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The social construction of authority among peers and its implications for collaborative mathematics problem solving.

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Summary: This article describes a study of how students construct relations of authority during dyadic mathematical work and how teachers' interactions with students during small group conferences affect subsequent student dynamics. Drawing on the influence framework [*R. A. Engle* et al., "Toward a model of influence in persuasive discussions: negotiating quality, authority, privilege, and access within a student-led argument", J. Learn. Sci. 23, No. 2, 245–268 (2014; doi:10.1080/10508406.2014.883979)], I examined interactions when students appropriated their peers' ideas during collaborative mathematical problem solving and noted that each moment tended to follow particular interactions around authority. Notably, social and intellectual forms of authority became linked in ways that were directly related to how students' ideas and behaviors were evaluated by the teacher. I close by discussing how the study of authority and influence offers fertile analytic ground to generate new understandings about collaborative student work in mathematics classrooms.

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