

Diversity in Australian higher education

An empirical analysis

Leo Goedegebuure

Centre for Higher Education Management and Policy, University of New England, Armidale, NSW and
LH Martin Institute for Higher Education Leadership and Management, University of Melbourne

Hamish Coates

Australian Council for Educational Research, Melbourne

Jeannet van der Lee

Centre for Higher Education Management and Policy, University of New England

V Lynn Meek

LH Martin Institute for Higher Education Leadership and Management, University of Melbourne

The concept of diversity has been part of the Australian government's higher education agenda for several years, but empirical studies on the actual state of diversity in the sector are limited. This situation raises questions regarding the factual basis for the policy claims made. With this in mind, this paper seeks to assess the degree of diversity within the Australian higher education sector through an analysis of the perceptions, aspirations and reported activities of Australian academics in terms of their teaching, research and community service. Using data collected in the 2007 international Changing Nature of the Academic Profession survey, we are able to cautiously conclude that some diversity appears to exist, however not to the extent one might expect given the importance placed on institutional groupings in the Australian higher education debate.

Introduction

The conservative Federal Government in power prior to 2007 identified diversity as a key issue in its 2002 review of the system (see Department of Education Science and Training 2002) and subsequently, through its legislation on National Protocols (see Ministerial Council on Education Employment Training and Youth Affairs, 2006) sought to influence institutional diversity by accommodating the establishment of private and

specialised higher education providers. The present Labor Government, elected in 2007, also placed diversity at the political forefront in its announcement of the Review of Australian Higher Education in 2008. It claims the sector needs greater diversity to meet its ambitious socio-economic objectives and that 'mission-specific funding of universities in order to recognise and promote greater diversity' (Department of Education, Employment and Workplace Relations, 2008, p. 57) should be implemented through the use

of compacts (see Group of Eight, 2008). Yet, empirical studies on the actual state of diversity in the sector are limited, which raises the question of the basis for policy claims made.

The Australian higher education sector is characterised by a number of self-defined and commonly used institutional groupings that supposedly reflect different orientations in these three basic activities. There are three self-defined groups, namely the Group of Eight (which 'represents Australia's leading universities'), the Innovative Research Universities (which 'brings together seven world class universities who share common aims, standards and values'), and the Australian Technology Network of Universities (an 'influential alliance of five distinctive and prominent Australian universities located in each mainland State'). Two additional informal groupings are frequently used, namely the New Generation Universities (institutions that arose out of the late 1980s merger processes) and the Regional Universities (institutions with an obvious regional location). However, the extent to which these groupings in reality reflect diversity is open to empirical testing.

Rather than looking at commonly used indicators that relate to these groupings such as mission, course profiles, disciplinary structures, types of students, we have adopted a different methodology to address the question of diversity. We attempt to determine to what extent this typology is supported by an analysis of the perceptions, aspirations and reported activities of academics in teaching, research and community service. Data for this analysis were gathered in 2007 for the Changing Nature of the Academic Profession (CAP) project, an international comparative survey involving about 20 countries, with the aim of determining the nature and extent of the changes experienced by the academic profession. Subsequently, this will enable us to formulate some conclusions about the degree of diversity in the Australian system.

Insights from previous empirical studies

Although much has been written about the diversity of the Australian higher education system, empirical studies on the subject are scant. An early study was undertaken by Lysons in the mid 1980s, with results published in 1990 (Lysons, 1990). Based on an organisational effectiveness taxonomy, he concluded that the Australian system prior to the creation of the Unified National System through the so-called Dawkins

reforms consisted of four discrete groups serving separate domains. The groups were: larger/older universities, smaller/younger universities, institutes of technology, and colleges of advanced education. With the demise of the binary system in the early 1990s, the latter group of institutions ceased to exist and was subsumed in either newly merged universities or became part of existing universities through merger (Meek & Goedegebuure, 1989). Combining the Lysons dataset with the survey results of Meek & Goedegebuure, the existence of four types of institution in the post-merger system was reconfirmed (Goedegebuure et al., 1993), with the smaller/younger group relabelled as 'universities on the social and geographical fringe of the higher education system' and the colleges as 'CAE combinations redesignated as universities' (Goedegebuure et al., 1993 p. 406).

Subsequent analyses by Huisman (2000) to an extent reconfirm the existence of groups, although some qualifications are in order. Using a cluster analysis with 39 variables (1996 data) he not only highlighted broad clusters of institutions in line with the earlier analyses, he also demonstrated the sensitivity of the data to different methods of analysis, which, one could argue, most probably reflects the post-merger turbulence at that time. Yet, even then, Huisman noted that on an international scale Australia features as the least diverse system when compared with Austria, Denmark, Finland, the Netherlands, Sweden and the United Kingdom. Huisman et al. (2007) repeated this analysis using an updated dataset and Huisman's earlier findings were confirmed. More important for our purposes, however, their longitudinal analysis, using datasets from 1980, 1985, 1990, 1996, 2000 and 2004, clearly indicates a decrease in diversity in the Australian system.

One can criticise the above studies to the extent that they use 'system level' data such as institutional size, forms of institutional control, disciplines offered, type of degrees awarded, and modes of study offered. We contend that indicators of this type 'hide' what is really happening within the walls of institutions. If one looks deep enough and is sufficiently sensitive, diversity can always be found (see Clark 1996). But is that a meaningful input into the policy debate? The notion identified above of decreasing diversity fits the hypothesis that the more institutions are confronted with a similar policy environment that does not differentiate in terms of the incentives it provides, the more similar institutions will become. This occurs because they all react in the same way to the limited set of incentives

provided. Goedegebuure et al. (2009) argue that such a policy environment has been characteristic for Australian higher education during the Howard era.

In an attempt to address the issue of 'type of indicator' for our current analysis we focus instead on what has been happening within our institutions by looking at what academics themselves consider important. The underlying assumption, obviously, is that what they consider important with respect to teaching, research and community service will affect how they behave, and that this has an impact on the 'products' produced by their institutions. This is an assumption shared by others. Coaldrake and Stedman (1999, p. 1) state that, 'The West Review of Higher Education Financing and Policy focused principally on structural and financial matters, and argued that diversity in the sector might be encouraged by changing funding mechanisms. In doing so, it left unanswered the question of how institutional change might come about without change in the work practices and aspirations of university staff.' In our empirical analysis, we also will relate our findings to earlier and comparable studies undertaken in Australia. This will enable us to provide an indication of the state of diversity in 2007 as well as a more historical analysis of diversity from the point of view of academics working within the system.

