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Vocabulary Intervention Strategies

USE VOCABULARY MAPPING TO ACQUIRE NEW VOCABULARY ■

Vocabulary mapping is a familiar strategy for many educators at all grade levels. I'm a firm believer in mapping strategies, and there is an abundance of research to support mind mapping and graphic organizers. The typical vocabulary map has students write a definition, synonym, and sentence as well as draw a picture.

I've varied the strategy slightly to incorporate humor with the "silly sentence" because the brain remembers humor. I have also incorporated stem words with the definition. When students learn the stem or root meaning of words, they are more apt to expand that understanding to new vocabulary. My goal when creating a lesson plan is to layer as many strategies as possible in the same block of time to reach students with a variety of learning styles in the shortest amount of time. For example, rather than spend 15 minutes on a lesson using the auditory mode of delivery, I'd prefer to use multiple modes of delivery in that same 15 minutes to deliver the equivalent amount of instruction. Again, time constraints at the secondary level must be considered when implementing RTI.

Research Background

David W. Moore and John E. Readence suggest that gains in vocabulary knowledge following graphic organizer use may be even greater than gains in comprehension. The average effect size for the 23 studies reviewed was more

than twice as large as that reported for comprehension, indicating that graphic organizers are a very effective tool for improving vocabulary knowledge (Moore & Readence, 1984).

Learning Objectives

- To acquire new vocabulary
- To connect that vocabulary to themes and categories
- To use appropriate questioning to gather information

Addresses These Nonresponder Indicators

- The student has Attention Deficit Disorder or an auditory learning deficit.
- The student has difficulty connecting new information with previously learned knowledge.
- The student has difficulty processing information in a way that is meaningful to him or her.
- The student has difficulty recoding incoming information into meaningful information.
- The student has reading comprehension difficulties in which vocabulary affects understanding and fluency.
- The student struggles to effectively use words to express organized and complete thoughts in writing.
- The student's word usage skills are below standard.

Materials Needed

- Markers
- Paper
- Ruler (optional)

Approximate Time Frame for Completion

This lesson plan may take more than one class period, depending on class length.

- Whole group introduction: 5 minutes
- Whole group minilessons: 10 to 15 minutes
- Small group practice: 10 to 15 minutes (variable depending on article length and student participation)
- Independent practice with peer feedback: 10 to 15 minutes

Intervention Procedure and Scripts

Tier One: Whole Group

Explain to students that vocabulary words have a point value determined by the number of syllables in the word. They may use a thesaurus. Each syllable

is worth one point. For example, the word *great* is worth 1 point, *immense* is worth 2 points, and *enormous* 3 points. The student groups or teams will earn grades based on the total number of points they receive for their words, as follows:

- 30 points = C
- 40 points = B
- 60 points = A

Tier One: Whole Group

1. Draw a large circle on the board, and write the theme topic in the center of the circle.
2. Have students brainstorm a list of words that come to mind for that theme.
3. One student records the words in the circle on the board.
4. Assign students to pairs. Use the High with Middle, Middle with Low method of choosing pairs (see Figure 2.5 on page 18).
5. Explain to the students that they are going to work with a partner to become an expert on one of the words.
6. Give each student a Vocabulary Word Map (see Figure 3.1 on page 28), and draw one on the board. Choose a word from the board, and complete a vocabulary word map with the class to demonstrate how to complete one properly.
7. Ask one person from each group to share a word map with the class and then post the word map on the board. Students can use them during their writing if they need help with a word.

Tier Two: Small Group (May Also Be Used at Tier One)

1. Put students in groups of two or three, leveled appropriately.
2. Provide each group with a thesaurus and a dictionary.
3. Assign each group one word appropriate to the pair or group's ability level from the lists the class brainstormed.
4. Have students work together to complete their word maps. Each person in the group will complete a word map.

Tier Three: One on One

Students work with a specialist or one on one with the teacher to master the skill.

