TEACH TRANSFORM

Create a Sorting Activity Using Your Own Classroom Resources

Purpose

Create a sorting activity that helps students discern one concept or problem type from another

Why?

When students learn two processes that are similar or related, they often confuse them. For example, students who learn perimeter and area separately may have to make several attempts before they succeed with problem sets containing both perimeter AND area problems. Similarly, students often first attempt to solve a two-step problem using only one step. They don't recognize how the structures of one-step and two-step problems are different.

Doing a sorting activity that juxtaposes such similar or related processes helps students discern the differences. They stop mixing things up!

Setting Up the Activity

1. Choose what you want students to sort. Some examples are:
   - Problems that can be solved by addition vs. Problems that can be solved by subtraction
   - One-step problems vs. Two-step problems
   - Examples of fourths vs. Non-examples of fourths
   - Area vs. Perimeter
   - Volume vs. Surface Area
   - Problems that involve conversions vs. Problems that do not involve conversions
   - Proportional problem situations vs. Non-proportional problem situations
2. Find approximately the same number of problems or figures of each type.
3. Count the students in your class and divide by 2. Make that many copies of each problem.
4. Cut the problems out and place them in baggies.

How to Do the Activity with Your Students

1. Place students in pairs. Hand out one baggie of problems to each pair.
2. Explain to students how they should sort the problems.
3. Monitor students as they sort. Don't tell them if they are right or wrong.
4. Once everyone has finished, facilitate a discussion of the sort. Don't skip this—it's the most important part of the activity! Here are some discussion starters:
   - How did you decide which problems go in which stack?

- What were the clues that told you how to sort?
- Did the way you sorted the problems match the way your neighbors sorted them?
- Were you confused by where to put some of the problems?
- Were there some problems that you thought could go into both groups? If so, why?

5. Ask students to write in their journals or on sticky notes the clues they used to sort the problems.
6. Have students work together to solve the problems.

Options

- Don't tell students how to sort. Just ask them to sort the problems. This ensures that you'll have rich conversations about the activity.
- Post a list of academic vocabulary words that you want students to use during their partner conversations, in the whole class discussion, and when they write about their thinking.