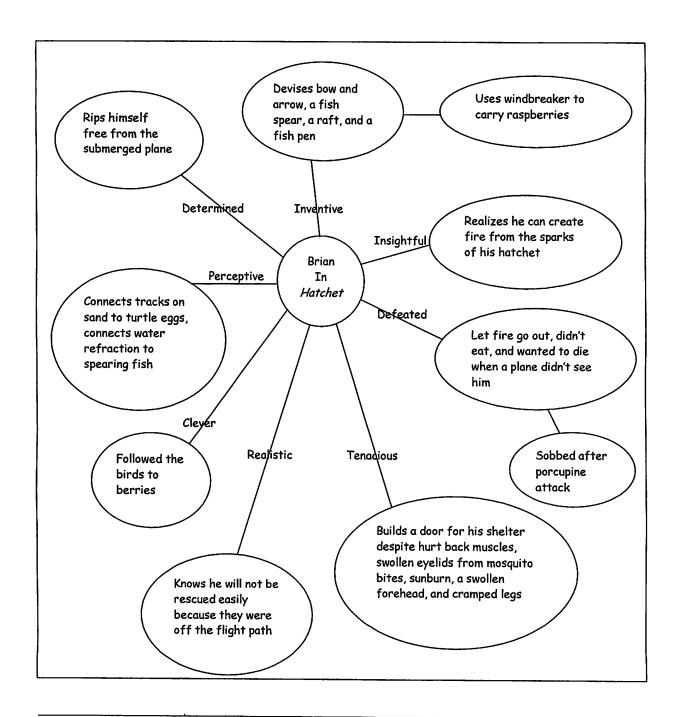
Analogies: (Sejnost & Thiese, 2001) - <u>Procedure</u>: (a) select a concept and explain how it relates to a concept that the students recognize (e.g. see the example below), (b) model the graphic organizer on an overhead, (c) have small groups generate similarities and differences, and (d) ask students to identify categories (e.g. rule making that comprise the basis for comparison).

Example: Analogies

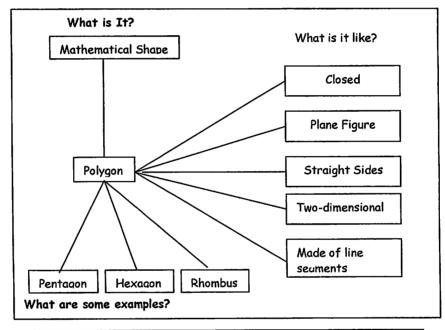
Analo	gies			
Similarities and Differences Between the Concepts of:				
Congress and a S	School Principal			
Similarities	Differences			
Congress and a principal both set rules and reaulations.	Congress has more members and rules and reaulations.			
Both organizations need to work together to achieve aoals.	Congress has nationwide goals.			
Neither has complete power regarding issues.	Congress has a Senate and president; a principal has a superintendent and a school board			
Both organizations represent other groups of people.	Congress rules the nation; principals rule the school community.			
Both have committees.	Congress has joint committees; principals have assistants and parent advisors.			
Both have processes for achieving goals.	Congress votes; principals make rulings based on input from others.			

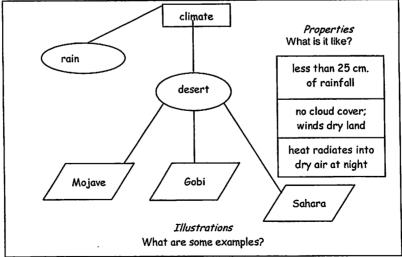
<u>Character Trait Maps</u>: - (Burns, 1999) - Words for labeling character traits are often missing in student's vocabularies. Even if the words are known, students are often unable to distinguish the subtle differences among connotations. <u>Procedure</u>: (a) after reading, have the class discuss the characters and in pairs have them try to visually verbalize the character traits (see example that follows), and (b) as a class, again, have the students compare their maps in order to select the words they think work best.



<u>Click and Clunk</u> - (Sadler, 2001) - Have students create two columns on a paper labeled "click" and "clunk." They read a passage and then list words they understand or don't understand in the two columns. Direct instruction or group discussion is used to clarify meanings of the words.

Concept Definition Mapping - (Billmeyer & Barton, 1998) - This strategy teaches students the meaning of key concepts by helping them understand the essential attributes, qualities, or characteristics of a word's meaning. Procedure: (a) use an overhead to display an example of a concept definition map (b) select a term and have students brainstorm information for such a map, (c) have students work in pairs to complete a map with a term you have chosen from the unit, and (d) instruct students to write a complete definition, using the information from their maps. See examples below.



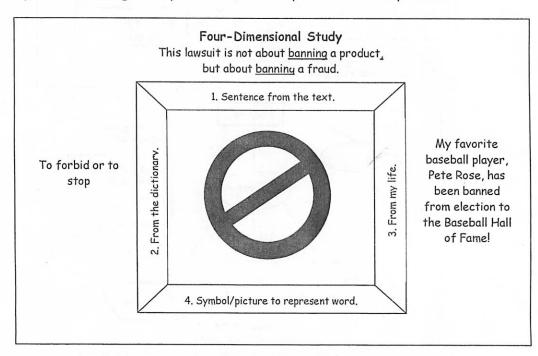


<u>Connect-Two</u> - (Cloud, Genesee, & Hamayan, 2000) - A vocabulary strategy which can be used before, during or after reading text. <u>Procedure</u>: Given a list of words, students try to identify connections between any two words on the list and explain the rationale. For example, they might explain the connections between "benefit" and "benefactor."

