

Indigenous students do not choose agriculture at University

Jim Pratley^{1,2}

¹School of Agriculture and Wine Science, Charles Sturt University, Wagga Wagga NSW 2678 jpratley@csu.edu.au

²Australian Council of Deans of Agriculture

Abstract

The Indigenous peoples of Australia pride themselves on their ‘connection with country’ as it comprises animals, plants and soils. Yet enrolments in agriculture courses at universities nationally show very few are from Indigenous students. This raises the question as to whether university agricultural education is appropriate for this cohort of students or whether there are other issues that are creating barriers to Indigenous entry into academia. This paper looks at the data to understand the *status quo* and whether there might be steps that can be taken to encourage better representation from Indigenous students.

Key words

Intakes, enrolments, completions, aboriginal education, higher education

Introduction

Higher education in Australia has been a growth industry for many decades and particularly from the 1970s. The Whitlam era of free higher education at that time opened opportunities for a wider range of people to access university education. Over time “free” has been wound back to a cost-sharing arrangement by student and government through the Higher Education Contribution Scheme (HECS), where the Commonwealth-supported place course fees are able to be paid off as a taxation liability, and more recently FEE-HELP for fee-paying places. Repayment becomes mandatory when taxable income reaches a threshold, currently \$51,957. The intention of such schemes has been to make higher education affordable to lower socioeconomic candidates, including indigenous students. The trends for the different equity groups since 2006 are shown in Figure 1.

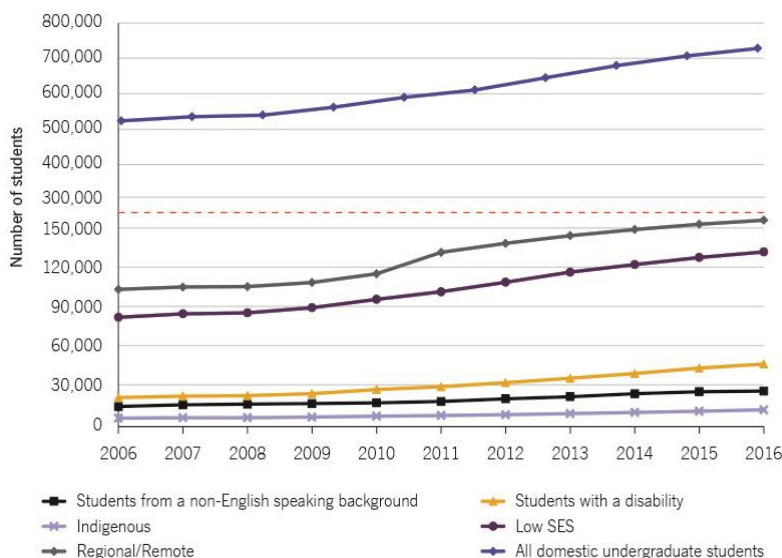


Figure 1. Domestic undergraduate students by equity group, 2006–2016 (Aust. Gov. 2017).

These data show that Indigenous student numbers at Australian universities grew by 50% (i.e. 8,600 to 12,900) in the 10 year period 2006–2016. The proportion of Indigenous in the Australian population is around 3.3% based on the 2016 census. However the proportion of indigenous students was only 1.7% of the student

population in 2016, up from 1.4% in 2006. Indigenous females outnumber males at university by about 2 to 1. The median age of the Indigenous people in 2016 was 23 years compared with nearly 38 for non-Indigenous people suggesting the proportion of university age represents untapped potential for higher education.

Evaluation

The trend upwards in number of indigenous students undertaking university study is encouraging but schools of agriculture in Australian universities see very few Indigenous students, at least those who identify as Indigenous.

Table 1 shows the number of indigenous students enrolled in 2014 in NSW universities of which 4 offer undergraduate agriculture degrees. The numbers are sizeable in those universities but very few of these students enrol in agricultural courses.

Table 1. Indigenous enrolments in NSW universities in 2014 (Korff 2018).