Empirical foundations of the current study

The Australian CAP survey was conducted in late 2007 to assess characteristics of academic staff and their work. The survey involved 21 of Australia's 39 universities, and produced one of the most robust contemporary perspectives on the nature and context of academic work in the country.

Broadly speaking, the target population for the survey were academic staff at Table A institutions, excluding adjunct, casual/sessional and honorary roles as well as senior university executive staff (for further details on the sampling methodology and distribution see Coates et al., 2008). A total of 1252 valid responses were received and the secured sample is representative of the population across a number of variables. For example, 42.6 per cent were from Group of Eight (Go8) institutions when compared with 49.5 per cent

in the actual population, 22.5 compared to 14.3 per cent were at Australian Technology Network (ATN) universities, 17.1 compared to 10.9 per cent were at regional institutions, and 17.9 compared to 25.3 per cent were at suburban institutions.

Responses were analysed in terms of four broad disciplinary groupings, and we found that 28.7 per cent of the sample worked in science, computing, engineering, agriculture or architecture, 13.9 per cent in business, law and economics, 33.4 per cent in humanities, arts and education, and 24.4 per cent worked in health. These percentages are close to the actual distribution of Australian academics over the four groupings.

By level, associate lecturers accounted for 14.3 per cent of the sample, lecturers 37.6 per cent, senior lecturers 24.9 per cent, associate professors 12.2 per cent and professors 10.6 per cent. Again, these percentages are very close to the actual group sizes found across Australian universities.

In terms of length of appointment, 27.4 per cent of the sample had been in the higher education

sector for less than five years, 48.8 per cent for 6 to 20 years, and 23.9 per cent for more than 20 years.

While virtually no (0.2 per cent) respondents were 25 years of age or younger, 43.1 per cent were between 26 and 45, and 55.3 per cent were between 46 and 65. Just 1.4 per cent were older than 65. The proportion of male and female respondents was balanced (49.5:50.5) compared with 59.1:40.9 in the actual population.

Expectations and aspirations: the desires of Australian academics

Aspirational diversity – research versus teaching

Research and teaching are the fundamentals of academic life. They can be combined in various ways, from teaching- and research-only to particular mixes of the two, leading to diversity in academic work and hence to diversity in the nature and outputs of higher education institutions. Over the last 30 years, the preferences of Australian academics for teaching or research have change considerably. We label this aspirational diversity.

The first reported study was the 1978 SERVAAC (Social and Educational Role and values of Australian

Research and teaching are the fundamentals of academic life. ... Over the last 30 years, the preferences of Australian academics for teaching or research have change considerably. We label this aspirational diversity.

Academics) study (see Bowden & Anwyl, 1983) and shows a preference of research over teaching (11 per cent 'mainly in research', 38 per cent 'both, leaning to research', 26 per cent 'equally in both', 19 per cent 'both, leaning to teaching' and 6 per cent 'mainly in teaching').

The early 1990s' Carnegie survey '... found two distinctive groupings of academics: those who were oriented towards teaching and those who were oriented towards research, with roughly equal numbers in each group' (Gottlieb & Keith 1997 in Coaldrake & Stedman, 1999, p. 22). This was confirmed by the work of McInnis (1996, p. 114), who found that 'Twenty-six per cent of the sample were clearly oriented towards teaching and expressed little or no interest in research. A similar proportion, 28 per cent, saw themselves as researchers'. A similar 1999 study by McInnis (1999, p. 6) found that a 'clear majority of academics profess an interest in both activities. However, while 42 per cent are primarily interested in research, only 21 per cent are primarily interested in teaching. Importantly, 48 per cent do not have a stronger interest in teaching as a career interest (17 per cent strongly disagree on this term). Considerably fewer are negative about research as a career interest'.

Our 2007 CAP survey shows that 29 per cent are primarily interested in research, 40 per cent in both teaching and research but leaning towards research, 23 per cent in both but leaning towards teaching, and 7 per cent primarily in teaching (see Figure 1). This leads us to the conclusion that the preferences of academics have certainly changed since 1978, and in a rather circular manner.

A more detailed analysis of the 2007 data shows that staff at non-Go8 institutions do express a greater 'non-

primary' interest in teaching compared to Go8 staff (shorthand for the two 'In both, but leaning towards...' answering categories), as shown in Figure 1. Conversely staff at Go8 universities report a greater interest in research compared with those at other institutions. The proportion of staff with a non-primary interest in research is relatively constant across institution types.

Positional diversity is important, stratifying academics' relative interests in research and teaching almost as much as their institution (see Figure 2). Interest in teaching peaks with lecturers and declines to almost nothing for professors. Academics' predilection towards research follows a similar trend. Interestingly, declared non-primary interest in research grows by rank but primary interest declines beyond associate lecturer, rising sharply for professors. As rank increases, according to these figures, a shift in orientation from teaching to research is indicated.

Read together, the results suggest that many academics express a primary interest in research, although those at non-Go8 universities are either more interested in, or resigned to, teaching. Of course, our results do not distinguish between these latter alternatives, but they do bring out a difference across the types of universities as well as across positions.

