

**ONE FRAMEWORK, MULTIPLE PRACTICES:
THE CASE FOR A COMMON DISCURSIVE RESOURCE**

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Linked research and development forms the central pillar of the Wits Maths Connect Secondary Project (WMCS) in South Africa, a project now working with secondary mathematics teachers in several districts in one province in South Africa. A key outcome of this work is a sociocultural analytic framework, and thus a discursive resource, that has been developed and refined in the project, through our simultaneous work in and across three inter-linked practices. Named Mathematics Discourse in Instruction (MDI), we have used the framework for crafting the two strands of our professional development activity: the teaching of a 16-day *mathematics for teaching* course at the University; and conducting *cycles of lesson study* in school with groups of teachers from clusters of schools. In addition to these two sites of teaching practice (professional development practice away from the school, and classroom lessons in school), we have developed MDI as an *analytic framework* for our research. It was our early empirical work in both primary and secondary classrooms that first focused our attention on the importance of coherence and connections in mathematics teaching, and specifically on the coherence, or lack thereof, between a selected example in a lesson and its accompanying explanation (Venkat & Adler, 2012), and then across a set of examples and the accumulating explanation in a lesson (Adler & Venkat, 2014). More recently, our research elaborated exemplification and explanatory communication, adding to these common elements of a mathematic lesson, analysis of learner participation. All three components are examined in relation to the lesson goal. This elaborated frame has enabled a description of mathematics made available to learn in a lesson (Adler & Ronda, in print), and an interpretation of shifts in practice across lessons and over time (Adler & Ronda, 2015). MDI is thus both process and product of the WMCS project. In this presentation I will describe and reflect on our use of MDI and in so doing build the case for embracing a common discursive resource across mathematics teacher education, mathematics school teaching, and research - and thus across multiple practices.

References

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