

Focusing vs. Funneling Questions

When engaging students in discussion, it is important to consider what happens as a result of the questions being posed. The questions you choose have the potential to either funnel or focus students' attention to the mathematics. Good questions come in many different forms and can have many different goals. However, generally good questions are focusing questions that:

- A. help students make sense of the mathematics
- B. are often open ended
- C. empower students to unravel their misconceptions
- D. require the application of facts and procedures and encourage students to make connections and generalizations
- E. are accessible to all students
- F. foster answers that lead students to wonder more about a topic and perhaps construct questions on their own (Kenney, 2012).

	Focusing Questions	Funneling Questions
Description	<p>In contrast, focusing questions require teacher to listen to students' responses and ask additional mathematically focused questions to support them communicating their thinking (Herbel-Eisenmann & Breyfogle, 2005).</p> <p>Characteristics:</p> <ul style="list-style-type: none"> • Attend to what students are thinking • Build on students responses • Help students make connections between their work and the main idea of the lesson • Student is engaged in cognitive activity • Help students to get to an understanding <p>Two types of focusing questions: Assessing and Advancing</p> <p>Assessing Questions</p> <ul style="list-style-type: none"> • Are based closely on the work students have produced • Clarify what students have done and what students understand about what they have done 	<p>Funneling is when a teacher asks a series of questions that guide students to a procedure or to a desired end.</p> <p>Characteristics:</p> <ul style="list-style-type: none"> • Guide students down the teacher's chosen path • Lead students directly to a desired procedure or conclusion • Closed-formed questions that limit what students do • The teacher is engaged in the cognitive activity • Help students get to an answer

	<ul style="list-style-type: none"> Give the teacher information about what students understand <p>Advancing Questions</p> <ul style="list-style-type: none"> Use what students have produced as a basis for making progress toward the target goal of the lesson Move students beyond their current thinking by pressing students to extend what they know to a new situation Press students to think about something they are not currently thinking about 	
	Focusing Questions	Funneling Questions
Examples	<p>Assessing questions</p> <ul style="list-style-type: none"> What do you think about when you see this equation? What should we do with these fractions? [Student: Add them] Why add them? [Student refers to word problem] What do you notice about the data? How would you describe them to someone? How did you reach that conclusion? Tell me about your thinking. <p>Advancing Questions</p> <ul style="list-style-type: none"> How do you want to solve this equation? What other ways might you be able to describe the data? Okay, so how would you add the fractions? Does that always work? Why or why not? What would happen if ...? Is there a way that you can show what is happening in the problem? 	<ul style="list-style-type: none"> Let's see if we can use what we did above to help us. What did we do first? <ul style="list-style-type: none"> How can I get rid of the 2? What do you have to do to the other side? Let's add these fractions by finding the least common denominator. What's the first step to find the least common denominator? How do you find the mean of the data? How many sides does that shape have?