Career aspirations and career planning

The 2007 CAP results show that staff express varying aspirations in terms of their own careers, and that these vary across institutional types (see Figure 3). Academics at regional institutions are more likely than others to consider seeking a management position in their own institution, or a position in another higher education institution. Along with academics in Go8

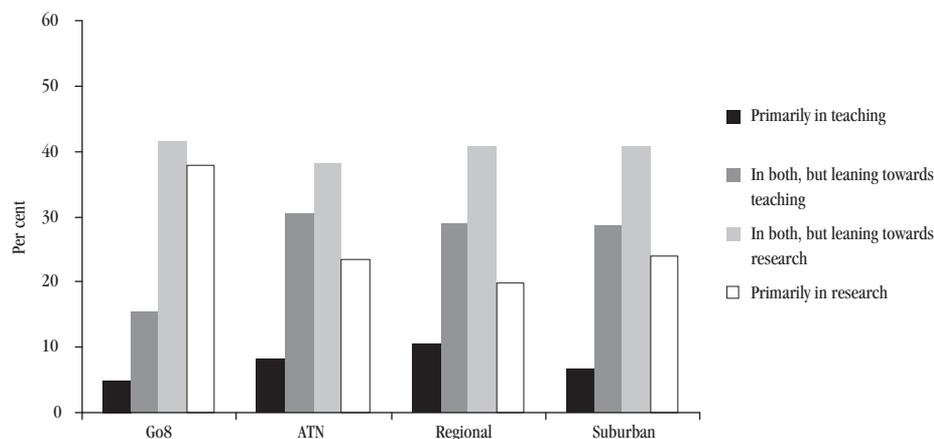


Figure 1. Primary interest by institutional grouping

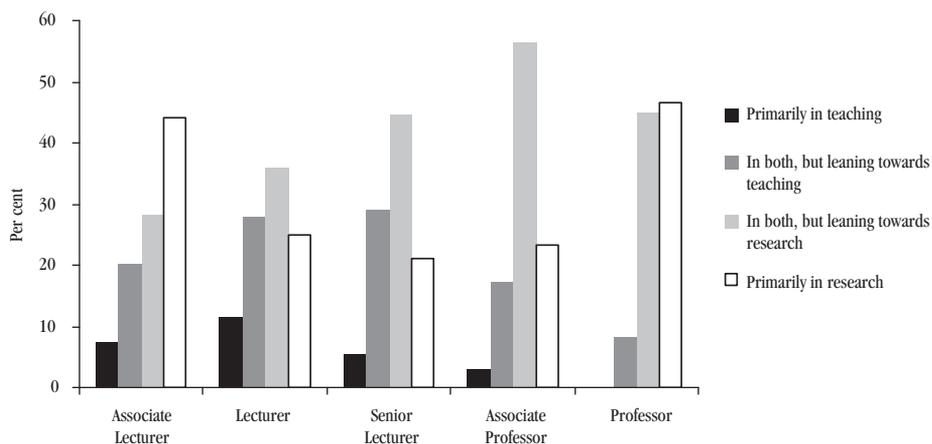


Figure 2. Primary interest by position

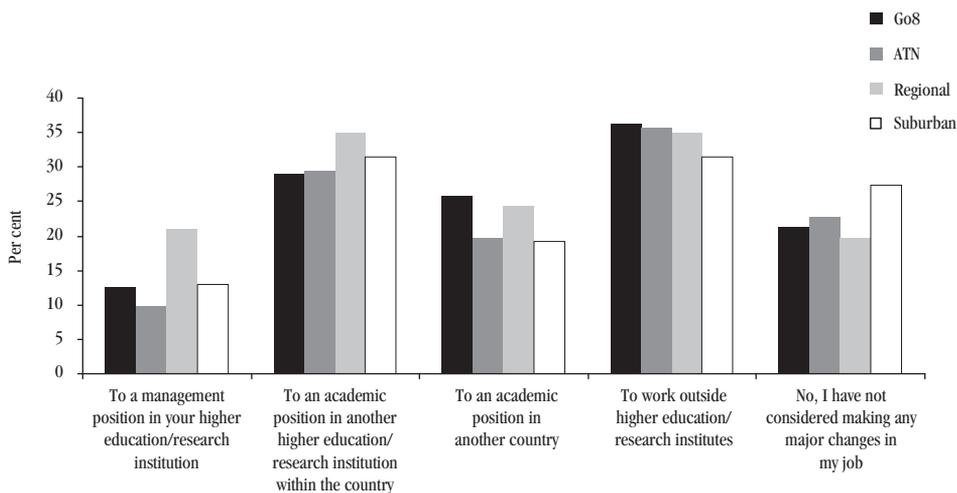


Figure 3. Career aspirations by institutional grouping

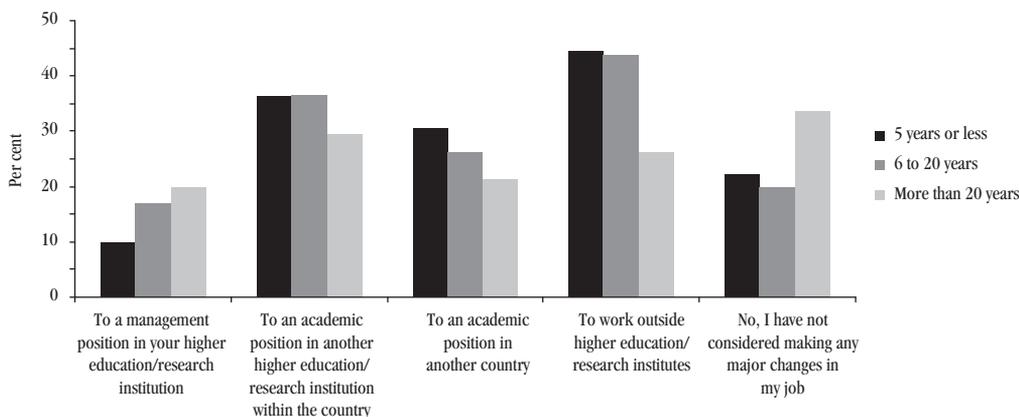


Figure 4. Career aspirations by length of employment

institutions, they are more likely than others to consider seeking a position in another country. Staff at suburban institutions are less likely than others to have considered making any major changes in their job.

Our survey results also suggest that the career aspirations of academics change as their length of employment in higher education increases (see Figure 4). Length of service is associated with a greater likelihood of seeking a management position, but less likelihood of seeking a position outside Australia, beyond higher education or, most generally, of making any major changes in their job.

In 2007, the average number of hours worked by persons employed full-time across the whole of the Australian workforce per week was 39.4 hours (Australian Bureau of Statistics, 2008). Based on the CAP data, the academic workforce puts in substantially more hours: 50.6 hours per week for academics when classes are in session and 49.6 hours per week when classes are out of session. This minimal difference in hours worked between teaching and non-teaching times corresponds to the situation found some 10 years ago (McInnis, 1996). '...whereas in the 1970s there was generally a substantial drop in workload over the summer break, somewhere in the order of 5 to 7 hours per week (McInnis 1990 in McInnis, 1996, p. 110).

