

## Chapter 5

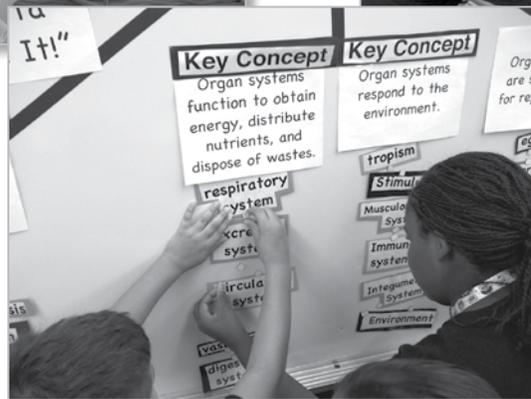
# Vocabulary: Making Meaningful Connections



Associating with  
Active Analogies



Contextualizing with  
Context Complex Clues



Associating with Academic Word Wall

The necessity for effective vocabulary instruction becomes increasingly evident in intermediate and secondary classrooms as readers engage with the specialized vocabulary presented in content area text. Secondary readers often struggle with the academic language (Marzano & Pickering, 2005) and require many opportunities for developing rich, expressive (speaking and writing), receptive (listening and reading), and technical (content area related) vocabulary. A report by the National Institute for Literacy (2007) confirms the complexity of understanding content area literacy for adolescent learners. A growing research base evinces the alignment of a rich vocabulary and a student's ability to make connections in reading. The intersection between vocabulary knowledge and comprehension is extended by presenting vocabulary as influencing comprehension and

fluency and as a consistent predictor of comprehension (Beck, McKeown, & Kucan, 2008; Blachowicz & Fisher, 2006; Nagy & Scott, 2000; NICHD, 2000; Pearson, Hiebert, & Kamil, 2007). Educators recognize that vocabulary words are at the heart of learning in content classrooms because new terms represent the concepts being taught.

Academic language may present roadblocks for adolescent readers, as “many words that seem familiar to students carry a completely different meaning when encountered in subject areas, a meaning which might be completely unrelated to what students understand in real life, disabling the usefulness of prior knowledge” (Kossack, 2007, p. 199). Integrating vocabulary instruction provides students with numerous opportunities to manipulate and extend usage of content-specific terminology. Infusing vocabulary instruction across disciplines provides multiple encounters for students to make connections to new and already known information, discuss meanings, and demonstrate appropriate applications. It is essential to encourage students to think strategically when learning new words. Vocabulary knowledge is cumulative and requires reexposures in a variety of meaningful contexts to have a profound effect on student comprehension. Educators can structure the process for students to think strategically when learning new words.

This chapter offers vocabulary strategies and techniques that support comprehensive vocabulary instruction to enhance students’ understanding of new terminology, academic vocabulary, and concepts. Students can benefit from intentional support to command the vast reading and oral vocabulary required of 21st-century learners. These strategies will provide students with powerful, in-depth learning as they strive to become successful readers. Graves (2009) articulates the importance of vocabulary: “Possessing and using a powerful vocabulary helps us better understand others, be better understood by others, and enjoy the richness of the English language” (p. 3).

To effectively use the vocabulary strategies and techniques presented in this chapter, ample time should be allotted for teacher modeling, student engagement, and scaffolding of learning. The goal is to structure instruction to support independent application and student ownership of learning.

Teachers can use the Motivation/Engagement section within many techniques as an additional means of motivating the whole learner and creating 21st-century secondary learners (refer to Chapter 1 for a description of the whole learner and to Figure 1.1 for an illustration of the composition of a 21st-century secondary learner). The Motivation/Engagement section allows for differentiation within the technique as needed to meet the needs of all learners. The section identifies and uses a multiple intelligence other than those that are highlighted in the main procedure of the technique.

Educators should use these vocabulary strategies and techniques within the planning and instructional process. However, it is essential to understand that these strategies and techniques are multifaceted and can be interchangeable within the components of lesson planning (before, during, and after instruction). The vocabulary techniques support secondary readers to sustain independence as readers and acquire the reading strategies.

The following are the strategies and techniques in this chapter:

- Associating: Active Analogies, Word-Net Wheel, Semantic Feature Analysis, Fusion, Academic Word Wall
- Contextualizing: Content Multiple Meaning, Inferring Word Meaning, Context Complex Clues, Inquisitive Stance
- Visualizing: Four Corners, Sensory Scenery, Mind's Eye, Mind Maps
- Personalizing: Knowledge Rating, Genre Jive, Word Tech
- Referencing: Start Your Engines, Resource Course, Defining Moment

## Vocabulary Strategy: Associating



Word associating allows the reader to form a *word-net framework* to make *connections* and determine *word relationships*. Understanding this network of words expands the reader's ability to analyze and *synthesize* the text information being read: "The students who can associate the words with each other can expand their vocabulary and choose the right word for the right context" (Istifci, 2010, p. 364). When readers use *analogies* and make associations among words, it influences the learning of word meaning. A reader processes in a "*linguistic* form that includes print and meaning and nonlinguistic form that includes visual and sensory images" (Bromley, 2007, p. 531; emphasis added). This strategy supports the reader's ability to increase the semantic value of their word-fabric internal system, creating a tapestry of meaning to every verbal and nonverbal means of communication. It is vital that secondary readers continuously sew words together to bring meaning to the content they are reading.

When making associations among words, readers begin to create categories to organize new concepts and experiences in relation to prior knowledge. Readers are supported by applying a variety of graphic word organizers as visual representations of the identified relationships: "The limits of the learner's cognitive capacity should be addressed in the design of graphic organizers" (Stull & Mayer, 2007, p. 818). Associating allows students to internalize the patterns under study and begin to *categorize*, make connections, and promote cognitive word knowledge (Ellery, 2009; Miller & Eilam, 2008; Strickland et al., 2002).

### Key Vocabulary for Associating

- Analogy: a comparison; standardization of linguistic forms
- Categorize: to use higher order thinking to organize words by essential attributes, qualities, and characteristics of the words' meanings
- Connection: a link between words, based on prior knowledge, to broaden word meaning

- Linguistic: related to the study of natural language; incorporates the structure of grammar
- Synthesize: to fuse, create, and produce meaning by combining understanding of words
- Word Relationships: connections among words; can be based on their similarities, differences, or other characteristics
- Word-Net Framework: an interconnected word meaning system



## *Assessment for Associating*

Use the following behaviors as a guide as you assess students' abilities to associate. Do students exhibit these behaviors never, rarely, often, or always?

- Determines how words relate and connects ideas to form the meanings of words
- Generates analogies to extend content knowledge
- Chooses and categorizes words by specific features

## *Teacher Talk: Statements, Questions, and Prompts for Associating*

The following are suggestions for teacher talk that encourages readers to think strategically as they employ the associating strategy. Try using some of these statements, questions, and prompts with your students as you work through the techniques in the following section. They are aligned with Bloom's taxonomy and Webb's DOK levels.

<b>Level of Thinking</b>	<b>Teacher Talk</b>
Creating Extended Thinking	<ul style="list-style-type: none"> <li>• Construct other examples that demonstrate the same analogy and theorize the structure that connects the words.</li> <li>• Create a graphic word organizer to demonstrate your understanding of the words.</li> </ul>
Evaluating Strategic Thinking	<ul style="list-style-type: none"> <li>• Check with a partner to see if you both agree about associations of these words.</li> <li>• What information would you use to support your view of how these words are related?</li> </ul>
Analyzing Strategic Thinking	<ul style="list-style-type: none"> <li>• Examine the features of the words. What does the similarity tell you about these features and about what these words have in common?</li> <li>• Distinguish what connects all these examples.</li> </ul>
Applying Skill/Concept	<ul style="list-style-type: none"> <li>• Create a word that corresponds with _____.</li> <li>• What other words have the same relationship as the example words?</li> </ul>

- |                                |   |
|--------------------------------|---|
| Understanding<br>Skill/Concept | <ul style="list-style-type: none"> <li>• Think about these words and how they are associated.</li> <li>• This word [say the word] is to this word [say the word]. Describe why these words are connected.</li> <li>• What comes to mind when you think of this word?</li> </ul> |
| Remembering<br>Recall          | <ul style="list-style-type: none"> <li>• What are examples and nonexamples of the word (i.e., synonyms and antonyms)?</li> <li>• What does it mean to fuse a word?</li> </ul>   |

## Techniques for Associating



# Active Analogies

**Purpose:** To recognize the relationship between the words in a word pair

**Multiple Intelligences:** Visual/spatial, logical/mathematical, bodily/kinesthetic, interpersonal

**Materials:** Active Analogies reproducible (see Appendix), Reflection Connection Puzzle Piece reproducible (see Appendix), context text, note cards

**Procedure:**

1. From content-specific text, select words, concepts, or symbols that have similar relationships (see Figure 5.1 for a sample Reflection Connection analogy).
2. Write each analogy's set of words on Reflection Connection Puzzle Pieces (one word on each piece) and cut the puzzle pieces apart.
3. Model the use of one puzzle set by introducing the words, concepts, or symbols and explaining how they relate; model the think-aloud to activate higher order engagement.