<u>Contextual Redefinition</u> - (Readence, Moore, & Rickelman, 2001) - It is essential that readers are able to use context clues to derive meaning; this strategy provides a format for students to realize this importance. <u>Procedure</u>: (a) select unfamiliar words from the text that are central to comprehending important concepts, (b) write a sentence for each word onto a transparency, (c) ask groups of students to provide a meaning for each word and to defend their guess, (d) then present the words in the original text, and (e) students consult a dictionary for verification. In essence, appropriate reading behavior is being modeled for the class.

<u>Find Someone Who</u> - (Kagan, 1992) - This is an interactive strategy to help students practice new vocabulary. <u>Procedure</u>: (a) prepare a *Find Someone Who* ... form that looks similar to a bingo card, (b) in each space put a new vocabulary word, (c) give one form to each student and give the class about ten minutes to roam and get definitions (i.e. the name of the student and what he or she gives as the meaning of the word or concept), and (d) the student who gets most of the spaces filled without using anyone twice 'wins.' Translations into the mother tongue are acceptable.

<u>Four-Dimensional Study</u> - (Stejnost & Thiese, 2001) - This strategy encourages students to learn vocabulary from different approaches: context clues, dictionary definitions, application, and visual. <u>Procedure</u>: (a) choose 5 to 10 words that are unfamiliar, (b) instruct students to do the following on an index card - copy a sentence from the text that uses the word, write the dictionary meaning, write a personal knowledge or experience, and draw a picture. See example below.



4-Square Vocabulary Approach - (Stephens & Brown, 2000) - This provides an interactive way to introduce key vocabulary words and helps students to draw on their prior knowledge and personal experience. The strategy takes less time as students learn how to use the strategy on their own. Procedure: (a) have the students fold and number their papers into four squares, (b) in square 1, students write the key term while the teacher presents the word in context and explains its definition, (c) in square 2 students write an example from personal experience that fits the term (can be done in the mother tongue if necessary), (d) in square 3 students write a non-example of the term, and (e) in square 4 students write their own definition of the word. See the example below.

(square 1)	(square 2)
compromise compromised compromising	Sometimes people have to settle things by giving up something they want. Some government delegates had to agree to give up some things they anted to reach an agreement.
(square 3)	(square 4)
The fighting couple could not settle their differences and so they divorced.	A compromise is an agreement between two or more people or groups where both must give up something.
An agreement between the two counties was not reached, and so a war was started.	

<u>Frayer Model</u> - (Billmeyer & Barton, 1998) - This is a word categorization strategy which provides students with different ways to think about the meaning of word concepts and develop understanding of content area reading vocabulary. Students form hierarchical word relationships by listing essentials, examples, non-essentials, and non-examples of a particular word (i.e. knowing what a concept isn't can help define what it is). <u>Procedure</u>: (a) assign concepts to groups, (b) explain the attributes of the Frayer model, (c) complete one with the class, (d) have students work in pairs to complete their concepts, and (f) have students share and then display their boards so the concepts can be continuously during the unit of study. See the example on the following page.

DINOSAURS - P	REHISTORIC REPTILES
ESSENTIALS: prehistoric reptiles: backbone, lay eggs, straight legs, walk or run fast	NON-ESSENTIALS: cold blooded (some may have been warm blooded); eat meat (some eat plants): chew food, hunt in packs
EXAMPLES: brontosaurus, allosaurus, stegosaurus, diplodocus	NON-EXAMPLES: snakes, crocodiles, turtles, lizards

Knowledge Rating - (Stejnost & Thiese, 2001) - <u>Procedure</u>: (a) distribute a list of words appropriate to the topic, (b) ask students to respond individually to each category by placing an 'x' in the boxes, (c) have students share their responses in small groups, and (d) have a whole class discussion to foster prior knowledge about the topic. See examples below.

n Define	x	Can Use in a Sentence	Don't Know at All
			×
			×
V			
· ·			
X	X	×	
			×
			×
			×
Х	х	×	1
	X	х х	x x x

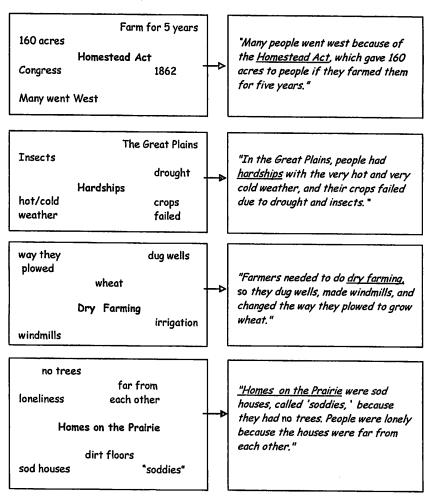
Knowledge Rating for Social Studies						
Word	Have Seen or Heard	Can Say	Can Define	Can Spell	Can Use in a Sentence	Don't Know at All
oligarchy						×
anarchy	×	Х	×	х	×	
democracy	×		х			
communism		X		×		
socialism						×
impeachment	x	X				
monarchy		х		×		
banishment	×					

<u>Independent Word Learning Strategies</u> - (Barton, 2001) - These three methods consistently help students learn to determine meaning of unfamiliar words on their own:

- 1. Modeling context clues When you are reading together with your students, be on the lookout for words you think they might not know. Stop and ask them what they think the words might mean in this text. Walk them through the process of looking around the unfamiliar word for words that offer clues to meaning, and tell them they are using context clues. Modeling this strategy on a regular basis a few times a week will help students begin to apply them on their own:
- 2. Structural analysis Reading also offers many opportunities for this strategy. Structural analysis means to look within an unfamiliar word for familiar word parts. Students can learn through your modeling to use this strategy if you explicitly show them how it works and practice with them regularly; and
- 3. Using the dictionary It is worth the time to teach students how to use the dictionary to look up unknown words since they tend to note only the first few words that appear in the dictionary definition when they look up a word. A practical format for helping students use the dictionary productively is to have them answer two questions when they define a word: "What larger group of 'things' does this word belong to?" and "What makes this word different from the rest of its group?"

Magnet Summaries - (Buehl, 2001) - This strategy involves the identification of key words - magnet words from a reading- that students then use to organize information into a summary (prewriting). Procedure: (a) have students read a short portion of text, looking for key terms to which the details in the passage seem to connect, (b) on a transparency model writing details from the passage that are connected to the magnet word, (c) distribute index cards for recording magnet words while students read the rest of the passage (tell younger students they should identify a magnet word for each paragraph or heading), (d) in groups have students share their words and decide on the best magnet words and generate the details, (e) model for students how the information can be organized into a sentence, (f) have students construct sentences for their remaining cards (on scratch paper first and then on the back of the cards), and (g) direct students to arrange the cards in the order they want their summary to read. See example on following page.

MAGNET SUMMARIES FOR HISTORY



<u>Missing Words</u> - (Stephens & Brown, 2000) - Missing words - an adaptation of the cloze procedure - engages students in reading a selection with certain words deleted, and then predicting in writing the missing words. It helps students learn to draw upon prior knowledge, use meta-cognitive skills, think inferentially, and understand relationships. <u>Procedure:</u> (a) the teacher selects a passage that the students haven't read and deletes certain words - leaving the beginning and ending sentences intact- (the deleted words may be key vocabulary words, certain parts of speech, or based on a numerical pattern like every seventh word), (b) the teacher also models - using a different passage - how to skim a passage for an overview and how to read the material looking for clues, (c) the teacher uses a think-aloud to model the meta-cognitive process of rereading the passage - monitoring the word choices and their effect upon the meaning of the passage.

Open Word Sort - (Cloud, Genesee, & Hamayan, 2000) - A strategy for before, during or after reading text. Procedure: (a) Student pairs are given words written on individual strips of paper, (b) they collaborate to categorize the words by identifying and explaining relationships among them, (c) students then read and reorganize the words in a way that would be effective for teaching key

information to others, and (d) following the reading they use the resorted words to explain the reading or answer questions.

Semantic Feature Analysis - (Johnson & Pearson, 1978) - This develops vocabulary concepts and categorization skills when students find similarities and differences in related words. Procedure: (a) write a category above a matrix, (b) list words or examples in the category vertically in the matrix, (c) write features horizontally on the matrix, and (d) have students study each feature and write a '+' if the word contains the feature and a '-' if the word does not. The strategy helps students form broader vocabulary concepts and review information by comparing and contrasting words in the same category. See example below.

	DINOSAURS						
	Triassic (220m)	Jurassic (213m)	Cretaceous (144m)	Meat Eaters	Plant Eaters	Large	Small
Tyrannosaur	-		+	+		+	-
Coelophysis	+			+	-		+
Bronotosauris		+	_	_	+	+	
Trodan			+	+			+
Duckbills	••		+	+		+	-
Prosauropods	+		-	-	+	+	_
Alosaurus		+		+ .		+	-

<u>Semantic Gradient Scales</u> - (Blachowicz & Fisher, 1996) - This scale helps students to see how new words fit into a patterns of known words. <u>Procedure</u>: (a) establish a semantic gradient scale (see example), (b) have the students develop words that fit between the two poles (e.g. developing words between courageous and cowardly might coordinate with a literature lesson while a freedom list might fit with a social studies unit).

THE SEMANTIC GRADIENT SCALE				
Hottest scorching sultry steamy tropical balmy sunny cool nippy raw freezing frigid glacial	Courageous	Free To Do As You Please		
Coldest	Cowardly	Totally Controlled		

Simon Says, Science Says: The teacher selects informal and formal ways of describing actions or events (i.e. rises/ floats, falls/ sinks, stays the same/ remains unchanged). The teacher uses the game of 'Simon Says' to practice the actions with students. During science experiments, the teacher reminds the students that there is another way to describe similar events which is how 'science says.' Words should be categorized onto a word wall so students can locate the formal vocabulary when recording data or writing lab reports. Variations: Simon Says, Einstein Says; Simon Says, Shakespeare Says; Simon Says, Columbus Says.

10 Most Important Words - (Stephens & Brown, 2000) - This is designed to help students become aware of the value of key concepts in developing content knowledge. It can be used as a 'pre' or 'post' unit activity. Procedure: (a) the teacher introduces a topic by helping students think about what they already know, (b) students are then asked to predict in pairs what they think the ten most important words of the unit will be, (c) then pairs share their lists with another pair - and they agree to a final list of ten, (d) the lists are continually referred to, revised and at the end of the unit the class reflects on which ten were the most important after all.