Table 1. Estimated average hours per week spent on major activities, reported by full-time academic staff when classes are in session

	1977* Williams		1992~ Carnegie	1993* McInnis, Powles & Anwyl	1999^ McInnis	2007 CAP-survey
	CAE	UNI		UNS		
Teaching	29.4 (65.9%)	23.3 (51.3%)	21.8 (43.1%)	25.3 (53.0%)	24.5 (49.8%)	18.3 (36.1%)
Research	3.8 (8.5)	11.5 (25.3%)	13.3 (26.3%)	10.1 (21.2%)	13.5 (27.3%)	14.6 (28.8%)
Administration	8.0 (17.9%)	7.0 (15.4%)	8.4 (16.6%)	6.4 (13.4%)	7.7 (15.7%)	9.5 (18.7%)
Community Service	2.0 (4.4%)	1.9 (4.2%)	4.2 (8.3%)	1.8 (3.7%)	1.8 (3.7%)	4.4 (8.6%)
Other activities	1.4 (3.1%)	1.7 (3.7%)	2.9 (5.7%)	1.1 (8.5%)	1.7 (3.5%)	3.9 (7.8%)
Total hours	44.6	45.4	50.6	47.7	49.3	50.6

Sources: *McInnis (1996, p. 109); ~ Sheehan et al. (1996, p. 40); ^ McInnis (1999, p. 20).

'Thesis Supervision' was allocated as a teaching activity and 'Consultancy' as a research activity.

Table 1 shows the average number of hours worked according to various studies. As is clearly illustrated, the average number of hours worked per week when classes are in session has increased by around 5 hours (about 10 per cent) since 1977. Interestingly, though, there has been no increase in working hours reported if we compare the 2007 study to the 1992 Carnegie study, despite a variety of claims of overload, pressures and the like. Over the full 30 year period the average number of hours dedicated to teaching has decreased by 5 hours, while the hours for research has increased by about 3 hours, with administration and service by

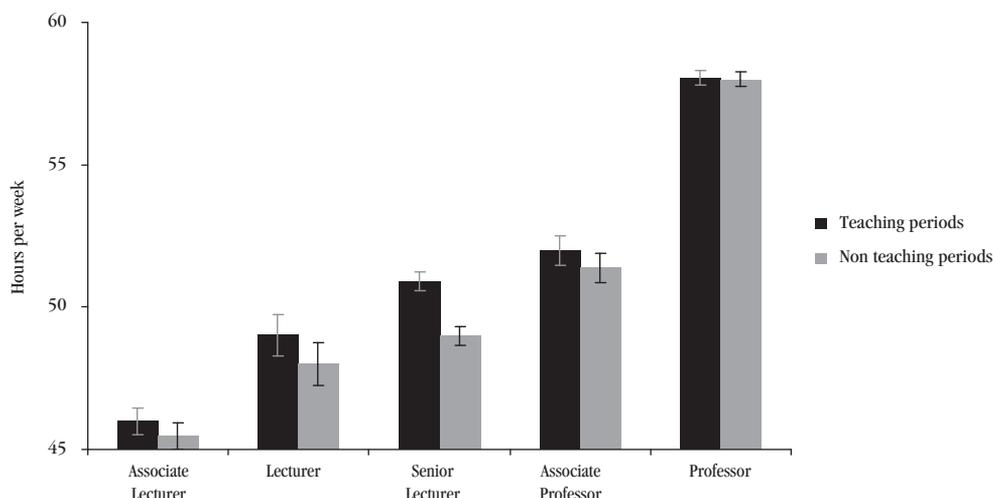


Figure 5. Hours per week per academic period

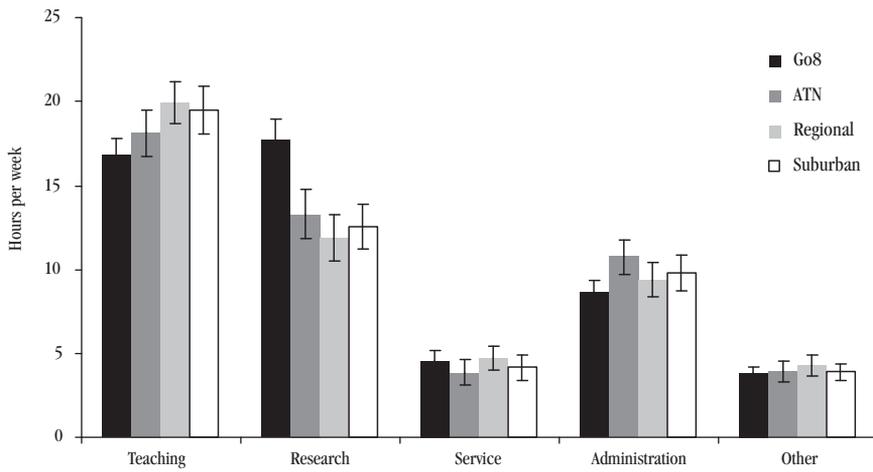


Figure 6. Hours per week by activity and university grouping, in teaching periods

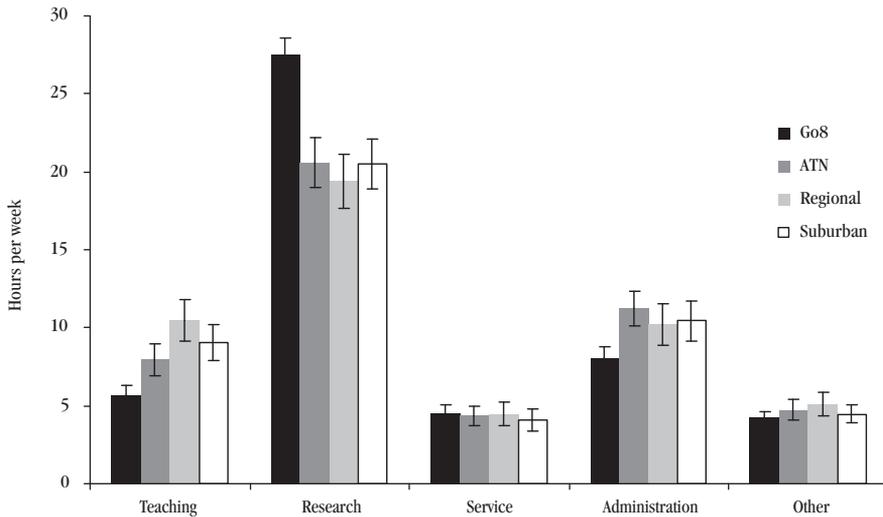


Figure 7. Hours per week by activity and university grouping, outside teaching periods

