

**Crossing Boundaries:  
Fostering Collaboration between Mathematics Educators  
and Mathematicians in Initial Teacher Education Programs**

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Prospective teachers of mathematics need both subject matter knowledge and pedagogical content knowledge – in other words, they need to know not only the content but also how to teach it. In most initial teacher education programs these two kinds of knowledge are usually taught in separate subjects, designed and delivered separately by mathematicians (content) and mathematics educators (how to teach the content). Consequently, few opportunities exist to interweave content and pedagogy in ways that develop professional knowledge for teaching. This talk will describe a large scale Australian project – *Inspiring Mathematics and Science in Teacher Education* – that developed strategies for combining knowledge of mathematics content and pedagogy by fostering genuine, lasting collaboration between communities of mathematicians and mathematics educators. It will focus on the boundary practices that led to new ways of working between the two communities, as well as new approaches to mathematics teacher education.