University	Total Indigenous enrolment	Proportion of student population (%)
Charles Sturt University*	908	2.3
Macquarie University	265	0.7
Southern Cross University	479	3.3
University of New England*	567	2.7
University of Newcastle	914	2.5
University of NSW	381	0.7
University of Sydney*	366	0.7
UTS	252	0.7
Western Sydney University*	580	1.4
University of Wollongong	321	1.1

*Universities offering undergraduate agriculture

What courses do attract Indigenous students? While data are not freely available for the immediate past, information from the 2014 year is shown in Figure 2 for the broad fields of education. Clearly ‘Society and Culture’, ‘Health’, and ‘Education’ are the most attractive to Indigenous students with significant improvements over time and probably reflect high female representation.

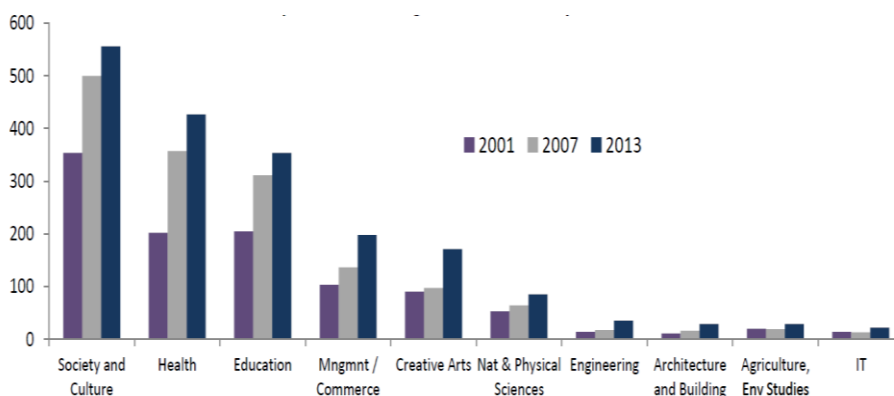


Figure 2. Award course completions for indigenous students by broad field of education (Department of Education and Training 2015).

Courses are coded according to broad fields of study officially called ‘Field of Education’ (FoE). Agriculture is categorised into FoE 05, which shows very little attraction to Indigenous students with barely any improvement with time. FoE 05 also contains all the environment courses and, in comparison with agriculture, these are likely to attract a much higher proportion of Indigenous students into this category as they provide park ranger qualifications. Yet Indigenous students account for only 0.9% of the students in FoE 05.

Data provided by University Statistics shows the intakes, enrolments and completions of indigenous students over 16 years and there is little indication of trends apart from a small improvement in intakes and thus

enrolments in the final 4-year cohort (Figure 4). More detailed evaluation cannot be done as the numbers are so small they invoke privacy provisions. Indications are that sector-wide there are about 35-40 indigenous students enrolled in agriculture courses on average at any one time, with an annual intake around 15-25 (Figure 3). However annual completions nationally for Indigenous students are around only 4 (Figure 3). Over the 2001-2016 period, 243 Indigenous students entered the programs but only 62 graduated, an attrition of around 3 in 4 (Figure 5). Across all courses the attrition for Indigenous students is around 1 in 3.

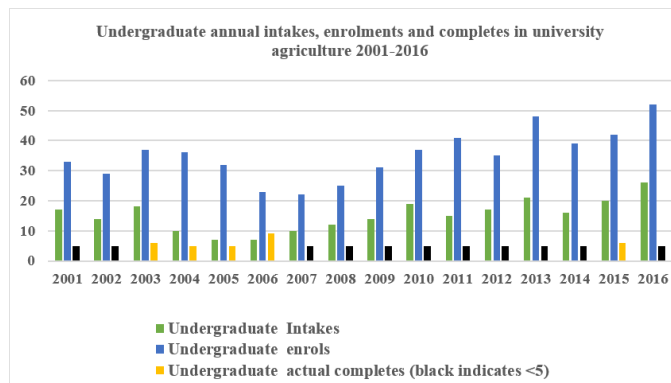


Figure 3. The annual intakes, enrolments and completions of undergraduate degrees by Indigenous students in agriculture and agribusiness in Australian universities from 2001 to 2016 (source: University Statistics 2018).

