

Editorial

Responding to Calls for Greater Accountability

Margaret Walshaw

Research in mathematics education is at an important moment in its development. The more positive amongst us view this critical stage as an opportunity to do research in more meaningful ways, specifically, through partnerships operating on a range of levels between researchers and practitioners. Others enter the discussion on largely negative terms, drawing attention to the fact that research is very much a governed site. They remind us that researcher accountability has shifted the focus away from process and inputs, towards products and outcomes. They question the current trend towards evidence based research.

The evidence based movement influences the work that many of us do as researchers in mathematics education. It calls for greater accessibility of sound educational research evidence, and a greater respect for the perspectives and investments of diverse stakeholders in the research process. Driven to a large extent by policy makers and funding agents searching for answers to pressing mathematics educational problems, the movement signals a major shift in thinking in relation to the gap between academic research and the real world of policy and practice. As a lever for policy and funding agents, the movement has the potential to become highly influential within our research community.

Critics have argued that the evidence based movement signals an increasingly centralised control that is seeking to transform our core ideas about research. They argue that prototypically, the key elements endorsed within evidence based research include classical experimentation and randomised trials and that achievement test scores and national data count as the principal means to establish system and teacher effectiveness. They point out that although the movement is used as a tool to describe and explain educational processes, it is also used to legitimate and control the research process.

Others have provided a counterpoint to this interpretation of evidence based practice. These particular champions of the movement acknowledge the complex reality of mathematics education by redefining outcome, efficacy, and consequence. Their approach to evidence is not simply in opposition to a mastery of cause/effect relations, but is based on the belief that it is both possible and desirable to develop structures, for the undertaking and scrutiny of research, that are simultaneously systematic and democratic.

The approach taken by the New Zealand Ministry of Education's Iterative Best Evidence program, gives due consideration to all forms of research evidence, irrespective of methodological paradigm and theoretical grounding. Its concern is in finding contextually effective appropriate and locally powerful

examples of what works, with what people, in which settings, and to what particular educational ends. Hence, the focus shifts from familiar evidence based struggles of establishing causality towards an emphasis on context dependence. Instead of making assessments about the causes of outcomes from the vantage point of scientificity, the syntheses in the program explore, bottom-up, what quality and effectiveness look like, case by case, in specific contexts.

Critical discussions of the best evidence movement are crucial to moving research in the discipline forward. As researchers and consumers of research in mathematics education, many of us are searching for ways to respond to the increasing demands for evidence based practice and for calls for greater accountability and transparency. At the same time we are looking for solutions to a concerning trend of systematic underachievement amongst particular groups of students. Building system capacity that is responsive to the outcomes of all students is what drives the Iterative Best Evidence program in New Zealand. We can learn a lot from it.