To Differentiate

- Differentiate by readiness and interest
- Include technology tools such as Inspiration Software, FreeMind, or Compendium

Assessment

Rubric: Creating Vocabulary Word Maps

Criteria	1	2	3	4
Practice	Makes no attempt to complete the vocabulary word map.	Correctly completes three steps.	Correctly completes four steps.	Correctly completes all five steps: <ul style="list-style-type: none"> Writes word in center box. Records synonyms or a definition. Records antonyms. Creates an original sentence using the word. Draws a picture representing the word.
Gives enough details and/or creativity in sentence	Uses sentences of less than 4 words, lack details or creativity.	Uses an adjective.	Uses an adjective and an adverb.	Uses adjectives, adverbs, and/or metaphors to create memory cue.
Gives enough details in picture	Uses almost no details or creativity.	Gives some details or creativity.	Uses creative imagery and shows thought.	Is very creative and shows thought behind imagery.
Acquisition (vocabulary assessment)	Scores below 70%.	Scores 70% or above.	Scores 80% or above.	Scores 90% or above.

Across the Curriculum

Teachers in social studies, science, and math can use this approach. Students can use vocabulary word maps to learn vocabulary related to new themes and to show connections within themes.

■ SIGNING AS AN INTERVENTION STRATEGY

Research has shown signing vocabulary to be an effective learning tool. It is novel and will be a new concept for almost everyone who reads this book. Consequently, no reader should find this lesson plan boring. Does one have to know American Sign Language (ASL) in order to use this strategy? No. Might the reader have students learn to fingerspell? Yes. This is an option that most intervention specialists never consider using at any level, much less the secondary level. Yet research backs up its significant potential to support reading, literacy, and spelling.

My first experience with using sign language was when I was asked to teach my differentiated instruction strategy seminar at a school for the deaf. I hired a Deaf Education teacher as a consultant to not only attend my seminar and give me critical feedback as to what applied, but also to help me understand the culture and learning methodology of the deaf community. She taught me the seven continents in ASL. We discussed the value of using sign language with hearing children who are also kinesthetic learners. It simply made sense to me and it worked. Yet I had no research to back up use of the strategy in the classroom.

Shortly thereafter, a middle school Language Arts teacher shared with me how she used finger spelling to help students learn their vocabulary words. She found that they not only learned the vocabulary, but spelled the words correctly as well. She and her team were highly enthusiastic about signing vocabulary because it had been such a success.

While researching whether there was data to support the use of sign language and finger spelling, I came across the work of Dr. Philip Prinz and Dr. Marilyn Daniels (Prinz & Strong, 1995, 1997; Daniels, 2001). Dr. Daniels has used sign language with older students. She has a chapter in her book devoted to that demographic.

Research Background

Sign language helps students learn vocabulary and improve their spelling skills. Utilizing sign language in the classroom allows students to process spelling from their orthographic processors and their autonomous memories, creating more internal repetition to help them learn more. Incorporating sign language into a lesson will help students master vocabulary concepts faster, which ultimately improves overall literacy and comprehension (Daniels, 2001).

In a recent study conducted by Dr. Philip M. Prinz, hearing children of deaf parents and hearing children of hearing parents were studied to assess literacy development during early childhood. This study determined that hearing children of deaf parents performed higher and were better early readers than hearing children of hearing parents (Peterson, 2007). Could incorporating a teaching model that utilizes sign language to enhance vocabulary instruction on a particular subject help students internalize more content?

Dr. Marilyn Daniels studies the connection between sign language and literacy. She states, "If sign language constitutes a portion of the reading instruction, the signs actually function as built in pictures for amplifying text" (Daniels, 2001, p. 23). She goes on to explain that "ASL is able to aid children's memory with its autonomous memory store by creating a built in redundancy that establishes two independent language sources for children to use for search and recall" (Daniels, 2001).

