The Australian academic profession in transition

*Addressing the challenge
of reconceptualising academic work
and regenerating the academic workforce*

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Executive summary

"Even though there is a spoken acknowledgement that all three (teaching, research, and service) are important, every academic knows there is a hierarchy, with research sitting at the top… I think academic institutions forget that we need a blended balance of strong teachers and strong researchers in order to make the university viable and profitable—and we can't expect that we'll get both out of one person who has any sort of work-life balance!"

Australia has an ageing academic workforce and the nation's capacity to refresh, build and maintain this workforce during a period of expansion in tertiary education participation needs urgent consideration. To inform possible strategies to recruit and retain academic staff, this study investigates the current attitudes of the academic profession in Australia towards academic work and academic careers. The research was conducted across 20 universities and a total of 5,525 responses were received from Australia's academics, including sessional and casual staff.

This research shows, as have a number of previous studies, that Australian academics are highly intrinsically motivated and most find their careers rewarding. However, the study also points to challenges for the future management of the academic profession if projected increases in student participation are not matched by new staff appointments. Many academics indicate that they are struggling to manage existing workloads. While the findings suggest that the satisfaction academics gain from their scholarly activities to some extent mitigates problems related to working conditions, protecting the future quality of teaching and research will require careful consideration of work design, workloads and working conditions.

This study provides a basis for policy-makers and university managers to meet the challenge of building and maintaining a robust academic workforce. One key step, among others suggested at the end of this Executive Summary, is a reconfiguration of the way academic work is conceived, valued and rewarded through recruitment, confirmation and promotion processes.

Key findings and implications

- A deep commitment to scholarship draws people to academic work and lies at the core of their professional values. The opportunity for intellectually stimulating work, a genuine passion for a field of study and the opportunity to contribute to new knowledge are the aspects of academic work most prized.

- Overall, less than one third of Australian academics believe that their workload is manageable, while just under one half indicate that their workload is not manageable. Close to half of mid and late career staff indicate that their work is a source of considerable personal stress.

- Early career staff are more likely to be dissatisfied with their job security and income than those later in their career - 60 per cent of early career staff are dissatisfied with their job security compared with less than one quarter of late career staff. In the same vein, 40 per cent of early career staff are dissatisfied with their income compared with less than 30 per cent of late career staff. Access to secure and well-remunerated positions is an important consideration for early career academics.

- Nearly three-quarters of staff intend to continue in their current role and position in the short term (two to three years). However, substantial proportions of academics have medium to long-term intentions (for the next five to ten years) to: move to another

institution (29 per cent); move to an overseas institution (25 per cent); leave the higher education sector all together (26 per cent); or retire (21 per cent).

- The intention to leave Australian higher education is highest among the younger age groups. Close to 40 per cent of academics under 30 years of age plan to leave Australian higher education in the next five to ten years, with 13 to 18 per cent intending to leave in the immediate future. Around one-third of staff aged 30-39 years intend to leave in the next five to ten years.

- Overall, when both short and long-term intentions are taken into consideration, close to half of the academic workforce intend to retire, move to an overseas university or leave Australian higher education at some time in the next ten years.

- While the mobility of academics, especially early in their career, is vitally important for innovation and the diffusion of knowledge in what is a highly skilled and knowledge intensive occupation, and Australia benefits from inward flows of academics from other countries, some Australian academics indicate that they intend to move overseas due to workplace issues. Of the range of attitudinal indicators investigated, the major differentiator between those who intend to leave Australia in either the short or long term to work in an overseas university and those planning to stay, is levels of satisfaction with income and with job security. Of those who intend to leave, 50 per cent are of the view that they do not have adequate job security, compared with 40 per cent of other academics; and 42 per cent are not satisfied with their level of income, compared with 34 per cent of other academics.

- Over half of those intending to move to an overseas university, or to leave the sector, cite reasons related to dissatisfaction with working conditions. The most common reasons are around issues of job security, remuneration levels, lack of research funding, and dissatisfaction with the institutional or sectoral culture.

- Academics are concerned about the perceived lack of recognition for teaching in existing promotions processes, despite the efforts of some universities to include teaching performance and achievement in promotion criteria: 88 per cent believe that teaching should be rewarded in promotion but only 31 per cent believe it is currently rewarded.

- There is a general disquiet with the leadership and management of institutions, although the extent varies greatly across the institutions involved in the study. On the national policy front, few academic staff believe the higher education sector is heading in the right direction or that there is strong government support for the university sector.

While there are many academics who indicate that they are satisfied with current conditions, and most indicate extremely high levels of satisfaction with their teaching, research and other scholarly activities, around half believe that their workload is not manageable, or that they experience high levels of stress related to their work. From a workforce management perspective, the key issues raised by these staff are: a perception of being over-managed; concerns about maintaining the quality of their scholarship across both research and teaching in an environment of high workloads, and the degree to which administrative tasks and bureaucratic requirements take them away from these core duties. Younger academics, crucial to regenerating the workforce as older members move toward retirement, reveal high levels of dissatisfaction with their job security and levels of pay.

These findings from the present study are in close alignment with those of a concurrent study of higher degree by research (HDR) candidates undertaken by the Australian Council for Educational Research and the Centre for the Study of Higher Education for DEEWR. This research investigates the career plans and motivations of HDR candidates and their level of interest in pursuing an academic career on completion of their degree (Edwards, Bexley and Richardson 2010, summary details can be found in Appendix 3 of the present

report). Together, the survey of HDR candidates and the present study show that HDR candidates, like professional academics, share a deep interest in the quality of scholarship and have strong interests in and allegiances to particular fields of study. The opportunity to develop new knowledge is the most attractive aspect of an academic position for HDR candidates.

However, HDR candidates believe a secure academic career is difficult to obtain and academic work is poorly paid. These views are also shared by early career academics in the present study. HDR candidates aspiring to an academic career are more likely than those who intend to pursue a career outside the university and research sectors to believe that their career will be overseas. Similarly, younger, early career academics in the present study are the most likely to indicate they plan to move to an overseas institution. There are many reasons why academics, young and old, may wish to work overseas, and the cross-border mobility of the academic profession is one of its attractive features. Further, global mobility and cross-border knowledge flows are vital to maintaining innovation and to nurturing good practice. However, the widespread dissatisfaction among HDR candidates and young academic staff around issues of pay and job security remains an important consideration for replenishing the academic workforce, especially in view of the large numbers of retirements expected among academic staff in the near future, and the increased participation in higher education expected to stem from recent policy initiatives.

Meeting the challenge of replenishing and retaining Australia's academic workforce

Immediate attention should be given to developing new strategies aimed at maintaining and replenishing the Australian academic workforce and resolving key issues identified by this study. Central to any policy response is greater recognition that academic work has diversified and will continue to diversify. It is no longer meaningful to speak of the academic profession as though the work roles within it are relatively homogenous. Yet this diversification is barely evident in institutional policies and within academic cultures themselves. A more explicit differentiation of academic work roles in recruitment, position descriptions, nomenclature and promotions policies to foster and support greater role specialisation is needed. Further, a concerted policy response is needed to ensure that there are adequate numbers of academic staff to meet forecast growth in student participation, and to maintain, or indeed improve, Australia's position in the global knowledge economy. Finally, there needs to be a reduction in the administrative duties required of academic staff. Addressing this issue requires, wherever possible, removing tasks that can be more efficiently and effectively completed by professional staff. A further specialisation and professionalisation of university administration will be an important step.

Twelve principles to guide planning for the future academic workforce

In the final section of this report we identify twelve principles for the regeneration and replenishment of the academic workforce, which we summarise below. We provide one caveat: in a higher educational sector in which institutional diversity is desirable, institutional responses to the present situation can be expected to differ considerably, and policy at the national level needs to allow for institutional differences: a uniform approach is undesirable and unlikely.

Principles related to the national approach to higher education

1. **Stability in higher education policy directions benefits workforce planning**. Policy instability limits the capacity of institutions to establish long-term staffing plans. The Bradley Review of Higher Education has offered a set of broad aims for the sector. The

challenge is to develop a long-term blueprint for higher education funding that establishes a stable, predictable future for institutions to facilitate better institutional planning.

2. **There is a need to establish better pre-conditions for more stable forms of employment.** While a certain level of casualisation within the academic workforce is both necessary and desirable for efficiencies and effectiveness (including for providing opportunities for HDR candidates and adjunct staff), the prevalence of casual and short-term contracts has to some extent undermined the sustainability of the profession. Job insecurity limits people's capacity to manage their personal finances, make important life plans and to engage properly with their professions. Further, young and early career academics need to be able to envisage, and to navigate, clear career paths unencumbered by the stresses of job insecurity.

3. **Institutions should be cautious about replicating national funding formulae at the academic unit level.** It is, of course, the responsibility of institutions and not of government to direct and manage universities' internal funding, yet national higher education funding mechanisms can have a direct and potentially adverse influence on employment practices. Internal funding allocation to academic units tends to mirror allocative mechanisms at the national level, for this is a rational institutional strategy. Monitoring the effect of national funding allocation formulae on unit-level staffing decisions needs to become a greater priority in the assessment and development of national policy.

4. **Support for early career academics should be made a national priority.** Consideration should be given to conceiving and implementing a national early career academic scheme aimed at replenishing the academic workforce. This could be in the form of a two- or three-year postdoctoral fellowship, and include: time and funding to support the development of a research profile; professional development opportunities in training for university teaching and other academic work roles; assistance in developing grant applications and undertaking community engagement activities, and mentoring from more senior academics.

5. **A better understanding of the nature of sessional and short-term academic work is needed.** The volume and character of the work undertaken by casual/sessional and short-term contract academics needs to be better understood. Data of this kind might be collected through DEEWR's statistical reporting processes, while acknowledging the additional burden this would create on institutions.

Principles pertaining to the research-teaching nexus and the status of teaching

6. **The primacy of the research-teaching nexus in the work of universities should be maintained.** In practical terms, the present settings often throw research and teaching into direct competition for academics' time: productivity and effectiveness in one area is achieved at the expense of the other, at least in part. New ways of ensuring that learning is actively connected to research within institutions is integral to maintaining the quality and meaning of higher education. This need not mean, however, that all academics are conducting research or are teaching in their area of research.

