1

Which do you do most of the time?

Assessment

The process of understanding student thinking.

Evaluation

The process of assigning a value metric to student work.

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2

"The starting point is the mathematics and thinking the student brings to the lesson, not the deficit of mathematics they do not bring. A standard defines a finish line, not the path. The path begins with the

et. al., 2011

Noticing and Wondering: A powerful tool for assessment

Mark Chubb

9th May 2018

What are teachers doing?	What are students doing?
• Selecting tasks that have an intended purpose • Anticipating what students might do • Providing ample time for students to work independently or in pairs/groups • Listening / observing to what students do • Asking students prompting questions	• Working independently or in pairs/groups solving problems • Talking to others about their thinking • Testing /manipulating ideas • Representing their thinking

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3

The questions we ask matter!

Funneling & Focusing

- **Funneling:** When teacher asks a series of questions that ***guide the students to a procedure or to a desired end.***
- **Focusing:** A focusing-interaction patterns requires the teacher to ***listen to students' responses*** and ***guide them based on what the students are thinking*** rather than how the teacher would solve the problem.

Herbel-Eisenmann, B. A. & Breyfogle, M. L. (2005).

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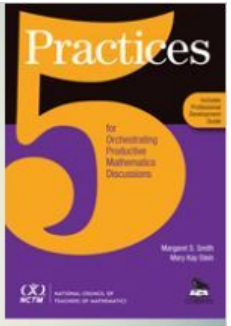
@MarkChubb3

4

5 Practices for Orchestrating Productive Mathematics Discussions

1. Anticipating - Do the problem yourself
2. Monitoring - Listen, observe, identify key strategies
3. Selecting - Purposefully select those that will advance mathematical ideas
4. Sequencing - How will the learning from the first solution help us better understand the next solution?
5. Connecting - Compare and contrast samples of students' work – what are the mathematical relationships?



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