<u>Tri-bond</u> – (Chen, L. & Mira-Flores, E., 2006) – Create a set of word cards that contain three words on one side and the larger concept they fit within on the other side. Have students work in partners: one reads out the front of the card and the other has to try out the concept. Example:

(front)	(back)
Jupiter	
Mercury	Planets
Mars	

<u>Verb Walls:</u> Understanding and using verbs helps students to grasp the actions of a discipline. Teachers can create a verb wall by posting the 50-verb list of their subject area onto the wall. Teachers refer to specific verbs as they present concepts (i.e. exposure) and students use the verb wall for writing tasks in the specific subject areas to explain or describe concepts (i.e. practice and mastery through the writing process). See verb lists below.

- <u>Math</u> add, subtract, multiply, divide, equalize, factor, correspond, graph, plot, compare, represent, travel, substitute, intersect, calculate, suppose, assume, function, bisect, depend, vary, estimate, slope, change, interpret, measure, connect, apply, match, distribute, simplify, evaluate, express, solve, construct, predict, order, designate, assign, follow, differ, coincide, justify, arrange, demonstrate, operate, extrapolate, draw, determine, find
- <u>History</u> cause, change, affect, influence, conflict, force, govern, rule; invade, dominate, rebel, attack, establish, expand, lead to, explore, follow, build, form, export/import, increase/decrease, support, promote, vanquish, develop, reign, result, contribute, grow,

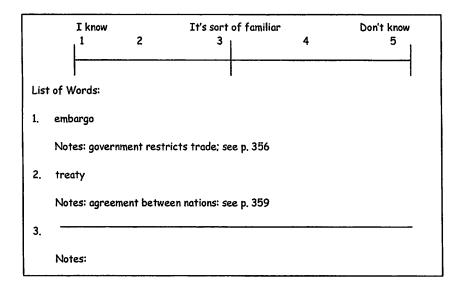
demand, produce, trade, modernize, industrialize, urbanize, reflect, turn, control, end, begin, rise, decline, believe, practice, advance, retreat, convert, isolate, integrate, worship

- <u>Literature</u> evoke, convey, express, imply, mean, infer, ascertain, contrast, coincide, relate, begin, proceed, end, tie in, juxtapose, clash, rhyme, alliterate, compare, analyze, symbolize, represent, relate, connect, explain, describe, expose, inform, interpret, foreshadow entail, suggest, summarize, imagine, satirize, understate, exaggerate, personify, motivate, dramatize, connote, denote, characterize, specify, philosophize, translate, narrate, portray, conflict, empathize
- <u>Chemistry</u> separate, mix, behave, join, bond, fuse, attract, repel, lower, raise, remain, liquefy, burn, calculate, discharge, explode, implode, deploy, balance, equate, level, form, involve, remove, melt, cool, dissolve, heat, change, affect, release, free, oxidize, control, absorb, differ, maintain, react, act, share, transfer, contain, saturate, exchange, equalize, occur, produce, complete, respond, evaporate
- <u>Earth Science</u> fill, develop, split, cleave, cut, flow, spin, drop, raise, increase, decrease, absorb, weather, erode, build, turn, drift, move, accumulate, maintain, change, support, release, migrate, sift, dissolve, moderate, float, sink, originate, reflect, radiate, settle, form, melt, cement, compact, collapse, disintegrate, arrange, date, overturn, precipitate, elongate, shorten, intensify, weaken, travel, diverge, converge
- <u>Biology</u> interact; develop, flow, block, react, act, metabolize, pump, oxygenate, deoxygenate, inflame, expand, contract, nourish, respond, produce, die, protect, reproduce, exchange, process, perform, digest, excrete, secrete, synthesize, breathe, divide, differentiate, transmit, filter, cross, graft, regenerate, disperse, fertilize, evolve, mutate, ingest, control, transport, stimulate, impede, function, connect, hydrate, dehydrate, acidify, proliferate, decompose
- <u>Physics</u> push, pull, fly, raise, lower, burn, flow, cohere, adhere, engage, disengage, force, float, expand, contract, melt, evaporate, sink, spin, differentiate, turn, drive, exert, convert, balance, calibrate, measure, deflect, bounce, reflect, explode, implode, relay launch, meet, gather, collect, signal, ignite, draw, touch, attract, repel, rotate, reverse, vibrate, recycle, counteract, act, react

(Benjamin, 1999

<u>Vocab Alert!</u> - (Stephens & Brown, 2000) - The design of the Vocab Alert! Helps make students aware of important terms prior to reading or a lecture. It serves as a form of self-assessment as well as an assessment tool for teachers. <u>Procedure:</u> (a) the teacher selects the most important words (between 5 and 10) from the text, (b) using the continuum below, students self assess their familiarity with each term, (c) then the teacher introduces the significance of the terms to the topic, (d) as the students read/hear the text, they record information, and (e) afterwards the teacher engages the class in discussion to further clarify and develop understanding of the terms.

See example below.



<u>Vocab-marks</u> - (Stephens & Brown, 2000) -A Vocab-mark is a bookmark made from laminated paper with spaces for students to list unfamiliar words as they encounter them in their reading.