Suggested Teacher Talk: *Think about these words and how they are associated. This word [say the word] is to this word [say the word]. What is the relationship between the two words?*

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**FIGURE 5.1. Sample Reflection Connection Analogy**

LANGSTON HUGHES: POETRY :: AARON COPELAND: \_\_\_\_\_  
 LIE: PREVARICATE :: DELAY: \_\_\_\_\_  
 DENTIST: PHYSICAL :: PSYCHOLOGIST: \_\_\_\_\_  
 ARTIST: ROCKWELL :: \_\_\_\_\_: ROWLING  
 CLUMSY: GRACEFUL :: AWKWARD: \_\_\_\_\_  
 FEEBLE: WEAK :: \_\_\_\_\_: CONTEMPLATIVE  
 UNFATHOMABLE: COMPREHENSIBLE :: \_\_\_\_\_: DISTANT

4. Students think of two additional words that have the same relationship to each other. Write an analogy sentence to begin the connection to demonstrate the connections among the words (i.e., \_\_\_\_\_ is to \_\_\_\_\_ as \_\_\_\_\_ is to \_\_\_\_\_). For example, in the content area of mathematics, a “purpose” relationship could be “ruler is to line as compass is to circle” (i.e., the purpose of a ruler is to measure a line, and the purpose of a compass is to measure a circle).
5. Have students make analogy predictions based on the earlier discussion of how the two words are related. Show the analogy symbols and their meanings to provide a visual imprint of formal representation of analogies (i.e., : [single colon] means “is to” and :: [double colon] means “as”): \_\_\_\_\_: \_\_\_\_\_:: \_\_\_\_\_: \_\_\_\_\_.
6. Divide students into two groups and give each student a puzzle piece. Students in group A get the left-side puzzle piece words (e.g., *ruler*), and students in group B get the right-side puzzle piece words (e.g., *line*), which are related to the words held by students in group A.
7. Students read the word on their puzzle pieces and find their partners from the opposite group—the person who holds the puzzle piece with a related word. Once the partners have been formed, have them create an analogy sentence and record their results on the Active Analogies reproducible. Encourage students to use content-specific words for their sample analogies.

**Motivation/Engagement:** *Intrapersonal.* Students craft additional content analogies and determine the appropriate categories for each analogy set by creating mental models. They can create “Jeopardy” question cards to be compiled for a class Analogy “Jeopardy” Board (see Figure 5.2). Students can also create an analogy collage to demonstrate pictorial analogies.

**FIGURE 5.2.** Sample Analogy “Jeopardy” Board

Authors	Lit. Terms	Lit. Works	Issues	Potpourri
<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
<u>200</u>	<u>200</u>	<u>200</u>	<u>200</u>	<u>200</u>
<u>300</u>	<u>300</u>	<u>300</u>	<u>300</u>	<u>300</u>
<u>400</u>	<u>400</u>	<u>400</u>	<u>400</u>	<u>400</u>
<u>500</u>	<u>500</u>	<u>500</u>	<u>500</u>	<u>500</u>

# Word-Net Wheel

**Purpose:** To compare words and determine their relationships

**Multiple Intelligences:** Visual/spatial, interpersonal

**Materials:** Word-Net Wheel reproducible (see Appendix), text

**Procedure:**

1. Select sets of words that relate to one another and record these words on index cards. Make copies of the Word-Net Wheel and distribute a copy to each student or to each group at a table, along with the word cards.
2. Have the students read their set of words and write each word on one of the spokes of the Word-Net Wheel reproducible. Ask the students to write what they know about each word in the open area between each spoke.
3. Ask the students to reflect on the words on the wheel collectively. Have them determine the relationship, attributes, and characteristics of the words on the wheel and categorize the words with a title.

*Suggested Teacher Talk: Examine the characteristics of the words. What similarities can you find in these features? What do these words have in common? Distinguish what connects all these examples.*

4. Have students share with the whole group their Word-Net Wheels. Lead a discussion about what students wrote on their wheels and how these ideas supported their process of making meaning for the words.

**Motivation/Engagement:** *Logical/mathematical.* Students can create Concept Circles (Allen, 2007; Vacca, Vacca, & Gove, 2000). Invite students to select four words from the topic of study, divide a circle into four equal sections, and write one of the words in each section. Ask students to describe the meanings and relationships between and among the Concept Circle words to demonstrate content knowledge. They should summarize their descriptions in student journals or notebooks.

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# Semantic Feature Analysis

**Purpose:** To explore the relationships among sets of essential vocabulary, elicit prior knowledge, make predictions, and monitor comprehension

**Multiple Intelligences:** Visual/spatial, verbal/linguistic, logical/mathematical, interpersonal

**Materials:** Semantic Feature Analysis Matrix reproducible (see Appendix), content text; Optional: student notebooks or journals, visual projection device, computer and online resources such as ReadWriteThink.org lesson titled "Guided Comprehension: Knowing How Words Work Using Semantic Feature Analysis"

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**Procedure:**

1. Select essential phrases or individual words and list them vertically on the left axis of the Semantic Feature Analysis Matrix (Baldwin, Ford, & Readence, 1981; Buehl, 2001; Frey & Fisher, 2004; Pittelman, Heimlich, Berglund, & French, 1991). Consider key concepts that represent larger ideas students will encounter as they read the content text. Gradually move toward more abstract ideas.
2. Provide each student with a copy of the Semantic Feature Analysis Matrix with the key vocabulary written in the left column. Students discuss the properties, features, characteristics, or elements that represent the topic and list these horizontally on the top axis. Encourage students to craft their own features to clarify word relationships.

Suggested Teacher Talk: *Think about these words and how they are associated. What information would you use to support the view of how these words are related?*

3. Prior to reading the text, students collaborate in pairs or as small groups or work independently to record and discuss their predictions of the relationships between the keywords and features. For each key concept on the left axis of the matrix, students can use a plus ( + ) or minus ( - ) as they are reading to indicate the presence or absence of a particular feature. Or they can use a Likert scale, using numbers (0–5) rather than symbols, to represent the degree to which the key concept relates to the feature.
4. Examine how this grid serves as a thinking tool to elicit students' prior knowledge, support critical thinking during reading, and guide reflection of learning after reading. During the process, students may add keywords to the left column as their understanding of the topic deepens.
5. Prompt students to articulate their reasoning for their responses by identifying terminology or features that remain uncertain. Direct students to revisit the text and to reflect on the vocabulary terminology and how the words are used in the text.
6. After they have read the text selection, guide students toward reflective dialogue, and synthesize and communicate group responses on a class chart. Support students to think critically, focusing on the associations between the key concepts and identified features.

**Motivation/Engagement:** *Intrapersonal.* Students can modify any portion of their matrix as needed to reflect new learning and capture this learning in a written summary in their notebooks, vocabulary journals, or through a secure electronic form of communication (e.g., blog).

Suggested Teacher Talk: *What information would you use to support and justify your view of how these words are related?*

# Fusion

**Purpose:** To link words and fuse ideas by forming a visual representation of the meaning of words and how they relate

**Multiple Intelligences:** Visual/spatial, verbal/linguistic, interpersonal, intrapersonal

**Materials:** Vocabulary words from text, chart paper or visual projection device

**Procedure:**

1. Select a content-related topic or concept based on what the class is studying. Initiate a discussion about the topic or concept to determine categories that support it through associations of class (categories of characteristics that describe the concept), property (attributes that define the concept), or examples (exemplars of the concept).
2. As a whole group, list words around the concepts or categories that relate to the chosen topic or concept. Display generated words on chart paper, with a visual projection device, or on a chalkboard.
3. Demonstrate how to categorize these brainstormed words by creating clusters under broader categories. Construct examples that demonstrate the word in the center of an oval and theorize how the words are fused together. This visual representation is a graphic word organizer called a Semantic Word Map (Heimlich & Pittelman, 1986) and demonstrates understanding of the words.

