Six Focal Teacher Discourse Moves (TDMs)

**Waiting.** Waiting (i.e., using “wait time”) to provide students with time to process teacher questions and think about their responses is critical to PRODUCTIVE and POWERFUL DISCOURSE. Although teachers are probably aware of the benefits of waiting after *asking a question*, a lesser-known form of wait time (i.e., Wait Time II) involves waiting after *a student responds*. When this second form of waiting is added, students’ responses can become more complex (Rowe, 1986), and students may be more likely to respond directly to their peers’ contributions.

**Inviting Student Participation.** Inviting student participation can take on multiple forms and address a variety of goals. For example, a teacher may wish to solicit multiple solutions or strategies for the same answer. Or a teacher may be looking to determine the variety of answers at which the students arrived. One main goal of inviting is to make diverse solutions available for public consideration, a key practice related to orchestrating productive discussions (Smith & Stein, 2011). Other goals could be more social nature, such as including multiple students in the discussion.

**Revoicing.** Revoicing occurs when a teacher restates or rephrases a student’s contribution. More specifically, revoicing has been defined as “the reuttering of another person’s speech through repetition, expansion, rephrasing, and reporting” (Forman, McCormick, & Donato, 1998, p. 531). An essential ingredient of what we call “full revoicing” lies in the second part of the teacher’s contribution (O’Connor, 2009). Full revoicing occurs when the teacher checks back with the original speaker and offers an explicit opportunity to respond to questions such as “Did I get that right?”

**Asking Students to Revoice.** This move is similar to the revoicing move described above except that the students are asked to do the revoicing. It requires that students listen to each other and allows students opportunities to revoice ideas in their own words.

**Probing a Student’s Thinking.** This move is about following up with an individual student’s solution, strategy, or question. The goal here is to have the student elaborate on his/her ideas. For example, the teacher might ask “how”, “why”, or invite the student to come up to the front of the room to provide additional information such as a diagram. Probing may stem from a teacher’s genuine desire to know more about the student’s thinking, or it could be used to make a student’s thinking explicit for the benefit of the other students.

**Creating Opportunities to Engage with Another’s Reasoning.** This move involves asking students to engage with another student’s idea. For example, the teacher might ask the class to use a particular student’s strategy to solve a similar problem or to agree or disagree with a solution. Another form that this move might be to ask students to add on or revise another student’s explanation or conjecture. Effective use of this discourse move could be enhanced by the prerequisite use of other discourse moves and works best when students are actively listening to each other.

These Teacher Discourse Moves (Herbel-Eisenmann, Steele, & Cirillo, 2013) were adapted from the “talk moves” in: Chapin, O’Connor, & Anderson (2009).
EXPLORING STUDENT THINKING IN SECONDARY GEOMETRY THROUGH LESSON STUDY

Proof in Secondary Classrooms Project (PISC) – PI: Michelle Cirillo, University of Delaware
NCTM Annual Meeting April 27, 2018 3:00 PM – 4:00 PM

Lesson Study Cycle

1. STUDY CURRICULUM AND FORMULATE GOALS
   Consider long-term goals for student learning and development
   Study curriculum and standards, identify topic of interest

2. PLAN
   Select or revise research lesson
   Write instruction plan that includes:
   • Long-term goals
   • Anticipated student thinking
   • Data collection plan
   • Model of learning trajectory
   • Rationale for chosen approach

3. CONDUCT RESEARCH LESSON
   One team member conducts research lessons, others observe and collect data

4. REFLECT
   Formal lesson colloquium in which observers:
   • Share data from lesson
   • Use the data to illuminate student learning, disciplinary content, lesson and unit design, and broader issues in teaching-learning
   Documentation of cycle, to consolidate and carry forward learnings, new questions into next cycle of lesson study

Source: Lesson Study: Step by Step: How Communities Improve Instruction (Lewis & Hurd, 2011)

Additional Resources

NCTM Session Presenters:
Michelle Cirillo (mcirillo@udel.edu), Jen Reed, Cheryl Cresci, Rachelle Bull, Amy Huebner, & Jen Hummer