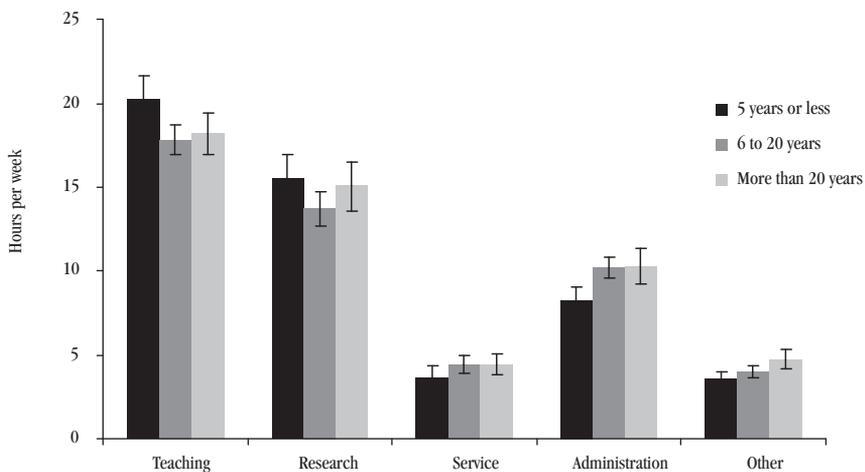


Figure 8. Hours per week by activity and length of employment, in teaching periods

about 2.5 hours per week. Yet, if we compare the early Carnegie with the 2007 survey, in 15 years the only significant change has been the decrease in hours dedicated to teaching which becomes more pronounced if we look at the percentage figures.

Table 1 is followed by Figures 5 to 11 that distribute the working week according to teaching/non T teaching periods, and by university grouping, length of employment and level of position.

A more detailed analysis of the CAP-data shows that reported working hours vary by type of institution, length of service, role and field of education. Staff at Go8 institutions report working around an hour per week more than colleagues at other institutions. On average, staff at all institutions report working for around an hour more during teaching than non-teaching periods. However hours worked per week varies notably by position. While associate lecturers report working for around 46 hours per week, professors work for around 58 hours (see Figure 5). Confidence bands have been added to the following figures to facilitate interpretation of statistical significance. Overlap between bands implies that the difference in means may not be statistically significant.

Looking beyond hours worked, it is informative to consider what academics do in light of their aspirations. Academic life is stratified into teaching and non-teaching periods, and it is helpful to analyse workflow in this light. Go8 staff report spending less time teaching during teaching periods and relatively more time researching than staff at other institu-

tional types. Another outcome is that administration, defined quite explicitly as intra-institutional activities, occupies about twice the amount of staff time as community service across all university types (see Figure 6).

In non-teaching periods, the distribution of work hours per week changes markedly by institutional type (see Figure 7). Staff from all institutional types generally spend more time on research outside teaching periods, with Go8 staff reporting significantly more hours spent on research during this time. Hours spent on service activities remains low.

The number of years spent in academia does not influence hours per week spent in various activities during teaching periods. Staff who have been tenured for longer periods of time spend longer in administration and less time teaching, but the effects are slight, as shown in Figure 8.

The effects are stronger during non-teaching periods (Figure 9). Most notably, staff reporting fewer than five years of service declare more hours on research while, conversely, there is a linear relationship between service and time spent on administration.

Diversity appears manifest in the time allocations made by staff across ranks, as shown in Figure 11. Associate lecturers and professors report spending the most time on research, both during and out of teaching periods. While associate lecturers may be bootstrapping their research careers, professors are consolidating their contribution affirming the lecturing role as most strongly focused on teaching.

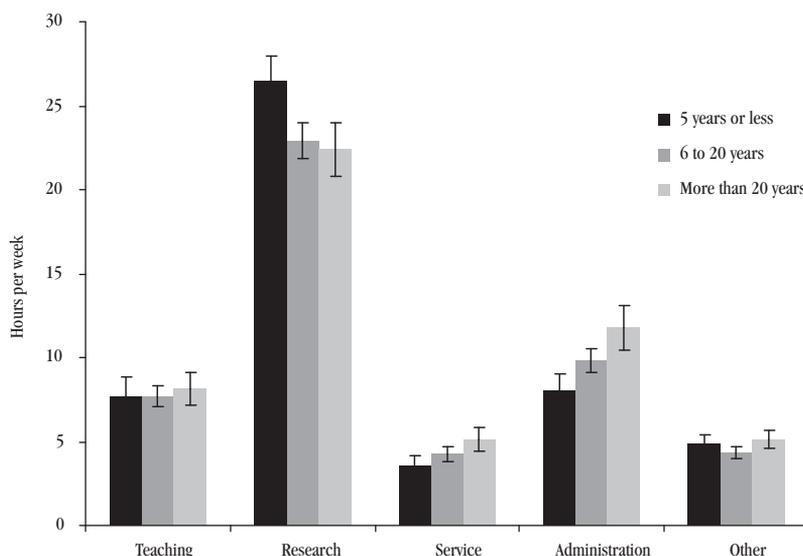


Figure 9. Hours per week by activity and length of employment, outside teaching periods