In addition to supporting literacy development, using sign language improves spelling. "Studies show that a child's memory of the spelling sequence of words is dramatically improved when he or she is taught spelling with this method [finger spelling]" (Daniels, 2001, p. 22). The reading success of a student relies heavily on spelling ability because learning about spelling

- elaborates and reinforces knowledge in the areas of the brain responsible for text comprehension;

- enhances reading proficiency; and
- allows visual recognition of text to connect with knowledge in the areas of the brain responsible for auditory vocabulary recognition.

"This brain activity strengthens children's ability not just to induce spellings, but to hear and pronounce words correctly in their oral cavities" (Daniels, 2001, p. 22).

Learning Objectives

- To form a connection between two language stores in the brain to enhance search and recall of vocabulary and word meaning
- To use finger spelling to increase spelling accuracy, which improves auditory processing of auditory language
- To provide students with visual and kinesthetic pictures to enhance reading comprehension

Addresses These Nonresponder Indicators

- The student has difficulty connecting new information with previously learned knowledge.
- The student has difficulty linking prior knowledge with new information.
- The student has language difficulties.
- The student's verbal acquisition is limited.
- The student has the necessary skills but lacks the motivation to complete the academic task (*performance or motivation deficit*).
- The student lacks the necessary skills to perform the academic task (*skill deficit*).
- The student struggles to effectively use words to express organized and complete thoughts in writing.
- The student's word usage skills are below standard.

Caveat: Teachers do not need to be fluent in sign language to use it with students. Rather, they need to be willing to learn signing along with their students.

Materials Needed

- Copy of vocabulary and spelling words from a relevant unit in your course of study
- Dictionary and thesaurus
- American Sign Language Alphabet Chart (see Figure 3.3 on page 34)
- Pictures that support vocabulary and spelling words
- A source relevant to your course of study: book and movie
- Graphic organizer: Vocabulary Word Map (Figure 3.1)

The book chosen is to illustrate the concept; you can substitute your own book or use your own vocabulary words as needed.

Approximate Time Frame for Completion

This lesson plan may take more than one class period, depending on class length.

- Whole group strategy (three activities): 30 to 40 minutes
- Small group practice: 10 to 15 minutes (variable, depending on article length and student participation)
- Partner work: 10 to 15 minutes (variable, depending on article length and student understanding)
- Independent practice/peer English language learner, limited English proficiency, etc.: 10 to 15 minutes (variable, depending on student understanding)
- Extension learning: Time is variable

Intervention Procedure and Scripts

Tier One: Whole Group

1. Introduce a book appropriate to your course of study to your students.
 - a. Guide a brief discussion about the book genre and potential topic.
 - b. Ask students to predict content based on the cover image, title, and back matter copy.
2. Write three vocabulary words from the book on the board. Explain that these are words from the book (example: futile, ideology, nostalgia).
3. Introduce students to the words listed on the board. Read the words aloud with proper enunciation and intonation.
4. Read aloud an excerpt from the book that contains the vocabulary words.
 - a. Ask students to use context clues to determine the meaning of the words.
 - b. Discuss the potential meaning of each word.
 - c. As a class, determine the accurate definition.
 - d. Visually demonstrate the word. For example, use the word in a sentence and act it out, or show a picture of the word or the word in action.
 - e. Using the Vocabulary Word Map graphic organizer, start demonstrating how to "map" out the word by filling in the word, adding the sentence and definition to the chart, and drawing the picture.
5. Fingerspell the word and/or sign the word with ASL three times, then whisper the definition.

