

Crossing Philosophical Divides to Better Understand the Complexity of the Learning Process in Mathematics

Mary Klein
James Cook University
<mary.klein@jcu.edu.au>

Kerry Smith
James Cook University
<kerry.smith@jcu.edu.au>

Silvia Dimarco
James Cook University
<silvia.dimarco@jcu.edu.au>

The papers in this symposium focus on crossing perceived divides to improve the quality of the learning process in mathematics. The second and third papers are empirical studies demonstrating how contextual factors can support or prejudice learning, respectively. Psychological, sociocultural and poststructural epistemologies are brought together in the first and final papers to provide an arguably more complete, though more complex portrayal of the learning process in the empirical studies and mathematics generally.

Paper 1: Mary Klein, James Cook University. *Uniting psychological, sociocultural and poststructural axes of analysis to better understand learning in mathematics.*

Paper 2: Kerry Smith, James Cook University. *Bridging understanding, interest and identity gaps in a first year numeracy subject.*

Paper 3: Silvia Dimarco, James Cook University. *Crossing the divide between teacher professionalism and national testing in middle school mathematics?*

Paper 4: Mary Klein, James Cook University. *Crossing philosophical divides: Adding poststructuralist insight into building, maintaining and changing teaching for better learning.*