FOR-PD’s Reading Strategy of the Month

**Structural Analysis**

June/July 2007

(Developed by Zygouris-Coe, V. & Smith, L., 2007)

**Rationale:**

With an estimated 993,412 words in the English language, it would be easy for any reader to say, “so many words, yet so little time.” And while many may declare the estimate of a mere 993,412 as just a fraction of words in the English language, most can agree that the English language definitely has a wide variety of words.

There are old words like “book”, these have been around for years, and new words like “mouse potato”, a person who spends a great deal of time using a computer. There are words that have had additional meanings derived like “wallpaper”, the background that you can have on the desktop of your computer. There are words we rarely ever hear anymore like “boanthropy”, a type of insanity in which a person believes themselves to be an ox, probably has not been used since those days when oxen were used for farming. There are words that are short and easy to grasp such as *I, a, and an*. And then there are words that are long, and quite involved like “antidisestablishmentarianism.”

When encountering a word such as “antidisestablishmentarianism,” it can be quite daunting, even for an avid reader. Even if a contextual sentence is provided, such as the sentence, “Many of England’s countrymen were taken aback by the creation of antidisestablishmentarianism during the 19th century”; it would still be difficult to describe the meaning of this long and thought provoking word. Often, many seek out a dictionary to assist with identifying, defining, and pronouncing this word. Yet, there may be another way, a better way, which infuses the use of word parts with critical thinking. And that way is structural analysis.

“Instruction in structural analysis looks at visual patterns and meanings that change as a result of adding inflectional endings, prefixes, and suffixes, and combining the root words to form compounds” (Heilman, Blair, & Rupley, 1998, 148). Assisting students in practicing in structural analysis will provide them with a way to not only pronounce and identify a word, but also to unlock the meaning by considering the word parts used in the structure of the word.

Structural analysis activities help students learn how to use what they already understand about words and word parts so that they can add it into their arsenal of word attack tools (Allen, 1999). Even the creation of nonsense words, using a variety of affixes, base words, and root words can support in their word knowledge. *Put Reading First* (2001) authors Ambruster, Lehr, and Osborn stated that “knowing some common prefixes and suffixes (affixes), base words, and root words can help students learn the meanings of many new words” and that “if students learn just the four most common prefixes in English (un-, re-, in-, dis-), they will have important clues about the meaning of about two thirds of all English words that have prefixes” (p. 38).

While one may hope words like “antidisestablishmentarianism” are not too abundant in our students’ texts and that context and the development of background knowledge will be provided to students, we must still arm our students with the ability to grasp this word even if a dictionary or teacher is not nearby. Structural analysis provides students with a scaffold to use on their own, when they may not have an understanding of a word as a whole, but can use analysis and their understanding of word parts to find the meaning.

**How to Use the Strategy:**

Before beginning, teachers must review, for themselves and their students, the word parts utilized in instructional analysis. Word parts include affixes (prefixes and suffixes), base words, and word roots and are described using the following definitions (Ambruster, Lehr, & Osborn, 2001, p39):

- **Affixes** are word parts that are “fixed to” either the beginnings of words (prefixes) or the ending of words (suffixes).
The word disrespectful has two affixes, a prefix (dis-) and a suffix (-ful).

- **Base words** are words from which many other words are formed. For example, many words can be formed from the base word migrate: migration, migrant, immigration, immigrant, migrating, migratory.
- **Word roots** are the words from other languages that are the origin of many English words. About 60% of all English words have Latin or Greek origins.

When working with affixes, teachers should be aware that prefixes are often easier to learn than suffixes because they have a clearer meaning. Suffixes can be challenging because some suffixes are more abstract. An example of this is the suffix __–ize__, meaning “to make”. While knowing the suffix is helpful, it still may not assist a student enough to determine the meaning of the word __rationalize__, especially if the context is unclear or if they do not know the base word, __rationale__ (Heilman, Blair, & Rupley, 1998; Ambruster, Lehr, & Osborn, 2001). Making sure students come into contact with many root and base words, along with building the background knowledge, will assist students with structural analysis and word attack skills (Heilman, Blair, & Rupley, 1998; Freeman & Freeman, 2004). Also, it is important to observe that when a word is derived, using instructional analysis, it may have a slightly different meaning than when used in a particular context.

