

# EMBEDDING INDIGENOUS PERSPECTIVES INTO ENGINEERING EDUCATION

OLT PROJECT ID13-2899, COMPLETED 2015

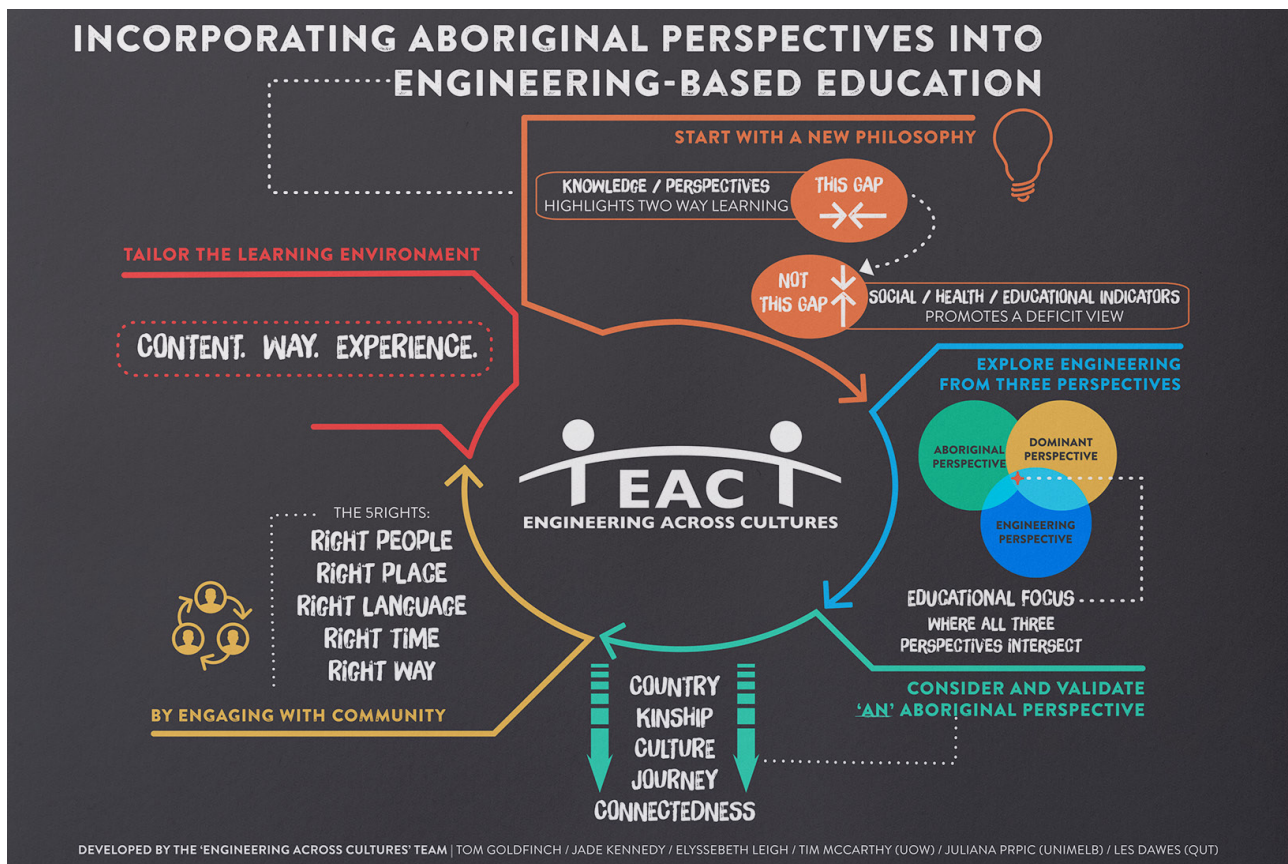
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This project has developed an approach to Indigenous student support that is integrated within existing engineering curricula. The project involved three dimensions: a culturally sensitive exploration of Indigenous values, perspectives and their meaning in engineering practice and the classroom; a constructivist approach to revising curriculum design for existing engineering subjects to accommodate different ways of perceiving and valuing ideas, objects and contexts; and, an innovative approach to course content design to introduce Indigenous cultural appreciation for both Indigenous and non-Indigenous students.

An interdisciplinary approach was taken, with the team itself consisting of academics from Engineering, Education, Archaeological, Business and Anthropological backgrounds, and Indigenous and non-Indigenous members. Input was also actively

sought from individuals outside higher education including practicing engineers, heads of industry, and Indigenous community leaders. Over the project's duration, the project team worked closely with Indigenous Communities, Academic and teaching staff involved with engineering education, and undergraduate engineering students..

The work undertaken placed a high priority on engaging with 'grass-roots' Indigenous community to understand the challenges that students may face in entering and completing engineering studies. As a result, the need to authentically embed Indigenous perspectives into engineering education, in partnership with Indigenous communities has been highlighted. The project has captured the many complex considerations to be made in designing engineering curricula for inclusion of Indigenous perspectives in a simple visual representation:



More detail, including a comprehensive guide to Incorporating Aboriginal Perspectives into Engineering Curricula is available at [indigenousengineering.wordpress.com](http://indigenousengineering.wordpress.com)