

The State of Geography in Australian Universities

Accepted for publication in *Transactions of the Institute of British Geographers*. The information, practices and views in this article are those of the author(s) and do not necessarily reflect the opinion of the Royal Geographical Society (with IBG).

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Article type: Themed Intervention [Geography Today]

Abstract: We place the state of Australian university Geography in brief historical context and assess the key contemporary challenges. We draw on recent strategic reviews and overviews, and perspectives from the heads of programs. Geography's presence and visibility in both STEM and HASS domains is a key source of its attractiveness to students and its cross-disciplinary strength. Unfortunately, this same STEM/HASS crossover is precisely what makes it chronically vulnerable to institutional restructuring.

This is the author manuscript accepted for publication and has undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the [Version of Record](#). Please cite this article as [doi: 10.1111/TRAN.12456](https://doi.org/10.1111/TRAN.12456)

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Acknowledgments: We thank the Heads of School and their delegates, as well as colleagues from the Australian Geography Teachers Association, who provided comments and perspectives, not all of which we have been able to do justice to in this short report.

Funding information: There are no funders to report for this submission.

Data availability statement: No new data were created for this article.

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1 INTRODUCTION

Teaching and research programs in Geography, and departmental structures that support them, can be found in about 25 of Australia's 40 universities. In this piece we place the state of Australian university Geography in brief historical context and assess the main challenges for the future. We draw on recent strategic reviews and overviews. We also sought comment and perspectives from the heads of programs around the country. Anonymised quotes from heads are used here to illustrate broader experiences. Geography's presence and visibility in both STEM (Science, Technology, Engineering and Maths) and HASS¹ (Humanities, Arts and Social Science) domains is a key source of its attractiveness to students and its cross-disciplinary strength, but is also a source of challenge. We show examples of how the challenge plays out across teaching programs, research assessments and funding changes. Unfortunately this same STEM/HASS crossover is precisely what makes Geography chronically vulnerable to institutional restructuring.

2 THE STATE OF GEOGRAPHY BY THE NUMBERS

In 2018 the National Committee for Geographical Sciences (NCGS, 2018) prepared a 'Decadal Plan for Australian Geography'. This review focussed on the 200 or so full-time geographers engaged in teaching in the 25 or so university departments that offer Geography majors in universities. More than 200 additional academic staff with a background in Geography are employed in a wide variety of other centres, schools and institutes in Australian universities. These figures can be compared with historical numbers to track the growth of university Geography in Australia. Geography as an academic discipline in Australia grew steadily from just eight full-time staff in 1951 (Figure 1) to around 200 by 1981. In the intervening 40 years the discipline has stayed about the same size in universities. Membership in the peak body, the Institute of Australian Geographers, has also stayed about the same, around 300. These decades saw the familiar rounds of amalgamations as Geography lost its distinctiveness inside hybrid schools with vaguely social and environmental character (Finlayson, 2015), and geographers were employed in allied endeavours such as demography, planning, environmental science, and natural resource management