**Activities**

There are a variety of activities used to assist students with practicing structural analysis. Before you begin, you’ll want to find a good list of prefixes, suffixes, and common root words with their meanings, that are appropriate to your students’ reading levels. You may want to consider the following websites.

### Prefixes, Suffixes, and Root Word Online Resources

<table>
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<tr>
<th>Prefixes, Suffixes, and Root Word Online Resources</th>
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| **Word Roots and Prefixes**  
http://www.virtualsalt.com/roots.htm |
| **Scientific Prefixes & Suffixes**  
http://sps.k12.ar.us/massengale/prefix__suffix_list.htm |
| **Vocabulary Workshop**  
http://www.southampton.liu.edu/academic/pau/course/webesl.htm |
| **Suffixes**  
http://www.msu.edu/~defores1/gre/sufx/gre_suffx_tab_prn.htm |

Teaching a few affixes weekly that are related to your curriculum, while demonstrating how other words can be derived, can be beneficial in assisting students to focus on words they may come in contact with in other classes and texts. While explicitly teaching students roots, affixes, and base words, along with strategies, make time to have students read and apply the strategies to authentic text.

**Structural Analysis Circles**

Structural Analysis Circles are an adaptation of the Morpheme Circle activity (Harmon, Wood, & Hedrick, 2006).

- Consider the words that need to be taught for a unit, a theme, or a piece of text.
- Identify any terms that have a similar prefix, suffix, or root word.
- Develop a structural analysis circle by writing the target affix or root word in one quadrant.
- Have students write a word with a similar affix or root in the remaining boxes and then describe how the words are related.

See the example and activity sheet below.
Word Builder

Use the **Word Builder** (*Florida Online Reading Professional Development, 2004*) strategy in a way that will support a robust vocabulary. Take a root word and determine how many other words can be made by adding suffixes and prefixes—model explicitly and provide practice and support; show students how they can problem-solve with words using this strategy. An example might be done with the word "salty." You can add different suffixes and prefixes and change the word into *unsalty, ultrasalty,* and *saltless.* Remember to take time to discuss the meaning with your students.

See the example and activity sheet below.

Suffix Brainstorm

Write a suffix on the board and have students generate as many words as they can from the word based on the words they have studied. Students should be able to give the meaning of the word parts, the meaning of the word, and how it relates to a topic or theme. Make sure that students go beyond the literal meaning and explain the function of the word within the context.

**Science Example: Study of Matter**

*Suffix: -ility*
Assessment

When assessing students’ knowledge and understanding of structural analysis, teachers may want to use a cloze or maze procedure. Focusing on 4-6 affixes at a time would be best. An example method may include the following:

**Prefixes:** in-, dis-, re-

**Suffixes:** -ment, -able, -ness

Complete the cloze by filling in the blank with the best choice, using one of the prefixes or suffixes we studied this week.

1. I ___pute the way I was challenged.
2. I feel un______ to complete my meal.
3. He showed much kind_____ to my dog.

Still wondering about the meaning of antidisestablishmentarianism?

Using structural analysis you should be able to break the word down into its many prefixes and suffixes.

anti - prefix for opposition

dis - prefix for negative

establish - root meaning to introduce and put into force

ment - suffix that change a verb into a noun

ary - suffix that add a sense of belonging

anism - suffix that generalizes the concept of the root

Within a context, this word means an opposition to the withdrawal of state support or recognition from an established church, specifically the Anglican Church in 19th-
Resources:

Understanding Structural Patterns of Words Improves Reading
http://www.readskill.com/Resources/TipsForTeachers/TipsStructural.htm
Structural patterns of words have common roots, affixes, divide words, and decode accurately. This strategy is helpful to use with struggling readers as well as all other students.

Putting Research to Work: Strategies for Structural Analysis
Strategies are outlined to use classroom implementation of structural analysis.

Phonics and Structural Analysis
Structural analysis is a great strategy to use in word skill instruction to become familiar with word parts and determining the meaning of unfamiliar words.

Strategies and Techniques
http://www.bankstreet.edu/literacyguide/tech.html
Structural analysis is included in this outline of strategies and techniques that can be implemented in the classroom. This strategy helps increase awareness of the structure and parts of words to conclude meaning.

References:


