

THE PROCESS OF FACILITATING MATHEMATICS DISCUSSIONS

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Building upon recent research on mathematics teachers' efforts to facilitate discussion (Chazan & Ball, 1999; Sherin, Mendez & Louis, 2000), this study examined the process of facilitating whole-class discussions in a secondary (grade 9) mathematics classroom. Analysis of data from this setting led to the identification of features of the process of facilitating discussion that extend beyond those frequently suggested in the literature (such as using wait time and asking high-level questions).

Underlying this study is a conceptualization of learning as involving both individual students' activities and participation in classroom communities. [See Cobb (1995) for a discussion of this conceptualization which he terms *the emergent perspective*.] Adopting this view of learning, I follow Simon (1997) and frame teaching as the attempt to support knowledge development at the individual level through posing problems, and at the classroom community level through facilitating discourse. In this study, I examined one particular aspect of the facilitating discourse component of mathematics teaching, namely facilitating whole-class discussions.

Elements of the process of facilitating whole-class discussion identified in this study included: (1) posing problems in such a way as to make whole-class discussion an essential part of the mathematical activity, (2) restructuring the physical space of the classroom, (3) helping students develop ideas and opinions about a problem and then bringing a range of ideas to the forefront of the discussion, (4) sharing the responsibility for questioning and responding to questions with students, and (5) motivating a need for consensus and pushing position-taking. Importantly, this study suggests that the process of facilitating discussion involves significant activity across the teaching cycle and points to influences on discussion that may be fruitful areas for future research.

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