

Activating student thinking through Modality Brainstorming.

The human brain stores and processes information in four primary modalities: visual, kinesthetic, auditory, and olfactory/gustatory. Modality Brainstorming taps learning style differences that appear to be hardwired into the brain. To test this theory, have students brainstorm for several minutes on a selected topic. Example: How do you know it is September in (your part of the country)?

Give students 3-4 minutes to generate a respectable list, then stop them and have the recorder apply the following procedure.

Directions to Students:

1. Examine your list and draw a line after the 10th item.
2. Read each item and ask the person in your group who generated the idea how that idea occurred in his or her brain. Was it a picture, a feeling, a sound, or a taste or smell?
3. Label each of the 10 ideas using the following code.

V Visual – pictures and images

K Kinesthetic – feelings both physical and emotional

A Auditory – sounds

O/G Olfactory/Gustatory – smells and tastes

It is important that the person who generated the idea be the one who labels the modality. All people do not process information the same way. Note: Some ideas may require double coding because the idea is stored in two modalities. For example, an image of a fire may be a picture (V), a feeling (K), or a smell (O/G). These would be coded VK, V/O/G, or K/O/G.

4. Count up the number of each type of modality used to generate the first 10 items on the list. By using just 10 items it is possible to establish rough percentages of the modality dominance of the class.

Note: The population as a whole is divided 46% visually dominant, 35% kinesthetically dominant, and 19% auditorily dominant. For details see the learning styles literature summary listed in the Research and References section.

5. You can now stretch the brainstorming by having students use their nondominant modalities to generate new ideas. Novel ideas are more likely to occur when we stretch beyond our normal ways of processing.

Source: Pathways to Understanding: Patterns and Practices in the Learning-Focused Classroom. See the products section for ordering information.