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Special Edition:
Emergent learning and threshold
concepts in tertiary education



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Submissions for special sections of the journal are usually by invitation. Offers for topics for these special sections, along with offers to edit special sections are also welcome.

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Editorial

This special issue of the *Waikato Journal of Education* features a selection of papers first presented at the Transforming Disciplines: Emergent Learning and Threshold Concepts (ELTC) boutique conference, held in Hamilton, New Zealand, November 18–19, 2013. ELTC was the first conference focused on threshold concepts to be held in New Zealand. The conference showcased current threshold concept research in tertiary education and its implications for successful teaching and learning.

The keynote speaker was Jan H. F. (Erik) Meyer who, along with Ray Land, is the originator of Threshold Concept Theory, and who kindly agreed to provide the foreword to this issue. Presenters came from all over New Zealand and Australia, from different tertiary institutions and from a wide range of disciplines, to share their research on threshold concepts and first-hand experience of threshold concept-informed teaching. After the conference, presenters were invited to submit full versions of their papers to the editors of this special issue of the *Waikato Journal of Education* and the present selection of diverse and inspiring articles focused on threshold concepts is the result.

This special issue also marks the conclusion of the two-year Teaching and Learning Research Initiative (TLRI) funded project on threshold concepts—*Re-envisioning tertiary teaching and learning of difficult concepts: How threshold concepts afford a basis for understanding problematic ideas*. The project aimed to increase the exposure of threshold concept theory in New Zealand as well as to inform local researchers about advances in educational research. The project explored teaching and learning of hard-to-learn threshold concepts in a first-year Bachelor of Arts foundation course, an electronics engineering course, leadership courses, and in doctoral writing. The project was envisioned to produce disciplinary case studies that lecturers could use to reflect on, and refine, their curriculum and pedagogy, thereby contributing to discussion about the relationship between theory and methodology in higher education research. Facilitated collaborative action research was key to sustaining lecturers' engagement in researching their own practice and their students' learning. A focus on threshold concept theory promoted a dialogue between lecturers, and between lecturers and educational researchers, that increased awareness and supported emergent knowledge about threshold concepts. Their collaborative examination of the structure of lecturers' various disciplines and the curriculum and pedagogy they were employing made a substantial impact on what and how lecturers taught, and how they assessed students' understanding of threshold concepts. Four articles in this issue explore various aspects of this project.

The first article in this issue offers an overview of the TLRI project by Ann Harlow and Mira Peter. Three articles by four of the participating lecturer-researchers (Moffat and McKim, Johnson, and Scott) follow, interspersed with articles contributed by other researchers who attended the ELTC conference. In his foreword Jan H. F. (Erik) Meyer notes the “distinctive contribution to the threshold concepts literature in terms of discourse, theory, further examples of threshold concepts, or new research questions” offered by this special issue. An afterword by Susan Groundwater-Smith, who also attended the conference, provides a reflective overview of the collected articles, which in their different ways reveal the benefits to student learning of focusing on threshold concepts.



Together, the nine articles, the foreword, and the afterword provide a window into the work currently being done on threshold concepts in New Zealand and Australia. This special issue unites researchers from multidisciplinary backgrounds who consider issues of identifying, teaching and learning threshold concepts. To gain insight into these issues we recommend that teachers and researchers read every article in this volume because each of them makes a distinct and positive contribution to the field. Volume 19, Issue 2 of the *Waikato Journal of Education* provides a picture of the diversity of answers offered to the much the same questions and this diversity opens doors to future investigations.

Many people contributed to the ELTC conference and the preparation of this volume. The editors gratefully acknowledge the funding for the two-year research project from the Teaching and Learning Research Initiative, New Zealand Council for Educational Research, and sponsorship from the Wilf Malcolm Institute of Educational Research, The University of Waikato, New Zealand. We thank our team members (Marcia Johnson, David McKie, Anne McKim, Kirstine Moffat and Jonathan Scott) and summer scholars (Toby Balsom and Lara Perrett) for their enthusiasm and commitment. We are indebted to Bridgette Redder, Lisabeth da Rosa Ferrarelli, and Jana Rowland for ensuring the smooth running of the ELTC conference. We also acknowledge the ongoing leadership and guidance of Bronwen Cowie throughout the project and Noeline Wright throughout the publication process. Finally, we are grateful to Margaret Drummond and Denyse Graham at the Wilf Malcolm Institute of Educational Research for their help with the project, the conference and the publishing of this volume.

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