and pronunciation of words and "understand the apparent complexities of the written language by contrasting (a) the regularity of words of Greek and Latin origin with Anglo-Saxon words that generally have less regular letter-sound correspondences, and (b) syllabic and morphemic patterns that differ according to word origins." (Henry, 1989, p. 263).

So, now we've identified the key elements of instruction in multisyllabic words. Now, let's turn to how to teach each of these elements of reading big words.

Teaching Syllables

First, students must understand some basic terminology, including words such *syllable*, *vowel*, and *consonant*. If you have students who don't already know these terms, this is the place to begin your instruction. Even if students are already familiar with the terms, it can't hurt to review them.

A **syllable** is a word or a part of a word with one vowel sound. The exception to this is the syllabic consonant. Syllabic consonants often occur in an unstressed syllable immediately following the following consonant sounds: /t/, /d/, /s/, /z/, /n/ (*cotton*, *tunnel*, *prism*).

A **vowel** is a sound made by sending air out of the mouth without closing your mouth or moving the parts of your mouth. All vowel sounds are voiced, which means you can feel the vibration of your vocal cords if you touch your hand to your throat. A **consonant** is a sound made by moving part of the mouth to touch another, such as the lips, tongue, or teeth. Consonants can be voiced (e.g., *m*, *g*) or unvoiced (e.g., *s*, *p*). Knowing the basic idea of vowels and consonants makes learning about syllables much easier.

Syllable Types

Remember, there are six types of syllables: closed, open, vowel-consonant-e, vowel team, r-controlled, and final stable. As you teach each type, it helps to have a clear explanation prepared in advance. It can also help to point out the various features of each syllable type. Here's a quick review of each type:

Closed: This is a syllable in which a single vowel is followed by a consonant (*mad*, *submit*). The vowel sound is short.

Open: This is a syllable ending with a single vowel (*hi*, *veto*). The vowel sound is long.

V-C-e:	This is a syllable with a vowel-consonant-silent e pattern (*late*, rep*tile*). The vowel sound is usually long.
Vowel team:	This is a syllable containing two or more letters that together make one vowel sound. The vowel sound can be long, short, or a diphthong (*maintain, headcount*).
R-controlled:	This is a syllable in which the vowel is followed by the single letter r (*torn, marker*). The vowel sound is neither long or short.
Final stable:	This is an ending syllable that has a consonant plus -le (*apple*, *table*) or a non-phonetic but reliable unit (*-sion*, *-tion*, *-ture*, *-cious*).

Students should be taught to recognize syllable types so that they know how to pronounce the vowel in the syllable. The most important syllable types to practice are closed, open, and final stable.

Open and closed syllables make up almost 75% of syllables in English Words (Stanback, 1992), so we should spend time teaching these first. Initial instruction in decoding usually begins with reading words with a consonant-vowel-consonant, or CVC pattern, such as *had*, *pet*, and *run*, along with short words, such as *go*, *we*, and *I*. Most students will have learned to read these words long before learning that they represent closed and open syllables.

One of the simplest and most memorable ways to introduce the concept is to compare closed and open syllables through a demonstration. Write an open-syllable word on one side of a card, and then fold the card to allow you to add an ending consonant when you "close" the syllable. The point to make clear in this demonstration is that open syllables have long vowel sounds, and closed syllables have short vowel sounds.
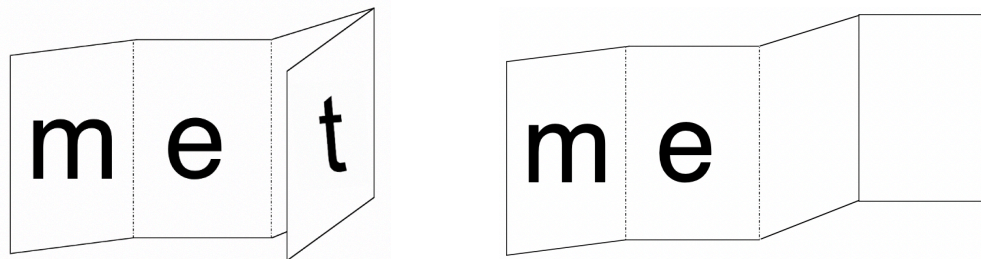
Another explanation that some students find helpful is thinking of open and closed syllables like sandwiches. The consonants are the bread and the vowels are the meat. If you take a piece of bread (a consonant) off, it becomes an open-faced sandwich.

