**http://www.readingrockets.org/article/connecting-word-meanings-through-semantic-mapping**

**Connecting Word Meanings Through Semantic Mapping**

By: Judy Zorfass, Tracy Gray, PowerUp WHAT WORKS



Semantic maps (or graphic organizers) help students, especially struggling students and those with disabilities, to identify, understand, and recall the meaning of words they read in the text.

[E-mail](http://www.readingrockets.org/forward?path=article/connecting-word-meanings-through-semantic-mapping)

[Print](http://www.readingrockets.org/index.php)

[Comment](http://www.readingrockets.org/article/connecting-word-meanings-through-semantic-mapping#comments)

**Related**

[Word Maps](http://www.readingrockets.org/strategies/word_maps)

[10 Ways to Use Technology to Build Vocabulary](http://www.readingrockets.org/article/52248)

[The Vocabulary-Rich Classroom: Modeling Sophisticated Word Use to Promote Word Consciousness and Vocabulary Growth](http://www.readingrockets.org/article/40991)

**Introduction**

Semantic maps (or graphic organizers) are maps or webs of words. The purpose of creating a map is to visually display the meaning-based connections between a word or phrase and a set of related words or concepts. Semantic maps help students, especially struggling students and those with disabilities, to identify, understand, and recall the meaning of words they read in the text.

Learning to create these maps aligns with three of the ELA Common Core State Standards:

* [CCSS.ELA-Literacy.CCRA.L.3](http://www.corestandards.org/ELA-Literacy/CCRA/L/3/) Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.
* [CCSS.ELA-Literacy.CCRA.L.4](http://www.corestandards.org/ELA-Literacy/CCRA/L/4/) Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate.
* [CCSS.ELA-Literacy.CCRA.L.5](http://www.corestandards.org/ELA-Literacy/CCRA/L/5/) Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.

**Teaching students to use semantic maps**

You can provide your students with direct instruction on how to use semantic maps. Below is an example of a step-by-step set of directions, which can be especially beneficial for struggling students.

* Pick a word you don’t know from a text you are reading and mark the word. If you're using digital text, you can highlight, bold, or underline the word.
* Use a blank map or begin to draw a map or web (either on paper or using an online tool).
* Place the word you don’t know in the center of the map.
* Pronounce the word. If necessary, use an online dictionary with audio to help you.
* Read the text around the word to see if there are related words you can add to your map. If you're using digital text, you can get the computer to read the text to you using the text-to-speech function (if necessary).
* Use an online dictionary or online thesaurus to look up the word and find a definition.
* Find words and phrases that fit with the meaning. Select pictures/images (online or from available resources) or draw pictures that fit with the meaning.
* Add these words, phrases, or images to your semantic map.
* If you're working online, print out the map.
* Read the text again, applying the meaning of the word to the text.
* Share and compare your map with your classmates.

With direct instruction and repeated practice, struggling students will find that using semantic maps is a very good way of expanding their vocabulary.

**Integrating technology**

There are many technology tools that can help students create semantic maps (including thinking maps, mind maps, bubble maps, and concept maps). You might want to check out [Webspiration](http://mywebspiration.com/), [Bubblus](http://bubbl.us/), [Gliffy](http://gliffy.com/), [Thinklinkr](https://thinklinkr.com/), [Glinkr](http://www.glinkr.net/), [Creately](http://creately.com/), [Diagrammr](http://diagrammr.com/), and [Mindomo](http://mindomo.com/).

In addition, many websites (including those listed below) provide information about different types of graphic organizers that you can use as a starting point as you customize your instruction to meet your students' needs.

