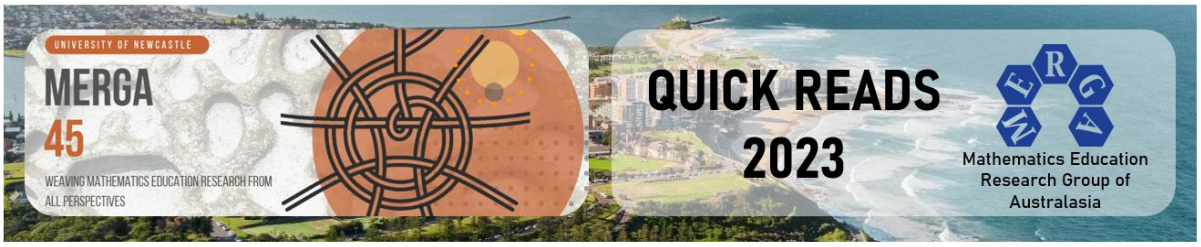

Reflecting Together: Classroom Video as a Tool for Teacher Learning in Mathematics

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With the aim of strengthening mathematics teaching | learning, classroom video is increasingly used as a tool for teachers to reflect on their practice. This paper reports on the first phase of a two-phase, design-based study which explored how participation in collaborative inquiry generates teachers' knowledge for mathematics teaching | learning (see Eden, 2019). The author and a group of teachers selected, viewed, and discussed video excerpts from mathematics lessons in the co-design and enactment of an approach to collaborative teacher inquiry.

The study was premised on the idea that inquiry is a stance teachers take, and that collaborative activity can afford teachers opportunities to learn in the context of their work. Critical reflection in collaboration with others can support future noticing thereby affording new possibilities for teachers' decisions and classroom actions, and potentially improving teaching (Mason, 2009; Jaworski, 2008). Mathematics teaching | learning is complex and largely private, and classroom video is commonly regarded as a valuable source of evidence to support teachers' reflection on and responses to classroom events (Gaudin & Chaliès, 2015).

A group of four teachers and the author met three-weekly over a six-month period to co-design, enact and refine an approach to collaborative inquiry, with a focus on using talk moves to facilitate mathematically productive student discussions. During the first design phase, the teachers' inquiry activity concentrated on viewing and reflecting together on classroom video excerpts from their mathematics lessons.

The teachers surfaced and discussed otherwise tacit elements of their practice, and the differences that emerged prompted them to explain and justify aspects of their teaching. Working to reconcile differences in their practice catalysed productive conversations whereby the teachers' thinking about mathematics teaching | learning was made public and available as a resource for others to reflect on and develop ideas about their own teaching. What was noticed and picked up for discussion mediated what conceptual resources were made available for the teachers' reflections. Sharing classroom video provided teachers with both a window into the otherwise private practice of others, and a mirror in which to reflect on their own practice.

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