



UNIVERSITY OF  
CANBERRA

# Aboriginal and Torres Strait Islander STEM education

**Peter Radoll**

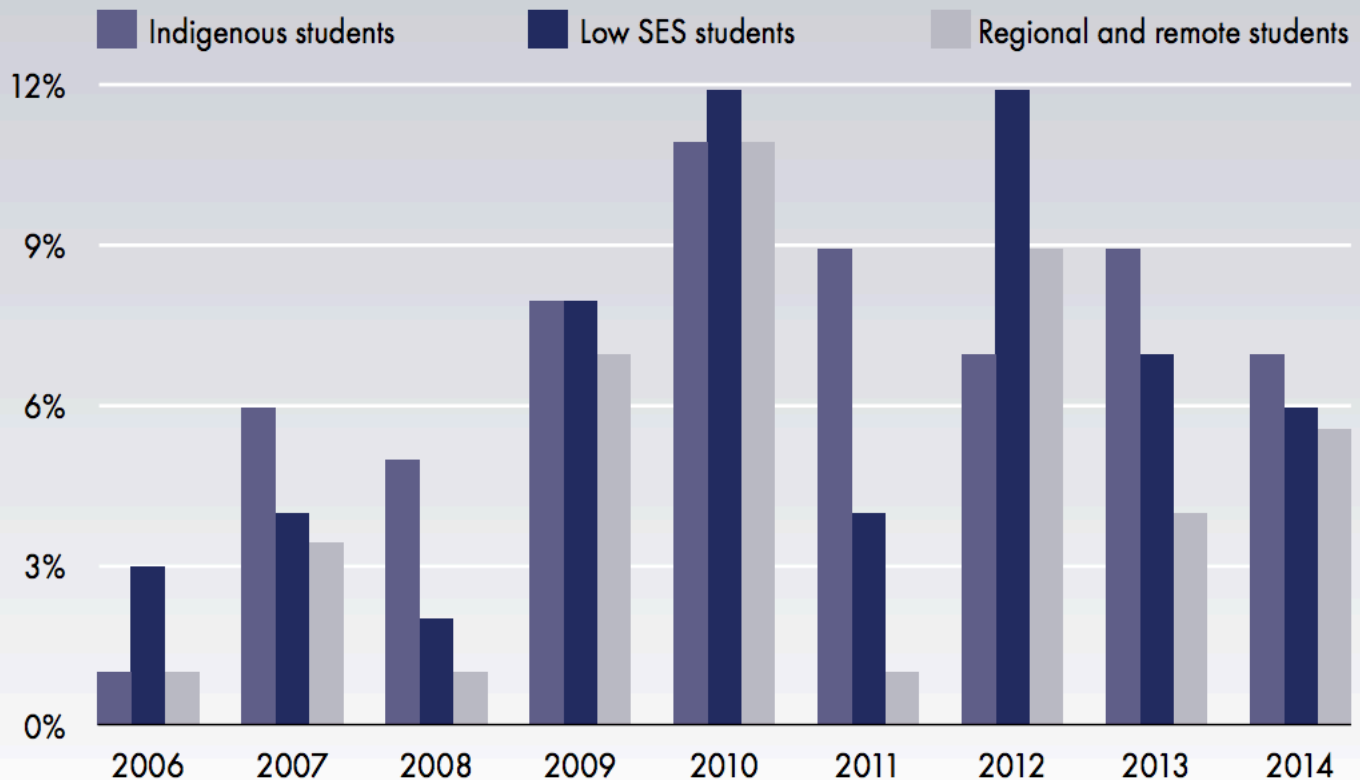
**Dean of Aboriginal and Torres Strait Islander  
Leadership and Strategy**

