SEMANTIC MAPPING

What Is Semantic Mapping?

Semantic Mapping (Heimlich and Pittelman 1986) is a teacher-directed study of a word or concept in relation to other related words and ideas. The teacher begins a Semantic Mapping activity by providing a word or concept about to be studied and students brainstorm characteristics, attributes, related words and ideas, and specific examples of the word. The map is a graphic representation of this thinking and discussion. Discussion is a significant aspect of a Semantic Mapping activity (Stahl and Clark 1987). In addition, there is a significant line of research that supports the positive impact of Semantic Mapping in terms of students' memory of the targeted word
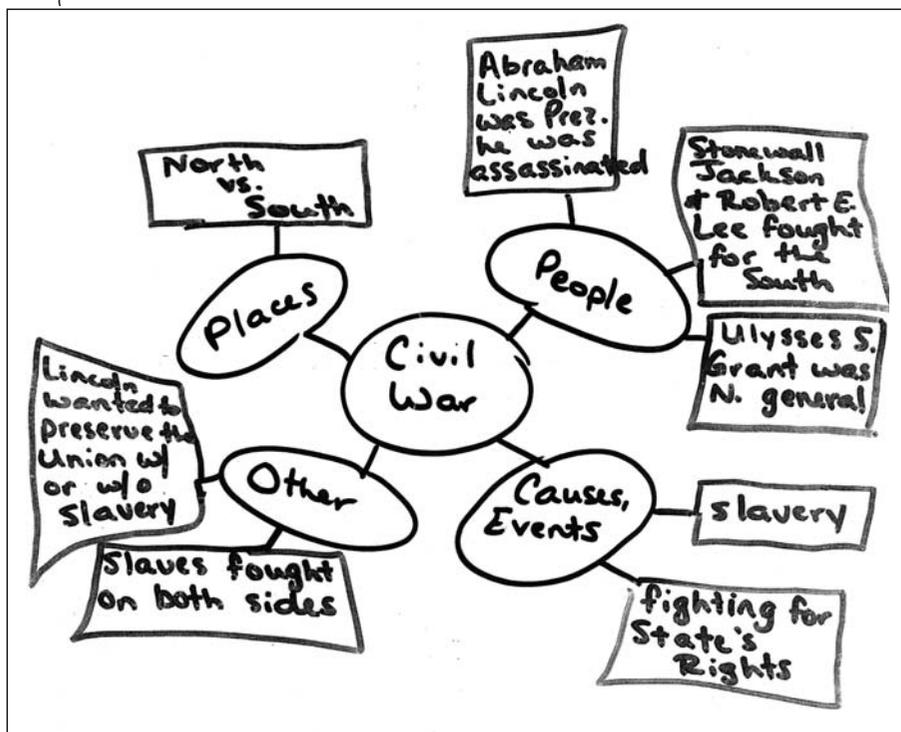
and recognition of that word in a variety of contexts (Johnson, Toms-Bronowski, and Pittelman 1982).
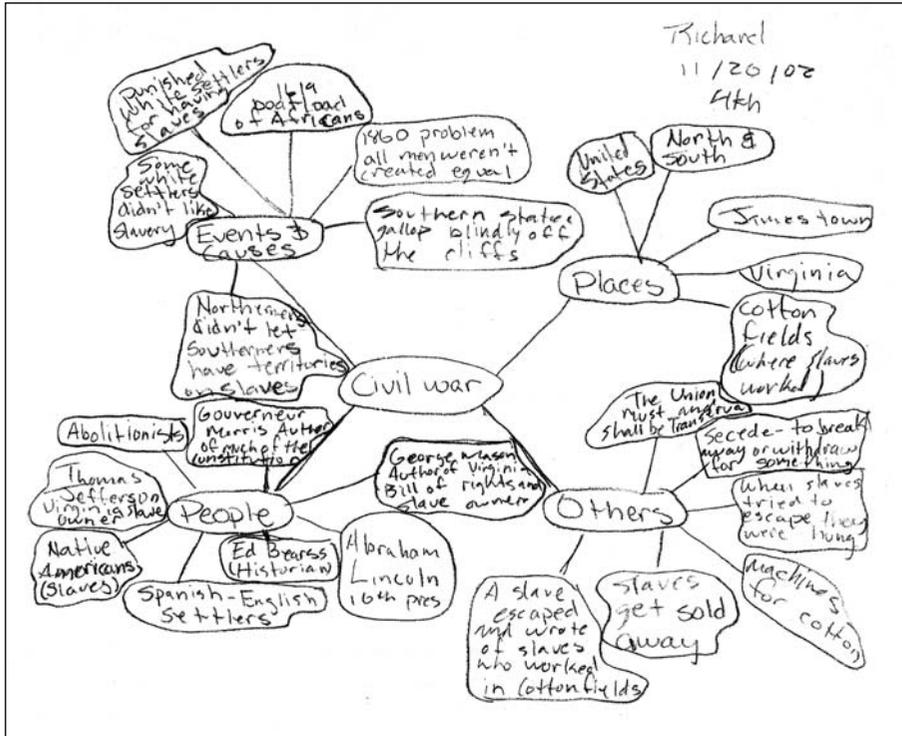
How Does It Work?