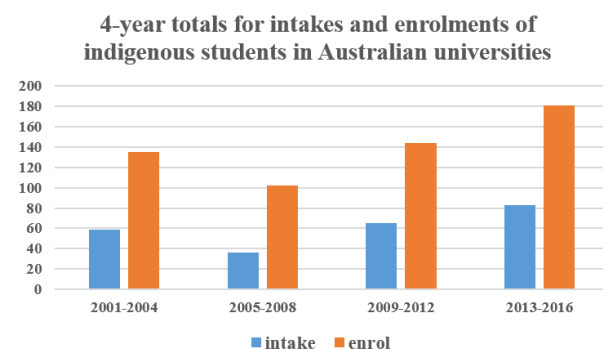


Figure 4. Intakes and enrolments for each 4-year period from 2001-2016 (i.e. 2001-2004, 2005-2008, 2009-2012, 2013-2016) for Indigenous students in Australian university undergraduate agriculture courses (source University Statistics 2018)

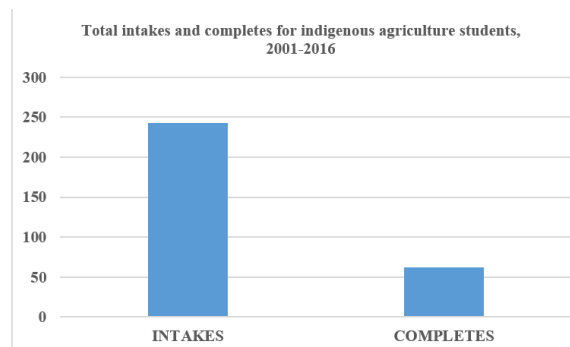


Figure 5. Total intakes and completions for Indigenous students in agriculture courses in Australian universities over the period 2001-2016.

Discussion

At least two disturbing aspects emerge from these figures. The first is that Indigenous students are not selecting agriculture as their chosen career. Secondly, universities are not retaining those who do choose agricultural

courses. It needs to be noted that these data refer only to those who identify as Indigenous. Some students who are Indigenous choose not to identify for particular reasons and so they are not counted in these statistics.

The 'connection to land' suggests that agricultural courses might be a preferential choice. This does not seem to be the case. Challenges faced by Indigenous students, indicated by Korff (2018), include financial hardship, fears of being a minority, typecast low learning expectations and being the first in the family. However, over 900 identified Indigenous students annually attend CSU and more than 500 attend UNE so they do enrol, albeit in relatively small numbers, but not to agriculture.

Maybe gender also plays a part in that other course choices, such as health studies, are perceived as having more relevant career options for such students. Binks et al. (2018) reported that only 1% of the national agricultural workforce identified as Indigenous of whom 23 % were female. They also reported that young Indigenous people (those aged between 15 and 34 inclusive) accounted for 44% of the indigenous component of the workforce. In proportional terms, the discrepancy between Indigenous make-up of the student population (0.9%) and of the agricultural workforce (1%) is not large. The significant proportion of young Indigenous workers in agriculture suggests potential exists for increasing their number in universities.

Indigenous students are an untapped source of students in Australia. They offer the prospect of sharing their culture and knowledge with the contemporary cohorts of non-Indigenous students and, through education, build relationships that often are not strong in regional areas. However the data presented suggest that universities have little attraction for the Indigenous community. Where there is engagement, universities do not offer attractive programs. This low rate of participation, especially in land-based courses, does seem to be a wasted opportunity. The agricultural profession should perhaps consider establishing a scholarship or assistance mechanism that is directed towards encouraging some Indigenous students into the agriculture sector through higher education.

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