# Indigenous Enrolments Growth 2006 – 2014

**Figure 14** Growth in commencing undergraduate student enrolments for selected equity groups

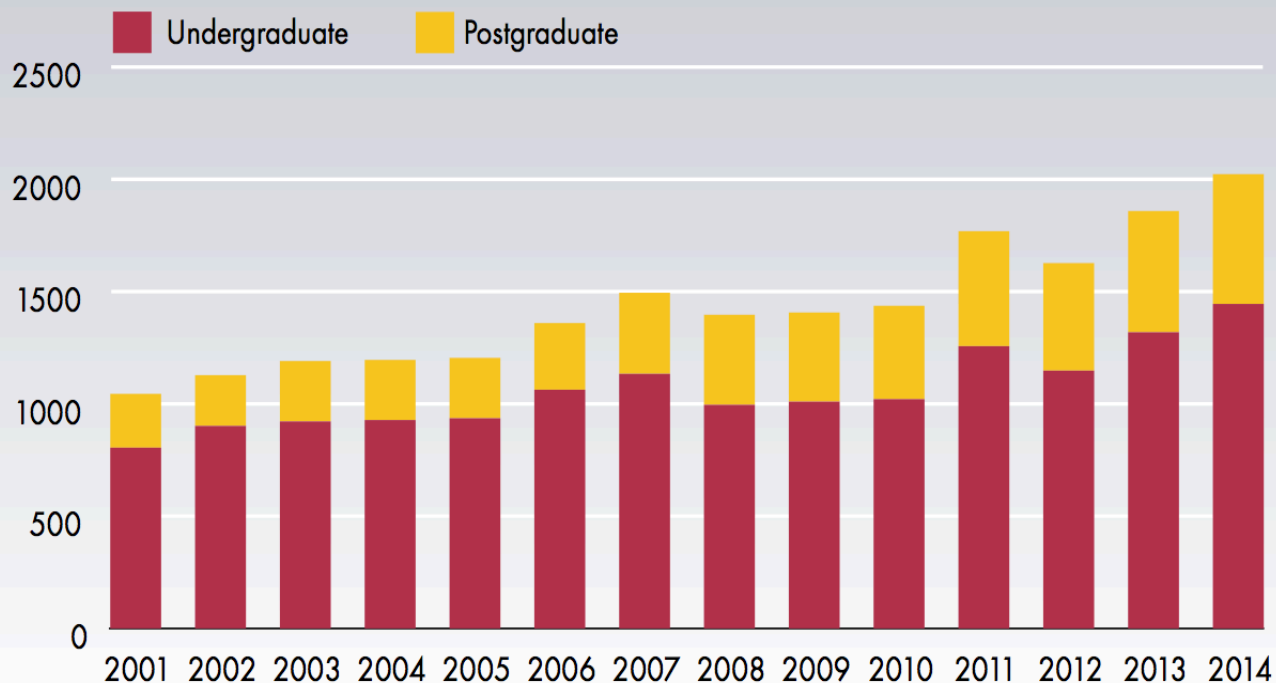
Source: Department of Education and Training 2015, *Higher Education Statistics Collection 2014 Student Data Appendix B—Equity Groups*.

Notes: Includes data for all higher education providers reporting student data through HEIMS. Low SES student definition is based on students' postcode of permanent home residence, with low SES postal areas based on the 2006 SEIFA Education and Occupation Index. Regional and Remote student definition is based on the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA) Geographical Location Classification.



