
The Knowledge Quartet 2003-23: the application of teacher knowledge to classroom practice

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For more than 20 years, my research with colleagues in and beyond the UK has focused on the professional knowledge of mathematics teachers. Since 2002 this research 'entered the classroom', to observe how teachers apply what they know in the act of teaching mathematics. The result was a theoretical framework for analysing, discussing and developing mathematics teaching. In 2003 we named this framework the Knowledge Quartet (KQ). In this presentation I shall describe how the KQ emerged from observations of mathematics teaching, and how in the following years the scope of the KQ has been extended from its origins in English elementary classrooms to teaching in secondary schools and universities. An exciting recent development has been the application of the KQ to the teaching of other disciplines, such as science, technology and English.

Tim Rowland, University of Cambridge, UK