

Brainstorming and Variations

Brainstorming helps students activate their prior knowledge about a particular topic. It sets the stage for the reading that will follow by helping students think about what they may already know about a topic or idea. Students generate words or phrases that are associated with a topic. Those provide a means to help students anticipate key ideas or concepts that they will encounter in the text. While there are not right or wrong words, students must understand that their choices must be relevant to the word or phrase. This strategy is generally done by first allowing students to generate individual words and then involving the class in sharing and recording their words. Brainstorming products can be organized in lists, flowcharts, or other graphic organizers. Brainstorming is frequently used in business settings to generate ideas and solutions to problems and issues.

How to implement the strategy:

1. Identify a question or problem scenario that is related to the topic or concepts under study.
2. Keep the topic broad enough to provoke student thinking but focused on the major concept or ideas of the text passage.
3. Explain the directions and model the strategy for the students.
4. Write a word or phrase on the board or overhead that is central to the reading of the lesson.
5. Have students individually write down several words that come to mind that relate to the word or phrase.
6. Have students share the words that they have written on their paper.
7. Continue calling on students to share words they have written until they have exhausted their lists or time runs out.
8. Engage the class in a discussion by asking them to note the frequency of some words, identify common themes or ideas among the words, and/or how particular words are related.

Variations:

- **Develop a Sense of Major Concepts/Themes:** Have students work in pairs to group the words the whole class has shared into categories. Through whole group discussion, assist student pairs in devising appropriate labels for the various categories. This can help students get a sense of the major concepts and categories that can inform them in their reading.
- **Thinking Changes:** Record the results of the brainstorming session on a transparency and refer back to it after students have a chance to read the text selection and the lesson has been developed. The initial product is used to generate new words to add to the collection (in a different color). The teacher engages students in dialogue to discuss how their thinking has changed a result of the reading and lesson.

- **Thought Collection:** Have students brainstorm their ideas or reflections related to the concept or topic of study. Ask students to capture each separate idea on a separate sticky note. Have participants place their collective sticky notes in the center of the table. Have students review their collective thoughts and discuss patterns, insights, or questions they might have about their collection. *(Note: The collection of sticky notes could also be used by the group to write a summarizing paragraph, complete an acrostic related to the topic, or some other activity to help them process and use the information.)*

Adapted from:

- Pugalee, David K. (2007). *Developing mathematical and scientific literacy: Effective content reading practices*. Norwood, MA. Christopher-Gordon.