# Indigenous Completions Growth 2001 – 2014

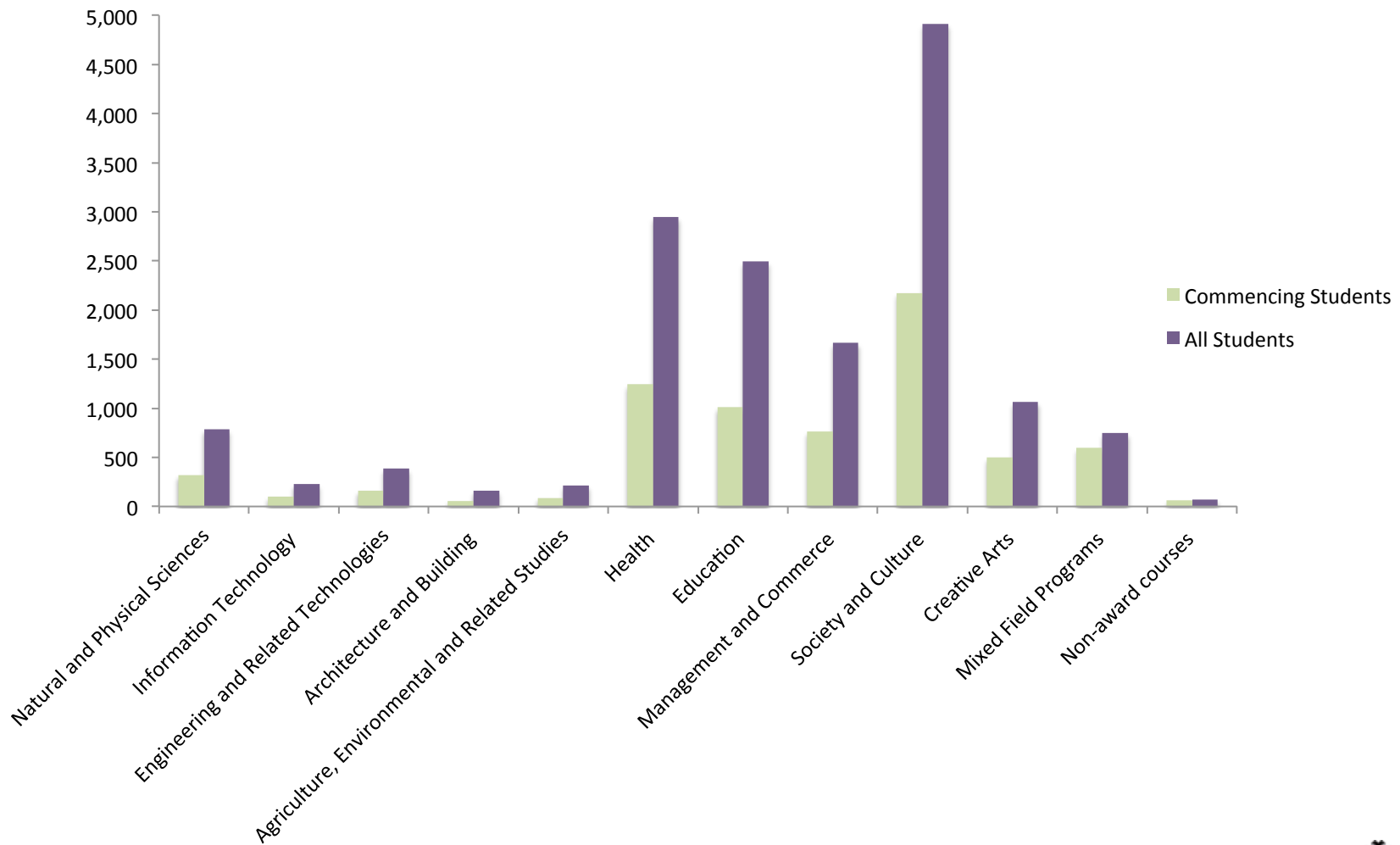
Figure 39 Number of award course completions for Indigenous students, by course level



Source: Department of Education and Training 2015, 2014 Selected Students Statistics—Award course completions.  
Note: Completions are for all higher education providers reporting student data through HEIMS.

