I introduced the formal term to them. Because they had already discovered it for themselves, they were able to understand the concept better than if I had showed it to them initially. This gave them a sense of ownership over their discovery.

Because I consider reflection a critical component of inquiry, I asked students to draw and write about their experiments. In drawing and writing, students can look back on what they thought occurred and why. In this case, students were instructed, for homework, to draw the road they had created, show how the ball moved, and write a sentence describing this. The following day we used the homework papers to remind us of our experiences with the balls and roads. The students' work provided various models for recording data.

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**Observing and learning to ask questions**

After my students discovered the concept of the incline, we looked at ways to create different inclines by changing the angle of a board. As we worked, I modeled questioning for the class by asking: “I wonder what will happen if I roll my ball down this ramp?” “I wonder what will happen if I hold the ramp up higher?”

I asked students to try rolling balls on different ramps and observe what happened. It was not important that a particular angle of incline be used, or a particular ball, or even a particular sequence of actions. The pairs of students chose their work space, devised their own ways in which to hold up the board, determined their own pacing, and voiced their own “wonders.” Some students went beyond the directed focus, trying out two ramps in a V-shape, rolling a ball down one and watching it roll up the other.

Following these activities, we again came back to the whole group to review. By this time, the children had had enough experience with the materials to focus on some very reasonable “wondering” for further exploration. I wrote down their “I Wonder” ideas on chart paper to remind us of what we were thinking.

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**More questions and mini-investigations**

The students’ mini-investigations were done in three parts: “I wonder . . .” “My plan . . .” and “I Found Out . . .” We started by reviewing the activities of the previous day. The “I wonder” questions that I had modeled for them received a lot of response from the group. As I expected, they practiced their own “I wonder . . .” questions, thus following through on my modeling. Children began to expect to discover answers to their own questions. The process of investigation became meaningful because the ownership came from student work, not from a worksheet created for them.

With the knowledge the students had acquired through their free explorations, and with the ability to come up with questions that could reasonably be tested, the children were now ready to move forward with their own mini-investigations. After a warm-up brainstorming session, the children were asked to write their questions by following the: “I wonder . . .” template. We used these questions to identify small groups of students with similar interests.

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What separates true inquiry from play are the processes of observing and questioning, and then developing and following a plan of action. This process leads to more inquiries that are progressively more focused and meaningful.

Modeling questioning gives the children a sense of what is reasonable to ask, given the constraints of materials available and location in or out of the classroom. Making plans helps students to see ways in which they can use their prior knowledge to seek answers to their questions. Following through with a plan demonstrates the expectation that we really do want to find answers, and that it is possible to do so. The students' belief in this expectation results in better observing, better questioning, and better inquiry practice overall.

As the facilitator I have found that I am able to guide the direction of the students' investigation toward the discoveries of specific content matter. If I want my students to understand that a rolling ball can be a force upon another object which would cause that object to move, I can position a block at the bottom of my ramp and ask, "I wonder what will happen to the block when I roll my ball down the ramp?" Content learning is not accidental in this process. It lies in the carefully guided modeling and questioning of the teacher/facilitator.

Jane Bresnick is a 1st-grade teacher at Ulloa Elementary School in San Francisco, California.