Suggested Teacher Talk: *How does the visual representation help you to connect and generate meaning of the word(s)?*

4. After creating the class Semantic Word Map as a visual representation, have students read content-related text and, when they encounter one of the words in the map, record it in their vocabulary journals along with how it was categorized in the text.

**Motivation/Engagement:** *Logical/mathematical.* To move from convergent to divergent thinking, have students use a form of a Capsule Vocabulary (Crist, 1975; Irwin, 1991). Present six to eight topically related vocabulary words one at a time with a brief discussion. These words may also be placed in a real capsule container and pulled out one at a time or displayed for all to see the words. Pairs engage in conversational dialogue using the capsule vocabulary and check off words as they use them in their conversations. Pairs can form teams with other pairs to compose a paper on the common topic using as many of the capsule words as they can.

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# Academic Word Wall

**Academic Word Wall in the Classroom:**

Joni Olson, a high school English teacher, supports her students in making word associations by applying the Academic Word Wall technique before, during, and after a unit on modern

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fiction. She shared that many of her students were unfamiliar with the many historical events and vocabulary that defined the period. To initiate the Academic Word Wall, she selected key concepts or historical events and assigned one to each group (e.g., The Jazz Age, Popular Culture). Groups read the background provided in the textbook and were provided access to laptop computers for further Internet research. They created a word picture poster with important details that defined their historical event or vocabulary term. Mrs. Olson was pleased with the level of discussion and the evidence of understanding: "While reading our [modern fiction] stories, my students could refer to our Academic Word Wall when they had trouble remembering specific concepts, ideas, or events relating in our stories." Figure 5.3 shows one student's contribution to the Academic Word Wall.

**Purpose:** To provide visual clues for interacting with subject-specific concepts

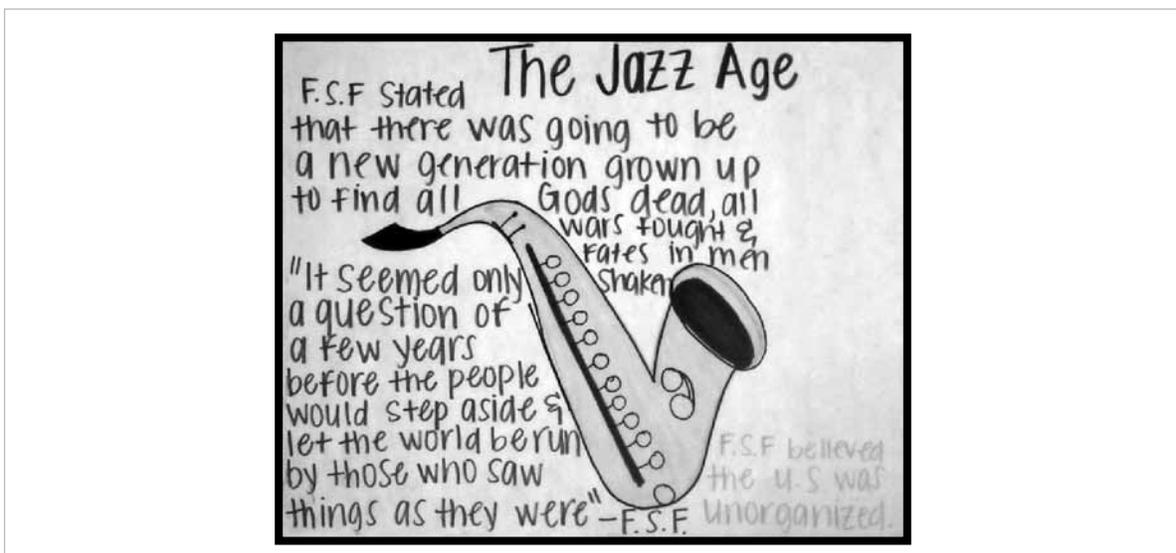
**Multiple Intelligences:** Visual/spatial, logical/mathematical, bodily/kinesthetic

**Materials:** Word Relationships reproducible (for Motivation/Engagement activity; see Appendix), chart paper, 3-by-5-inch cards, markers

**Procedure:**

1. Select vocabulary essential for understanding the content theme or topic of study. Present the vocabulary in the context in which students will encounter it in their reading and apply it through discussion and writing. Using markers, add four or five key terms on 3-by-5-inch cards per week to the same visual display area throughout the study to encourage students to use the Word Wall as a learning tool.
2. On chart paper, students can elaborate by defining and creating a visual representation of the word to clarify meaning.

**FIGURE 5.3.** Student Work for a High School Class Academic Word Wall



3. Add vocabulary in an organized display; avoid overcrowding the Word Wall. Remove words, maintain some key vocabulary, or revisit concepts as the unit progresses. Words can be presented alphabetically or organized by themes or features, such as genres or historical movements in literature or history (e.g., transcendentalism, progressive movement).
4. Use the Word Wall as a brief (approximately 5 minutes) lesson introduction to link to prior learning, to use as a reflection piece at the end of class, or to further develop it as a vocabulary focus lesson. Use the Academic Word Wall vocabulary during reading, enabling students to interact and actively engage in discussions and processes to synthesize key terminology.

**Motivation/Engagement:** *Interpersonal.* Students can work in pairs or small groups to articulate, cluster, and identify similarities and differences among words. Use the Word Relationships reproducible as a “thinking map” (Hyerle, 2004) graphic word organizer to promote higher order reasoning. Ask students to choose several words from the word wall and record them on the graphic word organizer. Using the Word Relationships reproducible as a guide, students record descriptors, attributes, words, and phrases about how the two chosen words chosen. On the outer circles, students note attributes that are only specific for the particular word.

## Vocabulary Strategy: Contextualizing



The contextualizing strategy allows readers to increase their vocabulary and extend comprehension by using the context that surrounds an unknown word, or *challenged word*. Using *context* is one of the most widely recommended vocabulary strategies (Graves, 2007). Readers use the various *cueing systems* as well as context *clue-glue words* as tools to derive meaning of an unknown word. Context clue-glue words can include categories such as definition words (e.g., *means, is, defines*), synonym words (e.g., *like, as if, same as*), or cause-and-effect words (e.g., *because, due to, consequently*). A study by Baumann, Font, Edwards, and Boland (2005) reveals how middle school students were able to use both linguistic and nonlinguistic information to unlock the meanings of unfamiliar words.

There is a discovery element that transpires as readers use surrounding information within the text to make predictions and that brings meaning to an unfamiliar word. The ability to make an inference or use the *clues* around the unknown word allows readers to take an *inquisitive stance* toward word meaning (Ellery, 2009; Greenwood & Flanigan, 2007; Nelson, 2008; Tierney & Readence, 2005). Taking an inquisitive stance permits readers to be active (productive), rather than passive (receptive), in the discovery of new words.

## Key Vocabulary for Contextualizing

- **Challenged Word:** an unfamiliar or unknown word that leads the reader to doubt or question meaning in context
- **Clues:** hints or indications that support the understanding of an unknown word
- **Clue-Glue Words:** words from syntactic categories (e.g., definition, synonym, antonym) that help make the meaning for the unknown word stick
- **Context:** text that surrounds a word or passage
- **Cueing Systems:** self-extending systems built into the structure and patterns of the English language, which readers use to comprehend text. These sets of cues include how language is structured (syntax), the meaning of words (semantics), letter–sound correspondence (graphophonics), and determining the author’s intent through the reader’s metacognitive process (pragmatics).
- **Inquisitive Stance:** analytical position toward the search for the unknown words meaning



## Assessment for Contextualizing

Use the following behaviors as a guide as you assess students’ abilities to contextualize. Do students exhibit these behaviors never, rarely, often, or always?

- Predicts and verifies omitted words using surrounding context
- Uses background knowledge to examine and verify word meaning
- Cross-checks the meaning of a challenged word by using multiple cueing systems

## Teacher Talk: Statements, Questions, and Prompts for Contextualizing

The following are suggestions for teacher talk that encourages readers to think strategically as they employ the contextualizing strategy. Try using some of these statements, questions, and prompts with your students as you work through the techniques in the following section. They are aligned with Bloom’s taxonomy and Webb’s DOK levels.

