

A TEACHER REFLECTS



Working with Outcome Grids

My students were able to “read” the outcome grid for the Special Sums Game quickly. They had no trouble finding the pattern or color coding the outcomes. Students commented that they had seen similar grids when they studied genetics in their science class. I was sure that they would breeze through the next lesson.

We started Lesson 8, and as I listened to groups of students making outcome grids, I was surprised by what I was hearing. Students were asking, “How do you make one of these things?” “How do you do it for a coin and a number cube?” “This doesn’t come out right.” They had a sense of what a grid for two number cubes would look like, but they didn’t know how to apply the model to games with other game pieces. I went from group to group helping them get started.

Setting the grid up was a problem for many students. They weren’t sure what to put across the top of the grid or what to put down the left side. They didn’t know how to figure out the total number of outcomes the game would have.

Some students thought that all grids should be square. They thought that there should be the same amount of numbers or letters across the top as down the side, like a grid for two number cubes or two coins. This made it difficult to set up grids for two different objects, such as a coin and a number cube, as shown.

	1	2	3	4	5	6
Coin H	H1	H2	H3	H4	H5	H6
Coin T	T1	T2	T3	T4	T5	T6

Other students assumed that all outcome grids followed a pattern because the grid for the Special Sums Game had a pattern. Students became confused when they couldn’t see a pattern in the grid they were working on. They were so convinced that a grid must have a pattern that they created a pattern that had nothing to do with the outcomes.

This made me realize that students were not as comfortable with grids as I had thought. I took the time to review their grids. I asked each group to present a grid and explain it to the class, so I could see if students were still having difficulties and offer assistance on the spot.