<u>Procedure</u>: (a) the teacher models finding unfamiliar words while reading and how to record them on a Vocab-mark and (b) students make their own and begin to list new words, the page number, and a brief definition (either through a dictionary or a friend). Some teachers structure the use of Vocab-marks by specifying what students must look for (e.g. three technical terms, two unfamiliar terms, etc).

<u>Vocabulary Cards</u> - (Kagan, 1990) - These cards are designed to generate higher level thinking among students in cooperative learning groups. <u>Procedure</u>: (a) the teacher provides a group of four with the vocabulary words from the unit, (b) after the question is read students pair up in the group of four to discuss the answer, and (c) then the pairs share their responses with one another; <u>or</u> (a) the teacher provides pairs with the vocabulary words, (b) student 1 asks the question, (b) both students write their answers down and then share, and (c) student 2 asks the next question (and so on). Cards are available from <u>www.kaganonline.com</u>.

<u>Vocabulary Concept Chain</u> - (Billmeyer, 2003) - Students study the vocabulary relating to the concept being studied. In pairs, they try to determine how the vocabulary words are related in order to organize the words into a concept chain (e.g. a circular set of words). After all of the vocabulary words are placed in the appropriate order, students write a relationship sentence which summarizes how the chain of words expresses the meaning of the concept. See example below.

Pollution Relationship sentence: In order to beautify our world we need to take care of our environment by recycling, reducing waste, reusing materials and eliminating pollution. Reuse Reduce Reduce

<u>Vocabulary Connections</u> - (Brisk & Harrington, 2000) - Choose a reading selection. Choose words crucial to understanding the selection - preferably in limited semantic fields. Have students look up the words in a dictionary - in class or as homework. Have students discuss their definitions with one another in class (i.e. give examples in their own lives of the selected words and their meanings). Have students read the selection. Have students retell or write a summary of the selection - using the new vocabulary.

<u>Vocabulary Elaboration</u> - (Brown, Phillips, and Stephens, 1993 in Billmeyer, 2003) - The strategy has students record a new word, the date it was encountered, and the context in which the word was found. Students propose a definition and check it against a dictionary or glossary and then they provide examples and non-examples based on their experiences. Students also record characteristics or elements which are situational to help them understand different meanings of the same words. Students work in groups to complete a graphic organizer. These are shared with other groups. See example two pages down.

<u>Vocabulary Graphics</u> - (Stejnost & Thiese, 2001) - <u>Procedure</u>: (a) give students 5×7 index cards, (b) instruct students to find the meaning of a given word and write it in the center of the card, (b) tell them to record the following information in each of the card's four corners: a sentence using the word, a synonym, an antonym, an illustration, and (d) hook the cards together for unit vocabulary file. See the example below.

SENTENCE:

When I think of a NUCLEUS, I think of a sunny-side up egg!

SYNONYM:

core

WORD: Nucleus

DEFINITION: A nucleus is the center

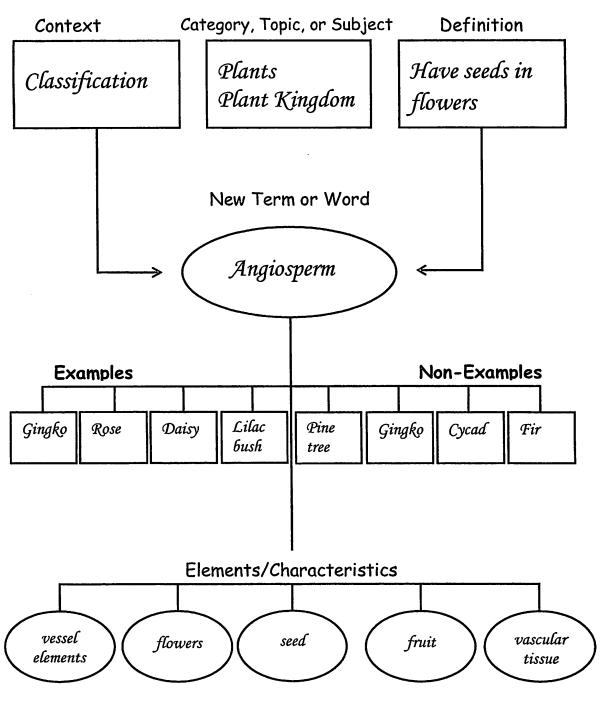
ILLUSTRATION:

23

ANTONYM:

edge

Vocabulary Elaboration Strategy Example



Brown, Phillips, and Stephens, 1993

<u>Vocabulary Notebook or Journal</u> - (Billmeyer, 2004) - After reading or discussing, students keep track of their vocabulary development in a notebook or journal by recording how a word is used in different contexts, sketching what it means, and providing meaningful examples which link to their lives. Notebooks and journals can be shared with peers. See example.

Vocabulary Notebook Example

1. word: concentric page: 5

6. association or symbol:

2. context: "There were more than a dozen vessels of various kinds, formed roughly into concentric circles."