### Level of Thinking

### Teacher Talk

Creating

Extended Thinking

- What would happen if you tried the new meaning of the word you chose in place of the word in the sentence? Does the word choice make sense given your understanding of the text?

Evaluating

Strategic Thinking

- How would you justify the determination of the meaning of the challenged word?
- Explain how you determined the meaning of the unknown word.

- |                                 |  |
|---------------------------------|--|
| Analyzing<br>Strategic Thinking | <ul style="list-style-type: none"> <li>• What word would be used to signal that an opposite, contrasting thought is occurring?</li> <li>• After examining the clues (words within the sentence that supported your understanding of the unknown word), distinguish how you used the word in context (definition, cause and effect, opposite).</li> </ul> |
| Applying<br>Skill/Concept       | <ul style="list-style-type: none"> <li>• What clues in the sentence helped you figure out the word?</li> <li>• Look at the omitted word in the sentence. What word do you think best completes the sentence? Why?</li> <li>• Does the word look and sound correct for the English language? Does it make sense in the text?</li> </ul>                   |
| Understanding<br>Skill/Concept  | <ul style="list-style-type: none"> <li>• When you come to a word that you do not know, explain how you use context clues to determine the meaning of the unknown word.</li> <li>• What do you know about the word _____ based on how it was used in this sentence?</li> </ul>  |
| Remembering<br>Recall           | <ul style="list-style-type: none"> <li>• What is a context clue?</li> <li>• Explain what it means for a word to have multiple meanings.</li> </ul>   |

## Techniques for Contextualizing



# Content Multiple Meaning

**Purpose:** To understand how the meaning of a content word may vary depending on the content area in which it is used

**Multiple Intelligences:** Visual/spatial, verbal/linguistic, interpersonal, intrapersonal

**Materials:** Multiple-meaning words from content area text, chart, index cards, computers, vocabulary journals

**Procedure:**

1. Select content vocabulary with multiple meanings to demonstrate how the content area in which a word is used can change the meaning of the word.
2. Write the selected words on index cards and write a specific content area after each word. For example, one card will have the word *range* followed by the content area of *mathematics*. Another index card will have the same word, *range*, followed by *music*.
3. Distribute cards to student teams and ask them to create a sentence and illustration using their word in the content area in which it is presented.

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Suggested Teacher Talk: *Think about the meaning of the word in the specific content area. Construct a sentence using the word to show the word's content meaning.* (Students may use any available print or online resources and their own background knowledge.)

4. Teams will determine a way to change their voice on the chosen word prior to reading the sentence aloud to the class (e.g., whisper, declarative, whimsical). Have the teams share out their created sentences to the whole group, changing their voices on the selected words and omitting the name of the content area.
5. Instruct the rest of the class to listen for the chosen word and then think about the context that surrounds the word and how the sentence was spoken to reveal the content area meaning. Display the word, content area, and meaning on a three-column chart.
6. Have the corresponding team then share how the same word may be used in a different content area.
7. Have students record the words in their vocabulary journals and brainstorm other terms that have multiple meaning across disciplines.

**Motivation/Engagement:** *Musical/rhythmic.* Have the students fold a piece of paper in half. On the left side of the fold, write a multiple-meaning word and create riddles, lyrics, or raps using context clues to define each meaning. On the right side of the fold, the students will illustrate the riddles, lyrics, or raps. Students reveal the answer on the back of the paper.

## Inferring Word Meaning

### Vocabulary: Contextualizing

**Purpose:** To use text clues to formulate evidence-based inferences and construct word meanings

**Multiple Intelligences:** Visual/spatial, verbal/linguistic, bodily/kinesthetic, interpersonal

**Materials:** Challenged Word Guide reproducible (see Appendix), texts, visual projection device, copies of text excerpt, or both

**Procedure:**

1. Use content area text excerpts that support contextualizing to practice making inferences. Students work independently to highlight or place a sticky note next to unfamiliar, or “challenged,” words or phrases. Students predict the meaning of each challenged word or phrase and record the words and phrases and their predictions in a vocabulary journal or notebook.
2. Arrange students in small groups or pairs to share their list of challenged words and their initial prediction of the meaning of each word or phrase.
3. Model the process for constructing and using the Challenged Word Guide. This guide is a three-column graphic organizer. Students record words or phrases that are unclear in the first column. In the second column, they write what they think the word means. In the third column, they list the context clue words.

4. Groups select three or four words to explore and formulate definitions. Each group will use the guide for sharing their challenged words and phrases, inferred meanings, and author's clues that helped predict the meaning.

Suggested Teacher Talk: *What do you know about the challenged word or phrase based on how it was used in the sentence? What clues are in the rest of the sentence that helped you figure out the meaning of word or phrase?*

5. On chart paper or with electronic media, groups present their findings to the whole class. Students are encouraged to note any additional terms to their list in their vocabulary notebooks or journals.

**Motivation/Engagement:** *Musical/rhythmic.* Encourage students to use multiple representations to present their inferences (e.g., illustrations, pictures clues, musical renderings, drama, pantomime). Students can capture their words on 3-by-5-inch note cards and display them on Academic Word Walls (see the Academic Word Wall technique in the Associating section).

Suggested Teacher Talk: *How would you justify your determination of the meaning of the challenged words or phrases? Do the words or phrases make sense and lead to understanding?*

## Context Complex Clues

**Purpose:** To use context clues to analyze the meaning of an unfamiliar word

**Multiple Intelligences:** Visual/spatial, verbal/linguistic, interpersonal

**Materials:** Types of Context Complex Clues reproducible (see Appendix), Clue-Glue Word Cards reproducible (see Appendix), text, notebooks, magnifying glass, poster chart paper

**Procedure:**

1. Using text from a specific content area, select several words to examine for meaning.
2. Create a large chart of the different types of context complex clues, or copy or enlarge the Types of Context Complex Clues reproducible (Ellery, 2009). Reproduce and cut the Clue-Glue Word Cards.
3. Distribute the Clue-Glue Word Cards to student volunteers. Display and read a sentence or sentences that use one of the chosen content words and highlight the word. Have students give predictions about the meaning of the highlighted word and write their predictions in their notebooks.

Suggested Teacher Talk: *Think about the sentence and the unfamiliar word. What do you think the word means based on the surrounding words?*

4. Remind the students that texts often have clues called *context clues* that hint at a word's meaning. Explain that these clues help "stick" the meaning of the unfamiliar word, and therefore the clues are called the "glue" word or words.

5. Ask the students to search the sentence(s) to determine if their Clue-Glue Word is within the sentence(s).
6. Ask the students to think about the types of Context Complex Clues and identify which kind of context clue the author used to “stick” the meaning. Place the Clue-Glue Word under the correct category type. Chart these words as Clue-Glue Words for each category of contextual clues.

Suggested Teacher Talk: *What Clue-Glue Words within the sentence help support the meaning of \_\_\_\_\_?* (Discuss what clues in the sentence help convey the meaning of the word.)

7. Continue with several more sentences, each time having a different volunteer identify the Clue-Glue Word.

Suggested Teacher Talk: *How did the author help you understand new words?*

**Motivation/Engagement:** *Intrapersonal.* Have students record unfamiliar words from other coursework and from their independent reading to transfer the learning into other disciplines. As needed, hold up the magnifying glass as a visual representation of the process to connect students with the concept. Those students holding the Clue-Glue Word share the word that is within the chosen sentence(s).