Tier One: Pair Work

1. Explain to the students that they are going to work with a partner until each becomes an expert about the new vocabulary words.
2. Assign students to pairs: Use the High with Middle, Middle with Low method of choosing pairs (see Figure 2.5 on page 18).
3. Give each group the ASL Alphabet Chart (Figure 3.3 on page 34) and five vocabulary words chosen from a relevant source such as the text from your course of study, a list of sight words, or vocabulary critical to successful test taking.
4. Explain to the students that they will take turns stating the word, drawing a picture representing it, and signing the word.
 - a. One student will sign the word while his or her partner says or guesses the word.
 - b. Repeat this process for each word, with each student taking both roles.
5. Have students complete the Vocabulary Word Map (Figure 3.1) together for each word.

Time-saving tip: If you can gain access to the Gauldet font and provide students with the five words list typed in both Century Gothic font and Gauldet font, it will save students from looking up the letters in the chart. This step is not critical; however, it may be helpful depending on your students' ability level.

Figure 3.1 Vocabulary Word Map

Root/Stem and Definition	Antonym
Silly Sentence	Visual Representation

- a. Review how to complete the five sections of the Vocabulary Word Map if necessary. There are many variations of this chart in educational literature and equally varied ways to present it. The specific example shown in this text is one of those variations and not specifically required for this sample lesson plan.
 - b. Ensure that students have colored writing utensils to highlight or color-code their map.
6. Once the Vocabulary Word Map is complete, have students find two more words that they do not recognize or know from a relevant text and repeat the above steps using those words.
 7. Have one person from each group share one word they found with the class and then post their Vocabulary Word Map for that word on the board so that the students can use it during their writing.
 8. After each group has shared its word, randomly review some with the class. For example, if a group picked the word *template*,
 - a. practice signing that word and saying as a class; and
 - b. follow up by having students quietly fingerspell words as a group.
 9. As you become skilled with finger spelling, you will quickly see who is misspelling the word. Collect data on students who are struggling with the process, and adjust interventions based on the data you collect.

Tier Two: Small Group (May Also Be Used at Tier One)

1. Assign students to pairs: Use the High with Middle, Middle with Low method of choosing pairs (see Figure 2.5 on page 18).
2. Each pair will need a thesaurus and a dictionary.
3. Assign each pair one chapter from a book or specific number of pages to read together. (You might assign words appropriate to the pair's or group's ability level.)
4. As students read the chapter aloud, they will underline or write on a separate sheet of paper words that are new to them.
5. When reading is complete, students will work together to complete their vocabulary word maps. Each person in the group will complete a vocabulary word map on at least one new word.

Tier Three: One on One

Note: The following intervention uses ASL. It's perfectly all right to learn along with your students. There are also videos available online to teach ASL. If you are concerned about whether learning ASL is not a good use of time, consider the research on Baby Sign Language in addition to the research results noted above. Learning to sign as a remediation helps students connect the sign language to the meaning of a known word. If the students are below level, it is crucial that they understand the concept of connecting the sign language to the meaning of the word first. If students are struggling to comprehend the meaning of words, they will not make the connection because of their inability to understand the word.

1. Students work with a specialist or one on one with the teacher to master the skill.
2. Start by signing sight words.
3. Introduce a sight word visually in print.
4. Sign and say the word to the student.
5. Student signs with the teacher.
6. Student signs the word without assistance.

To Differentiate

- Differentiate by readiness and interest.
- When showing videos in the classroom, turn on closed captioning. Dr. Philip M. Prinz found that hearing children of deaf parents watch television with closed captioning, which enables them to connect images to words at an early age (Peterson, 2007).
- Use the Gallaudet manual alphabet font: <http://simplythebest.net/fonts/fonts/gallaudet.html>.

English as a Second Language and English Language Learners

Depending on the student's native language, there may be many English words that have no comparable word in the learner's language. ASL provides a picture for these nonnative words in the student's mind. They make the connection between the sign and the English word (Daniels, 2001).

The purpose for using ASL with English language learner (ELL) students is to provide kinesthetic and visual associations for specific words. I do not recommend this strategy as a tool for teaching syntax.

1. Teach ASL along with English to ELL students to enhance understanding of specific vocabulary words as appropriate.
2. Start by including a physical object that represents that word that you are teaching.