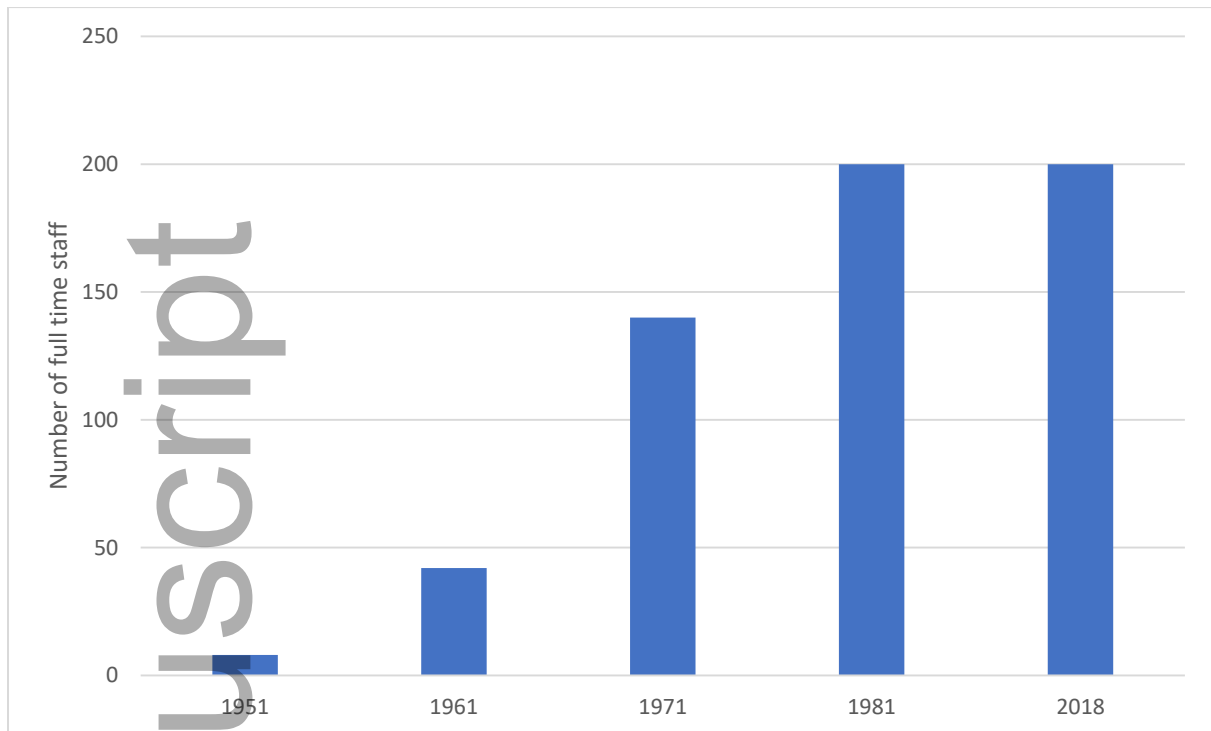


Figure 1: Full time academics employed in continuing positions in Australian university geography departments that provide a Geography teaching Major (Data from Spate & Jennings (1972), Jeans & Davies (1984), and NCGS (2018)).

The Decadal Plan concluded that “Geography is a relatively small but dynamic discipline in Australian universities, with a strong research record and graduates who enter a wide variety of careers” (p.8). The average number of staff identified as geographers in the academic units teaching a geography major is 9.4, with a range from 2 to 27. The review concluded, first, that Geography programs lacked critical mass, with at least 10 academics estimated to be needed in each academic unit. Second, the Geography programs lacked visibility. Ninety percent of respondents to an online questionnaire of Geographers thought that this lack of disciplinary identity was a significant or very significant problem.

3 THE STRUCTURE OF DEPARTMENTS, DEGREES AND THE IDENTITY QUESTION

Geography programs, units and schools are found in various Faculty structures – Science, Arts, Social Science and Planning. Human and physical are sometimes split between separate units, and not all universities have both sides of the discipline. Heads of School report slightly higher levels of satisfaction in Science faculties than Arts, because the importance of field work and lab work are recognised and more likely to be resourced. However the

humanities and social sciences dimensions of the discipline can tend to be marginalised in science faculties if there is insufficient support from the leadership.

Of the 25 academic units that teach a geography-related major, 14 do not have Geography in their name; instead, the discipline is part of a School of: Social Sciences; Geosciences; Biological, Earth and Environmental Science or similar (NCGS 2018, p. 8). Furthermore, in only seven of the 25 academic units are the Geographers clearly identified as Geographers on the unit's website. The others are hidden in long lists of staff from unspecified disciplines. However institutional submergence is not necessarily a barrier to high international research rankings; there are examples of high rankings for universities without an identifiable Geography Department or School.

In the Australian system students can do Geography majors in a range of bachelor degrees, including Arts, Science, Social Science, Environmental Science, Environmental Studies, Planning, Sustainability, Development Studies and Education. There is one Bachelor of Geography in Australia, at the University of Wollongong. Many students encounter Geography units as electives in quite different degrees. This can sometimes be accidental:

the lack of a named Geography degree means that students tend to discover Geography in second and third year units. The Geography major is popular (I am the convener of this major) but I feel that many students miss opportunities to pursue interests/specialize in Geography because they come to the party a little late. (Group of Eight university²)

Heads of School report that the identity question is ever-present for Geographers, and they expend considerable effort explaining and justifying the discipline, and defending its rigour and relevance. The presence of social science in a science faculty provides one example, as does the Planning context:

While in practice the Geography-Planning nexus has proven to be mutually beneficial to students and staff, it rears itself in external debates of 'job readiness' and the perception that studying Geography falls short of 'training' people to commence their professional career. (Capital city university)

The identity question provides both opportunities and challenges. Challenges include a lack of understanding about what the discipline is, where it sits, why it is important, the employable skills it offers, and competing disciplines who ‘all claim expertise in spatial and place-based thinking and human-environment interconnections’ (Regional university). One expression of this competition is in majors such as Natural Resource Management, Environmental Science, Marine and Coastal Science and Environmental Humanities.