## Inquisitive Stance

### Vocabulary: Contextualizing

**Purpose:** To use cueing systems and context clues to predict an omitted word and reflect on word’s meaning by using a semantic gradient

**Multiple Intelligences:** Visual/spatial, verbal/linguistic, logical/mathematical, interpersonal

**Materials:** Semantic Gradient reproducible (see Appendix); content text passage(s), sticky notes, visual projection device, student vocabulary notebooks or journals

**Procedure:**

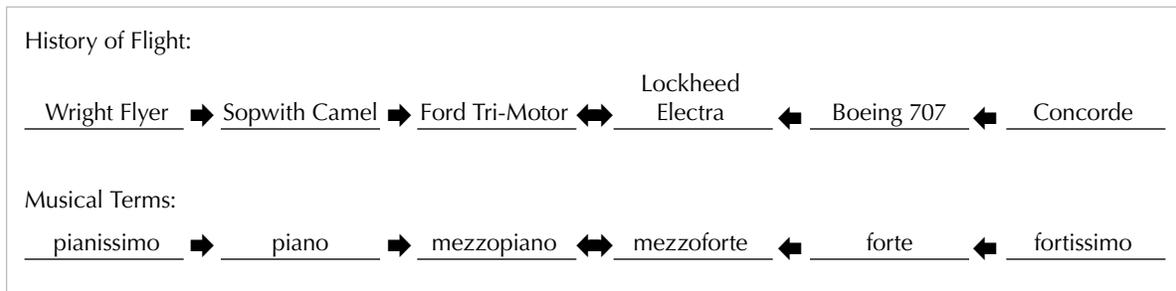
1. Select an engaging content passage and display it on a visual projection device for easy viewing. Determine several key vocabulary words to omit and place large sticky notes over the words. Think aloud to model and guide students in using context clues to craft thoughtful predictions of the omitted words.

Suggested Teacher Talk: *What word do you think best completes the sentence? Why? What clues are in the sentence that helped you figure out the word?*

2. Guide students to develop an analytical position as they reflect and share words that best complete the passages. Students investigate by using questions that support the cueing systems to move toward an inquisitive stance.

Suggested Teacher Talk: *Does the word look and sound correct for the English language? Does it make sense in the text?*

**FIGURE 5.4. Sample Semantic Gradients**



3. On sticky notes or chart paper, record the students' predictions of the omitted words.
4. As students finish generating their replacement words, peel back the sticky note from the first omitted word to allow students to view a portion of the word. Give students an opportunity to modify or change their predictions. Remove the sticky note completely, exposing the remainder of the missing word. Discuss with students how this technique guides them to cross-check, using various cueing systems as they reflect on meaning (semantic), letter-sound relationships (graphophonic), and the structure of the language (syntactic).

*Suggested Teacher Talk: Does your word choice make sense given your understanding of the text? Explain what cueing system(s) you used to determine the meaning of the unknown word.*

**Motivation/Engagement:** *Intrapersonal.* Using the words that students generated to complete the passage, explain that words can be connected to one another in different ways. Two ways are by degree and by order. Display the Semantic Gradient reproducible (see Appendix; Blachowicz & Fisher, 2006; Ellery, 2009; Greenwood & Flanigan, 2007) and have students determine where the words could be placed on a continuum. Encourage students to create their own semantic gradients by generating words from two ends of a continuum (see samples in Figure 5.4).

## Vocabulary Strategy: Visualizing

Visualizing enables students to create an image representing the meaning of a word or concept. This *mental concept acquisition* also has been referred to as concept, mental, or mind imagery. Making *sensory connections* is the bond to meaning for visual learners. These learners know how to create an image or movie in their *mind's eye* as a vivid picture of the content or concept, thus creating a *content concept image*. When readers visualize, they are using their *spatial intelligence* (Silver, Strong, & Perini, 2001).

Research is proving that there needs to be interplay between verbal and visual information to activate different parts of the brain (Jensen, 2005; Ogle, 2000). According to



the Greek philosopher Aristotle, “It is impossible to even think without a mental picture.” Even Albert Einstein noted, “If I can’t picture it, I can’t understand it.” For some learners in the content areas, educators need to provide opportunities for the use of picture books. Picture books allow adolescent readers a greater understanding of higher level concepts through lower level texts that support the various content areas (Hibbing & Rankin-Erickson, 2003).

## *Key Vocabulary for Visualizing*

- Content Concept Image: a picture-like representation in the mind of a word that is heard or read and is related to specific content
- Mental Concept Acquisition: attainment of a mental representation of an idea, thought, or perception of a word
- Mind’s Eye: visual perception in the mind; the ability to “see” things in the mind
- Sensory Connections: associations of word meanings using the senses
- Spatial Intelligence: the ability to think and learn the meaning of a word through shapes or arrangement of images in the mind



## *Assessment for Visualizing*

Use the following behaviors as a guide as you assess students’ abilities to visualize. Do students exhibit these behaviors never, rarely, often, or always?

- Imprints visual meaning by creating a mental image of a word
- Constructs sensory connection with the content
- Questions and hypothesizes the meaning of the image (its purpose and context)

## *Teacher Talk: Statements, Questions, and Prompts for Visualizing*

The following are suggestions for teacher talk that encourages readers to think strategically as they employ the visualizing strategy. Try using some of these statements, questions, and prompts with your students as you work through the techniques in the following section. They are aligned with Bloom’s taxonomy and Webb’s DOK levels.

<b>Level of Thinking</b>	<b>Teacher Talk</b>
Creating Extended Thinking	<ul style="list-style-type: none"> <li>• What can you combine to construct a model that would support your theory?</li> </ul>
Evaluating Strategic Thinking	<ul style="list-style-type: none"> <li>• Defend why you created the image you did to represent the content.</li> </ul>

- |                                 |  |
|---------------------------------|--|
| Analyzing<br>Strategic Thinking | <ul style="list-style-type: none"> <li>• Do the illustrations match what you imagined in your mind when you heard the story?</li> <li>• Which word goes with _____? Why does that word go with _____?</li> <li>• How does the example remind you of the word?</li> <li>• Why did you choose that movement or picture to represent the word _____?</li> </ul> |
| Applying<br>Skill/Concept       | <ul style="list-style-type: none"> <li>• Think about the word _____. What comes to mind that reminds you of the word? Describe what the word is like.</li> </ul>   |
| Understanding<br>Skill/Concept  | <ul style="list-style-type: none"> <li>• Describe how your illustration helps you remember the new word.</li> </ul>  |
| Remembering<br>Recall           | <ul style="list-style-type: none"> <li>• What do you see when you think of the word _____?</li> </ul>  |

## Techniques for Visualizing



# Four Corners

### Four Corners in the Classroom:

Bill Kebler, a middle school agritechnology instructor, applied the Four Corners vocabulary technique to support students in making word associations relating to technology concepts. His students seemed to have misconceptions and varied interpretations of the concept of “technology.” Mr. Kebler shared that his students needed a solid understanding of relevant content vocabulary for speaking, writing, and successfully participating in technology competitions. He used the Four Corners technique with adaptations of the root word *way*, and supported students in crafting working definitions of terms such as *pathways* and *highways*. “Sometimes we assume students have a solid understanding of frequently used terms,” said Mr. Kebler, “but areas of confusion become evident when they must apply these terms in writing and speaking.”

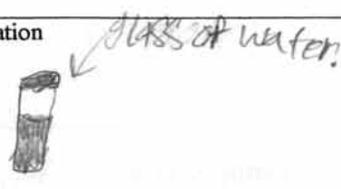
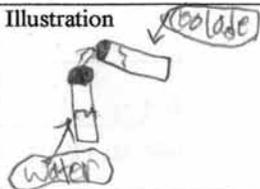
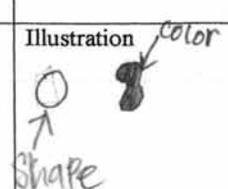
Kristi Latture-Simpson, a high school science teacher in Bebe, Arkansas, supports her students in gaining a deeper understanding of essential physical science content vocabulary by applying the Four Corners technique (see student samples in Figure 5.5). She shared how she selected familiar vocabulary to model the Four Corners process and moved to more involved words that may have been more difficult to understand. Initially, some students struggled to visualize or illustrate a concept that was “not like,” but Kristi continued to model and guide their responses: “I applied the process with the next section of the same chapter, and they loved it—presenting the most creative and real life responses!”