7. **Appropriate career pathways and promotion opportunities for teaching-specialist academic work should be ubiquitous across the sector.** Ensuring that excellence in teaching is defined and recognised and is a viable path to progressing through a successful career will be an essential element in achieving an effective differentiation of academic work roles.

Principles shaping human resources policies within institutions

8. **A more sophisticated distribution of academic work roles than the conventional classification of teaching-only, teaching-and-research and research-only positions is needed.** The present norms of teaching and research positions (often tenured), teaching-only positions (often sessional) and research only positions (often fixed term), are overly rigid, and do not provide adequate scope for career development for teaching-specialist and research-specialist staff. Institutional innovation and diversity in approaches to work roles is needed, and for this reason it may be inappropriate to introduce a national typography of academic work. However, institutional diversity and innovation in

supporting teaching- or research-specialist career paths need not inhibit the movement of staff between institutions, as experience and expertise in the core academic duties of teaching, research, administration and engagement will remain essential across the sector, regardless of the way individual institutions choose to divide, reward, promote or classify these skill areas.

9. **The casualisation of academic work needs to be reversed, and sessional and short-term contract staff load shifted to longer term and ongoing forms of employment.** To ensure that projected growth in student participation, and the retirement of older staff, do not result in staff shortages, institutions should explore strategies for shifting casual and short-term staff load to long-term and ongoing contracts. As the main impediment to the provision of secure positions appears to be uncertainty around finance and planning at the work-unit level, institutional employment policies should ensure that some of the cost/risk of this shift in staff load toward ongoing and long-term employment and away from casualised and short-term employment is carried at the institution level.

Principles guiding further specialisation and professionalisation in university leadership and administration

10. **A better understanding of the nature and extent of administration activities associated with national and institutional benchmarking and quality audit requirements is needed.** The perception that academic staff are undertaking unnecessary amounts of administrative and basic data entry work is widespread. A structured approach to business process reform of reporting is needed. There should be an ongoing and over-arching monitoring of accountability and auditing processes to ensure that they have minimal adverse effects on the time available for teaching and research.

11. **There is a need for the development of a new and specialised kind of professional staff.** At present, academic staff undertake many tasks that are in essence administrative, and peripheral to core academic duties around teaching and research. Such tasks may include: reporting activities for audits and performance measurements (of publications, grant histories, etc); preparation of grant applications; and subject coordination tasks (such as data entry for grading and other administration). Such tasks often require expertise in academic management, but need not be undertaken by academics themselves. These duties might better be undertaken by a new kind of specialist professional staff, freeing academic staff to focus on their own core duties.

12. **Further professional development is needed at senior levels for academic staff moving into department and faculty leadership roles.** Specialised professional development is needed to improve managers' skills in mentoring and developing academic staff.

The traditional model of academic work evolved to serve the knowledge generation and knowledge dissemination needs of a student body and a society different to those it serves today. The unbundling of academic work is an evolutionary stage in the way in which universities are organized to fulfil their social mission. This process will not be successful if a diverse range of contributions are not placed on equal footing within the policies and cultures of universities. The suggestions above, which are more fully elaborated in the final section of this report, are presented within a context in which the performance capacity of the academic profession, while already under some pressure, will be further stretched by projected increases in participation and the retirement of older workers. The suggestions above are aimed at improving capacity within the present workforce, and for growing a workforce sufficient to meet planned Commonwealth participation and equity targets.

1.
Review of the literature and trends in the national statistics

This section tracks key shifts in academic work roles over the past fifteen to twenty years reported in the national and international literature, as well as through an analysis of the higher education staff statistics collection. These shifts centre on three changes in the characteristics of the academic profession: the casualisation of academic work and increase in short term contracts; the ageing of the academic workforce; and inward and outward flows of academic professionals to and from Australia. The findings here form a background to, and a context for, the findings of the study's survey of academic work roles in 2010.

Growth in short-term and sessional modes of academic employment

Perhaps the most significant change in the academic workforce over the past 20 years has been the increase in the amount of teaching work undertaken by sessional staff. During the 1990s, the proportion of academic staffing with a teaching component which was sessional more than doubled, from 10 per cent of full-time equivalent (FTE) staff load to just over 21 per cent (DEEWR selected statistics, various years).

Yet shifts in the composition of FTE staff load paint only part of the picture. Estimating the number of casual staff in Australian universities, in terms of individual people, is notoriously difficult as universities report casual staffing levels to DEEWR in FTE only, and these are often based on estimates. Junor (2004) and more recently Coates and Goedegebuure (2010) have estimated that around 40 per cent of university staff are casual employees. This compares to an average of around 25 per cent in the overall workforce (Junor 2004; ABS 2009). However, new research using the superannuation records of university staff indicates that there are currently 67,000 academics employed on a casual basis, comprising 60 per cent of the academic workforce (May 2011, forthcoming).

The FTE data held by DEEWR, can, however, be used to derive some basic assumptions about the characteristics of the sessional workforce in Australian universities. Sessional positions are typically concentrated in the lower classifications: 71 per cent of sessional work is undertaken by employees at the Level A classification and 24 per cent at Level B (DEEWR selected statistics 2009). Casual contracts are more common in some disciplines than others, with 30 per cent of FTE staffing in the Creative Arts, Architecture and Education being sessional, compared with 13 per cent in Agriculture and 19 per cent in Society and Culture (DEEWR selected statistics 2009).

While there are obvious organisational benefits offered by a highly casualised workforce, especially in terms of flexibility, there is evidence this kind of work is less attractive to many academics. In a study conducted in 2004, only 28 per cent of sessional academics agreed that sessional work was their first choice mode of employment (Junor 2004). A large Australian survey-based study of sessional academic staff found that while most sessional teaching staff were enthusiastic about their teaching, they reported significant stress from the constant insecurity of unstable work and the 'intellectual marginality' of their positions in relation to other academic staff. The study found that this was exacerbated by the nature of semester-based contracts, which do not offer an ongoing income source (Brown, Goodman and Yasukwa 2008). The study also found that there is a tension between the casually employed academics' actual work and what is stated on the contract of employment, with much of their work unpaid due to the demands of students for frequent meetings and constant email contact.

Casualisation has also been found to increase the workload of the continuing staff who manage casually employed academics. Coates, Dobson, Goedegebuure and Meek (2009b) contend that casualisation has added to the burden on tenured staff, as they must manage

the army of sessional staff on top of their other work. Casualisation means that those entering on casual contracts face a far less certain professional future than previous generations of academics, while those who obtain tenure are likely to experience increased administrative workloads. Coates *et al.* conclude that this tension indicates "academic work is now being perceived as being less likely to lead to a real career than in the past" (p. 53).

Increased casualisation has been accompanied by a trend toward limited term contracts, especially in research-only positions, from 33 per cent of university staff in 2000, to 40 per cent in 2009 (DEEWR selected statistics 2009). Limited term contracts are not the norm in the wider workforce: only 5 per cent of employees were on a fixed term contract in November 2006 (ABS 2008). However, by far the largest group of employed persons who are on fixed term contracts are professionals. Professionals comprised 45 per cent of the fixed term workforce in 2006, yet only 21 per cent of the total workforce; education professionals comprised 36 per cent of the professional workforce on fixed term contracts, yet only 25 per cent of all professional employees (ABS 2008).

The rise of limited term contracts represents a shift from traditional modes of academic employment, and is a trend that has its greatest impact on early career staff. Indeed, Edwards, Radloff and Coates (2009) pose the concept of the 'post doctoral treadmill', a long series of short term contracts that do not guarantee professional advancement or lead to substantive appointments. Dawson (2007) also recounts the growing norm of early career staff moving from one short-term contract to another without being able to secure a full academic position. Studies of the casualisation of the academic workforce in the US have also found non-tenured academic staff feel "expendable" as they undertake a series of short-term contracts (Anibas, Hanson-Brenner and Zorn 2009).

To some extent, these problems have already been recognised by government. The 2008 House of Representatives Standing Committee on Industry, Science and Innovation inquiry into research and research training, *Building Australia's Research Capacity*, has found that major impediments to attracting researchers to academic careers included scarcity of opportunities, lack of job security and uncompetitive salaries. These were found to be a particular problem for early career researchers, who must compete for scarce grants against experienced researchers across all disciplinary fields. Further, early career positions in research were also found to be most frequently casual or short term, and frequently dependent on more senior researchers securing project funding. The Committee recommended that universities develop mentoring schemes to support early and mid career researchers as well as developing established career pathways and improved job security (Parliament of the Commonwealth of Australia 2008).

The ageing academic workforce

The changes in academic work outlined above have partly resulted from the rapid increase in student participation in recent decades. Yet, participation is likely to increase further in coming years. The *Review of the National Innovation System* (Cutler 2008), the *Review of Higher Education* (Bradley, Noonan, Nugent and Scales, 2008), and the *Inquiry into Research Training and Research Workforce issues in Australian Universities* undertaken by the House of Representatives Standing Committee on Industry, Science and Innovation (2008) all point toward increases in participation in higher education, particularly by students from educationally disadvantaged backgrounds. The Group of Eight (2010) has calculated that, assuming no change in staff/student ratios over the next 20 years, an additional 26,600 full-time teaching staff will be required to meet the growth of the sector, putting aside retirements.

Yet this expected increase in student participation will occur at a time when many academics who entered the profession in the 1970s begin to reach retirement age, a problem that has

been well documented (Hugo 2008, 2005abc; Skills Australia 2010; Edwards 2010; Edwards and Smith 2009; Coates, Dobson, Edwards, Friedman, Goedegebuure and Meek, 2009a; Hughes and Rubenstien, 2006). The Group of Eight estimate that a further 16,400 staff will be needed to replace those who will retire over the next 20 years, on top of those required for increased student participation: a total of over 40,000 extra staff required by 2030.

An ageing academic workforce is a problem faced by many nations, including Austria, Belgium, France, Germany, Iceland, Norway, Sweden, the Czech Republic and the Netherlands (OECD, 2008; Huisman, de Weert and Bartelse, 2002). The ageing of the academic workforce in Australia has resulted from the fast-paced expansion of the higher education sector in the 1970s, which necessitated an accompanying sharp increase in academic staff numbers. This trend continued, with some variation, through the 1980s but ceased with the tightening of funding to higher education in the mid-1990s, since which time numbers of continuing and long-contract staff have increased only modestly. The age-group distribution of the tenured and continuing academic workforce has therefore become skewed toward the older end of the spectrum. This is particularly apparent when the age-profile of academics is compared to the age-profile of the overall workforce (Figure 1).
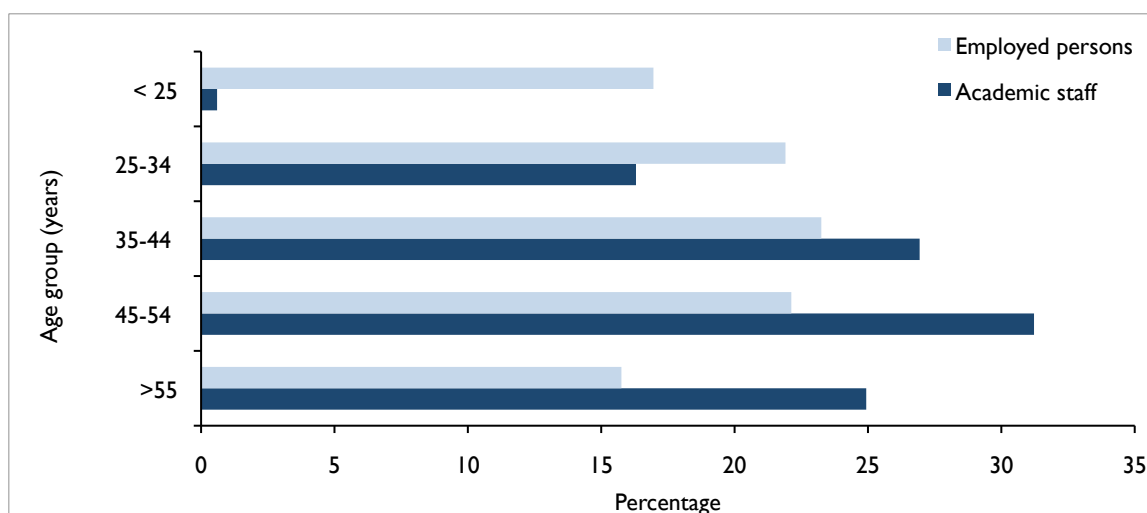
Figure 1: Academic staff by age group compared with other employed persons in Australia (%). Source: DEEWR selected statistics 2008; Australian Bureau of Statistics Cat: 6359.0.

While staffing levels have picked up somewhat in the early 2000s, a missing generation of academics—Generation X—has left a hole in the age profile of the workforce as the Baby Boomers move toward retirement. This phenomenon is evident in the data presented in Figure 2, below, which shows the shift of the 40-50 year old age group into the 50+ range over the 2000-2008 period, while the percentage contribution of the younger age groups has remained stable.
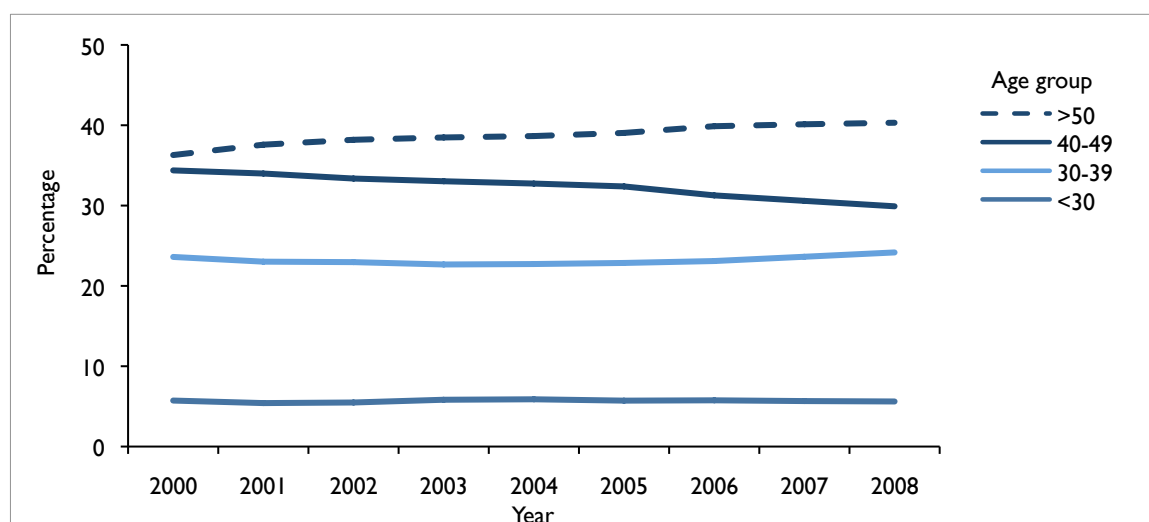
Figure 2: Trends in age of academic staff (%), 2000-2008. Source: DEEWR selected statistics.

The concentration of older age groups in the academic workforce evident in Figure 1 has also lead to imbalances in the strata of professional classifications within the sector. As older workers are more likely to hold higher level positions, the classification levels of D and E (above Senior Lecturer or Level C) are the only classification group to have increased their percentage share within the workforce over the period from 1996; moving from having the smallest percentage share of the four classification levels, to the second highest over that period (Figure 3, below). Shifts in the composition of the academic workforce toward the more senior of the classifications also has implications for institutional budgets, as wages at the most senior levels are around twice those of a Level A staff member, reducing the financial base on which to employ more junior staff on an ongoing or long-term basis.
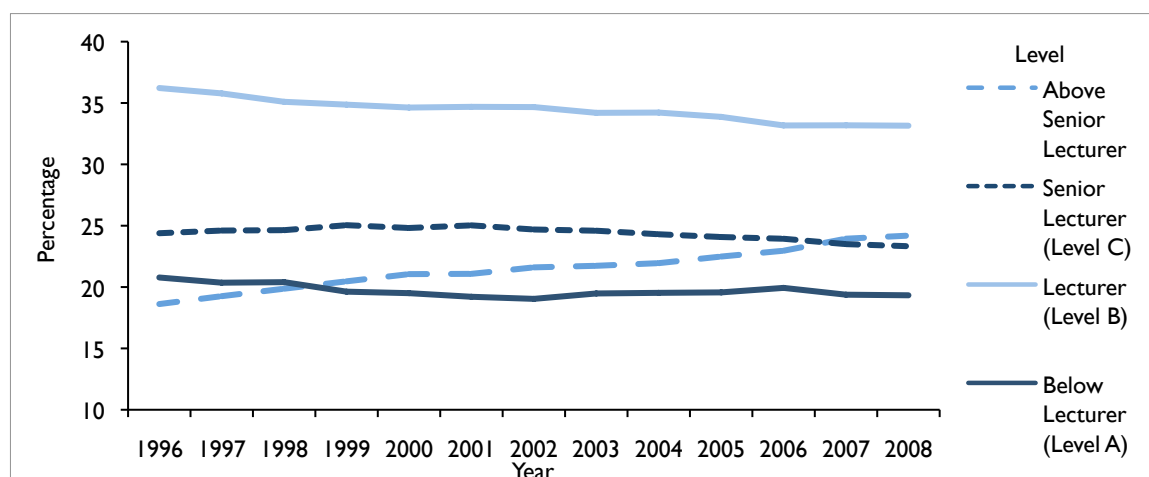
Figure 3: Trends in proportions of academic staff by classification (%), 1996-2008. Source: DEEWR selected statistics.

The ageing of the academic workforce is occurring at different rates across different disciplines. A number of the organisational areas with the highest proportion of staff over 50 years of age (Table 1) are areas of key policy importance; particularly education, information technology and systems, nursing and the mathematical sciences. Hugo (2008) estimates that at least one half of the total Australian academic workforce will retire in the next 15 years.

Table 1: Australian academic staff: academic organisational units with high proportions aged 50 years or more, 2006. Source: Hugo 2008: 20.

Academic organisational unit	Number of staff	Percentage aged 50+
Teacher Education	696	62.8
Education—General	1,126	60.4
Agriculture	85	60.0
Curriculum and Education Studies	181	58.6
Human Welfare Studies	196	57.6
Visual Arts	213	56.8
Information Systems	176	53.9
Studies in Human Society	733	53.2
Mathematical Sciences	444	52.7
Nursing	789	51.3
Information Technology	925	50.0

The increased casualisation occurring at the lower end of the classification scale, and the ageing and imminent retirement of workers at the upper end of the classification scale, result in different stressors depending on seniority: short-term and sessional staff face uncertainty about their immediate employment future (Edwards, Radloff and Coates 2009; Dawson 2007; Anibas, Hanson-Brenner and Zorn 2009), while older, tenured staff face increases in administrative work and the management of the younger, casual workforce (Coates et al. 2009b).

Increased reporting requirements

Mid and later career staff experience increases in administrative duties beyond the management of the casual workforce. Research funding, in particular, has been tied to a variety of performance indicators and increased time must be spent by staff reporting the data upon which indicators are based. In a 2006 interview-based Australian study, academics 'complained bitterly about the time spent on low clerical work and accountability requirements', especially as this reduced the time available for what they saw as their primary tasks – teaching and research (Anderson 2006: 584). Reduced time for research was regarded as 'a source of considerable stress' (p. 585). An earlier Australian survey-based study investigating the relationships between and among academics' demographic characteristics, work environment perceptions, and work attitudes also raised concerns that:

> Corporate management practices may deliver significant efficiencies for a university, but managerialism comes at a significant human cost, particularly for those academics with a strong sense of professional identity (Winter, Taylor and Sarros 2000: 291-2).

Cross-border workforce mobility

The final significant change in the academic profession discussed here is the impact of globalisation on the academic workforce. The Australian academic workforce is a highly mobile one, with Coates *et al.* (2009a) finding that 30.8 per cent of academics had taken concrete steps to find an academic position in another country, compared with an international average of 20.5 per cent across the countries taking part in the Changing Academic Profession (CAP) survey, placing Australia second only to Italy in terms of academic staff mobility. However, Australia also benefits from inflows of academics from other countries. Hugo (2008) cites 2006 ABS census data showing that 40.5 per cent of Australian academic staff were born overseas, compared with 25.7 per cent of the total workforce. Overall, Australia has experienced a net increase in academic staff through migration in recent decades, yet in terms of permanent migration the margin is extremely narrow: in 2006-07 Australia experienced a net gain of only 37 academics through permanent migration, while in 2002-03, 2004-05 and 2005-06 it experienced a net loss.

Considering outward flows only, in 2005-06 alone Australia lost 1,071 academics to long-term migration and 411 to permanent migration off the back of a five to six year trend (Hugo 2008). These figures are offset by greater net gains in the long-term, as opposed to permanent inflows, but are cause for some concern nevertheless in the context of an ageing workforce, impending retirements, and the need for increased workforce capacity as student participation continues to increase.

Comparing the destinations of academic staff leaving Australia with the origin of those arriving, Hugo (2008) finds that permanent outward flows to the US (602 in 2005-06) and UK (676) outweighed permanent inward flows from these destinations (556 and 622 respectively). For China and India the trend was reversed, with 647 academics arriving from China and 461 from India, but only 62 and 6 departing for these destinations respectively. The reasons for these patterns warrant further investigation, but a commonsense interpretation is that those academics willing to emigrate are self-sorting; leveraging the best pay and conditions they can obtain with their experience and expertise; and that the US and UK sit at the top of the desirable destinations in terms of employment conditions, with Australia below and China and India lagging somewhat behind.

Such an interpretation is strongly supported by a 2001 survey of Australian expatriates in which Australians living overseas gave reasons for leaving and for not returning. These were primarily related to employment conditions and are summarised in the table below:

Table 2: Survey of Australians overseas, 2001: reasons for emigrating, and for not returning, given by academic respondents (n=167). Source: Hugo 2008: 37 and 39.

Reason for leaving	%	Reason for not returning	%
Better employment opportunities	55.7	Career and promotion opportunities	39.5
Professional development	43.1	Employment opportunities	38.9
Career advancement	29.9	Established in current location	30.5
Education/study	27.5	Higher income	29.9
Higher income	26.9	Children grew up here	24.0
Marriage	20.4	Lifestyle	19.8
Job transfer/exchange	15.0	Marriage/partnership	19.2
Lifestyle	14.4	Partner's employment	13.8
Partner's employment	8.4	Family/friends here	13.8
Separation/divorce	1.8	Better taxation system	12.6
		No equivalent jobs in Australia	12.0
		Business opportunities	4.8

The findings presented above illustrate the key shifts that have taken place in academic work over the past ten to fifteen years: casualisation, an ageing tenured workforce and increased mobility. Four large-scale surveys of the academic workforce conducted since 1999 support this picture, and are discussed below.

Previous large-scale surveys of Australian academics

There have been four major surveys of Australian academics over the past 11 years. Major findings from these studies are outlined below:

1. *The Work Roles of Academics in Australian Universities (previous CSHE study), 1999.*

This study was based on a survey of 2,609 academics from 15 Australian universities, and focused on workloads, levels of satisfaction, key aspects of teaching and research activities, and work preferences of Australian academics, complementing a previous, 1993 study of the academic workforce conducted by the CSHE. It is reported in McInnis-CSHE 1999.

Key findings of the 1999 CSHE study were:

- A drop in the level of work satisfaction from 67 per cent in 1993 to 51 per cent in 1999, and an increase in those reporting that their work was a source of considerable personal stress from 52 per cent to 56 per cent.
- Low levels of satisfaction with both salary (31 per cent satisfied) and job security (43 per cent). Only 20 per cent of casual and part-time academics were satisfied with their job security.
- A drop from 66 per cent to 53 per cent in the proportion of academics who were satisfied that they were free to pursue their own academic interests.
- 40 per cent of academics reported working more than 50 hours per week.
- Contrasts between the satisfaction of early, mid and late career academics: late career academics were the most negative about their work, and mid career academics were the most stressed.
- Inadequate training in teaching, with many teaching staff "learning as they go." Most academics surveyed said they would prefer to see teaching rewarded as highly as research in the promotions system.

2. Occupational Stress in Australian University Staff, 2000.

This study, based on a survey of 8,732 non-casual employees from 17 Australian universities measuring psychological strain and work satisfaction, is reported in Winefield, Gillespie, Stough, Dua, Hapuarachchi and Boyd 2003, and Winefield, Boyd, Saebel and Pignata 2008. The study was used to confirm results of an earlier interview-based study that found: both general and academic staff were experiencing more stress than they were 5 years previously; academic staff were experiencing greater stress than general staff; and five major antecedents of stress were insufficient funding and resources, work overload, poor management practice, job insecurity, and insufficient recognition and reward. With regard to the levels of stress experienced by academic staff, the authors hypothesise that:

> According to Karasek's (1979) demand–control theory, high stress jobs are defined as those combining high demands with low control or autonomy. Universities in Australia… have experienced major organizational changes in recent years, with academic decision-making becoming less collegial and more managerial and autocratic… This has meant that control has shifted from academics to university senior managers. At the same time, demands have increased as a result of pressures brought about through decreased funding and increased demands for accountability (Winefield, Gillespie, Stough, Dua, Hapuarachchi and Boyd 2003: 60).

3. Anderson, Johnson and Saha, 2002.

A survey of 2,075 academics at 12 Australian universities, the study focused on a number of components of academic work. These included student and staff interactions; teaching; academic standards; research; administration; entrepreneurship and community links; collegiality and corporatism; the academic career; and work satisfaction and stress. The findings are reported in Anderson, Johnson and Saha 2002, with the authors asserting:

…new tasks, new technologies, and new accountability and bureaucratic procedures have added to the traditional academic responsibilities. Nothing has been taken away. One consequence of this change has been the increase in stress amongst academics (Anderson, Johnson and Saha 2002: 8).

Key findings of the study were:

- More than half of the respondents said that small group teaching had decreased, and 96 per cent of those who took this view thought it was a change for the worse.
- Almost half of the respondents thought that the intellectual quality of incoming students had declined. Over half the respondents said that the academic standards required for graduation had decreased.
- Almost four out of five respondents said that time for scholarly writing had declined and three out of four academics thought the pressure to publish had increased in recent years.
- More than one half of the respondents perceived administrative time to have increased, and

thought this was for the worse.
- About half of the respondents thought time spent on entrepreneurial activities had increased.
- Many academics believed that the academic career had lost its attractiveness; male academics perceived the decline more than female academics; older more than younger; higher ranks more than lower. Many believed that the academic career had lost its prestige.
- Most academics thought their prospects for promotion had declined.
- About two-thirds of the respondents indicated that their levels of work satisfaction had decreased and become worse. There were no major differences between universities in terms of work satisfaction.
- Four out of five academics thought job security to be very important, and 45 per cent thought it had changed for the worse. Job security was more likely to be seen as important by younger academics. Academics at Go8 universities were more likely to perceive their job security as poor.
- Overall, almost 80 per cent of academics said their work stress had increased in recent years. There were no differences by university group in the experience of work stress.

4. The changing academic profession (CAP) survey, 2007.

CAP is an international study of the academic profession involving 20 countries and coordinated through a project team located at the University of Kassel. The Australian Council of Education Research and the LH Martin Institute conducted the Australian element of the survey. The Australian instrument was distributed in 2007 across 20 Australian universities yielding 1,370 responses. The focus of the study was on changes in the academic profession since a previous international survey in the early 1990s, including the implications of any changes for the attractiveness of an academic career, and for the ability of the academic community to contribute to the development of knowledge societies. The Australian findings are reported in Coates, Dobson, Goedegebuure and Meek 2009.

The authors comment that:

> Our review of the evidence shows that… there is a clear, present and growing demand for academic work, a demand being propelled by system growth, looming retirements, and increased international mobility. The response to these demands has largely been through increasing the proportion of casual staff undertaking academic work. This approach lacks coherence, strength and vision (Coates et al. 2009: 2).

Further:

> … the settings are not right for either converting the large casual workforce into the academic profession of the future, for keeping younger colleagues interested in a continued career in our universities, or for attracting a new generation of qualified academics. There appear to be strong push and pull factors within our own institutions, both from the international academic labour market and from outside higher education, that create a serious problem for the near future (p. 4).

Coates et al. suggest that an appropriate response to these challenges should include: expanding staff numbers; streamlining accountability requirements; engaging the new generation of academics; increasing understanding of the casual workforce; stimulating mission diversity; and building institutional leadership capability.

Other key findings were that, compared with academics in other countries, Australian academics:

- Earn salaries that are commensurate with their international peers but not comparable with Australian professionals in other sectors.
- Are less satisfied with their work than international colleagues.
- Appear to be less satisfied with their work than other professionals in Australia (based on a comparison of the CAP data with data from the Annual Report of the Household, Income and Labour Dynamics in Australia (HILDA) Survey)

- Report one of the highest propensities for employment change – either out of the profession or the country.
- Report one of the lowest levels of satisfaction with institutional management and support.
- Have one of the lowest rates of employment on a permanent contract, and work among the longest number of hours per week).

Summary of findings from the literature and national statistics collection

There is a high degree of congruence with the findings of the four large-scale and recent surveys outlined above. The quantitative studies reveal the academic workforce has become more casualised, top-heavy in its age and classification profile, and is highly mobile. The qualitative studies provide a personal face to the trends uncovered in the statistics by revealing the levels of frustration experienced by early career and sessional staff and the increased burden on staff time imposed by administrative duties and bureaucratic requirements. The studies and the national statistical data indicate a workforce characterised by:

1. An ageing demographic profile, with many staff close to retirement.
2. High levels of international mobility, with outward flows directed toward the US and UK and inward flows from Asia.
3. Excessive demands on staff time to meet the reporting requirements of an increasingly managerialist workplace culture.
4. Older, late career academics overloaded with administrative duties and younger, early career staff with few clear professional pathways.
5. High levels of casualisation and low levels of job security.
6. High levels of satisfaction with the intellectual aspects of academic work but decreasing overall satisfaction.
7. High and increasing workplace stress.
8. Low levels of satisfaction with university management.