3. definition: having a common center

4. antonyms: imbalanced

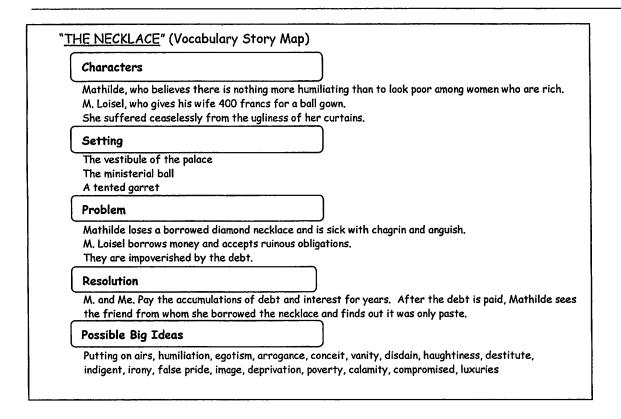
5. predicted definition: round



<u>Vocabulary Writing in Math</u> - (Billmeyer, 2004) - Learning math is often equated to learning a new language due to the vocabulary-dense texts and conceptual context within which vocabulary is presented. One way to help students assimilate mathematical language is to have them create their own vocabulary journal as follows:

WORD		PICTURE		DEFINITION
yard	f†	ft	ft	A standard unit of measure made up of three feet. It is smaller than a meter.

<u>Vocabulary Story Map</u> - (Blachowicz & Fisher, 1996) Integrating new vocabulary with students' schema or prior experiences makes them more accessible. <u>Procedure</u>: for an upcoming story, map out the story line choosing vocabulary words that are critical to the story elements (see example). The possible big ideas section may not be in the story but are needed for effective discussion and the vocabulary should be used multiple times in discussing, explaining, summarizing, and responding to the story. See example below.



<u>Word Boxes/Journals & Logs</u> - (Fogarty, 2001) - These are based on the same principles but are for different age groups. For younger students, shoeboxes are used for individual word boxes. Students gather new words each day using 8 inch \times 3 inch colored construction strips to record them. Students play the game "Go Fish" mixing their word cards with partners. When students know their words, they keep them (unknown words are discarded). Word strips are then used to create a story - some- of which are illustrated, bound and read to others. Over the months students will see their own progress. Vocabulary journals and logs serve the same purpose for older students as they use their growing list of words to better understand content specific material.

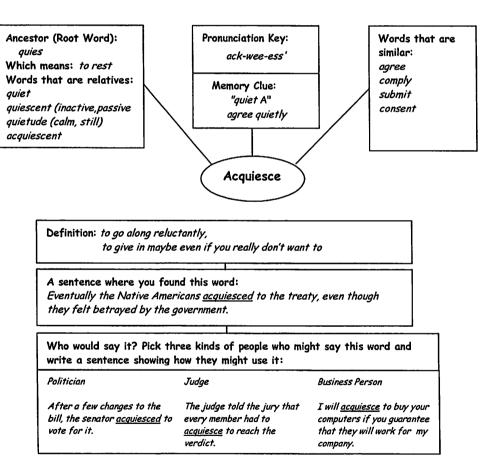
Word Chains - (Stephens & Brown, 2000) - A word chain provides students with a structure to explore relationships among words, understand how they can be used, and remember their meanings. Procedure: (a) the teacher selects 5 to 7 new vocabulary words that are related to the same concept and models how to develop a word chain based on the connections, (b) the students - in pairs - are given a group of words, (c) the students develop a word chain and then share it with another pair (or the rest of the class), and (d) finally each student writes a short paragraph using the new words in a way that demonstrates their connection.

<u>Word Cards Strategy</u> - (Brisk & Harrington. 2000) - <u>Procedure</u>: Prepare strips of strong cardboard. Each day have each student give a word; write it on the card. Give the cards to the students to read alone or to trace the letters. Keep a file box in which to place the cards (first write the names

of the children on the cards). Every day have the children find their own words, sit with a classmate, and read their words to each other. If they can't remember their words, sit and help them. Once students have 20 to 30 cards, use these follow-up activities:

- . Taking a few and checking to see if they remember them
- . Choosing one to elicit discussion of a topic by a group or the whole class
- . Having the students write their word and draw a picture
- . Having students put together a dictionary or create a game with the words

<u>Word Family Tree</u> - (Buehl, 2001) - This strategy involves students in connecting a key term to its origins, to related words or words that serve a similar function, and to situations in which one might expect the word to be used. <u>Procedure:</u> (a) select a group of target words for students to investigate (i.e. pivotal words in a story, a unit of study, or general-high utility vocabulary) and (b) have students work with partners or in cooperative groups to complete the organizer using appropriate resources. See example.



<u>Word of the Week</u> - (Stephens & Brown, 2000) - This process of making new words their own helps students to construct an ever-widening vocabulary. <u>Procedure:</u> (a) students identify a new word that they are interested in adding to their vocabularies, (b) they list the word, the part of speech, the

definitions, and a sentence, (c) students use 'their word' in class all week, and students share their words with partners, then small groups, then the class.

<u>Word Splash</u> - (Burns, 1999) - Word splash sounds very simple but an amazing amount of connected information is shared in a relatively short amount of time. The strategy may not produce precision with vocabulary but when the words are encountered in the text, they will not be complete strangers. <u>Procedure:</u> (a) a variety of words that are integral to the unit are spread across a transparency, (b) the teacher elicits from the student what is already known about the terms - including their use in sentences, and (c) the teacher checks off the words as they a re used, (d) The next step is to predict the story based on the word splash. Seethe example below.

falcon	celestial	ancient
Osiris		tomb
	deceased	
inscription		dismembered
ointments		divinities
	dynasty	
sarcophagi		mumiform
netl	nerworld	

<u>Word Walls</u> - (Pinnell & Fountas, 1998) - <u>Procedure</u>: (a) be selective and *stingy* about what words go up there, limiting the words to those really common words that students need a lot in writing, (b) add words gradually - about five a week, (c) make them accessible where everyone can see them, write them in big letters, and use a variety of colors, (d) practice the words by chanting and writing them in different ways (i.e. magnetic letters, sand, portable word walls), (e) do a variety of review activities, (e) make sure that word-wall words are spelled correctly in any writing the students do. See examples in their books!