Conversely, there are also opportunities in that ‘Geography is clearly seen as useful and central to these areas, with units from the subjects used extensively through cross-listing’.... *‘While the utility of the discipline is not in question, it is not necessarily being done as a Geography major’* (GO8 university). Heads of Schools often report success in attracting students from competing subjects where there has been a strong focus on skills and fieldwork:

[these] might be seen as ‘old fashioned’ skills, but with modern technologies – from map and aerial photo interpretation, to simple quantitative techniques for the measurement of patterns and processes in human and physical Geography, to developing and responding to consultancy briefs etc. We found it was not enough to talk in general terms about critical thinking, communication, synthesis etc. and needed to give students a more tangible ‘toolkit’. The outcome was a measurable improvement in student satisfaction with units. (GO8 university)

Where it has been possible to maintain domestic and international fieldwork, there are always reports of increased student satisfaction and transformative life experiences. Geographers are good at doing interdisciplinary work, and a number of universities report that they have used this to good effect building different Masters programs and joint degrees.

4 GEOGRAPHY RESEARCH

A recent national evaluation provides further insights into research by Geographers. The ERA (Excellence in Research for Australia) is a research quality evaluation program for Australian universities, that evaluates a variety of research outputs. (It was based on the REF in the UK.) University departments were assessed on a 5 point scale from well above world standard (5) to well below world standard (1). For Geography, the boundaries of disciplines is always a problem, of course, but Geography was assessed as Human and Physical, using

Commonwealth government fields of research codes. These assessments are done via citation metrics in STEM disciplines (including Physical Geography) and via by peer review in HASS disciplines (including Human Geography). The STEM disciplines have advanced in rankings more rapidly than the HASS ones because of this difference. Out of the 20 universities ranked for Geography in 2018, 8 were ranked above world standard for Human Geography, and 15 for Physical Geography (Table 1).

Table 1: Excellence in Research for Australia from Human and Physical geography (2018)

	Human Geography	Physical Geography
Category 5 (Well above world standard)	2	5
Category 4 (Above world standard)	6	10
Category 3 (World standard)	8	0

Other conclusions from the ERA include:

- Human and Physical Geography are of comparable size, with just under 200 researchers in each across the country (although only about half of these researchers are located in Geography departments as such).
- Human Geography as a discipline is about the same size as the disciplines of Anthropology or Criminology in terms of full-time staff and research income.
- Physical Geography is slightly smaller than the discipline of Geology
- Both Human and Physical Geographers produce similar numbers of research outputs, although Physical Geographers have about twice as much funding.

Human Geographers publish at a higher rate and at lower cost than other disciplines in the Studies in Human Society Division.

The ERA is currently under review, and there is considerable debate over whether it is worth the effort. As an assessment at several points in time, it showed governments where Australian research was performing well on the world stage (Geography being a case in point), and where further investment is needed. But it is widely recognised as a very blunt instrument, and internal decision-making in most universities would draw on more fine-grained local data.

5 THE RELATIONSHIP WITH HIGH SCHOOL GEOGRAPHY

Traditionally there has not been a strong relationship between university Geography and high-school Geography. Unlike, for example, British and Canadian universities, students do not leave school and enter a Geography program at university, they instead do very general degrees. However, the situation of school Geography mirrors developments in universities. Through the 1980s and 1990s school Geography was conflated with environmental studies and the general SOSE subjects (studies of societies and environments). This was also true in teacher training at universities where Geography lost ground. In part this is because of the rapid expansion of subjects available for students to take. The result is that of 37 education degrees across Australia in 2016, only a quarter (nine of the 37 universities) have a full-time specialist Geography educator. This flows through to the classroom where Geography is taught by the highest proportion of 'out-of-field' teachers of any school subject in Australia. Weldon (2016) suggests that, in 2013, 40% of Year 7 – 10 Geography teachers were not trained in that discipline, compared with 20% of maths teachers, and 10% of biology teachers. Weldon points out that this is not only detrimental to students, but also leads to substantial dissatisfaction for teachers (see a full discussion in Caldis and Kleeman, 2019).

We believe that things are now turning around for Geography in schools. Up until 2013 each state had its own curriculum, but at that time a new national Geography curriculum was adopted that is compulsory from Foundation (F) (5 y.o.) up to Year 8, 9 or 10, depending on the jurisdiction. It is otherwise offered as an elective in Years 9–12. The new curriculum uses the concepts of place, space, environment, interconnection, sustainability, scale and change (Maude, 2013). Years 11 and 12 involve units on natural and ecological hazards, sustainable places, land cover transformations and global transformations. For the first time this curriculum provides systematic and compulsory geographical learning right through school, with a strong emphasis on concepts and field experiences.