These findings paint a worrying picture of the academic workforce in Australia, but it is a picture that is remarkably consistent across a large number of studies.

The present study takes a somewhat different approach to previous studies by focusing on the factors that drive the academic workforce, which include:

- The locus of intellectual interests and passions;
- Levels of engagement with the core tasks of teaching and research;
- Satisfaction with the work environment, and with the work itself; and
- The way work conditions such as pay, leave, professional development opportunities and the availability of time for scholarly activities affect and interact with overall satisfaction and career motivation.

The findings of the present study largely confirm the findings discussed above. However, by uncovering the personal and professional drivers of satisfaction and dissatisfaction with academic work, they provide a basis for policy-makers and university managers to meet the challenge of building and maintaining a robust academic workforce.

2.
The present study

This study was commissioned by DEEWR to gain a better understanding of the immediate and longer-term career intentions of Australia's academics. In investigates the factors influencing these intentions, motivated by concern with the ageing profile of the academic community and the nation's capacity to replenish the academic workforce during an anticipated period of growth in tertiary education participation.
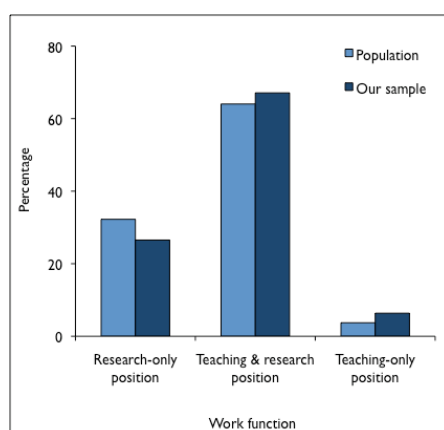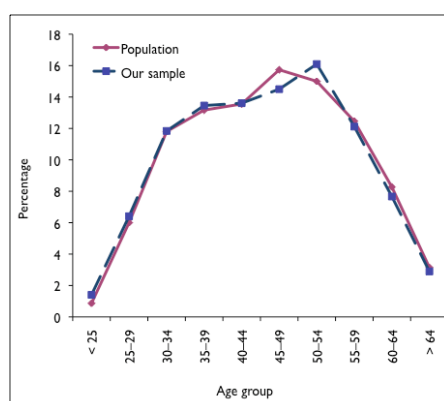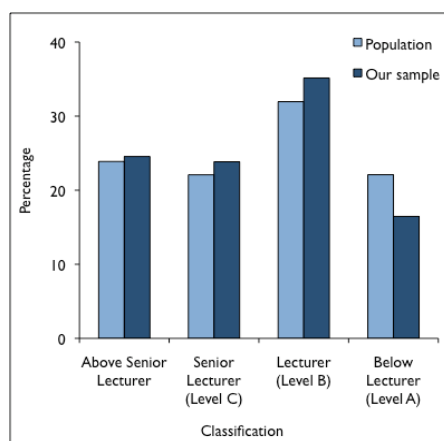
The findings are based on an online survey across 20 universities that received 5,525 responses from academics, including sessional and casual staff. The questionnaire sought to document academic staff members' current work roles, attitudes and career objectives. This study builds on earlier work by the CSHE, in particular the 1999 CSHE study of academic work (McInnis 1999) with which comparisons are provided where relevant throughout this report.

In all, 2,458 continuing staff, 1,818 limited term contract staff and 622 sessional staff responded to the survey (627 respondents did not indicate their contract type). It is difficult to report the degree to which the sample of sessional staff is representative of the population for little is known about the characteristics, or even size, of the sessional staff population at Australian universities. This project goes some way toward addressing the present paucity of information on sessional staff. The demographic characteristics of the fulltime and fractional fulltime (FT and FFT) staff in the sample (set out in full, along with the method, in Appendix 1) show a very close fit to that of the population of the sampled institutions as reported to DEEWR for its 2009 statistics collection, particularly in terms of level of employment, age distribution and work function (Figures a, b and c). Female respondents outweighed male respondents in the sample, as is generally the case for surveys by questionnaire. There is also some variation at the institutional level, however the findings reveal only small differences between universities on most issues. Where relevant, these differences are reported.

Figures a, b and c: Comparison of characteristics the FT&FFT sample to corresponding population at participating institutions.

The findings are reported as proportions with 95 per cent confidence intervals following the method for proportions developed by Newcomb and Altman (2000). The 95 per cent confidence intervals acknowledge the chance (at 5%) that the population value is not contained in the interval. Statistical significance can be read directly from the 95 per cent confidence intervals such that when 95 per cent confidence intervals (on independent group data) overlap by less than one quarter of the average of their total widths, the difference between the two estimates is statistically significant at p<0.05 (Cumming and Finch 2005).

3.
Core academic values

"The opportunity to explore areas of genuine passion with students or in research are declining as there is a greater requirement for utilitarian focus."

A deep, widely shared and seemingly unwavering commitment of academics to scholarly values, expressed through both teaching and research, has profound implications for the structuring of academic work and the recruitment and retention of academic staff. Consistent with previous studies, the present research confirms the strong personal commitment to scholarship that draws people to academic work and lies at the core of their professional values. The opportunity for intellectually stimulating work, passion for a field of study and the opportunity to contribute to new knowledge are the most prized aspects of academic work, and almost universally so, with these factors being nominated by 95.9 per cent, 93.8 per cent and 91.1 per cent of academics respectively (Figure 4, below).
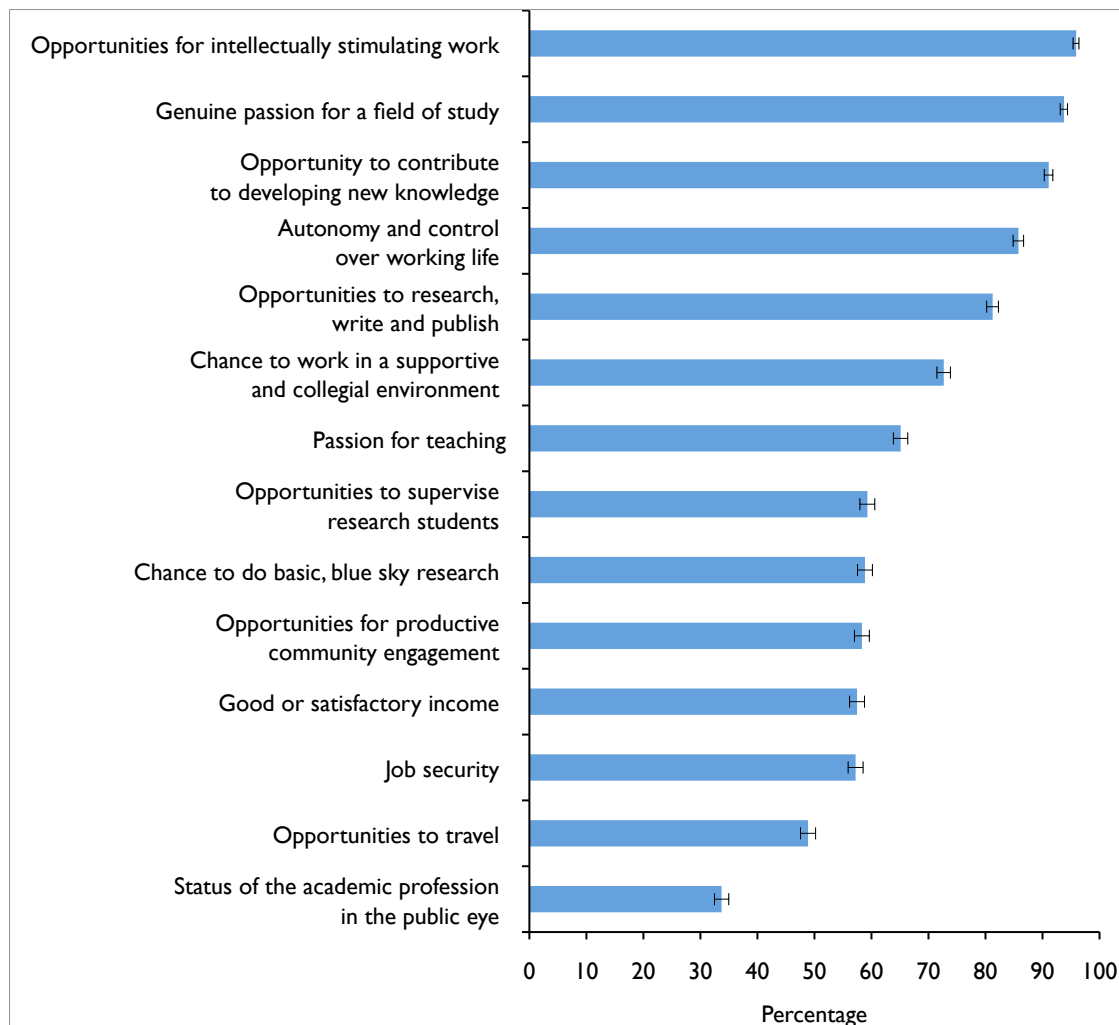
Figure 4: Aspects of academic work that drew respondents to the profession, and that held the most value for them (percentage valuing item highly or very highly; error bars are 95% CIs).

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In addition, autonomy and control over one's working life also figured highly (85.8 per cent) in the findings on attractors to the academic profession, as has been the case in previous studies. Of the possible factors attracting people to academic work, the most valued centre almost solely on scholarly, intellectual activities. Income, job security, travel and public status are relatively less influential in drawing people to the profession, though all are valued by a considerable proportion of academics.