The Four Corners posters were displayed in the classroom as a learning tool so that students could see which words other classes selected and their descriptions. Kristi indicated

**Vocabulary:  
Visualizing**

FIGURE 5.5. Sample Student Work for Four Corners

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<b>Pure Substance</b> - a sample of matter; single element, or single compound. <span style="float: right; border: 1px solid black; padding: 2px;">1<sup>st</sup> - 4<sup>th</sup> Period</span>	
<b>Examples</b> water, H <sub>2</sub> O, sugar, and salt.	<b>Opposite</b> <u>Mixture</u> Limonade, Grape Juice, Diet Coke.
<b>Connection</b> I can drink it, cook with it, and, eat with it.	<b>Illustration</b> 
<b>Mixture</b> - combination of two or more substances, that are not chemically combined.	
<b>Examples</b> pizza, muffin.	<b>Opposite</b> <u>pure substance</u> H <sub>2</sub> O - pure grape juice
<b>Connection</b> can eat them. mixtures are every where.	<b>Illustration</b> 
<b>Physical Property</b> - a characteristic of a substance that does <u>not</u> involve a chemical change.	
<b>Examples</b> color, shape, density, and hardness.	<b>Opposite</b> Reactivity, and Flammability
<b>Connection</b> color of your eyes, what your hairstyle is, height.	<b>Illustration</b> 

(continued)

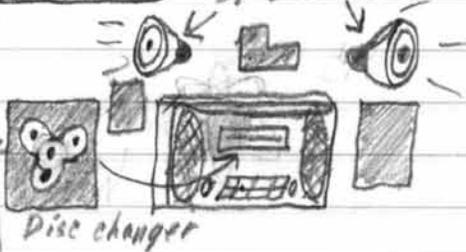
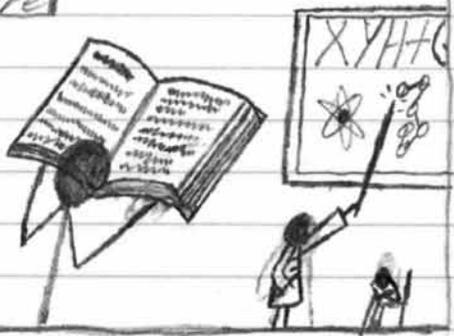
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FIGURE 5.5. Sample Student Work for Four Corners (Continued)

<p><b>Chemical Property</b> - describes the ability to <sup>particulate</sup> a chemical reaction.</p>	
<p>Examples Reactivity, and, Flammability</p>	<p>Opposite color, density, shape, and size.</p>
<p>Connection Bonfire - paint can explodes Sour milk.</p>	<p>Illustration Fire burning a car.</p> 
<p><b>Homogeneous</b> - uniform structure, or, composition throughout.</p>	
<p>Examples Sugar water, and, salt water.</p>	<p>Opposite Fruit salad Heterogeneous.</p>
<p>Connection use salt water to disinfect things.</p>	<p>Illustration (Sugar and water)</p> 
<p><b>Heterogeneous</b> - has dissimilar components.</p>	
<p>Examples Fruit salad. Hamburger.</p>	<p>Opposite Jello. Homogeneous.</p>
<p>Connection I eat fruit salad. I eat hamburgers.</p>	<p>Illustration (Flour and water)</p> 

(continued)

FIGURE 5.5. Sample Student Work for Four Corners (Continued)

<h3>Technology.</h3>	
<p><b>Definition:</b> The application of science for practical uses.</p>	<p><b>Opposite:</b> Taping two objects together.</p>
<p><b>Connection:</b> Disassemble an electronic and put it back together to understand how it works and how it is made.</p>	<p><b>Picture:</b> </p>
<h3>Science.</h3>	
<p><b>Definition:</b> A search for explanations for things.</p>	<p><b>Opposite:</b> Guessing or making up a story that could explain most things but not how.</p>
<p><b>Connection:</b> Find answers through rational, proven explanation to understand complicated questions or puzzles.</p>	<p><b>Picture:</b> </p>

how this technique supported students of all ability levels to understand content vocabulary that they otherwise might have written down, defined, and then moved on. She said, “I could see by test scores that it increased the students’ understanding of some very uncommon scientific terms that they will see again on state assessments.”

**Purpose:** To visualize the meaning of a content-specific word

**Multiple Intelligences:** Visual/spatial, verbal/linguistic, bodily/kinesthetic, interpersonal

**Materials:** Four Corners reproducible (see Appendix), poster boards or large sticky note chart paper, pencils or markers

**Procedure:**

1. Present a content-specific word to the class. Divide the class into four teams. Give each team a poster board or a piece of large sticky chart paper.
2. Assign a different task card, adapted from the Frayer Model (Frayer, Frederick, & Klausmeier, 1969), to each team.
  - Task Card 1: Opposite—write what the word is NOT
  - Task Card 2: Example—write what the word IS like
  - Task Card 3: Connection—write a personal connection to the word
  - Task Card 4: Illustration—create a picture to demonstrate the word
3. Have the teams decide on a leader to share their findings. The team leaders take turns sharing while the rest of the students use their vocabulary notebooks or the Four Corners reproducible to record the presentations.
4. Display the four large posters in an area called the “concept wall.” Arrange the posters to match the layout of the Four Corners reproducible, creating a large representation of the content-specific word or concept.

## Sensory Scenery

**Purpose:** To use prior knowledge of a similar term to visualize an unknown word

**Multiple Intelligences:** Visual/spatial, verbal/linguistic, interpersonal, intrapersonal

**Materials:** Text, vocabulary notebook, chart paper

**Procedure:**

1. Have students think of a keyword that shares some common features to the new word (e.g., acoustically similar, but not necessarily similar in meaning), imagining it as a picture or creating a scene for the word.
2. Ask students to visualize a picture or scene that represents the meaning of the new word or information.

**Vocabulary:**  
Visualizing

Suggested Teacher Talk: *Try to visualize the meaning of the new word by creating an image that represents the meaning of the word.*

3. Have the students link the two pictures in their minds and share their creations with a partner.

Suggested Teacher Talk: *What do you see when you think of the word \_\_\_\_\_?*

4. Revisit the literature and highlight the words the students are studying. Students create sensory scenery in their vocabulary journals by illustrating the new words, capturing what they may see, hear, smell, taste, or touch when associating the words to their scenery.

## Mind's Eye

### Vocabulary: Visualizing

**Purpose:** To use visual imagery to make meaning in your mind and to hypothesize the purpose and context of key concepts

**Multiple Intelligences:** Visual/spatial, verbal/linguistic, interpersonal, intrapersonal, naturalistic/environmental

**Materials:** Content text, illustrations, sketches, photographs, electronic graphic imagery; Optional: Word Splash reproducible (see Appendix), visual projection device, appropriate movie clips

**Procedure:**

1. Select a print or electronic text with a nonlinguistic representation (graphic) related to the current theme or content. Display only the graphic and ask students to reflect on what they see and to describe the picture. Encourage students to share their ideas with a partner.
2. Read aloud a portion of the text that correlates with the picture and guide students to make predictions (hypothesize) the possible thoughts, ideas, events, and problems associated with the picture or scene.

Suggested Teacher Talk: *How do the illustrations match what you imagined in your mind when you heard an excerpt of the story or text?*

3. Use a Word Splash (see the reproducible in the Appendix for an example; distribute the reproducible if desired) and ask students to brainstorm additional vocabulary that relates to the characters, setting, time period, and actions from the picture or graphic. Capture, or “splash,” these ideas on chart paper, whiteboard, electronically, or on the reproducible.
4. Select two or three key concepts from the Word Splash or present other key concepts that are essential for the understanding the theme or unit. Ask students to close their eyes and create a mental image of the terms.

Suggested Teacher Talk: *Think about the word \_\_\_\_\_. What comes to mind that reminds you of the word(s) presented?*

5. In pairs, students will infer what they think will happen next in the text from the scene or graphic. Have students share ideas in whole group, making connections to the vocabulary from the Word Splash and other key concepts.

**Motivation/Engagement:** *Logical/mathematical.* View appropriate content-related movies clips without sound. Ask students to predict or hypothesize possible dialogue and vocabulary to go with the silent movie. Show the movie clip again, this time with sound. Students compare and contrast their predictions with the actual dialogue and vocabulary. Suggested Teacher Talk: *Defend why you created the image and predictions you did to represent the content.*

## Mind Maps

**Purpose:** To structure vocabulary networks and make visual connections between words

**Multiple Intelligences:** Visual/spatial, verbal/linguistic, interpersonal, intrapersonal

**Materials:** Content text, visual projection device or chart paper

**Procedure:**

1. Display a list of content-related words on the whiteboard, chart paper, or electronic media. Allow students an opportunity to reflect on their level of knowledge of the words. Use a two-minute focused dialogue for students to share their understanding of the words.

