USING THE VALUES FRAMEWORK TO UNDERSTAND AND IMPROVE MATHEMATICS PEDAGOGY: EVIDENCE FROM FIVE CONTINENTS

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Values are the convictions which one regards as being important. In the context of mathematics education, values such as 'practice', 'investigations' and 'creativity' guide teacher and students' decisions and actions about how best to teach and learn mathematically. This construct is not only cognitive and affective in nature, but also lifts the consideration of (mathematics) pedagogy into the social plane, acknowledging the socio-cultural context within which teachers/students interact with mathematics.

The 'Third Wave Project' has been set up to investigate how this construct might be harnessed to help us better understand and improve mathematics learning in schools. Over the last 8 years, up to 22 research teams from 19 economies located across 5 continents have been working collaboratively on several studies on values and valuing in mathematics education. This invited lecture will present the theoretical framework, report on the findings of the research studies conducted, and suggest practical ideas on how classroom mathematics pedagogy may be re-conceptualised.