Academics' commitment to the scholarly aspects of their work was also apparent in the qualitative aspects of the survey. Academics were asked to provide written responses to the statement, "The most satisfying aspect of my academic work or career is…?" Of the over 4200 comments provided, most were focused on the pleasure of teaching and seeing students and research candidates experience moments of clarity and understanding in their learning, and on making breakthroughs in research problems. Interaction with a community of scholars and achieving highly in their field were also common responses. A selection of comments which typify the written responses to this question were:

> *"Seeing the light go on when students "get" the concepts."*

> *"The best moments of teaching, when I feel like it is an aspect of my teaching that has made the difference for a student and the best moments of scholarly writing, when you feel like you have made a breakthrough…"*

> *"Creating new researchers with high level skills and confidence and discovering new knowledge through PhD supervision."*

> *"Autonomy and the thrill of novel research findings."*

Comments such as these paint a rich picture of the motivators underlying academic work.

Academics were also asked to nominate the least satisfying aspect of their jobs. Most responded to this question (over 4,200 participants) by nominating what they perceived to be excessive administrative duties, overbearing bureaucracy and lack of job security, reflecting findings from the quantitative elements of the survey that are reported throughout this document.

Preferences for teaching and research

When asked about their primary interest in aspects of academic work, most academics surveyed (38.9 per cent) chose 'both teaching and research, but leaning toward research'. About a quarter chose 'research' (25.9 per cent), or 'teaching and research, but leaning toward teaching' (23.1 per cent). Only a small proportion chose 'teaching' (7.4 per cent) or 'leadership and administration' (4.6 per cent). These findings are broadly consistent with the 1999 CSHE study and Coates *et al.*'s 2007 CAP survey.

When the primary interest in each dimension of academic work is broken down by the work function of respondents, there is some indication that staff have specialised in their main areas of interest (Figure 5). Department and faculty managers and administrators tend to express an interest in leadership and administration (38 per cent and 48 per cent respectively), yet it is notable that many maintain an interest in teaching and research work. For the majority of academics, those who are interested in teaching have teaching roles and those interested in research have research roles. It is worth noting, however, the small but important proportions of staff who are not working in their area of interest illustrated in the figure below, particularly teaching-only staff who would like to incorporate research into their role.
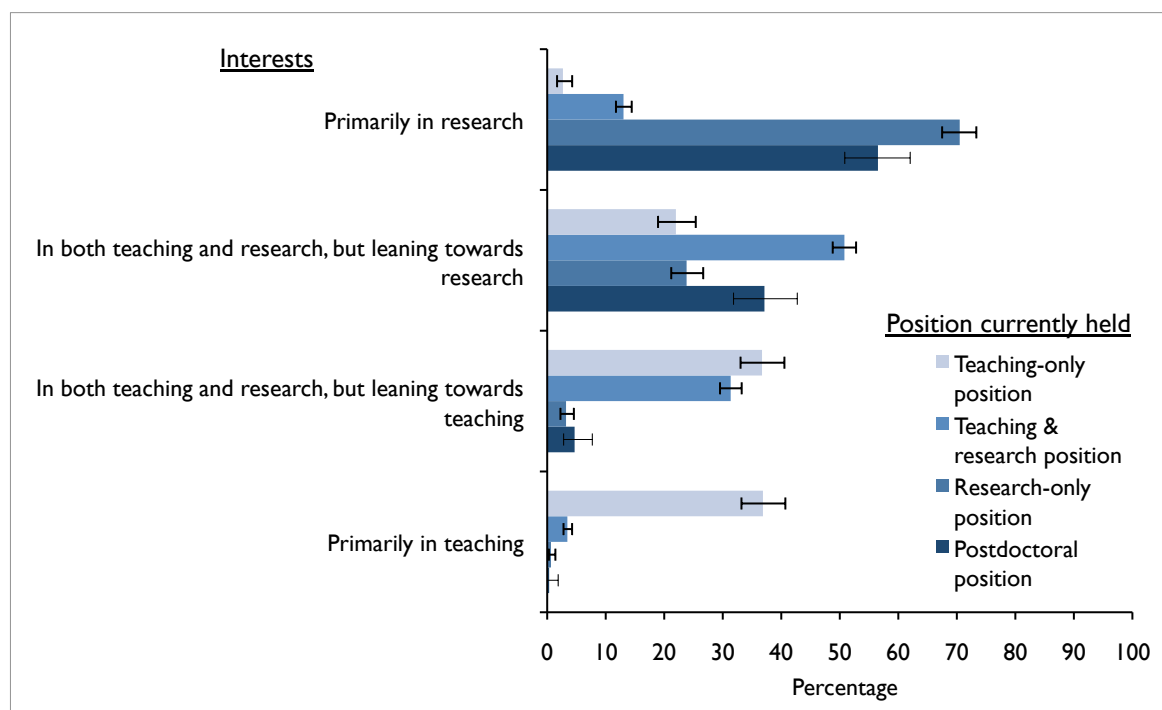
Figure 5: The primary interests of staff and the nature of their current position (error bars are 95% CIs).

4.
Personal career priorities and career intentions

"The direction of the sector towards micro-managed workloads and increased competition for research funding/resources (without any increase in total pool of funding/resources available, e.g. ARC) has me looking at other, much more lucrative, fields or sectors (such as consulting)."

Nearly three-quarters of academics (73.5 per cent) intend to continue in their current role and position in the short term, however, substantial proportions of academics have longer term intentions (for the next five to ten years) to move to another institution (28.9 per cent); to move to an overseas institution (24.6 per cent); to leave the higher education sector all together (25.9 per cent); or to retire (20.5 per cent). On top of expected retirements, over one quarter of the academic workforce appears to have serious intentions to move out of higher education or out of Australian higher education during the next ten years (Figure 6, below).

There are, of course, many factors that may motivate people to consider making changes to their work arrangements, particularly so in the academic profession, which has traditionally been relatively highly mobile. Some of these reasons are explored over the following pages.
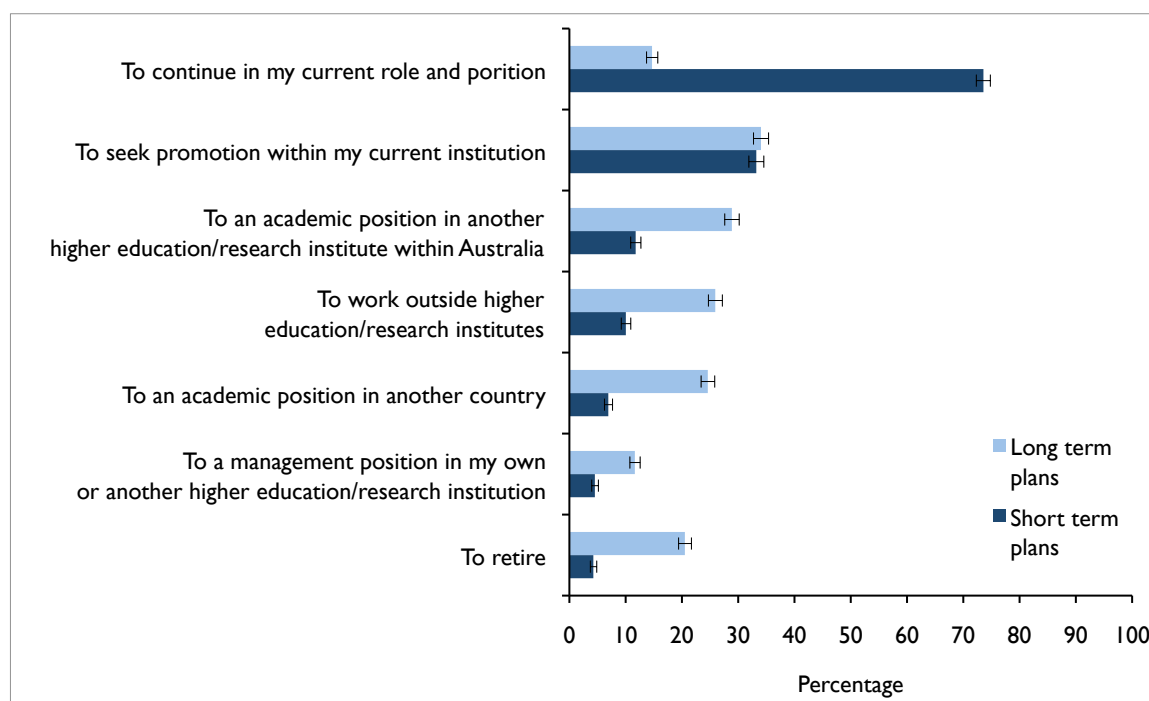
Figure 6: Long and short-term career plans of academics (error bars are 95% CIs).

The long-term intentions of the academic workforce illustrated in Figure 6 may have grave implications for the replenishment of the academic workforce as the 'Baby Boomer' generation retires. A number of cross-analyses were undertaken to better understand the characteristics of those intending to depart the Australian higher education sector. Variation in career plans is not strongly associated with institution, or with satisfaction regarding institutional policy directions or leadership, as discussed further below. Nor is variation in career plans strongly associated with discipline, beyond obvious connections such as those from the professions being somewhat more likely to plan to work outside of higher education. By far the strongest factor associated with the intention to move to an overseas institution, or to leave higher education all together, is age. Younger academics are far more

likely than older academics to be planning to move out of work in Australian universities. These differences are both large and statistically significant.

