1.1 The Learning Process Methodology

What Do You Already Know?

Tapping into your existing knowledge

1. What are three concepts you can teach others in mathematics, including explaining the "*why's*" of the concepts (i.e., "Why can you do that?" or "Why does it work?")?

2. In the process of learning mathematics, how often do you ask *why* you can do a certain thing (e.g., subtract a number from both sides of an equation)?

3. What are the three most important mathematical ideas you use when you're solving problems?

4. What do the practices of *prediction*, *estimation*, *validation*, *finding similarities*, *finding differences*, *using examples*, *modeling what if*, and *generalizing* play in the learning of mathematics?

5. Think about someone you know who seems to learn math quickly. What are three things that person does that helps them do that?

6. Think about someone you know who is "math smart." What does this mean and what is it that makes him or her "math smart"?

7. What is the relationship between mathematical learning skills and being "smart"?