

A TEACHER REFLECTS



Students lined up according to the number of letters in their first names. We were going to find the median number of letters in the class. The students counted off to determine the total number of students in the line. There were 30 students present, and before we could move on any further, some of the more eager students volunteered that the median would be the middle student, number 15. There was general agreement about this, and students on their own began counting off again to get to the 15th student. It turned out that the 15th student had five letters in his name, and my class was ready to end the activity.

I needed to correct their misunderstanding. But with a number of students in the middle of the line with five letters in their first names, I could see that the median number wasn't going to change. I reminded them that the median was supposed to be the middle number, which meant there had to be the same number of students on either side. This didn't throw most of them, since they had already decided that half of 30 was 15, so obviously 15 was the middle.

I had the first three students in the line stand forward and asked the class who was in the middle. After a quick answer, I told the middle student to sit down and asked the class who was in the middle now. For the first time, some students looked like they were really having to examine the problem. Someone volunteered that no one was in the middle, since there were only two

students there. (I really wanted students to get the idea, so I had two more students come up, and asked the same question, and got the answer again that none was in the middle.) With the addition of another student, making five, they quickly pointed out the middle student.

By this time there were several groups of students seeing the pattern of what happened with odd and even numbers. I had the group count from either end to drive home the idea that there were the same number of students on either side. Then I got a different group of six students (chosen for the difference in the lengths of their names) and had them line up in order and asked the class what was the median in the small group. This time the answers did not come so glibly. Since they now knew that they had to make sure there were the same number of students on either side of the median, some students initially said there wasn't a median since the number of students was even. I asked if they knew approximately what the median was, and they responded that would be around four or five. I told them that was as close as we could get for this group of numbers, and so that 4–5 would be the median.

I had the whole class line up again. They counted from either end and found that the median was between student 15 and 16. Of course, ultimately, the median, 5, was the same for the class anyway, but the students had participated in solving a genuine problem and had a better understanding of the median, so I felt the time was well spent.

