Teaching is about sleuthing in the most meaningful ways to move from students’ current knowledge to enduring understandings. This requires knowing what knowledge students already possess. But this is a real challenge at the beginning of the school year.

In this video clip, you’ll see a math teacher set the stage for learning about her 11th grade students on the second day of school. She knows that dialogue and questioning is vital if she is to gain insight into what they already know. To make this point, she asks them to explain a simple action—tying one’s shoes. She listens as students break this task down into manageable steps then grow frustrated when the teacher takes them literally. She then makes the point that in order for them to teach and learn from one another, they must build a classroom community that places value on asking questions, furnishing explanations, and being patient with themselves and others.

Discussion Questions

1. In order for ongoing assessment to take place, student discussion and interaction is essential. In what ways do you establish and nurture this expectation with your students?

2. A discipline-specific expectation of mathematics is that solutions are subject to public scrutiny (Shanahan & Shanahan, 2008). In what ways do you use discourse and discussion to assess student background knowledge?

3. Novice teachers often assume incorrectly that assessment is only a formal paper-and-pencil task. How do you help less experienced colleagues understand that discussion is essential to assessment?

4. What misconceptions do students hold about your content area? How can you use discussion to determine what misconceptions might be held by your students?