Zip Cloze - (Burns, 1999) - <u>Procedure</u>: Put a reading passage on an overhead and block out words with masking tape. Choosing selected vocabulary words seems more useful than deleting every seventh word (the usual doze). Students use all the strategies they know to guess the missing words. When the tape is guessed, the tape is *zipped* off and students can compare their choice with the author's.

@1998 Kagan's Cooperative Learning Structures

1. Agreement Circles

Students stand in a large circle, then step to the center in proportion to their agreement with a statement by a student or teacher.

2. Blind Sequencing

Students sequence all pieces without peeking at the pieces of teammates.

3. Circle-the-Sage

Students who know, stand to become sages; teammates each gather around a different sage to learn. Students return to teams to compare notes.

4. Corners

Students pick a corner, write its number, go there, and interact with others with same corner choice in a Rally Robin or Timed Pair Share.

5. Fan-N-Pick

Played with higher level thinking Q cards. #1 fans; 2 picks; #3 answers. #4 praises. Students then rotate roles.

6. Find My Rule

The teacher places items in a frame (two boxes, Venn, on a line); Students induce the rule.

- Two Box Introduction
- What's My Line
- Crack My Venn

7. Find Someone Who

Students circulate, finding others who can contribute to their worksheet.

- People Hunt: Students circulate, finding others who match their own characteristics
- Fact Bingo: Find Someone Who played on bingo worksheet

8. Find the Fib

Teammates try to determine which of three statements is a fib.

• Fact or Fiction: Teammates try to determine if a statement is true or false.

9. Flashcard Game

Flashcards in pairs, with rounds, progressing from many to no clues.

10. Formations

Students stand together as a class to form shapes.

11. Four S Brainstorming

Sultan of Silly, Synergy Guru, Sergeant Support, and the Speed Captain play their roles as they quickly generate many ideas which are recorded by Synergy Guru.

 ThinkPad Brainstorming: No roles. Students generate items on thinkpad slips, announcing them to teammates and placing them in the center of the table.

12. Idea Spinner

Spin Captain "Shares an Idea" or "Quizzes a Pal" to Summarize, Evaluate, Explain, or Predict.

13. Inside/Outside Circle

Students in concentric circles rotate to face a partner to answer the teacher's questions or those of the partner.

14. Jigsaw Problem Solving

Each teammate has part of the answer or a clue card; teammates must put their info together to solve the team problem.

15. Line Ups

Students line up by characteristics, estimates, values, or assigned items.

- Value Lines: Student, line up as they agree or disagree with a value statement.
- Folded & Split Line Ups: Students fold the Line Up or Split and Slide it to interact with someone with a different point of view, characteristic or estimate.

16. Lyrical Lessons

Students write and/or sing songs based on curriculum, often to familiar tunes.

17. Match Mine

Receivers arrange objects to match those of Senders whose objects are hidden by a barrier.

- Draw-What-I-Say: Receiver draws what sender describes
- Build-What-I-Write: Receiver constructs what Sender has described in writing.

18. Mix-Freeze-Group

Students rush to form groups of a specific size, hoping not to land in "Lost and Found."

19. Mix-Pair-Discuss

Students pair with classmate, to discuss guestion posed by the teacher

20. Mix-N-Match

Students mix, then find partners with the matching card.

 Snowball: Students toss crumpled papers over imaginary volleyball net, stop, pick up a snowball, then find the person with the matching "snowball."

21. Numbered Heads Together

Students huddle to make sure all can respond, a number is called, the student with the number responds.

- Paired Heads Together: Students in pairs huddle to make sure they both can respond, an "A" or "B" is called, the student with that letter responds.
- Traveling Heads Together: Students in Numbered Heads travel to new teams to share response.

22. One Stray

The teacher calls a number: students with that number "stray" to join another team, often to share.

- Two Stray: Two students stray to another team, often to share and to listen.
- Three Stray: Three students stray to another team, often to listen to the one who stayed to explain a team project.

23. Pairs Check

Students work first in pairs each doing a problem and receiving coaching and praise from their partner: then pairs check and celebrate after every two problems.

24. Pairs Compare

Pairs generate ideas or answers, compare their answers with another pair, and then see if working together they can come up with additional responses neither pair alone had.

25. Paraphrase Passport

Students can share their own ideas only after they accurately paraphrase the person who spake before them.

26. Partners

Pairs work to prepare a presentation, then present to the other pair in their team.

27. Poems for Two Voices

Partners alternate reading "A" and "B" lines of a poem, and read "AB" lines together in unison.

 Songs for Two Voices: Partners alternate singing "A" and "B" lines of a song, and sing "AB" lines together in unison.

28. Q-Spinner

Students generate questions from one of 36 question prompts produced by spinners.

29, RallyRobin

Students in pairs take turns talking.

 RallyToss: Partners toss a ball (paper wad) while doing RallyRobin.