Figure 7 below shows that close to 40 per cent of academics under 30 plan to leave Australian higher education in the next five to ten years, with 13 to 18 per cent indicating an intention to leave in the immediate future. Around one third of staff aged 30-39 intend to leave in the next five to ten years, and 8 to 11 per cent in the short term.
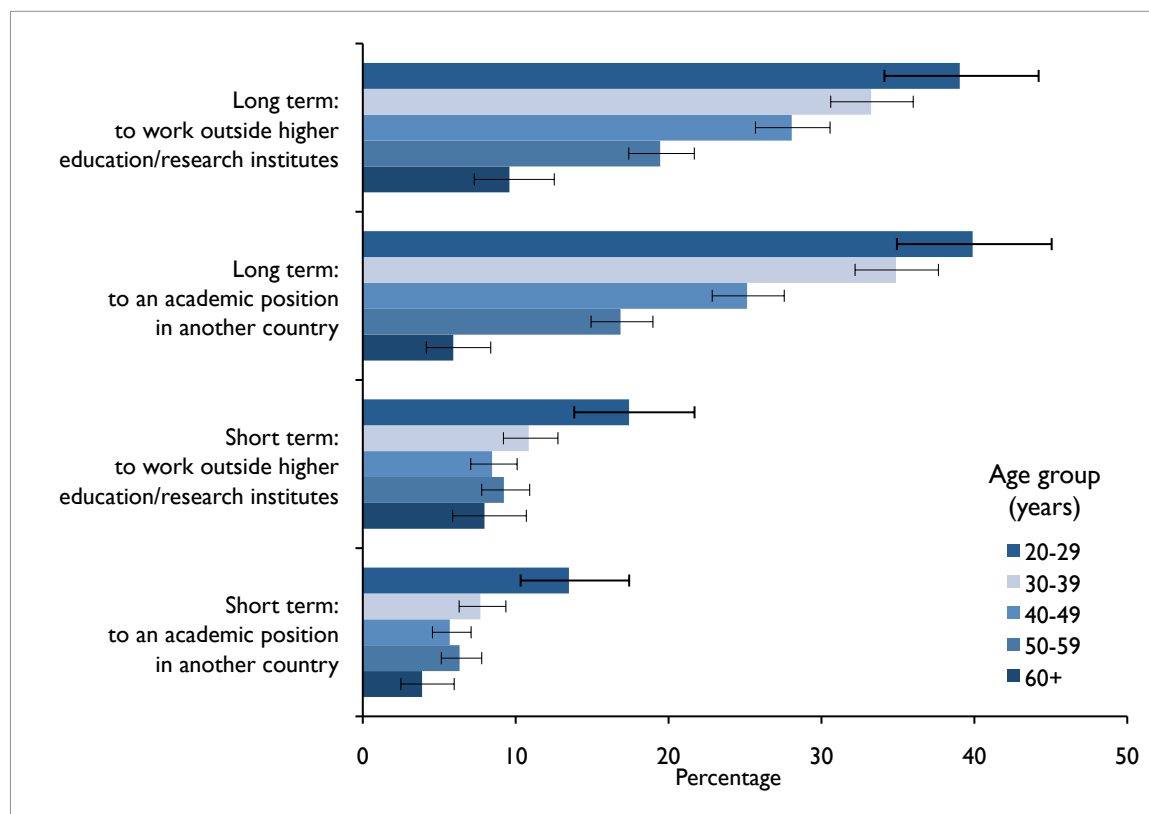
Figure 7: Long and short-term career plans of academics, by age group (error bars are 95% CIs).

As well as asking academics about their immediate and long-term career plans, the present survey replicated a related question from the CAP international survey of academics, asking if they have considered any major changes to their career or position in the last five years, and whether they have taken concrete action to make such a change. Around one third of academics indicate that they have not considered making any major changes to their career or position (32.6 per cent). However, over 40 per cent reveal that they had either considered moving to another higher education institution in Australia (42.1 per cent) or to work outside of Australian higher education (43.2 per cent). About one third of academics have taken action to move to another university or research institute (32.0 per cent), while 14.6 per cent have sought to move to an overseas university and 15.1 per cent to work outside higher education (Table 3 below).

Table 3: Proportion of academic staff who have considered making a change in their career or position in the last five years, and proportion who have taken concrete action to do so. 95% CIs.

	Considered changing	Lower limit	Upper limit	Action taken	Lower limit	Upper limit
No, I have not considered making any major changes in my job	32.7	31.3	34.1	-	-	-
Yes, to take an academic position in another higher education/research institute within Australia	42.1	40.7	43.6	32.0	30.6	33.4
Yes, to take an academic position in another country	33.5	32.1	34.9	14.6	13.6	15.7
Yes, to take a management position in my own or another higher education/research institution	17.0	16.0	18.2	10.2	9.3	11.1
Yes, to move to work outside higher education/research institutes	43.2	41.8	44.7	15.1	14.1	16.2
Yes, to retire	12.9	11.9	13.9	3.6	3.1	4.1

These findings are somewhat different to those of the CAP study, which found much higher levels of action had been undertaken by academics to change their careers. In the CAP study, 22.6 per cent of surveyed Australian academics indicate that they had taken action to move to a management position; 49.7 per cent to move to another university in Australia; 30.9 per cent to move to an overseas institution; and 28.2 per cent to work outside higher education (Coates, Dobson, Goedegebuure and Meek 2009b). It is difficult to pinpoint the cause of these differences between the two studies. The CAP study had a much smaller sample (1370 participants) than the present study (4488 academics answered this question) but the disparity falls outside the estimated margin of error for the CAP study (which we estimate at around 4.4-5.3 percentage points if all 1,370 participants answered the relevant question). There may, however, be differences in sample composition.

Despite the size of the sample of the present study, we are unable to make estimates with confidence at the disciplinary level on this issue. However, there are some large and statistically significant differences in cohorts when compared by age group. These differences are in keeping with trends uncovered throughout this report: younger academics are much more likely to have considered moving to an overseas institution or moving out of higher education altogether, and also to have taken concrete action towards doing so. These comparisons are illustrated in the two figures below. It is important to consider the margins of error in interpreting these data: as a rule of thumb, when the 95 per cent confidence intervals overlap by less than one quarter of their combined length, the difference is statistically significant at the p<0.05 level (see the Method section at Appendix 1).
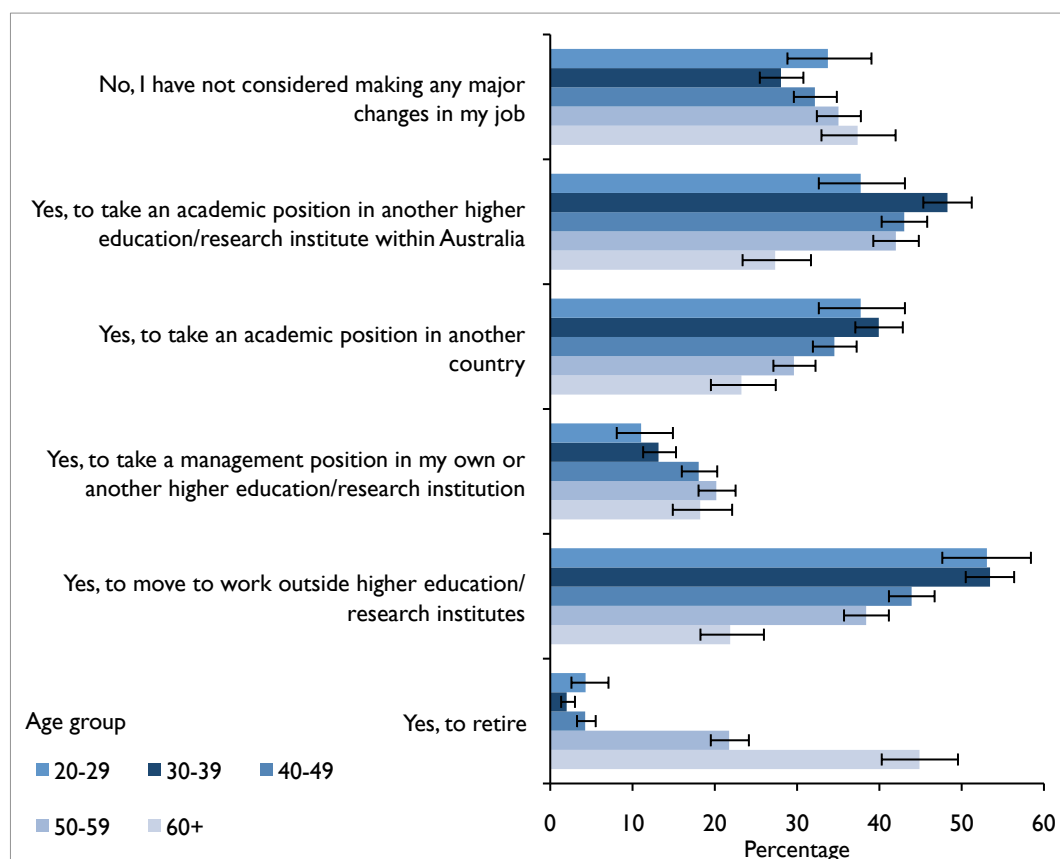
Figure 8: Proportion of academic staff who have considered making a change in their career or position in the last five years (error bars are 95% CIs).
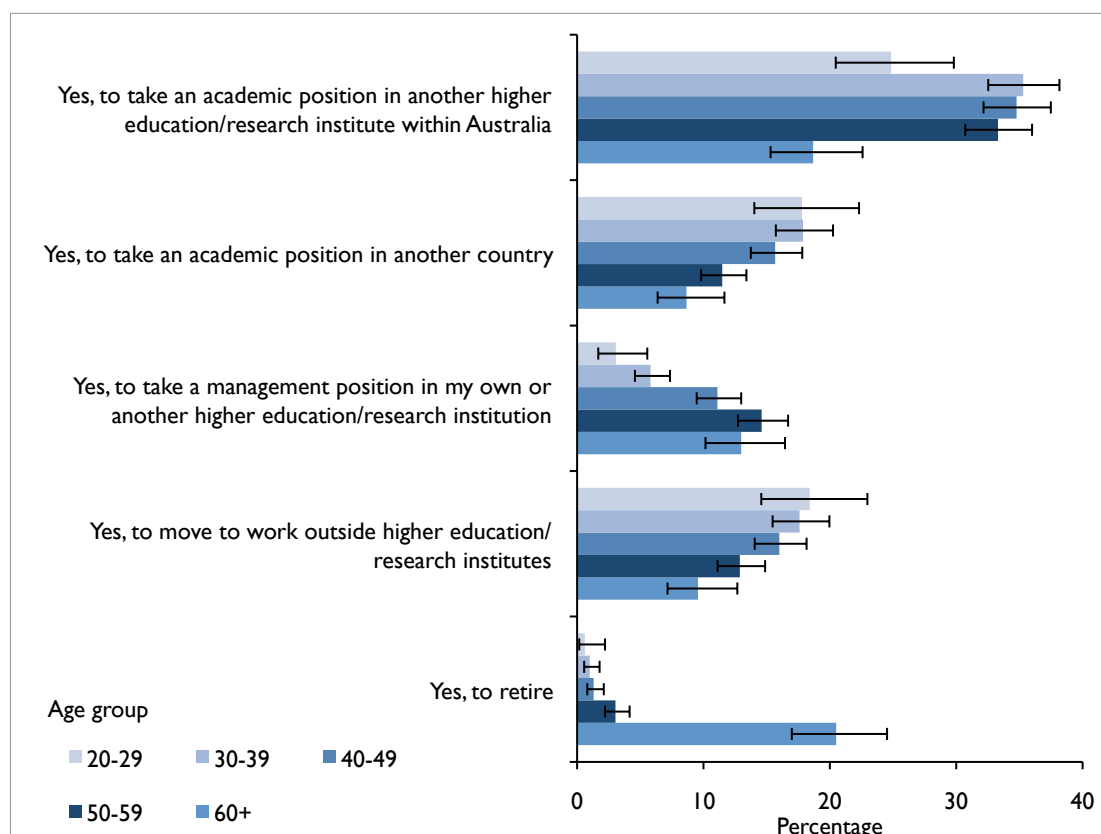
Figure 9: Proportion of academic staff who have taken concrete action toward making a change in their career or position in the last five years (error bars are 95% CIs).

