

Rae Munro Award 2005

The recipient of the 2005 Rae Munro Award, for an excellent master's thesis with implications for New Zealand teacher education or classroom practice, is Judy Bailey from the University of Waikato. Judy's thesis is titled Mathematical investigations: A primary teacher educator's narrative journey of professional awareness.

Judy's thesis work has given her the opportunity to investigate her professional practice in mathematics education with pre-service primary teachers, using mathematical investigations. Narrative inquiry was used as a tool to explore her own assumptions about the nature and learning of mathematics. Three previously unrecognised personal beliefs emerged which were contrary to what Judy espoused in the classroom. These were that 'real' mathematicians solve problems quickly, do so on their own, and do not 'get stuck'.

Judy changed some of her ways of thinking about mathematical problems as her study developed. One of these changes was to view mathematics as a sense-making activity involving numbers, patterns, shape, and space. Her previous conception of mathematics had been one of a separate body of 'correct' mathematical ideas where the emphasis was on attaining the correct answer. Similarly, Judy also adapted her teaching approach when using mathematical investigations. She learnt that such learning can involve long periods of being 'stuck'. She realised that her natural response when teaching, was one of providing immediate support and intervention, with careful questioning. Personal reflective writing about her experiences of mathematical investigations highlighted that 'being stuck' was beneficial. This approach, therefore, gave room for the student teachers to explore and think using multiple interpretations to solve problems, rather than adopting a sole focus on a definitive statement of learning about a particular mathematical idea.

Judy included student teachers in her study. She was able to compare the way she had responded to the solving of mathematical problems, with the experiences of four of her student teachers. Whilst some of the insights of the student teachers resonated with Judy's own, others were different, and she gained new perspectives about her learning and teaching approaches. Judy's thesis meets the criteria for the Munro Award very well, in that it has the potential to impact on theorising and practice within teacher education and in the classroom.

It is with pleasure that the New Zealand Association for Research in Education confers on Judy Bailey its 2005 Rae Munro Award.



Judy Bailey

Thesis Title: Mathematical investigations: A primary teacher educator's narrative journey of professional awareness