30. RallyTable

Students in pairs take turns writing, drawing, pasting, (2 erasers, 2 pencils per team)

 Pass-N-Praise: Students in pairs take turns writing and hand their paper to the next person only after receiving praise.

31. ReadingBoards

Students manipulate game pieces relating to the song as they sing along.

32. Rotating Review

Teams discuss topic, chart their thoughts, rotate to the next chart to discuss and chart their thoughts.

 Rotating Feedback: Teams discuss, then chart their feedback to another team's product: then rotate to do the same with the next team.

33. RoundRobin

Students in teams take turn talking.

- Turn Toss: Students toss a ball (paper wad) while doing RoundRobin.
- Think-Write-RoundRobin: Students think, then write before the RoundRobin.

34. Roundtable

Students in teams take turns writing, drawing, pasting, (1 paper, 1 pencil per team)

- Rotating Recorder: Students take turns recording team responses.
- Simultaneous Roundtable: RoundTable with more than one recording sheet passed at once. (4 papers, 4 pencils per team)

35. Sages Share

Students ThinkPad Brainstorm ideas, and each initial those ideas they can explain, then students take turns interviewing the "sages"—those who can explain an idea they don't understand.

36. Same-Different

Students try to discover what is the same and different in two pictures, but neither student can look at the picture of the other.

37. Send-A-Problem

Teammates make problems which are sent around the class for other teams to solve.

Trade-A-Problem: Teammates make problems which are traded with another learn to solve.

38. Showdown

Teammates each write an answer, then there is a "showdown" as they show their answers to each other. Teammates verify answers.

39. Similarity Groups

Students form groups based on a commonality.

40. Spend-A-Buck

Each student has four quarters to spend on two, three, or four items. The item with the most quarters is the team choice.

41. Spin-N-Think

Students follow a thinking trail (Read Q. Answer Q. Paraphrase & Praise, & Discuss). At each point on the trail a student is randomly selected to perform after all students have had think time.

 Spin-N-Review: Students review questions by following trail (Read Q, Answer Q, Check Answer, Praise or Help).

42. Stir-the-Class

Teams stand in circle around room, huddle to discuss a question from the teacher, stand shoulder to shoulder when they have their answers, rotate to next team when their number is called to share their answer, and join the new team for next question.

43. Talking Chips

Students place their chip in the center each time they talk; they cannot speak gain until all chips are in the center and collected.

 Gambit Chips: like Talking Chips but chips contain gambits (things to say or do): For examples, Affirmation Chips contain praisers: Paraphrase Chips contain gambits for paraphrasing.

Response Mode Chips: Like Talking Chips but chips contain response modes: For examples, Summarizing, Giving an Idea, Praising an Idea

44. Team Chants

Teammates come up with words and phrases related to the content, then come up with a rhythmic chant often with snapping, stomping, tapping, and clapping.

45. Team Interview

Students are interviewed, each in turn, by their teammates

46. Teammates Consult

Fur each of a series of questions, students place pens in a cup, share and discuss their answers, and then pick up pens to write answer in own words.

47. Team-Pair-Solo

Students solve problems first as a team, then as a pair, finally alone,

48. Team Stand-N-Share

All teams stand. Teams share ideas and record ideas from other teams. Teams sit when all ideas are shared and continue to record until all teams sit.

49. Team Statements

Students think, discuss in pairs, write an individual statement, RoundRobin individual statements, and then work together to arrive at team statement they all endorse more strongly than their individual statements.

50. Team Word-Web

Students write the topic in the center, Round Table core concepts then free-for-all supporting elements, and bridges. Students each use a different color pen or marker for individual accountability and to ensure equal participation.

 Team Mind Map: Students draw and label the central image, brainstorm, draw and label main ideas radiating out of the central image, and finally add details using colors, images, branches and key words.

51. Telephone

One student leaves the room. The teacher teaches the remaining students. The absent student returns and is taught by teammates.

52. Think-Pair-Share

Students think about their response to a question, discuss answers in pairs, and share their own or partner's answer with the class.

 Think-Pair-Square: Same except students share their answers with teammates rather than with the class

53. Three-Pair-Share

Students share on a topic three times, once with each teammate.

54. Three-Step Interview

Students share with a partner, the partner shares with them, and then they RoundRobin share their partner's response with the other teammates.

55. Timed Pair Share

Students share with a partner for a predetermined amount of time and then the partner shares with them for the same amount of time.

56. Who Am I?

Students attempt to determine their secret identity (taped on their back) by circulating asking "yes-no" questions of classmates. They are allowed three questions per classmate (or unlimited questions until they receive a no response). They then find a new classmate to question. When the student guesses his/her identity, he/she becomes a consultant to give clues to those who have not yet found their identity.

Responsive ESL Classroom Rating Scale @VPRojas, 2010

UNRESPONSIVE RESPONSIVE 1. 2 3 4 5 7 6 Ethos of subtractive Ethos of additive bilingualism; i.e. students' bilingualism; i.e. students' primary languages primary languages perceived as detrimental honored as beneficial to to English language and necessary for English acquisition language acquisition **EVIDENCE:** 2. 1 2 3 4 5 6 7 Parents perceived as Involvement of parents, problematic or especially in development disinterested of primary language **EVIDENCE:** 3. 1 3 5 7 Students' cultural Connection of students' backgrounds and cultural backgrounds and experiences perceived as experiences made to irrelevant and at times bridge development of dismissed as inferior new concept, knowledge and skills