

Recreating Multiple Choice for Deeper Learning & More Fun (Method 1)

Purpose

Use the choices in multiple choice (MC) problems to deepen discussion and address misconceptions

Why?

Every teacher has access to lots of multiple choice problems that are tied to their standards. Having lots of problems is a good thing. But there are several drawbacks to using MC problems just as they are.

Drawbacks from a teaching point of view:

- It's hard to tell what kinds of errors students are making just by looking at their answer choices.
- Students often don't show their work when completing MC problems.
- Working MC problems doesn't lead to academic discussion.
- Copying MC problems takes lots of paper and ink. In other words, they're expensive.

Drawbacks from a student point of view:

- MC problems are boring.
- MC problems feel like a test even when they aren't.
- MC problems don't provide a good practice of skills.

Rethinking the way MC problems are used solves all these issues.

Setting Up the Activity

1. Choose the problems.
2. Prepare the problems so they can be projected using your classroom technology.
3. Gather white boards and markers for each student.
4. Post a sign with A, B, C, and D in the corners of your room.
5. You may need to push the desks away from the walls.

How to Do the Activity with Your Students

1. Project a problem. Ask students to work it on their white boards and choose an answer.
2. Ask students to stand up.
3. 1-2-3 Move! Students take their white boards to the corner of the room that matches their answer choice.
4. Once in four separate groups, students come up with their team response for why their answer is correct and choose a spokesperson.
5. Don't tell students which is right or wrong!

6. Choose a group to begin the discussion. I usually choose a group who has gotten it wrong to start the discussion. If you're doing several problems, you'll need to sometimes choose the group that is correct in order to make efficient use of class time.

Here are some discussion starters:

- What is the team response? How do you know you're correct?
 - (If no one picked one of the answer choices) Why didn't anyone pick that answer? What was wrong about that answer?
 - (If a student realizes that they are wrong while defending their "correct" response) Why do you want to change groups? What did you do wrong?
 - (If groups still think they are right after everyone has given their team response) How can you all be right? Where's the mistake?
7. After everyone agrees on the correct answer, ask students to move back to their desks.
 8. Project another problem.

Options

- Post a list of academic vocabulary words for students to use in their team responses.
- You can also use this strategy with problems that aren't multiple choice, but have certain wrong answers that are common. For example, $-5 + 8$ has three common wrong answers: 13, -13, and -3. Designate the four corners with the three incorrect answers and one correct answer.