Assessment

Rubric: Creating Vocabulary Word Maps

Category	1	2	3	4
Overall Practice	Makes no attempt to complete the vocabulary word maps or sign the words.	Correctly completes three sections of each of the vocabulary word maps and signs all of the words.	Correctly completes four sections of each of the vocabulary word maps and signs all of the words.	Correctly completes all five sections of each of the vocabulary word maps and signs all of the words.
Writing	Uses fragmented or incomplete sentences.	Uses an adjective in the silly sentences.	Uses an adverb and adjective in the silly sentences.	Uses adjectives, metaphors, and adverbs to generate memory cues.
Picture	Gives no detail or creativity to depict the word.	Gives some detail or creativity to depict the word.	Imagery is creative and shows thought.	Very creative; demonstrates creativity and thought.
Vocabulary and Signing	Recalls fewer than three out of seven of the words learned through sign language.	Recalls at least four out of seven of the words learned through sign language.	Recalls at least five out of seven of the words learned through sign language.	Recalls at least six out of seven of the words learned through sign language.

Across the Curriculum

Teachers in all core subjects can use this approach to help students master concept-specific vocabulary.

- Sign the relationship between historical figures (sibling, parent, child, friend, and so on).
- Incorporate sign language into mnemonic strategies for memorizing critical concepts or basic facts in every subject to internalize content-specific vocabulary.
- Create a rap or song to review instructional material and incorporate signing.
- Show a movie with closed captioning to connect verbal language with visual representation and text for visual learners.
- Teach your curriculum as usual, incorporating sign language at your own pace.

ADDITIONAL VOCABULARY INTERVENTIONS

If your school offers ASL as a language, encourage ELL/ESL students and struggling readers to take ASL instead of other foreign languages. This will help these

students increase their vocabulary and mastery of the English language, thus improving their overall literacy and comprehension skills.

■ ADDITIONAL NONLINGUISTIC INTERVENTIONS

Many students are bodily-kinesthetic learners. They learn through their bodies and they need to move. They fidget and squirm. The following ideas can help make movement into a positive learning force in your classroom. The first four tips were contributed by Fritz Bell in *Creative Classrooms* (Bell, 2005).

- Have your students act out vocabulary words with their bodies. This will give them a visual picture to remember their words.
- Have the class clap out the syllables in the names of their classmates or their vocabulary words. This is a great strategy for helping kids remember long, multisyllabic words.
- Kinesthetic alphabetizing: Put vocabulary words on individual cards and pass them out to the class. Then have them move around the room and, at a signal from you, form groups of five or less (depending on grade level and vocabulary) and line up in alphabetical order based on the words on their cards.
- Kinesthetic prepositions: Have students use an object such as a pencil and hold it *in*, *under*, *over*, *next to*, *beside*, or *above* their desks to act out prepositions.
- Have students fingerspell their vocabulary and spelling words (Koehler & Lloyd, 1986). Form pictures to connect to vocabulary for visual vocabulary review cards. Makebeliefscomix.com is a website with wonderful tools for teachers and students alike.
- Building vocabulary skills at home: Suggest to parents that they turn on the closed captioning on TV.

■ COMBINING VERBAL LINGUISTIC AND NONLINGUISTIC INTERVENTIONS: PRACTICE STRATEGIES FOR TIERS ONE, TWO, AND THREE

I'm always looking for ways to make learning motivating and fun. Vocabulary development and spelling are passions of mine that have been building for the past year. I constantly hear teachers lament that students do not remember vocabulary. Reading deficiencies, many times exacerbated by poor vocabulary development, affect test scores, both on state tests and on the SAT and ACT. Students also are developing their own vocabulary and respellings because of text messaging. Those new spellings are making their way into student class work.

