

Transforming Cultural Landscapes of Science/Mathematics/Technology Education for a Sustainable Future: An International Symposium

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A major challenge facing science/maths/technology educators in the 21st Century is to prepare future generations with appropriate knowledge, skills and values to live sustainably on planet Earth. Sustainability has been a key focus of the United Nations for a decade, initiated by the Brundtland Report which advocated that in meeting the needs of the present we do not compromise the ability of future generations to meet their needs. The recent Rio+ 20 UN conference on sustainable development ratified this view. Given recent IPCC reports calling for urgent action to resolve near catastrophic human-induced climate change and the obduracy of industrialised nations to respond, it is time to reach beyond the modern Eurocentric worldview to non-Western wisdom traditions. This international symposium will address innovative research on education for cultural sustainability and provide a forum for exchange of ideas across cultural borders. Peter Taylor will outline a professional development model of transformative learning for developing higher-order sustainability skills. Ken Kawasaki will outline a language-based model of science education as 'worldview education'. Emilia Afonso will outline a model of culturally contextualised science education for multicultural Mozambique. Alberto Cupane will share his experience of transforming his cultural identity from a tribal indigene to a global citizen. Hisashi Otsuji will outline a model of Buddhist inspired science teacher education for Japan. Bal Chandra Luitel will outline a hybrid model of culturally contextualised mathematics education for the 124 living cultures of Nepal. Symposium participants will benefit from attending panel members' earlier paper presentations.

Keywords: sustainability, education for sustainability, cultural sustainability, transformative education, professional development