Suggested Teacher Talk: *Think about a chosen word from the generated list. What comes to mind that reminds you of the word? Reflect on your level of understanding of the word and describe what the word is like.*

2. For the whole group, model, using a think-aloud, one possible way to organize the words by creating a visual map.
3. Encourage students to generate a mental picture to visualize the connections between the focus words. Students organize the words in a Mind Map and then compare ideas on how they have grouped words and related them.
4. In pairs or small groups, students share their Mind Maps.

**Motivation/Engagement:** *Logical/mathematical.* Use this technique as a tool in the planning stage for writing, as students can structure ideas and discuss how they are related.

## Vocabulary Strategy: Personalizing

Students use personalizing as a vocabulary strategy that increases a sense of ownership of a word. To support students in creating ownership, educators need to provide definition and context as well as multiple exposures, and use discussion (Stahl & Nagy, 2006). This ownership enables readers to bring their thinking about the usage of a word to an awareness



level known as *word consciousness*. This level of engaging with a word to an application level personalizes word learning in verbal and written form. Personalizing words to a word-conscious level allows the reader to know the subtleties of word meaning and gives power to words (Graves, Juel, & Graves, 1998; Graves & Watts-Taffe, 2008).

Content-specific vocabulary is difficult for some readers because of the limited frequency with which they encounter the words in context. Therefore, it is vital for content area educators to create *word tapestries* of their content vocabulary through incidental learning. “In promoting students’ *incidental word learning* through reading, considerations include recognizing the importance of *wide reading*, helping students select books that will promote vocabulary growth, and facilitating and encouraging their reading widely” (Graves, 2006, p. 40; emphases added). Wide reading incorporates a vast sampling of *genre jive* in the various content areas, enabling the readers to connect and personalize their word awareness while reading.

### *Key Vocabulary for Personalizing*

- Genre Jive: categorizing words by specific genre
- Incidental Word Learning: secondary learning of word meaning resulting from exposure to word choices through a variety of contexts, such as conversations, movies, music, and literature
- Wide Reading: the reading of a plethora of text independently, exposing readers to more words, exposing word meaning in contexts, and expanding readers’ background knowledge of words
- Word Consciousness: awareness, interest in, and ownership or personalization of words read and used, with a sense of enjoyment and engagement
- Word Tapestry: an intricate design of meaningful language made by weaving words spoken and read



### *Assessment for Personalizing*

Use the following behaviors as a guide as you assess students’ abilities to personalize. Do students exhibit these behaviors never, rarely, often, or always?

- Gains ownership of words by applying new words in everyday conversations
- Indicates levels of knowledge of words
- Identifies characteristics of words in various genres

### *Teacher Talk: Statements, Questions, and Prompts for Personalizing*

The following are suggestions for teacher talk that encourages readers to think strategically as they employ the personalizing strategy. Try using some of these statements, questions, and

prompts with your students as you work through the techniques in the following section. They are aligned with Bloom’s taxonomy and Webb’s DOK levels.

<b>Level of Thinking</b>	<b>Teacher Talk</b>
Creating Extended Thinking	<ul style="list-style-type: none"> <li>• How have you used some words from your vocabulary journals or word lists in your everyday conversation?</li> </ul>
Evaluating Strategic Thinking	<ul style="list-style-type: none"> <li>• Rate the word according to how much you know about the word.</li> <li>• Do you feel confident to use the word _____ in a conversation or in your writing? Why? Why not?</li> <li>• How did your word choice affect the other students’ understanding of your journal entry?</li> <li>• What pattern do you notice the author using for his or her word choice?</li> </ul>
Analyzing Strategic Thinking	<ul style="list-style-type: none"> <li>• How did being aware of one word today help you to learn about that word?</li> <li>• Why are these words interesting to you?</li> <li>• In what genre would you most likely find these words?</li> </ul>
Applying Skill/Concept	<ul style="list-style-type: none"> <li>• What did you do to personalize the word?</li> <li>• How often did you use your chosen word in your journal writing?</li> </ul>
Understanding Skill/Concept	<ul style="list-style-type: none"> <li>• Tell about some interesting words you are encountering while you are reading. Have you used these words before in your own speaking or writing?</li> </ul>
Remembering Recall	<ul style="list-style-type: none"> <li>• What do you know about the word _____?</li> <li>• What kinds of words are common to this specific genre?</li> </ul>

## *Techniques for Personalizing*



# Knowledge Rating

**Purpose:** To identify the level of knowledge of a word by having the students independently rate how well they know the concept or word

**Multiple Intelligences:** Visual/spatial, verbal/linguistic, interpersonal, intrapersonal, logical/mathematical

**Materials:** Content text, student vocabulary notebooks or journals

**Vocabulary:  
Personalizing**

**Procedure:**

1. Determine words related to the content area and create a knowledge rating chart using a number system (e.g., 1 = *Never have seen the word*, 2 = *Not sure what this word means*, 3 = *Can define the word and use it*). Knowledge rating (Blachowicz, 1986) encourages students to think metacognitively about their conceptual background for each word being introduced.
2. Have students analyze their familiarity with the chosen words as a prereading strategy. Ask them to rate their knowledge of the meaning of each word by placing a check mark beside their level of knowledge on the knowledge rating chart you created.

Suggested Teacher Talk: *Try to rate the word according to how much you know about it: 1 means "I don't know anything (haven't seen or heard the word before)," 2 means "I have heard or seen this word (not sure what the word means)," 3 means "I know this word well (can define the word and use it in an intelligent "showing" sentence)."*

3. If the student is familiar with the word, a short definition is written in the column in the student's own language. Discuss some of the preliminary predictions about the words.
4. Create a class tally of how many students actually know each word and select words to focus on during the upcoming reading of the text. This will give an overall picture of those that have the vocabulary word at expressive knowledge (can communicate the meaning) versus receptive knowledge (recognize the word only).
5. Students skim the text to locate the words in context. After they read, have students reflect on their rating matrix and determine whether their knowledge of certain words changed or was confirmed. Have students place an X in the appropriate column of the matrix to represent any changes.
6. Ask students to keep their rating charts in a personal vocabulary log and review them periodically, making adjustments on words that are becoming more familiar to them. Encourage them to use these terms in the expressive oral and written work with partners as they study the concepts.
7. Reread the text, and have students listen for the new words they are studying and think about how they are used in context.

## Genre Jive

**Vocabulary:  
Personalizing**

**Purpose:** To identify similarities and differences among vocabulary words within genres

**Multiple Intelligences:** Visual/spatial, verbal/linguistic

**Materials:** Texts in a variety of genres, chart, materials for creative writing, highlighters

**Procedure:**

1. Locate a variety of genre "jive" words—words that reflect a specific genre (Ellery, 2009) and content area (see Figure 5.6 for examples).

**FIGURE 5.6.** Examples of Genre Jive Words

Genre	Vocabulary Words and Phrases
Science	Encounter, discovery, scientific
Mystery	Suspense, classified, investigate, clue
Fable	Teaching a lesson, moral, responsibility

2. During this genre study, ask students to continue adding to a class chart of specific vocabulary words that correlate with each particular genre and content area being studied.

Suggested Teacher Talk: *What kinds of words did you notice that are common in the specific genre?*

3. Have students frequently discuss the similarities and differences among the vocabulary words within the various genres.

Suggested Teacher Talk: *In what genre would you most likely find these words?*

**Motivation/Engagement:** *Interpersonal.* Using the genre chart, have students select a genre and create a writing piece using at least 10 words that strongly indicate their genre choice. Have partners read the writing, identify the chosen genre, and highlight the words that correlate with the genre.

## Word Tech

**Purpose:** To become powerful in applying words using technology

**Multiple Intelligences:** Visual/spatial, verbal/linguistic, bodily/kinesthetic

**Materials:** Computers, iPhones, or some form of online capability

**Procedure:**

1. Students use vocabulary websites to apply meaning of words in a plethora of ways:
  - Visualthesaurus.com or visuwords.com—these are interactive dictionaries and thesauruses that create word maps and produce diagrams that demonstrate word meaning and associations with other words or concepts
  - OneLook.com—a search engine for a variety of online dictionaries
  - Wordsmith.org—a site that features a daily word with its meaning, etymology, usage, and pronunciation; it also offers anagrams, acronyms, and dictionary and thesaurus usage
  - Punoftheday.com—an online program that allows students to search for specific words to find humorous puns related to the word, or twists on the word's meaning or sound

Vocabulary:  
Personalizing



## Vocabulary Strategy: Referencing

Referencing is a strategy that allows readers to use *resources* to determine the meaning of a word. This strategy requires more than just looking up the definition of a word in the dictionary. “Definitions alone can lead to only a relatively superficial level of word knowledge. By itself, looking up words in a dictionary or memorizing definitions does not reliably improve reading comprehension” (Nagy, 1988, p. 5). Referencing directs the student to a source for help or information when encountering unknown words.