So, how about a homework assignment that requires students to create a word collage of sorts? This may require that students have access to a school computer; on a site such as Wordle.net students can access tools

that will highlight the most commonly used word in a passage, and thus can visualize vocabulary in an interactive way (Figure 3.2). Wordle.net can also be used by students to check word overuse in a paragraph or essay. The most used words turn out the largest in the design. If the word *nice* is overused, it will be larger than all the other words.

A word of caution: Anyone can upload anything into the Wordle.net gallery. Some students discover very quickly that there are Wordle images that are quite entertaining from a student's standpoint, yet off limits from an educational standpoint. See if it's possible to block the gallery if using this tool in the classroom; otherwise, supervise carefully.

Figure 3.2 Wordle

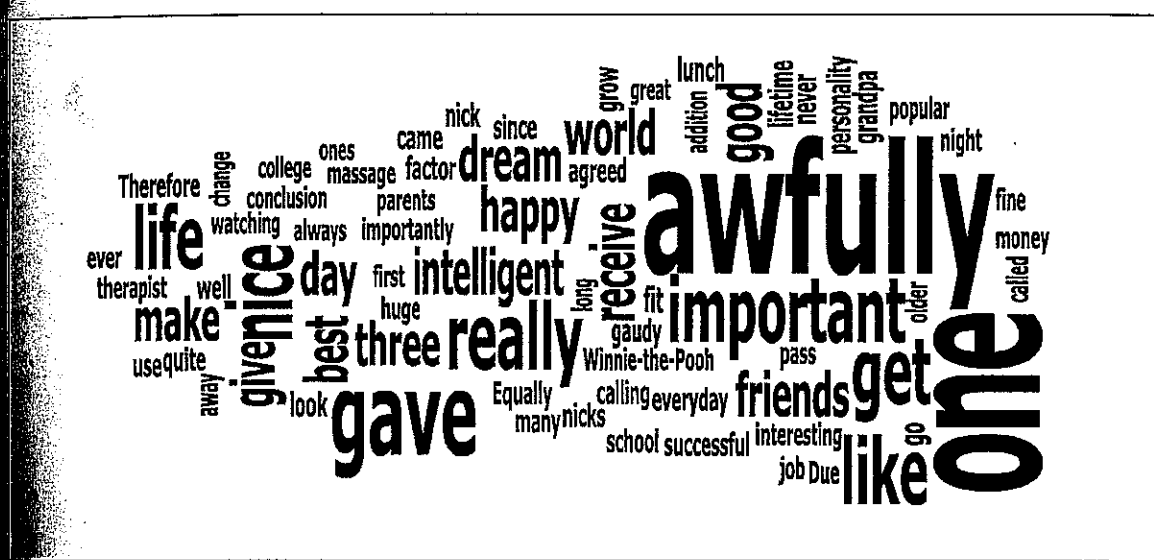


Figure 3.3 ASL Alphabet Chart

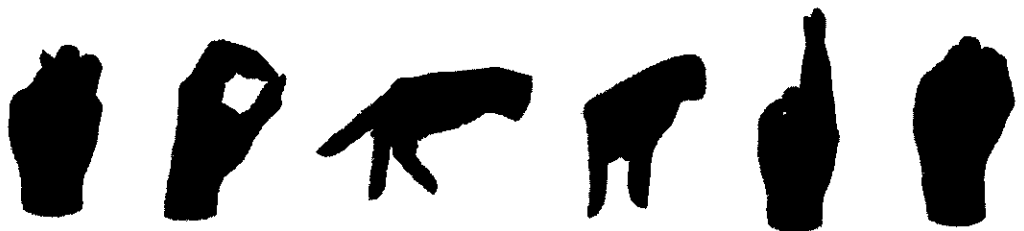
SIGN LANGUAGE



Aa Bb Cc Dd Ee Ff Gg



Hh Ii Jj Kk Ll Mm



Nn Oo Pp Qq Rr Ss



Tt Uu Vv Ww Xx Yy Zz