Once students know these two most common syllable types, you can introduce multisyllabic words that include one or both types, such as *napkin*, *veto*, or *donut*. This is a great introduction to the concept of multisyllabic words and how knowing the syllable type helps us know how to pronounce the vowel sound.

Final stable syllables are important to practice because they are also quite common and most of them do not follow simple decoding rules. For example, learning that *-tion* and *-sion* are pronounced /shən/ will aid in the pronunciation of an enormous number of multisyllabic words.

The other syllable types—*vowel-consonant-e, vowel team, r-controlled*—are much less common in multisyllabic words. They are also all letter patterns that children tend to learn well during instruction in single-syllable words. Therefore, minimal practice, if any, is necessary for most students to learn to read words with these syllable types.

Syllable Division

Once students are familiar with at least a couple of syllable types, you can begin teaching them syllable division patterns and the process for marking and dividing syllables.
To mark syllables for division, there are several steps to follow:

1. Find the vowels, mark the vowels with a 'v', and draw a "bridge" between them.
2. Find all the consonants between the vowels, mark each consonant with a 'c'.
3. Ask the student to identify how many syllables are in the word.
4. Look for blends and digraphs—digraphs will always act as a unit and stay together, while blends may or may not.
5. Look at the pattern and divide the word.
6. Identify each syllable type to determine how to pronounce it.
7. Blend each syllable and read the whole word.
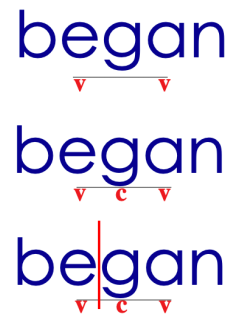
It can really help to know the most common syllable patterns and how to divide them.

- The **VCCV** pattern is usually divided between the two consonants (*submit*); however, be careful to check for digraphs and don't split them (*freshen*).
- For the **VCV** pattern, first try splitting the syllables after the first vowel, as in o-pen. If that doesn't work, try splitting it after the consonant, as in cab-in.
- You'll usually see the **VCCCCV** pattern in a compound word (*rainbow*), so look for the division between words, but also watch for three-letter blends in the second syllable (*instruct, handspring*).
- Most words with two vowels together are vowel team syllables, where only one vowel sound is produced (*boat*). But there are a few words in which a **VV** pattern is split between the vowels (*diet, poem, lion*).

A simple way to remember the steps for breaking apart multisyllabic words is the BEST strategy (O'Connor, p. 99).

B - Break the word apart
E - Examine each part (or base word)
S - Say each part
T - Try the whole thing in context

It's also helpful for students to have a back-up strategy for when a multisyllabic word stumps them. One helpful back-up strategy is to pronounce all the vowels as schwa sounds. Often, this will spark recognition of a familiar word. For example, if I read the word *complicate* as "cəm-plə-kət," that all-schwa pronunciation will probably trigger my recognition of the actual word. Of course, this only works if the word is part of my oral vocabulary.

It also helps to have the mental flexibility to recognize approximations of the correct pronunciation that come from mispronouncing the vowel sound. For example, if I read "breek-fast," that may be close enough to the real word for me to recognize it as *breakfast.* Some students have greater flexibility than others. This is the student's **set for variability**. Students with a strong set have much less difficulty translating their attempts at decoding into the correct pronunciations, especially with irregular words (Steacy et al., 2019).

