

Editorial

Dr Gregor Lomas
Head of School
Science, Mathematics and Technology Education

This 'student' edition of the *ACE papers* focuses on writing about mathematics education by students who were studying at the Auckland College of Education before amalgamation with the now Faculty of Education at the University of Auckland and that of lecturers who have been undertaking study for further qualifications. It addresses aspects of students' learning from socio-cultural perspectives across a variety of issues within early childhood, primary, secondary and tertiary settings.

The writers, 4 practising teachers, 2 pre-service secondary students (now teaching) and 3 lecturers, were all enrolled in teacher education courses and their papers in this volume arose from their assignment work and, in one case, from thesis work. They were invited to consider shaping and 'polishing' their work for publication and engage in a process of responding to a sequence of peer critique / commentary and then the usual external reviewer critique. Finally, I carried out the pre-publication editing process.

In the Early Childhood area Nicola Simon's paper examines issues around the teaching of mathematics in early childhood environments while Shiree Babbington's explores the narrower focus of the place and nature of problem solving. Papers written about the NZ Numeracy Development Projects by Alison Ayr and Trish Holster focus on the effectiveness of the accompanying professional development teachers undergo and the place of questioning, and how it can be enhanced using the 'Advancing Children's Thinking framework,' respectively. Jodie Hunter and Peter Nicholas take a wider view and deal with the more general historical, political and pedagogical aspects of the developments in numeracy. In the secondary area Simon Henley raises issues of 'fitting in' when significant philosophical differences exist in mathematics department environments while Priscilla Alan discusses the place and nature of effective technology use in assisting the learning of mathematics in the classroom. The paper from thesis work by Margaret Thomson deals with how prepared for classroom realities of teaching mathematics pre-service primary students were.

The papers reflect to varying degrees the personal understandings that the 'students' developed during their exploration of the literature and small scale research projects, and their sense making of its relevance to their practice. While the literature explored goes well beyond the material initially presented during the courses it does not necessarily cover all the relevant literature as the limited duration of the course and the scope of the projects did not always allow for deeper coverage.

As lecturers and teachers we all have specific learning intentions as the basis for our teaching but as we are well aware, all too often, what students take from our offerings and best efforts is not always what we intended. The range of topics and approaches taken in the papers here, however, is clear evidence that the nature of students learning can be extensive and deep.