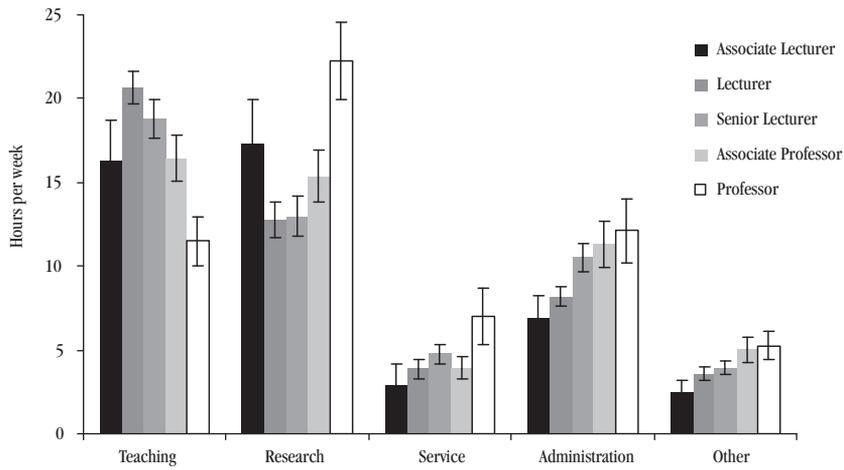


Figure 10. Hours per week by activity and position, in teaching periods

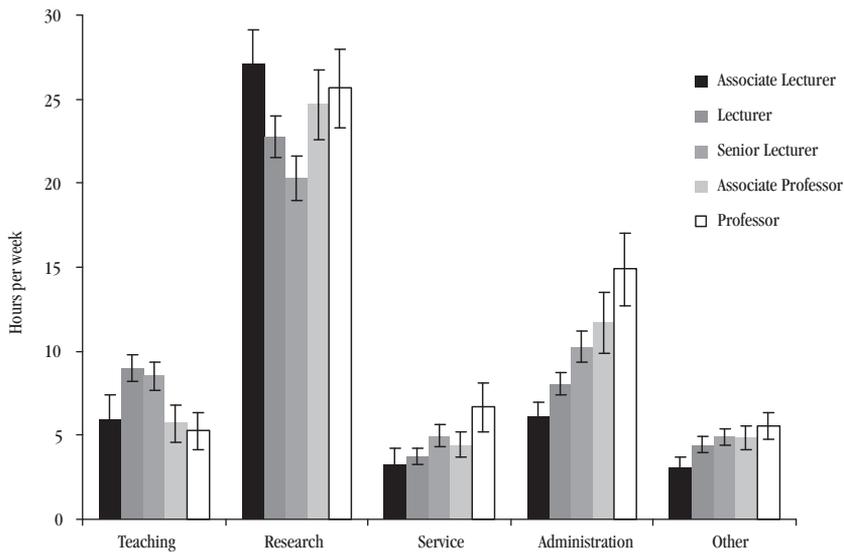


Figure 11. Hours per week by activity and position, outside teaching periods

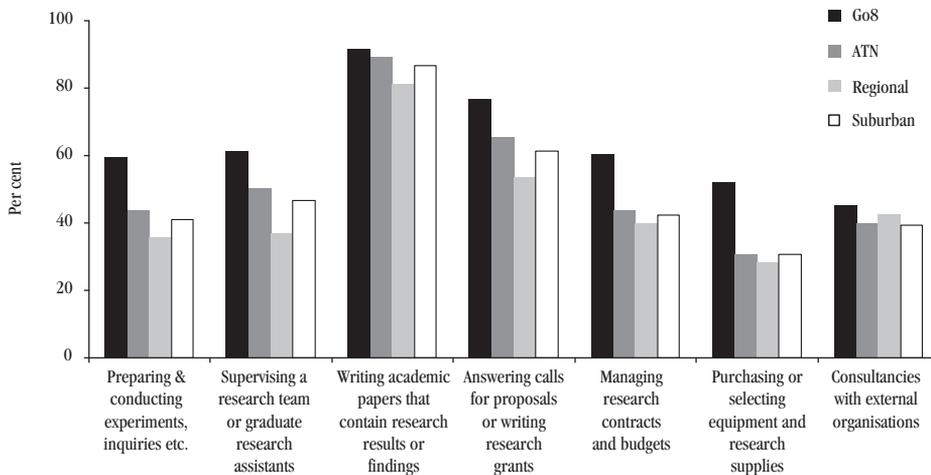


Figure 12. Engagement in key research by activity and institution type

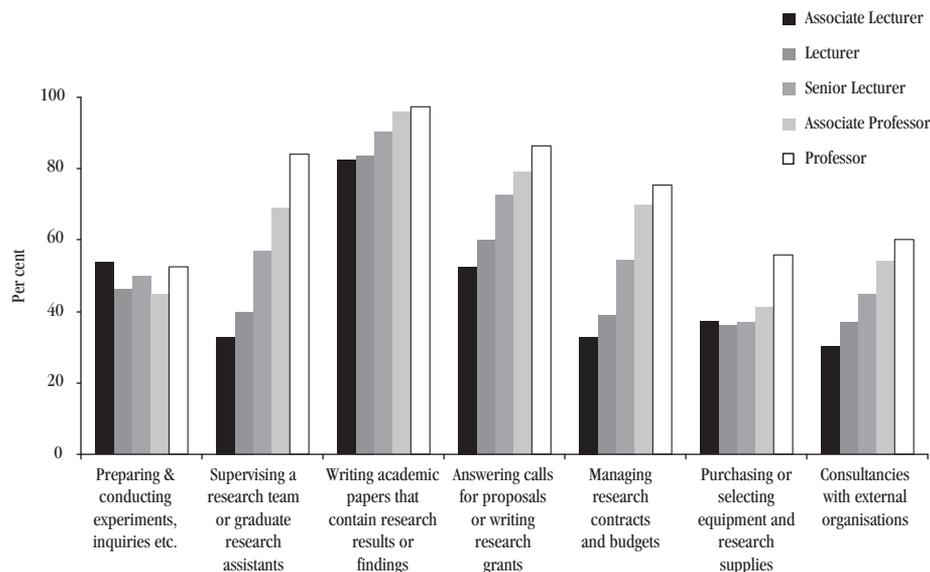


Figure 13. Engagement in key research by activity by role and academic role

Level of appointment is also correlated with participation in community service and institutional administration. In general, professors spend around 15 hours per week on administration, out of a total of around 60 hours.