Finally, knowing how to shift the stress from one syllable to another will help your students find the right pronunciation. For example, when decoding the word *opponent*, a student might first say OPP-ə-nənt. It's important to realize that, at some point, we've probably heard most words we read. If a word sounds completely unfamiliar, it's likely that our pronunciation is off. Trying to stress other syllables can often lead us to the correct pronunciation.

Teaching Morphemes

Now let's think about how we can help students increase their knowledge of morphemes and use that knowledge to be more successful reading, spelling, and understanding big words. Instruction about morphemes is often accompanied by instruction in etymology, or word origins.

In reading instruction, **morphemic analysis** includes the study of affixes, root words, and compound words. This includes **structural analysis**, or dividing a word into parts (prefixes, suffixes, and root words) and examining the parts to determine word meaning. It also includes learning **spelling patterns** related to the addition of affixes.

As you are planning for instruction about morphemes, it helps to think about which morphemes are worth teaching. We've also developed a **list of morphemes** that are worth teaching because they occur frequently in English words (Lane, Gutlohn, & van Dijk, 2019).

Affixes

Some of the easiest morphemes to learn are affixes. They're easy because they occur frequently, and they are consistent across words. You can start teaching some affixes from the very beginning of reading instruction. For example, soon after a child learns to decode the word *cat*, you can introduce the concept of the plural suffix so they can also read *cats*. The other inflectional suffixes can be taught early on, as well. If a child can read the word *fast*, the words *faster* and *fastest* should be fairly easy to learn. Even with some of these simple affixes,

children need to learn about variation in spelling and pronunciation. Soon after they learn the *s* in *cats*, pronounced as /s/, you'll want to teach that the *s* can also be pronounced /z/, as in *dogs* or *cabs*.

The past tense "E-D" is also a little more challenging. First, the "E-D" can be pronounced in three different ways: /t/ as in *stopped* or *looked*, /d/ as in *learned* or *smiled*, and /əd/ as in *needed* or *wanted*. What determines the pronunciation is the sound of the letter that precedes the "E-D" in the word. If the preceding sound is unvoiced, such as /p/, /k/, or /sh/, the sound for "E-D" is the unvoiced /t/. If the preceding sound is voiced, such as /b/, /g/, /l/, or /v/, the sound for "E-D" is the voiced /d/. If the preceding sound is either /t/ or /d/, the sound for "E-D" is /əd/.

Some derivational suffixes are also easy for most students, including for example, *-er* as in *teacher*, *ness* as in *sadness*, *ment* as in *excitement*. Others may be a little tricker because the letter-sound correspondences are more challenging because they are unstressed syllables with a schwa sound, such the various spellings of /shən/, /əj/ as in damage, or /əbl/ as in edible. Some inflectional endings are challenging in some words, especially when they require a spelling change, such as changing a Y to I to add an *-es*, *-er*, or *-est*.

Most prefixes are also fairly easy for students to learn. Soon after a child learns to read *play*, the word *replay* can be introduced. The same goes for words like *undo* or *prepay*. Here are some steps to introducing prefixes:
1. Review the spelling, pronunciation, and meaning of the prefix.
2. Model adding the prefix to familiar base words and guide the student in determining the new word's meaning.
3. Divide the prefix from the base word with a slash.
4. Model blending each part of the word and then blending both parts to make the whole word.
5. Review the meaning of the new word.
6. Explain that the letters that form the prefix don't always form a prefix (e.g., the "un" in *uncle* or the "re" in *rest*).
7. Provide examples and non-examples.

Roots

By sometime in third grade, most students are ready to learn some Latin and Greek roots used frequently in social studies, math, and science texts. Learning these roots can help students with decoding, spelling, and understanding meanings of big words.

About 55% of English words have a Latin root, and these are usually multisyllabic. Most have at least one prefix or suffix added. Once students know several affixes, learning Latin roots to combine them with can lead to a vocabulary explosion. For example, beginning with the root "port," which means "carry," you can demonstrate how adding prefixes and suffixes, and even

combining roots, creates many different words, such as *import, export, report, transportation, teleportation, important, insupportable, passport, porter, portable, portfolio,* and *portmanteau*.