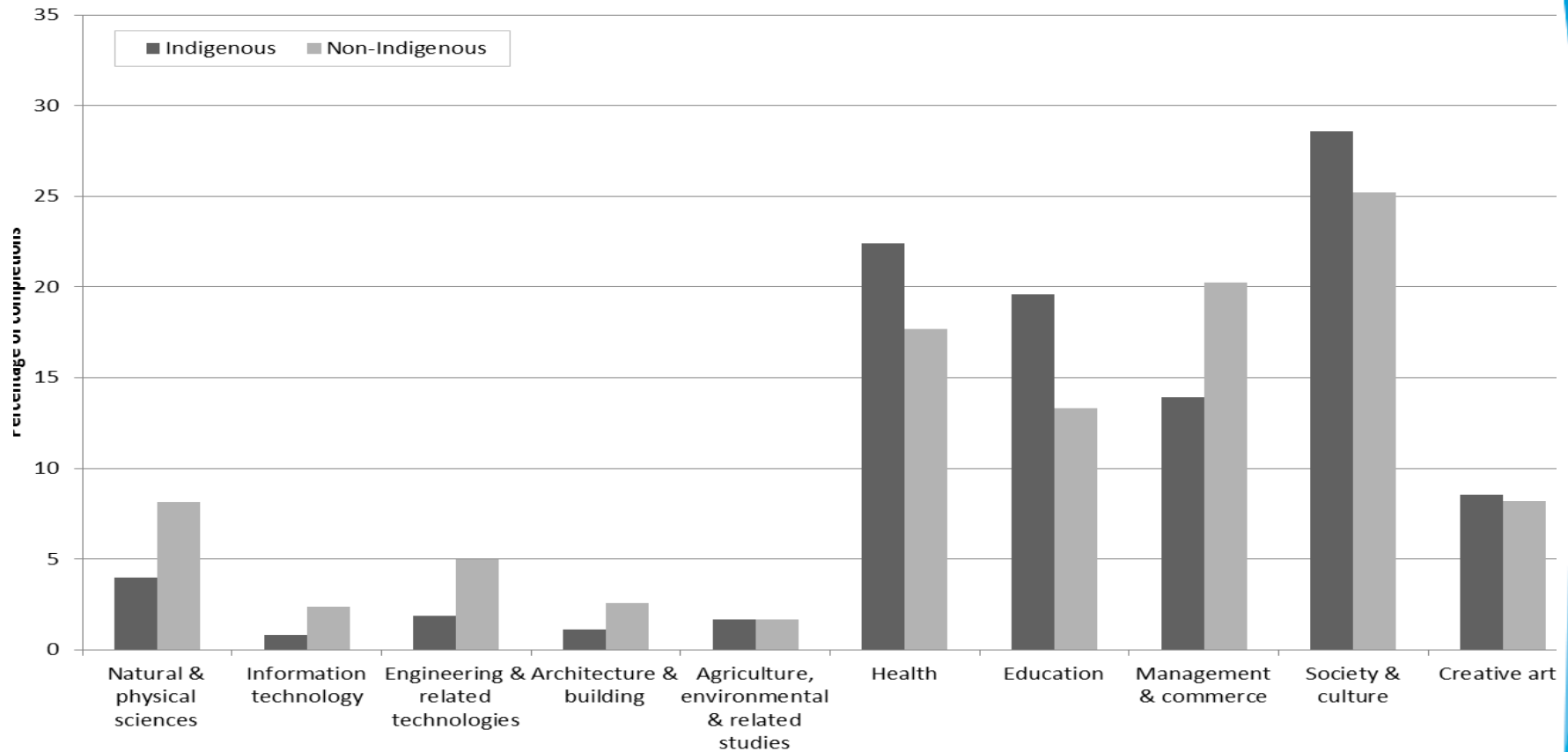
Source: Higher Education Facts and Figures, November 2015, Universities Australia

