

Towards a framework for analysing and comparing the mathematical engagement afforded in lessons

In this seminar I shall describe progress towards developing a framework which can expose threads of mathematical engagement afforded by tasks, questions and prompts in lessons, as might be experienced by learners. In doing so, I draw on hierarchical taxonomies of learning objectives, models of mathematical learning and descriptions of how mathematics develops from a constructivist perspective. The framework I shall offer appears to be applicable to all maths lessons, on all topics, and reveals contrasts between the kinds of intellectual engagement afforded by different patterns of teaching.