Usually, at least two Greek roots are combined to make up an English word. Words made of Greek roots are less phonetically regular and not as easy to read as Latin. Many of these words also use less common phoneme-grapheme correspondences, such as the P-H or G-H for the /f/ sound, as in *photograph*, or the C-H pronounced as /k/, as in *chemist*. Determining syllable stress can also be tricky. Greek roots typically carry equal stress, such as in *microscope* or *autograph*, but there are many exceptions, such as *biography* and *zoology*.

You can guide your students in breaking down each of these words into its component parts to determine what the word means. Doing this allows students to internalize the parts, so that when they encounter them combined in new ways, they'll be able to decode the word and figure out its meaning.

One activity to support this is making a **Morpheme Tree**, with the root word on the root of the tree, words with one affix on the close branches, and variations with multiple affixes on the outer branches. Another activity that supports awareness of morphemes and how they can be combined is a **Morpheme Matrix**. A matrix provides possible prefixes, roots, and suffixes to be combined.

Decoding Morphemes

When planning instruction, it may also be worth noting the phonic elements that commonly occur in high-frequency morphemes:

o High-frequency prefixes include many short vowels in closed syllables (e.g., ad-, com-), long vowels at the end of open syllables (e.g., pre-, pro-), and r-controlled vowels (e.g., per-).
o High-frequency derivational suffixes also include short vowels (e.g., -ic, -est), r-controlled vowels (e.g., -er, -or), vowel consonant-e patterns (e.g., -ate, -ize), and morphemes with stable but irregular spellings (e.g., -ive, -tion).
o Latin roots tend to include many short vowels (e.g., fac, vid, rupt) and r-controlled vowels (e.g., port, vert).
o Greek roots contain many short vowels (e.g., log, gram), long vowels at the end of open syllables (e.g., micro, bio), and spelling patterns unique to Greek (e.g., ph pronounced /f/ as in graph or phon, y pronounced /i/ as in syn or phys, ch pronounced /k/ as in chem).
o Finally, Anglo-Saxon roots tend to frequently contain vowel digraphs and diphthongs.

Morpheme Spelling Rules

Knowing some of the common spelling rules associated with combining morphemes is also helpful. For example, there are reliable rules for combining some of the more challenging prefixes ending with the letter *n* with various other morphemes. When combining with a

morpheme that starts with the letters *b, m*, or *p*, the *n* is changed to *m* (e.g., *con- + ply* becomes *comply, in- + possible* becomes *impossible*).

Similarly, the *n* is changed to *l* when combining with a morpheme beginning in *l* (e.g., *in- + legal* becomes *illegal, con- + lect* becomes *collect*) and to *r* when combining with a morpheme beginning in *r* (e.g., *in- + regular* becomes *irregular, con- + rect* becomes *correct*). Instruction or review with these phonic elements and spelling rules could be paired with instruction in the specific types of morphemes to promote decoding and spelling skills while building vocabulary.

Some common prefixes are especially tricky because their spellings change based on what word they're affixed to. For example, the prefix *con-*, which means "*with*," can be spelled as *co-, col-, com-*, or *cor-*, as in *condense, cohesive, collect, complicate*, and *correspond*. It's best to focus on one spelling at a time when teaching this prefix, but it helps to connect each variation to the ones previously taught.

The prefix *in-* can have multiple spellings AND multiple meanings. It can be spelling in-, il-, im-, or ir-, and it can mean "*in*" or "*toward,*" or it can mean "*not,*" depending on what root it's combined with. For a prefix like this one, be sure to separate the meanings *and* spellings for instruction.

Affixes that are added to words as unstressed syllables are more challenging. For example, suffixes such as the various spelling of /shən / (-tion, -sion) and /əbl/, as in edible, have graphemes that do not map to their most common sound. This makes both reading and spelling those words more difficult. Inflectional endings can be challenging in some words when they require a spelling change, such as changing a Y to I to add an *-es, -er*, or *-est*.

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