Landmark Teaching Principle™ #2

Use Multisensory Approaches

BRAINSTORMING AND EFFORT

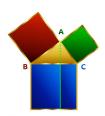
Brainstorming can enhance student effort by helping them be "ready to learn." Brainstorming is not just for the writing process. Instead, it can be used to think through any process, come up with potential answers for a question, or determine multiple ways to go about a task. Furthermore, brainstorming can be done using many different methods. The following are some suggestions for getting students prepared to learn, mixing up activities, and approaching different tasks, all with the idea of creating situations in which students are able to display the effort they put in to an assignment.

BRAINSTORMING CONTENT



WRITING

Brainstorming is rightly the first step in the writing process as it helps students gather information and begin to formulate ideas. They can make lists, webs, or graphic organizers, or can share information and ideas aloud with a partner before writing them down. In each of these situations, students generate information, questions, and ideas related to their topic. Brainstorming enables students to progress more successfully through the next steps of the writing process.



PROBLEM SOLVING

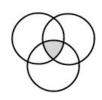
Brainstorming is also a good first step in the problem solving process. Before beginning a mathematical problem, students can brainstorm strategies or estimate solutions. Are there any formulas that might be helpful? Are there any similar problems it might relate to? Are there processes that can be referenced in notes or somewhere in the classroom? What type of answer are they looking for? Brainstorming answers to these questions before trying to solve the problem opens up their thinking, and increases their chances of success.



EXPERIMENTING

A major step in research is formulating a question or hypothesis. Prior to that, students can brainstorm what they know from their past research, learning, and experience. They can also generate multiple questions and hypotheses about various outcomes under various conditions. When they do select their hypothesis and perform the experiment, they will be better able to explain their choices. This process encourages ownership of their ideas and, therefore, enhances effort.

TYPES OF BRAINSTORMING TASKS



WRITTEN FORMAT

Semantic maps, like word webs and Venn diagrams, help students generate ideas in a written format. At the same time, the visual component of these maps can help students see connections and not only generate connecting ideas, but also better organize these ideas.



DRAWING PICTURES OR CONCEPTS

Similarly, drawing pictures or icons of one's ideas can be a way that better addresses some students' strengths and allows them to demonstrate skills that accurately portray the effort put in to the task. These sketches can be fairly simple – or more elaborate – depending on the assignment.



ORALLY WITH A PARTNER

Students can sometimes get "stuck" when trying to brainstorm concepts. Thus, a way to mix up this task is to have them brainstorm with a partner. Students can talk through their ideas, ask each other questions, and even note how they might perceive their topic differently based on their own experiences.



BUILDING ON OTHERS' IDEAS

One way to brainstorm in groups is to have each person take a sticky note pad and a marker and begin to jot down ideas. They can then tack them to a board or a wall. As each student says their idea out loud, others can expand that idea or use it as a jumping off point to launch a new set of ideas. This version of brainstorming thus addresses written, oral, and kinesthetic components.

HOW DOES THIS USE MULTISENSORY APPROACHES?

 Helping students brainstorm through written activities, pictures, oral discussions, and physically adding sticky notes to a board addresses this idea of a variety of approaches to the task. Furthermore, using these differing modalities allows a diverse group of students the opportunity to portray their effort in a manner in which they can be successful.