# Working Across Disciplinary Boundaries in Pre-service Teacher Education

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In Australia, a suite of national projects has been funded by the Australian government to promote strategic change in mathematics and science pre-service teacher education. This round table session will share some of the interdisciplinary strategies being trialled in one project, *Inspiring Mathematics and Science in Teacher Education* (IMSITE), and invite feedback from participants on the transferability of strategies to other institutional contexts and the sustainability of these strategies over time.

The specific objectives of the IMSITE project are:

- to develop and validate a repertoire of strategies for combining knowledge of content and pedagogy in mathematics and science; and
- to connect academics from different communities of practice – mathematics, science, education – in order to collaboratively design and implement these new teacher education approaches.

Six universities and 23 investigators – mathematicians, scientists, and mathematics and science teacher educators – are the core participants in the project, with more universities to be added in 2015.

The first half of the round table session will showcase interdisciplinary strategies such as:

- Collaborative development and delivery of new content and pedagogy courses by mathematicians and mathematics educators;
- Reciprocal tutoring by mathematicians and mathematics educators into each other's courses;
- Peer observation by mathematicians and mathematics educators of each other's teaching;
- Development of a mathematics specialisation in primary pre-service programs.

The remainder of the session will invite discussion of challenges to interdisciplinary collaboration ("siloing" of disciplines, inflexible workload and course funding models, cultural differences between the disciplines) and ways to overcome these.