Broadly, it appears that staff preference for research plays out in the number of hours per week they devote to particular activities. Non-teaching periods in particular play an important role in balancing activities with aspirations, providing opportunities for greater participation in research.

Looking more closely at participation in various research activities, it can be seen that, not surprisingly, writing academic papers and grants are the most common activities. As illustrated by Figure 12, Go8 staff report doing more of most research activi-

ties than their counterparts at other institutions, which correlates with the greater emphasis placed on research at these Go8 institutions. Figure 13 shows that research activity varies by role, with an increase in rank associated with greater engagement in supervision, paper and grant writing, project management, and consultancies. Figure 12 shows that, quite surprisingly given the policy rhetoric and institutional mission statements, overall technology transfer is the least common activity, undertaken by less than a fifth of all staff. There is a surprising lack of diversity in this area across institutional types and, as Figure 13 shows, academics' work roles. This corresponds with the low level of hours invested in service activities.

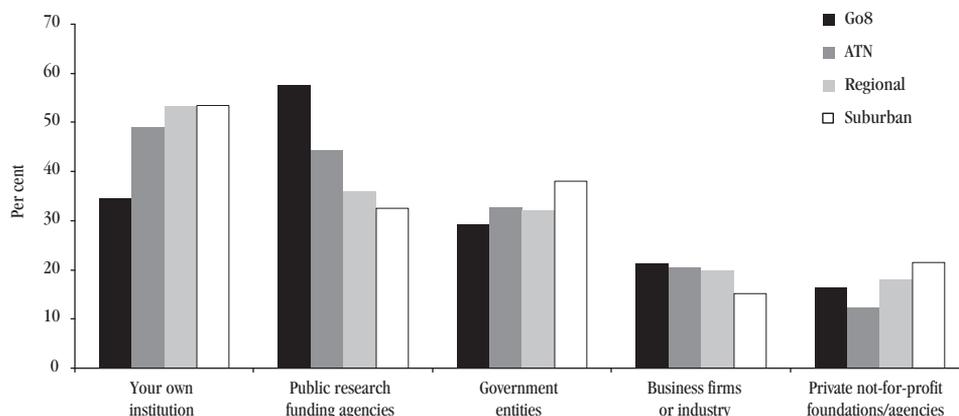


Figure 14. Funding by source and university grouping

Diverse achievements

Aspirations and activities need to be related to achievements. Ideally such analysis would consider various dimensions of accomplishment such as quality, impact and possibly productivity, and cover research, service and teaching. The Changing Academic Profession project focused on research outputs, reflecting the international availability of metrics more generally.

As public funding declines, securing funds from other sources is an important input for academic work. But it also reflects an important outcome. In particular, the source of funding says much about the audience and implications for academic work. The CAP-data indicates variation in both the sources and quantum of funding. Figure 14 shows that staff at Go8 institutions secure proportionately less funding from their own institutions than do staff at other institutions, but more from public research agencies and national and international organisations.

In terms of production, academics produce between 4 and 17 academic papers or books every three years, which is the most common type of output. The reported number depends on institutional grouping, with Go8 staff averaging nine (three per year) and staff at others averaging around seven (around two per year). Conference presentation is the next most common activity, followed by the production of consultancy reports and articles for the media.

Discussion

Previous empirical studies suggest a decrease in institutional diversity in Australian higher education. Recent data in part confirm this conclusion, but paint a more nuanced picture. By examining links between aspirations, activities and achievements, we have highlighted aspects of the work that academics do, which forms the backbone of the contribution of their institutions.

In terms of the aspirations of academic staff there is little evidence of diversity. Australian academics show a remarkable preference for research over teaching. This is true across both institutional groupings and is evident in longitudinal analysis. These aspirations

rest uneasily with the trend observable in Australian higher education over the last decades, with increasing student numbers particularly at the undergraduate level. If we look at rank, professors express a marked preference for research over teaching, and associate lecturers, who many would argue are the new fuel in the system, have a clear preference for research over teaching. One explanation for this is the entry level requirements for academia in Australia which predominantly require a PhD for the 'lower' positions. Doctoral training in Australia still is very much geared towards the traditional conceptions of research, and this is the culture PhD holders subsequently bring to the job. Whether this is what Australian higher education needs in terms of students and employers' expectations is an entirely different matter.

For many months of the year, academics spend most of their time teaching, and nearly as much time doing administration as research.

Interestingly, however, while academics aspire to do research, this aspiration is not reflected in what dominates their work and hence their likely contribution. For many months of the year, academics spend

most of their time teaching, and nearly as much time doing administration as research. There is an increase in research during non-teaching periods, particularly at Go8 institutions, but administration remains a substantial component of the academic workload. Institutional grouping, position and length of service mediate academics' contributions in these areas. Participation in community service is relatively low across the board. But the differences do not appear as great as people's aspirations would suggest.

The nature of academic work means that achievements are always harder to measure than aspirations or engagements. In terms of research output, of all measured activities, academics report most investment in the preparation of academic papers, and second in the preparation of proposals and submissions. Funding and publishing are of course central to all research. But other activities count too, and appear to be less part of Australian academics' work lives. While it plays a fundamental role in bringing research into practice, for instance, participation in technology transfer is done by only a few academics. There is some variation across university groupings, with Go8 staff reporting greater production of research than others. In line with published finance statistics, Go8 staff also report securing more funding from public sources than staff at other

institutions. However, our empirical analyses do not support the notion of significant diversity across institutional groupings used, again with the exception of the Go8.

Conclusion

Our analysis has explored diversity within Australian higher education through the lens of academics' perceptions of their work. In doing this we have sought to look beyond conventional distinctions and classifications to explore what academics aspire to achieve, undertake and accomplish. Among the many results and themes discussed, four are particularly worthy of emphasis.

First, while academics weekly work hours have increased slightly over the last 20 years, the time they give to key activities has remained relatively constant, with the exception of teaching for the time has decreased. Second, academics' expectations appear to be out of alignment with their reported activities. Most aspire to research, yet many still spend a substantive proportion of their time on teaching and administration. Third, not unsurprisingly, in many areas Go8 institutions differ from others particularly, as expected, in terms of the emphasis given to research. Fourth, from what we can see in our data, research achievements tend to focus on those areas that are underpinned by policy incentives. We might conclude, cautiously, that diversity in academics' work in terms of their aspirations, perceptions and activity does exist. Our results do not necessarily reflect the common typology of institutional groupings, although Go8 respondents appear to come up as a distinct group due to their perceptions, aspirations and actual activity relating to research.