Controversially, the national curriculum places Geography amongst the Humanities and Social Sciences (HASS) subjects. But there is a push from Geography associations to recognise it as both a STEM and HASS subject. This is particularly driven by the addition of spatial science elements into the curriculum, including partnerships with large spatial science companies. School teaching associations (led by the Australian Geography Teachers Association) are developing good links with the Institute of Australian Geographers, and the largest Geography conference in Australia is still the Victorian Geography Teachers

Association conference, with over 500 delegates each year. State Geography organisations and AGTA routinely have university academics as office bearers. The decadal plan suggests several ways in which links between university and school geography can be strengthened (NCGS 2018, p.87). These include: strengthening links between universities and local geography teacher associations (following the model of the American Geographic Alliance); encouraging university students to become school teachers, and providing some basic training to teachers, particularly capitalising on the growth of spatial science.

The need for teacher education keeps some departments viable as recognised by a heads of schools in diverse university contexts:

Geography is quite strong at my university at the moment because it services teachers into a range of programs, where students can take one or more (compulsory or elective) courses and up to a minor or a major in some degree programs. This leads to a healthy graduate cohort. Teachers need to teach Geography and therefore we, even as a small university, can keep offering Geography. (Regional university)

Geography remains a very popular [high school] subject., but here too there is a crowded curriculum. So, while actual enrolments are strong, in relative terms the discipline has declined given there is more choice. Geography is not always taught by Geographers, and so students coming to university have not necessarily had an experience that would encourage them to continue with the subject at tertiary level.... I know we've been on about this for years, but the nexus between [high school] Geography nationally (and the national curriculum) and tertiary education must be an opportunity. (GO8 university)

We suggest that possibly the most useful immediate action is to strengthen links between university Geographers and their colleagues who train school teachers in the education faculties of the same university. This includes assistance with the STEM aspects of training, especially spatial sciences.

6 POSTCOLONIAL CHALLENGES AND INDIGENISATION

This is not the place to examine the intellectual contribution of Australian university Geography and Geographers (see a selection of such reviews in the bibliography) , but it is worth noting that Geographers are heavily involved in Australian university struggles to acknowledge their colonial heritage and support Indigenous knowledge, staff and students into the future (Howitt 2019). There are a number of examples across the country of innovative teaching partnerships with Indigenous communities, often including field-based approaches where engagement with place provides opportunities for collaboration and sharing (Wright et al. 2007; Graham et al. 2017, Atchison and Kennedy 2020). Geographers are often to be found helping lead the Indigenisation of the curriculum within their universities, building on the strong tradition of Indigenous Geographies in Australian research.

7 CONCLUSION - COVID-19 CHALLENGES AND ENHANCED UNCERTAINTY

The never-ending challenges of funding models, inadequate resources, performance metrics and academic workloads are all being exacerbated under Covid-19 conditions. Covid-19 is throwing a new set of challenges to the university sector in Australia, much of which has become dependent on the international student market in recent years. This is playing out in contraction of universities dependent on international students, and a revised funding model for domestic undergraduates that explicitly aims to encourage students into science subjects rather than humanities. It is likely that many universities will experience significant restructures and losses of tenured positions in the time it takes to get this article to print. Many casual and contract positions have already been lost.

Paradoxically the GO8 universities are potentially more vulnerable to Covid-19 challenges than small capital city and regional universities, because of their higher dependence on international students. Regional universities are recognised by both their communities and by state and federal governments as having a distinctive mission in their connections to their region. In this respect they may benefit from place-based approaches, as this small capital city university reports:

the University's strategic plan focuses very sharply on 'place based' and the Vice Chancellor regularly champions one of our offerings as being 'the' example of this... Having the backing of your VC in such times is very good indeed but this

also comes with expectation of load growth. For a wider audience, the take home is that as Universities seek to differentiate themselves and resize that Geography has the potential to be highly place based and locally relevant/distinctive.

There is a lot of lip-service in Australian universities about the need to support cross-disciplinary research to address global challenges, and the need to equip graduates with tools and perspectives from different disciplines. Geography is superbly well-placed intellectually to contribute to such efforts. Unfortunately the budget models rarely match the rhetoric, making Geography chronically vulnerable to institutional restructuring, and requiring a disproportionate amount of institutional labour from Geographers just to survive within their institutions. The experience of Geography in Australian universities provides an exemplar of the challenges of cross-disciplinary scholarship, particularly across the HASS/STEM boundary.

NOTES

¹ The HASS acronym resonates internationally much more poorly than STEM. There is a move in the UK to replace it with SHAPE (Social Sciences, Humanities and Arts for People & the Economy/Environment).

² The Group of Eight (GO8) comprises the self-styled 'leading research-intensive universities' – the University of Melbourne, the Australian National University, the University of Sydney, the University of Queensland, the University of Western Australia, the University of Adelaide, Monash University and UNSW Sydney.

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