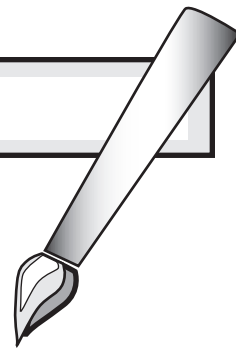


SILENT or DISCOVERY DEMONSTRATION

“One way to heighten attention and make observation more acute is to make it more demanding. An effective way to do this is to use a silent demonstration and follow it with reflection on what was observed.”

Gibbs, 1988



OVERVIEW

Picture a teacher standing at the front of a classroom, perhaps at some sort of table or bench, surrounded by a mound of materials, objects, or equipment. A group of well-behaved, fully attentive students listens in silence as the teacher gives a running commentary (in precise, deliberate, and carefully sequenced language) to describe events that are transpiring during the presentation. When this show and tell demonstration ends, the teacher asks probing questions to elicit student reactions to what they just observed. Time is available for students to ask their own questions. This is what we all recognize as a classic demonstration. The teacher is the principal worker and students are passive observers.

There are many reasons that justify using teacher demonstrations with students. They can save instructional time, address equipment limitations and possible safety issues, and clearly they activate observation skills. And, if the goal is to model thinking processes (i.e., think aloud) then demonstrations are ideal. Good demonstrations, even traditional ones, can be creative, entertaining, and help students to grasp important concepts.

Now, let's visualize an alternative form of classroom demonstration that actually promotes student inquiry. The teacher repeats the same steps as above with one major exception... the entire event is carefully orchestrated without using words. It's done in complete silence. Students, now the active observers, are challenged to carefully identify the salient features that the instructor hopes will be gleaned from the demonstration. Taking notes is permitted; talk isn't. Sometimes the demo is repeated to give students another opportunity to recognize any missed elements. In contrast to the traditional demonstration, the key to success resides with the learners.

IMPLEMENTING THIS ACTIVITY

Here are some directions medical students might receive before watching their instructor suture a wound:

“I am going to suture this wound. I want you to watch carefully. When I have finished I am going to ask you for a full description of what I did. While you are watching and making mental notes, I'd also like you to think about why I used the materials and instruments I did and why I used them in the way I did. I shan't say anything or point out what I am doing, so you will have to watch carefully” (from: www2.glos.ac.uk/gdn/gibbs/ch4_2.htm4.2).

Medical schools use this type of instructional experience to heighten learning among future doctors. Why not adopt this same practice in K-12 classrooms?

Similar instructions could be provided to guide students through virtually any type of silent or discovery demonstration. Directions could be supplemented by a viewing guide, if this wouldn't reduce the level of student awareness. Teachers should be certain that the simple rules of the silent demonstration are clear to everyone before beginning.

Discussions that follow silent demos are when genuine opportunities for discovery emerge. Because silence leaves gaps these demonstrations prompt questions and create rich contexts for learning in which minds are actively engaged in the search for personal understanding.

A SSESSING THIS ACTIVITY

Assessment of a silent demonstration is situation specific. However, there are two factors to consider in assessing a silent demonstration. One is for the instructor to reflect upon their own performance. The other is to determine what students gained from the experience. If skill building was the purpose for the silent demo, then the extent to which students can perform this skill independently can be measured. If the purpose was concept development, then the teacher could ask students to complete sentence stems that revealed the depth of student understanding.

C ONTENT AREA APPLICATIONS

- English/Language Arts: To introduce the topic of bias in images that accompany text, show students a selection of pictures that illustrate examples of bias. Challenge them to identify the different categories of bias (e.g., gender, age, race, etc.).
- Social Studies: for a structured controversy project, show a set of images that depict both sides of some controversial issue to help define the central issues that are in contention.
- Science: demonstrate a variety of fish to help students discover adaptations associated with swimming.

M ANAGING THIS ACTIVITY

1. Be sure to rehearse the demo ahead of time.
2. Make sure that all materials and equipment are available and easy to access.

R EFERENCES

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