Instructing students on how to reference the meaning of words for the appropriate context is key. When readers activate their ability to reference a word, they are using an indicator that orients them to bring clarification and meaning. These *resource indicators* can be in forms such as a dictionary, glossary, online *search engines*, or a thesaurus. “To make *deriving the meaning* from the dictionary definitions most effective, it needs to be modeled for students and practiced in a scaffolded way” (Beck et al., 2008, p. 47). The ability to use these resources effectively requires readers to understand the various elements involved with a particular resource reference (e.g., dictionary parts).

### Key Vocabulary for Referencing

- Deriving Meaning: deducing the meaning from the resources provided
- Resource Indicator: a print or online resource that provides quantified information to obtain the meaning of a word
- Resources: sources of help for determining the meaning of a word
- Search Engine: a Web-based software program that searches for sites based on specific keywords and returns a list of choices connected to the keyword



### Assessment for Referencing

Use the following behaviors as a guide as you assess students’ abilities to reference. Do students exhibit these behaviors never, rarely, often, or always?

- Analyzes resource indicators and determines their purpose for bringing meaning to a word
- Uses glossaries, dictionaries, and thesauruses to determine meaning of words
- Selects meaning of a word that best supports the use of the word in context

### Teacher Talk: Statements, Questions, and Prompts for Referencing

The following are suggestions for teacher talk that encourages readers to think strategically as they employ the referencing strategy. Try using some of these statements, questions, and

prompts with your students as you work through the techniques in the following section. They are aligned with Bloom’s taxonomy and Webb’s DOK levels.

<b>Level of Thinking</b>	<b>Teacher Talk</b>
Creating Extended Thinking	<ul style="list-style-type: none"> <li>Formulate a definition of the word based on how it is used in context. Elaborate on the reason for your definition of the word.</li> </ul>
Evaluating Strategic Thinking	<ul style="list-style-type: none"> <li>How can you prove the word’s meaning?</li> <li>How does the communication tool used determine the degree of information received?</li> </ul>
Analyzing Strategic Thinking	<ul style="list-style-type: none"> <li>Discuss the various meanings of the word _____. Describe which meaning best represents the identified word and why?</li> <li>Analyze which search engine provided the best response to your search and why.</li> </ul>
Applying Skill/Concept	<ul style="list-style-type: none"> <li>Think about the word _____. Which word means _____? How did you find the meaning for the word? What keywords did you use to narrow your search on the Web search engine?</li> </ul>
Understanding Skill/Concept	<ul style="list-style-type: none"> <li>How did the dictionary help you to figure out the word?</li> </ul>
Remembering Recall	<ul style="list-style-type: none"> <li>What feature helps you to know if a word will be in the glossary?</li> </ul>

## Techniques for Referencing



# Start Your Engines

**Purpose:** To navigate online search engines to find meanings of words

**Multiple Intelligences:** Visual/spatial, verbal/linguistic, bodily/kinesthetic

**Materials:** Web-based technology, variety of search engines

**Procedure:**

1. Examine the use of keywords and phrases as a starting point that might lead to necessary topical information. Explain how online search engines deliver multiple results from technology and that the information might be found in any one of the results that come up after a keyword or phrase search.

Suggested Teacher Talk: *How does the communication tool you used determine the degree of information received?*

2. Investigate the various types of search engines and their functions (e.g., page rank, statistic bar, dictionary definitions, search results). Below are a few recommended search engines for keyword vocabulary development:

**Vocabulary:  
Referencing**

- Googlewonderwheel.com—a graphical representation of related search items
- Visuwords.com—a site that creates a word map of connections and word families
- Eyeplorer.com—a colorful wheel that arranges topics by categories
- Shahi (blachan.com/shahi/)—a visual dictionary that combines wiktionary.org content with flickr.com images

3. Have students select three search engines and try out the same topical search in each.

Suggested Teacher Talk: *Describe which search engine provided the best response to your search and why. What keywords did you use to narrow your search?*

4. Students record in the vocabulary journal the keyword or phrase that supported their connection to the necessary information.

## Resource Course

### Vocabulary: Referencing

**Purpose:** To effectively use the glossary and thesaurus to analyze content vocabulary

**Multiple Intelligences:** Verbal/linguistic, interpersonal

**Materials:** Content text with glossary, text selection with key vocabulary emphasized typographically (e.g., bold, italics, color), dictionary, thesaurus, sticky notes, markers, student notebooks or journals

**Procedure:**

1. Prior to reading a content text, students can initiate their journey by skimming the selection and noting the text features that are used for emphasizing important vocabulary (e.g., bold print, italics, different colors). The emphasized terms often align with the word selections in the text glossary.
2. For the next steps on their journey, students work independently to select terms that are emphasized in the content text selection and brainstorm possible definitions, synonyms, and antonyms for each word. Students share their chosen vocabulary definition predictions with a partner.
3. Working in pairs, students confirm or modify their predictions through analysis of the words in a dictionary, glossary, or thesaurus. Students note the definitions (from the glossary or dictionary), synonyms, and antonyms on 3-by-5-inch cards or in vocabulary journals or notebooks. When applicable, encourage students to include a visual representation to enhance their understanding.
4. Wrap up the journey by leading students in a whole-group discussion about how the dictionary, glossary, and thesaurus support student learning and vocabulary understanding.

Suggested Teacher Talk: *How might these resource tools support the writing process?*

**Motivation/Engagement:** *Visual/spatial.* Encourage students to use online dictionary and thesaurus resources (e.g., [www.dictionary.com](http://www.dictionary.com), [www.thesaurus.com](http://www.thesaurus.com), [dictionary.cambridge.org](http://dictionary.cambridge.org)). Use the Word-Net Wheel technique (see the Associating strategy in this chapter) as a tool for student application in organizing and displaying their dictionary or glossary definitions, synonyms, and antonyms.

## Defining Moment

**Purpose:** To explore the dictionary features to sum up the meaning of a word

**Multiple Intelligences:** Verbal/linguistic, bodily/kinesthetic, interpersonal, intrapersonal

**Materials:** Defining Moment Feature Cards reproducible (see Appendix), Four Corners reproducible (see Appendix), dictionaries, technological support (e.g., online dictionary sources)

**Procedure:**

1. Preview content text and select essential academic vocabulary for students to explore for a deeper understanding.
2. Copy and distribute the Defining Moment Feature Cards (pronunciation, syllabication, parts of speech, etymology [history of the word], definitions, and synonyms).
3. Model the process for Defining Moment using a sample content word. Using a print or online dictionary, locate the sample word and read aloud each of the dictionary resource features noted on the Defining Moment Feature Cards. Select four of the cards as focus areas to create a Four Corners model (see the Visualizing strategy in this chapter) on notebook paper or chart paper. Use a think-aloud to demonstrate how each feature provides the reader with a deeper understanding of the word.
4. Initially, assign each group one of the focus content vocabulary words. In table groups of four or five, students collaborate to distribute the Defining Moment Feature Cards (there are six cards, so some group members may need to present two cards to their group), and locate their focus word using a print or online dictionary resource. Students use the information on their assigned card(s) as a guide for sharing their word feature(s) with the group.
5. Groups will need to identify four of the Defining Moment Feature Cards that would support understanding of the focus vocabulary to create their Four Corners model. Encourage students to be creative by using diagrams, models, or illustrations to share their focus vocabulary term.
6. Each group presents their vocabulary word to the whole class. Display the groups' work in the classroom during the theme or unit of study to revisit key vocabulary.
7. Guide students in a reflective discussion on how the multiple features presented in a print or online dictionary support readers in extending their understanding beyond a definition.

Vocabulary:  
Referencing

**Motivation/Engagement:** *Visual/spatial.* Encourage students to self-select their Defining Moment vocabulary in the text. Deepen word associations by having students craft an acrostic poem using the letters from their word. An acrostic poem takes a word and uses each of its letters as the first letter of a line in the poem (see [www.readwritethink.org](http://www.readwritethink.org), search on keywords “acrostic poem” for a selection of lessons).