

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 me to identify 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 (Cobb, 1995). 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.

I identified elements of the process of facilitating whole-class discussion including: (1) posing problems in ways that make whole-class discussion an essential part of 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. Results of this study suggest that the process of facilitating discussion involves significant activity across the teaching cycle and point to influences on discussion in need of further research. The results of this study can be easily communicated in a chart that links elements of the teaching cycle to features of discussion facilitation.

References

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