# Indigenous Enrolments by FOE – 2014 (commencing and all students - 15678)



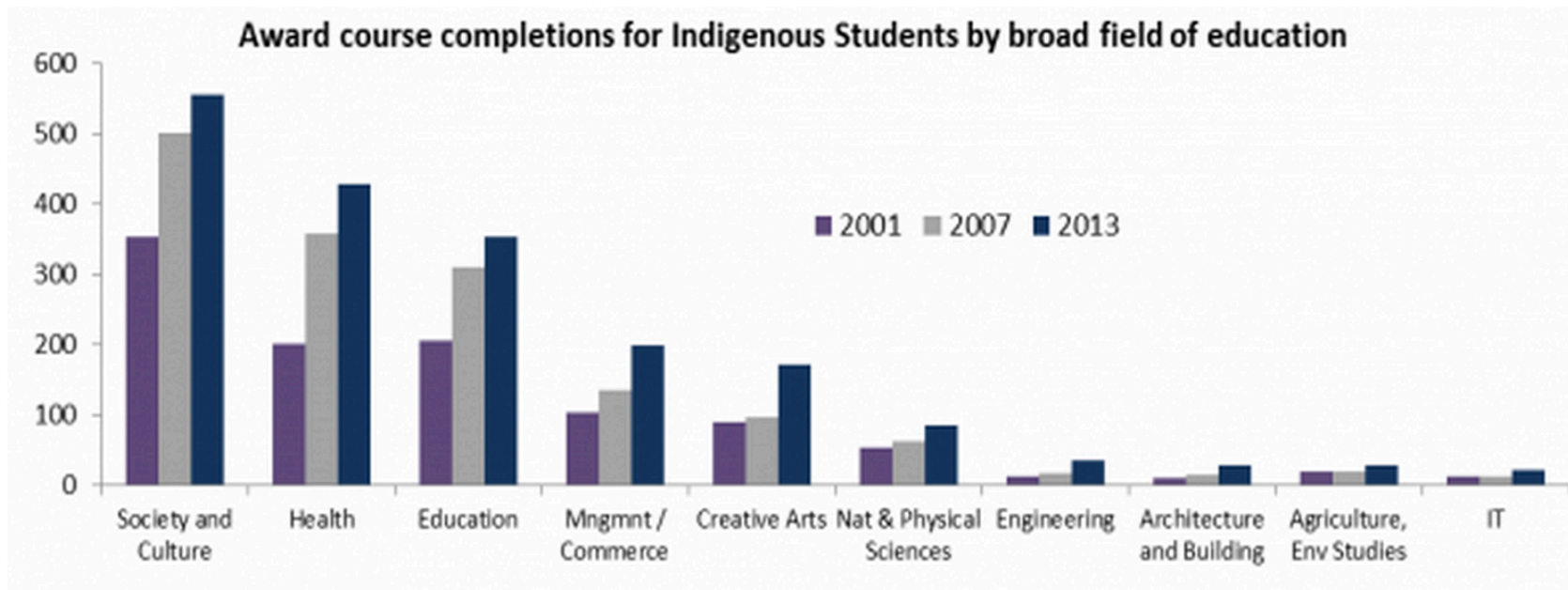
Source: Australian Government Department of Education, Higher Education Statistics Collection

# Award completions by field of study by Indigenous status, Australia, 2010–12



Source: Australian Government Department of Education, Higher Education Statistics Collection

# Indigenous award completions by Indigenous Status (2001,2007,2013)



Source: Australian Government Department of Education, Higher Education Statistics Collection

# Anti-Diffusion

- (this page redacted – not yet approved for publication)

# What are the challenges?

- Lack of appreciation of STEM degrees
- Lack of Indigenous role models – growing number of non-Indigenous researchers
- Mathematics in School
- Time on task – impact of cultural programs, tutoring programs, time out of class.
- The way we “market” university to schools and students



# Opportunities

- Make geeks cool in the Indigenous community
- Provide a link between STEM and Indigenous Cultures
- Inform students about the importance of Mathematics
- Align cultural and extra-circular school activities to not clash with Mathematics classes

# What I have worked on – Strategic Approaches

- Inspiring Australia's Indigenous Engagement in Science Report
- Foundation document for the establishment of the Indigenous Digital Excellence Agenda at the NCIE – Telstra Foundation
- Digital Careers – ACT and NSW
- ACS
- GoDigi – Australia Post and Infoexchange
- AJIS – ACIS
- Australian Science Media Centre – Susannah Elliot - NAB
- Aboriginal Summer School for Excellence in Technology and Science – CSIRO/BHP