We will not attempt to characterise here what a 'truly diverse system' might look like, or to substantiate whether this is a desirable policy objective. But if it implies a network in which institutions respond to and create new opportunities and directions, then our analysis of academic work appears to show that gains so far have been modest. There appears to be a misalignment between aspirations, activities and achievements which suggest that the policy structures that underpin academic work, both institutionally and nationally, require review. To be overly simplistic by way of making the point, current policy structures appear to promote just a few aspects of research within a system that demands many more varied forms of contribution

and indeed, as appears to be the case, a much greater or complementary emphasis on teaching. If diversity is the goal, we hope our results provide some insights that help shape the design of future thinking and, ultimately, of the policy settings that underpin academics' work and the contributions to learning and knowledge made by Australian universities.

Leo Goedegebuure is an associate professor at the Centre for Higher Education Management and Policy, University of New England, Armidale, NSW, Australia and LH Martin Institute for Higher Education Leadership and Management, University of Melbourne, Victoria, Australia.

Hamish Coates is a senior researcher at the Australian Council for Educational Research, Melbourne, Victoria, Australia.

Jeannet van der Lee is Senior Research Fellow and Research Project Officer, Centre for Higher Education Management and Policy, University of New England, NSW, Australia.

V Lynn Meek is Director of the LH Martin Institute for Higher Education Leadership and Management, University of Melbourne, Victoria, Australia.

Acknowledgements

First, we would like to acknowledge the academics that took the time to respond, some of whom did so with great detail and passion. Second, we are grateful to the team at INCHER-KASSEL (Germany) for their support in coordinating this project and their ongoing work in preparing the international datasets. Finally, we want to thank the two anonymous reviewers for their helpful comments and suggestions.

References

- Australian Bureau of Statistics 2008, 4102.0 - Australian Social Trends, Table 1 Work, National Summary, 1997-2007. Retrieved 06 August 2008, from <<http://www.abs.gov.au/AUSSTATS/abs@.nsf/Latestproducts/4102.0Main%20Features12008?opendocument&tabname=Summary&prodno=4102.0&issue=2008&num=&view=>>>
- Bowden, JA & Anwyl, J 1983, 'Some characteristics and attitudes of academics in Australian Universities and Colleges of Advanced Education', *Higher Education Research and Development*, 2(1), 39-61.
- Clark, BR 1996, 'Diversification of Higher Education: Viability and Change', in Meek, VL, Goedegebuure, L, Kivinen, O & Rinne, R (eds), *The Mockers and Mocked: Comparative Perspectives on Differentiation and Diversity in Higher Education*, pp. 16-25, New York: Pergamon.

- Coaldrake, P & Stedman, L 1999, *Academic Work in the Twenty-first Century: Changing roles and policies*. Canberra: DETYA.
- Coates, H, Goedegebuure, L, van der Lee, J & Meek, L 2008, *The Australian Academic Profession in 2007: A First Analysis of Results*. Centre for Higher Education Management and Policy, University of New England.
- Department of Education Employment and Workplace Relations 2007, Appendix 2 - Academic Organisational Unit Group: Current release - Staff 2007: Selected Higher Education Statistics. Retrieved 6 August 2008, from <http://www.dest.gov.au/sectors/higher_education/publications_resources/statistics/publications_higher_education_statistics_collections.htm>
- Department of Education Employment and Workplace Relations 2008, *Review of Australian Higher Education*, Discussion Paper, June. Canberra: Australian Government.
- Department of Education Science and Training 2002, Varieties of Excellence: Diversity, Specialisation and Regional Engagement [Electronic Version]. Retrieved 02 December 2006, from <<http://www.backingaustraliasfuture.gov.au/review.htm>>
- Goedegebuure, L, Lysons, A & Meek, L 1993, 'Diversity in Australian Higher Education?', *Higher Education*, 25(4), 395-410.
- Goedegebuure, LCJ, Hayden, M & Meek, VL 2009, 'Good governance and Australian higher education: an analysis of a neo-liberal decade', in Huisman, J (ed.), *International Perspectives on the Governance of Higher Education: Alternative Frameworks for Coordination*, 145-160, London: Routledge.
- Group of Eight 2008, Comprehending compacts and higher education reform: A discussion paper, Draft - 31 January 2008. Canberra: Go8.
- Huisman, J 2000, 'Higher Education Institutions as Different as Chalk and Cheese?', *Higher Education Policy*, 13(1), 41-53.
- Huisman, JL, Meek, VL & Wood, FQ 2007, 'Institutional diversity in higher education: a cross-national and longitudinal analysis', *Higher Education Quarterly*, 61(4), 563-577.
- Lysons, AF 1990, 'Taxonomies of higher educational institutions predicted from organisation climate', *Research in Higher Education*, 31(2), 115-128.
- McInnis, C 1996, 'Change and diversity in the work patterns of Australian academics', *Higher Education Management*, 8(2), 105-117.
- McInnis, C 1999, *The work roles of academics in Australian Universities*. Canberra: Commonwealth of Australia.
- Meek, VL & Goedegebuure, LCL 1989, *Higher Education: A Report*. University of New England: Department of Administrative and Higher Education Studies.
- Ministerial Council on Education Employment Training and Youth Affairs 2006, National Protocols for Higher Education Approval Processes [Electronic Version]. Higher Education - Publications, from <<http://www.mceetya.edu.au/mceetya/default.asp?id=15212>>
- Sheehan, BA, Welch, AR & Lacy, FJ 1996, 'The Academic Profession in Australia', *Evaluations and Investigations Programme*, 96/1. Retrieved 21 February 2008, from <http://www.dest.gov.au/archive/highered/eippubs/eip9601.htm>
- Universities Australia 2007, University Staff Profile (1996-2005), *Statistics, Staff*, retrieved 6 August 2008, from <<http://www.universitiesaustralia.edu.au/content.asp?page=/publications/stats/staff.htm>>