* [Education Place Graphic Organizers](http://www.eduplace.com/graphicorganizer/)
* [Holt Interactive Graphic Organizers](http://my.hrw.com/nsmedia/intgos/html/igo.htm)
* [Enchanted Learning Graphic Organizers](http://www.enchantedlearning.com/graphicorganizers/)
* [Thinkport Graphic Organizers](http://www.thinkport.org/technology/template.tp)

**A semantic mapping lesson**

Mr. Green's Grade 5 class is studying American presidents. He wants his 25 students to understand how the personality of each president may have impacted the president’s political career. Although some students have no difficulty decoding, several students struggle to recognize or remember word meanings. Mr. Green is reintroducing the use of semantic maps to support vocabulary development.

The specific objective of the lesson is to have students expand their vocabulary by creating semantic maps to represent the different characteristics of a personality. Mr. Green plans to model this strategy first, and students will then have an opportunity to practice the strategy themselves. The unit will culminate in the creation of multimodal president cards — one component of which will be a semantic map — which will be posted on the class website.

As part of his ongoing practice, Mr. Green will use his interactive whiteboard to demonstrate and involve students in creating the maps. To gather information for vocabulary development, he will access a website titled [Abraham Lincoln's Personality](http://www.abrahamlincolnsclassroom.org/Library/newsletter.asp?ID=107&CRLI=155).

Mr. Green's lesson plan is outlined below. It is organized into three sections to show the steps he will take before reading, during reading, and after reading.

**Lesson plan**

**Before Reading**

* Introduce the unit's goals, which are to learn about presidents and create multimodal president cards with new vocabulary.
* Review and discuss three different types of semantic map.


* Display and discuss the website on Abraham Lincoln's personality.
* Invite students to fill out the semantic map with words, definitions, and images.
* Save the map on the class website.

**During Reading**

* Continue practicing using semantic maps.
* Have groups create new multimedia maps.
* Have students share and discuss new vocabulary in maps.

**After Reading**

* Have students begin making the multimodal president cards.
* Set the criteria for these cards: the name of the president, vocabulary words, definitions, images, and sentences.

**More teacher resources on semantic mapping**

This article draws from the [PowerUp WHAT WORKS](http://www.powerupwhatworks.org/) website, particularly the [Semantic Mapping Instructional Strategy Guide](http://powerupwhatworks.org/strategy-guide/semantic-mapping). PowerUp is a free, teacher-friendly website that requires no log-in or registration. The Instructional Strategy Guide includes a brief overview that defines semantic mapping and an accompanying slide show; a list of the relevant ELA Common Core State Standards; evidence-based teaching strategies to differentiate instruction using technology; a case story; short videos; and links to resources that will help you use technology to support instruction in semantic mapping. If you are responsible for professional development, the [PD Support Materials](http://powerupwhatworks.org/resource/using-powerup-pd-semantic-mapping) provide helpful ideas and materials for using the resources on semantic mapping. Want more information? See [PowerUp WHAT WORKS](http://www.powerupwhatworks.org/).

http://www.melta.org.my/ET/1990/main11.html

|  |
| --- |
| **Teaching Composition Writing through Semantic Mapping** **JANA MATHIALAGAN***Institute Technology MARA*   An integral part of ESL learning is composition writing. Raimes (1983) has this to say with regard to including writing as a part of our second language syllabus: "First, writing reinforces the grammatical structures, idioms and vocabulary that we have been teaching our students. Second, when our students write, they also have a chance to be adventurous with the language, to go beyond what they have just learned to say, to take risks" (Raimes, 1983: p.3)Thus when we teach composition, we are actually reinforcing grammatical structures which the students have learned in class. For example, the simple past tense is taught and practised in class for the first week and the next week a topic is given to the students which requires them to use the simple past e.g. describing an accident. What exactly happens is that a simple past tense schema is activated during this composition class. There is a play on students' prior knowledge here. Semantic mapping is one such activity which can safely be said to activate existing schemata in a student in relation to a topic. Semantic mapping is a technique developed by Johnson & Pearson (1978). A semantic map is a graphic arrangement of words and it shows how new words and ideas are related to each other within a text. It is also an effective diagnostic tool. It is not my intention here to advocate semantic mapping but it is felt that a variation of semantic mapping which is given in the lesson plan below will benefit lower level ESL learners in coming to grips with composition writing. The lesson plan below goes one step beyond semantic mapping. Hague (1987) outlines the major steps to semantic mapping as below: 1. Write target topic on chalk board;
2. Have students brainstorm words related to topic;
3. Write/list the words by categories in the form of a map;
4. Have the students provide labels for each category (optional);
5. Discuss the words on the semantic map;
6. Revise map after discussion.