Semantic Mapping works with any word, concept, phrase, event, character, or theme. It begins with the teacher providing the word that students will be exploring. In the first example shown, Christine Landaker and the students in her middle school classroom are exploring the Civil War prior to their reading and study. They brainstormed predicted categories they would learn about in their study: people, places, causes/events, other related information. They then worked in groups to come up with details they already knew prior to their reading and study.

Once this information was gathered, students drew the group semantic map in their individual academic journals. Academic journals

Example 1

Richard
11/20/02
4th

Punished white settlers for having slaves

1619 boat load of Africans

1860 problem all men weren't created equal

Some white settlers didn't like slavory

United States

North & South

Southern states gallop blindly off the cliffs

Events & Causes

Jamestown

Places

Virginia

Northerners didn't let Southerners have territories or slaves

Cotton fields (where slaves worked)

Civil war

The Union must and shall be preserved

Abolitionists

Gouverneur Morris Author of much of the Constitution

Thomas Jefferson Virginia owned slaves

George Mason Author of Virginia Bill of rights and slave owner

Secede - to break away or withdraw for some thing

People

Native Americans (Slaves)

Ed Bearss (Historian)

Others

When slaves tried to escape they were hung

Spanish-English Settlers

Abraham Lincoln 16th pres

A slave escaped and wrote of slaves who worked in cotton fields

Slaves get sold away

Machines for cotton

Example 2

are individual notebooks kept by each student and used as a natural part of each class as well as support during assessments. Teachers vary in the sections they ask students to keep in their academic journals but typical sections include note taking, language collection (vocabulary), and strategies learned (how-to lessons). During their study of this event, Christine gave students opportunities to add to their semantic maps as they discovered additional information. The semantic map in Example 2 shows one student's note taking using his semantic map. The map then serves as a review and study tool as well as an organized way to high-light significant aspects of their study.

When and Why Would I Use This Strategy?

This activity lends itself to use at any stage in your study of a con-cept, event, theme, or unit of study. It provides an assessment for

you about the background knowledge your students bring to the study and gives students in the class an overview of critical aspects of the study you will be doing. During your study, it becomes a place for students to take notes and organize the notes in a meaningful way. Students might choose to redo their semantic maps once they have gathered enough information that a new map and its design might better help them keep track of their learning. Finally, it serves as a way for you and your students to review their knowledge base prior to any academic writing or demonstrations of learning you might ask students to do.

Research/Origins/Further Reading

Heimlich, J. E., and S. D. Pittelman. 1986. *Semantic Mapping: Classroom Applications*. Newark, DE: International Reading Association.

Johnson, D. D., S. Toms-Bronowski, and S. D. Pittelman. 1982. *An Investigation of the Effectiveness of Semantic Mapping and Semantic Feature Analysis with Intermediate Grade Children*. Program Report 83-3. Madison: Wisconsin Center for Educational Research, University of Wisconsin.

Stahl, S. A., and C. H. Clark. 1987. "The Effects of Participatory Expectations in Classroom Discussion on the Learning of Science Vocabulary." *American Educational Research Journal* 24: 541–56.