

General Implementation Attributes

Ease of Use: High
Time Demand: Low
Cognitive Demand: Low

Modifications

POMS can be changed to *Part of Most Significance* and used as a reflection on the most effective part of a lesson, rather than the key points that contributed to their learning.

Caveats

Focusing only on the most significant point of the lesson may result in overlooking areas where students are experiencing conceptual difficulties. Vary this strategy with *Muddiest Point* in order to provide opportunities for students to express what was difficult for them as well.

Use With Other Disciplines

This FACT can also be used in *science*, social studies, language arts, health, foreign language, and visual and performing arts.

My Notes

#44. POPSICLE STICK QUESTIONING

Description

Popstick Stick Questioning is a technique used to selectively choose students for *No Hands Questioning*. The purpose of this technique is to ensure that certain students, identified in advance by the teacher, are called on during "random" class questioning. Names are written on Popstick sticks and placed in a cup. An inner cup, placed inside the outer cup, holds the Popstick sticks with the names of students the teacher wants to be sure to call on. The names can be pulled out from the inner cup when needed while giving the appearance that students are all randomly selected when called upon to respond to a question (William, 2005).

How This FACT Promotes Student Learning

This is a type of *No Hands Questioning* strategy that encourages all students to think and be prepared to answer questions when randomly called on. Since hands are not raised, students who do not raise their hands cannot opt out of the questions; therefore, students tend to engage more in their own thinking to prepare for the chance of being called on for a response. All students think they have an equal chance of being called on. However, this selection strategy ensures that students who need to be heard from will have an opportunity to formulate and express their ideas.

How This FACT Informs Instruction

There are times when it is important for the teacher to gather specific information about individual students in a class. This FACT provides a way for teachers to ensure that certain students are called on to share their thinking without their feeling as if they had been singled out. The teacher can use the information to examine how individual students are progressing in their learning and select differentiated strategies as needed to improve their learning.

Design and Administration

Write all students' names on the Popstick sticks and place them in an opaque cup such as a coffee mug. Place another smaller cup inside the larger cup. The names of a few preselected students the teacher wants to be sure to call on are placed in the inner cup, which is visible only to the teacher. The other Popstick sticks are placed outside of the inner cup. When the teacher feels a need to call on a particular student, his or her name is drawn from the inner cup. The following describes how a teacher might use this FACT:

Mrs. Johnston was questioning students about their ideas related to transformations. She noticed that three of her students were struggling through the previous day's activity. She decided she needed to call on them during the class discussion so they would make their thinking visible to the class and receive feedback to help understand the different types of transformations. In order to ensure that they would be selected during the "random" Popstick stick draw, she placed their Popstick sticks in the inner cup, where she could easily draw them out as needed during the class discussion.

General Implementation Attributes

Ease of Use: High
Time Demand: Low
Cognitive Demand: Depends on the question asked

Modifications

Use different-colored inks for particular subgroups of students. Write some students' names down more than once to increase their probability of being selected. For teachers who teach multiple classes throughout the day in the same classroom, seats can be labeled with the labels written on the Popsicle sticks.

Caveats

Don't allow students to see the inner cup!

Use With Other Disciplines

This FACT can also be used in **science*, social studies, language arts, health, foreign language, and visual and performing arts.

My Notes

#45. PVF: PAIRED VERBAL FLUENCY

Description

PVF is a technique used to activate thinking about a topic. It is used between partners to elicit prior knowledge, review a lesson, or reflect on learning at the end of a lesson or conclusion of an instructional sequence. Partners take turns in timed rounds talking about an assigned topic without interruption. While one person talks, the other listens without speaking until the allotted time has elapsed and partners switch roles (Lipton & Wellman, 1998).

How This FACT Promotes Student Learning

The purpose of *PVF* is to activate reflective thinking. This FACT stimulates students to dig deeper into what they have learned and make sense of it as they talk without stopping for a specified interval of time. Active listening by the partner stimulates their own thinking about the topic as they