Figure 1 shows a simple semantic map with the categories of Appearance, Where Found, Food Use and Needs of the Cow. http://www.melta.org.my/ET/1990/img/117.jpg**FIgure 1 An example of a semantic map (Fry 1987)**  Similarly, Culyer (1978) in hrs guidelines for skill development suggested developing vocabulary related to a particular topic (e.g. seasons, holidays) that is in thematic terms. As suggested by Fry (1987) in Figure 1, words related to a topic are generated. Thus, a study of "weather" words might include brisk, sultry, squall, alert, high pressure, torrid, tornado, cyclone, barometer, travelers advisor, etc. How does semantic mapping relate to composition writing? A basic problem voiced by most, especially lower-level, ESL learners is the lack of vocabulary to write good compositions. However, it is felt that lack of vocabulary is not the issue here, but poor activation of existing vocabulary knowledge. Composition topics are normally selected for a class, keeping in mind the grammatical structures and idioms that the students have learnt. Thus it is not in the practice of ESL teachers to assign topics for which students do not have the vocabulary and grammatical structures at all. Therefore, an activating prewriting technique is required here. The very purpose of semantic mapping is to activate known terms in relation to a topic. The present paper considers a further step to semantic mapping leading to composition writing for lower level ESL learners. A slow transition from word mapping to sentence production is suggested within the framework of semantic mapping. A word of caution is in order, however. To conclude my introduction, several assumptions concerning the nature of lexical competence are given here: Assumption 1: For many words, we also 'know' the sort of words most likely to be found associated with the word. Assumption 2: Richards (1976) says that knowing a word entails knowledge of the network association between that word and other words in language. He goes on to offer eight assumptions that are related to lexical competence which can be used as a frame of reference to realise objectives related to vocabulary teaching. It is felt that the above two assumptions further support the practice of semantic or network mapping.  **The Lesson Plan** *Step 1*The teacher writes the target topic on the blackboard, for example 'A Bank Robbery'. The teacher has the class brainstorm verbs in the past tense related to the topic. Everyone must contribute. The teacher writes items on the board. *Step 2*Once the verb list has been exhausted, the class brainstorms things and people (nouns) related to the topic. The teacher writes items on the board. *Step 3*Once all or most of the nouns have been elicited and written on the board, brainstorming is done for adjectives. *Step 4*The teacher has a brainstorming session for adverbs related to the topic or to the verbs given on board. Suggested adverbs are written on the board. http://www.melta.org.my/ET/1990/img/119.jpg*Step 5*The teacher goes over the items, asks for any more suggestions and discreetly adds in any new vocabulary which she/he wished students to use in composition or add to their collection. *Step 6*Now students are asked to brainstorm some simple sentences using any of the words in the map. The teacher writes around 15 or 20 sentences on the blackboard. The teacher writes the original sentence given by the student. No correction of errors is made at this stage. Students are encouraged to form simple sentences of the subject + verb + object pattern in order to avoid subordinate clauses at this stage. Example1. Three robbers suddenly rushed into the bank;2. One robber had a gun;3. There was a car waiting outside;4. They threatened the customers;5. The customers were afraid;6. One robber slashed the cashier;7. He had a sharp knife;8. One gunman guarded the door;9. They shot the security guard;10. They demanded cash;11. He put all the money in a bag;12. They ran quickly out of the bank;13. They drove off in the car;14. The manager phoned the police;15. The police rushed to the bank;*Step 7*The teacher has 15 sentences on the blackboard. ShG goes through each sentence to correct any errors. *Step 8*The students read through all the sentences. They are given 10-15 minutes to rearrange the jumbled up sentences. Since it is a narration of events, students are given some of the devices used to convey chronological order. They also learn that in a composition of chronological order, the verbs are all in the same tense. The chronological order devices that are given to them include first, second, third, then, next, after that, finally which may be used to clarify sequence to the reader. *Step 9*The students write out the whole composition in paragraph form, keeping to the limit of 150-200 words.  **Discussion** As stated earlier, semantic mapping helps map out a list of words related to topics and themes. The above activity using semantic mapping as a prewriting technique has been found to be successful by the writer in the following ways: 1. There are a lot of words thrown about in class.
2. Everyone comes up with a word somehow or other.
3. The class atmosphere becomes lively and small group discussions are heard.
4. As the teacher writes on the board, some students spell out the words.
5. Even weak and shy students utter a word or two.
6. Towards the end, students become enthusiastic about putting the parts together, like a jig saw puzzle.
7. They are actively involved in the session because the brainstorming warms them up and the comfort of their chairs and friends around encourages even the very weak and shy to suggest words and sentences.

The teacher is a facilitator here. She writes the words and sentences on the board, and corrects errors at the end. She is also an adviser, giving hints on certain words.  **Some problems do crop up:** 1. Students are always at a loss as regards technical terms like nouns, verbs, adjectives and adverbs. They may know the items but forget the categories.
2. Since this lesson deals with the linguistic aspect of writing, non-linguistic factors such as organisation, paragraph management and topic sentences may hinder the composition writing process. Here, the teacher is the one who determines the necessary steps to train the students in the non-linguistic aspect, either incidentally or directly.

 **Follow-up Activities** This lesson is meant to be a prewriting activity. Therefore, the teacher could follow it up with another topic along the same lines for the next composition class. However, she/he should stop at the semantic mapping stage and instruct the students to construct the sentences individually in their notebooks. It is assumed that the previous lesson has provided a base to start their writing, in this case, a narrative or chronological order of writing. It has been suggested in the earlier paragraph that topics along the same lines should be chosen. The reason is that students remember and learn better as they use the same words again and again. Raimes (1983: p.14) says:- "... the longer the students grapple with the subject, the more their command of the necessary vocabulary and idioms develops....the more they discuss a topic, the more ideas they develop". Therefore, to ensure that the students explore the subject as fully as possible, a few excellent topics of interest should be found and whole series of assignments should be built around them. For example, a reading passage, a dictation exercise, role-playing activities, unscrambling jumbled up sentences, a form to fill out, etc.  **Conclusion** This technique of teaching composition writing may be more useful for lower-level ESL learners who are still struggling with basic structures in the language. Complaints like lack of ideas and lack of vocabulary may find some practical solutions through this technique. Finally, through this session of brainstorming and semantic mapping, composition writing can become more lively and adventurous.  **References** Culyer, R.C. (1978). "Guidelines for Skill Development: Vocabulary". *The Reading Teacher* Vol. 32 No. 3. Duin, A.H. and Graves, M.F. (1987). 'Intensive Vocabulary Instruction as a Prewriting Technique". *Reading Research Quarterly*, Vol. xxii No. 3. Fry, E.B. (1987). "Picture Nouns for Reading and Vocabulary lmprovement". *The Reading Teacher* Vol.41, No.2. Hague, S.A. (1987). "Vocabulary Instruction: What L2 can learn from L1". *Foreign Language Annals* Vo. 20, No. 3. Johnson, D., Pearson, P.D. (1978) *Teaching Reading Vocabulary*. New York: Holt Rinehart and Winston. Raimes, A. (1983). *Techniques in Teaching Writing* New York: Oxford University Press. Richards, J.C. (1985). *The Context of Language Teaching*. London: Cambridge University Press.  |
|  |