Values, satisfiers and dissatisfiers of those considering leaving Australian higher education

Overall, 28.3 per cent of academics have either a long-term or a short-term intension to move to an academic position in another country. Differences in the satisfaction levels and opinions of those intending to leave and those intending to stay have been investigated. There are a number of small differences: those leaving were a little less likely to believe they have autonomy and control over their working lives, somewhat more likely to be of the view that they spend too much time teaching basic skills due to student deficiencies, and less likely to be satisfied with their work/life balance. They are also more likely than others to have been drawn to academia by the chance to do blue-sky research and by a passion for a field of study, and a little less by teaching. However, the main difference that stands out, above all others, is higher levels of dissatisfaction with income and with job security: 49.9 per cent indicated that they do not have good job security, compared with 39.7 per cent of other academics; and 42.4 per cent of those who intend to move to an overseas academic position indicated that they are not satisfied with their level of income, compared with 33.6 per cent of academics who are not planning to move overseas (see figure 10 below).
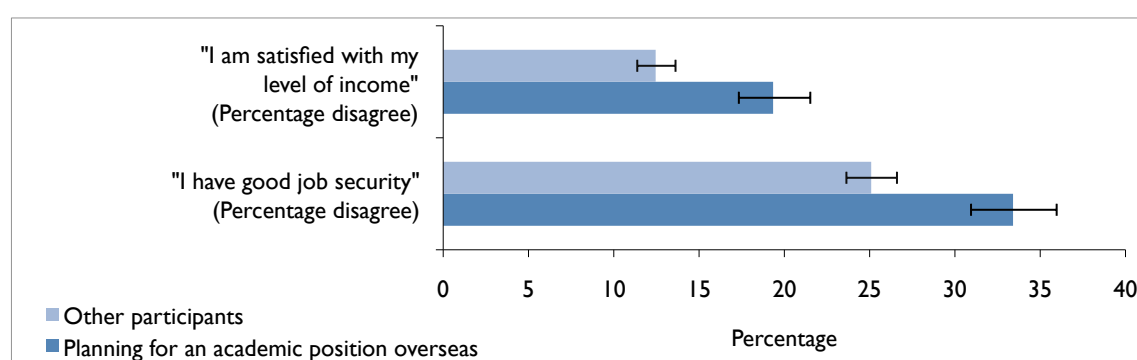
Figure 10: Proportion of academics planning to move to an overseas university who strongly disagreed with the propositions, "I am satisfied with my level of income," and "I have good job security." Error bars are 95% CIs.

The other characteristic of interest in relation to those intending to work in an overseas institution is contract type – 38.3 per cent of those who express an intention to move to an overseas institution are on a limited term contract (of more than one year), compared with 30.1 per cent of those who did not intend to move overseas, This important difference reinforces the importance of job security in retention.

To assess the extent to which the relationship between poor job security and dissatisfaction with levels of remuneration is causal, responses to an open question asking participants to identify the main reason for their future intentions was coded and analysed. Importantly, over half of those intending to head overseas and of those intending to leave the sector cited dissatisfaction with their work conditions. The most common aspects of this dissatisfaction were: inadequate pay; lack of job security; lack of research funding; and dissatisfaction with the institutional or sectoral culture. The other half of those intending to leave the profession or to move to an overseas institution either gave no response to the question of why they were doing so, cited personal or family reasons, or a simple desire for travel.

Personal career priorities

The study also sought respondents' specific priorities with regard to their immediate academic work and CV building (Figure 11). Around 80 per cent of staff indicate that their primary priorities are focused on publication and research, although a substantial proportion, 67.0 per cent, indicate that they want to improve their work/life balance.
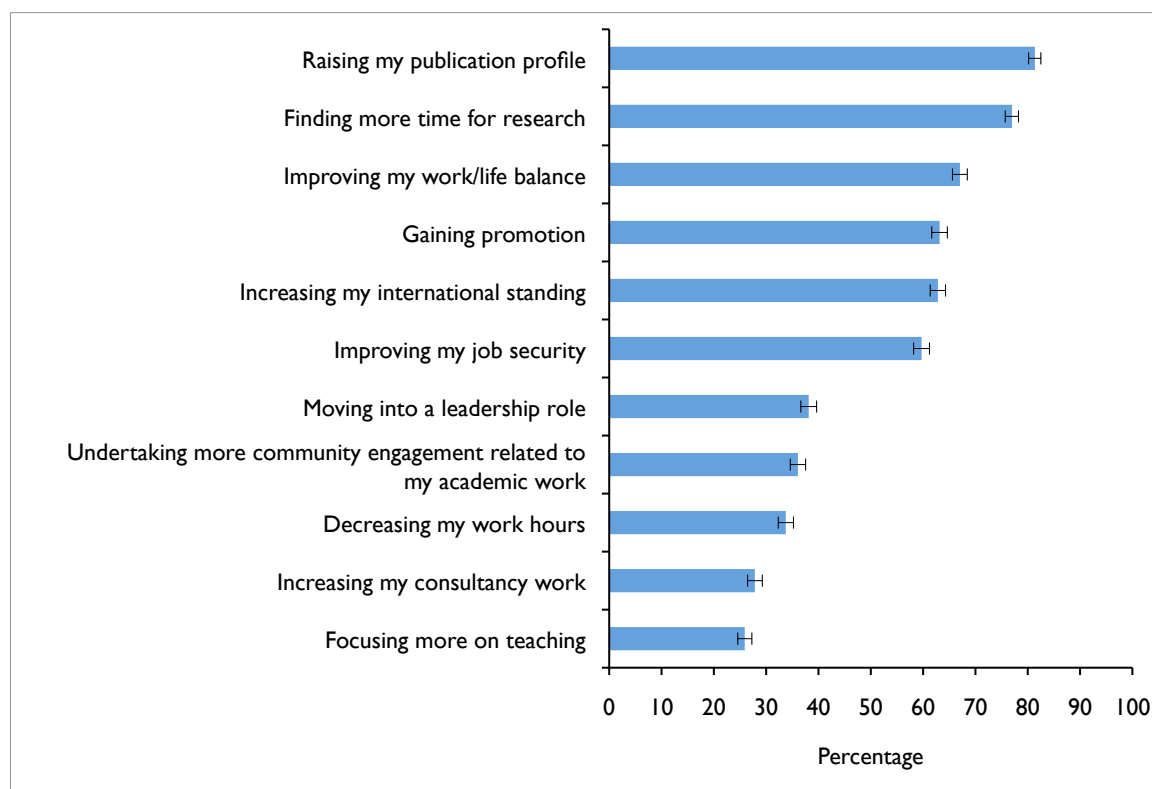
Figure 11: Professional priorities for the future for those planning to stay in higher education in Australia (forth and fifth point on five point Likert; error bars are 95% CIs).

The data on work priorities was analysed by level of appointment, age group and contract type, although there was little variation of interest except on the issue of job security, with differences of up to 50 percentage points between older and younger staff and between levels and contract types (Table 4 below). This emphasises the significant level of uncertainty and concern among younger staff and staff at lower levels of appointment with achieving a more secure foothold in the industry.

Table 4: Percentage of respondents with selected characteristics indicating that improving their job security was a high priority.

Characteristics of those placing a priority on improving their job security		Percentage
Age	20-29	83.8
	30-39	74.4
	40-49	61.5
	50-59	45.8
	60+	28.8
Contract type	Sessional/casual contract	80.6
	Limited term contract of less than one year	85.2
	Limited term contract of at least one year (part time)	78.1
	Limited term contract of at least one year (full time)	84.2
	Continuing position (part time)	36.4
	Continuing position (full time)	37.3
Level of appointment	Level A	84.6
	Level B (Lecturer)	67.5
	Level C (Senior Lecturer)	45.6
	Levels D and E (Associate Professor; Professor)	30.0
All respondents		59.7

5.
The influence of institutional context

"There needs to be a change in the university culture with more support for career development. Currently there is very little support for mid-career academics, which is one of the reasons they leave."

There is a general disquiet among a significant number of academic staff with regards to institutional leadership and management of their institutions (42.2 per cent). While many believe there *are* adequate opportunities for conference attendance and study leave (44.3 per cent) and are positive about the infrastructure/built environment (40.1 per cent), academics are also show high levels of *dissatisfaction* with the way teaching expertise is valued in academic recruitment (39.2 per cent dissatisfied), support for career development plans (38.9 per cent) and overall institutional culture (38.5 per cent).
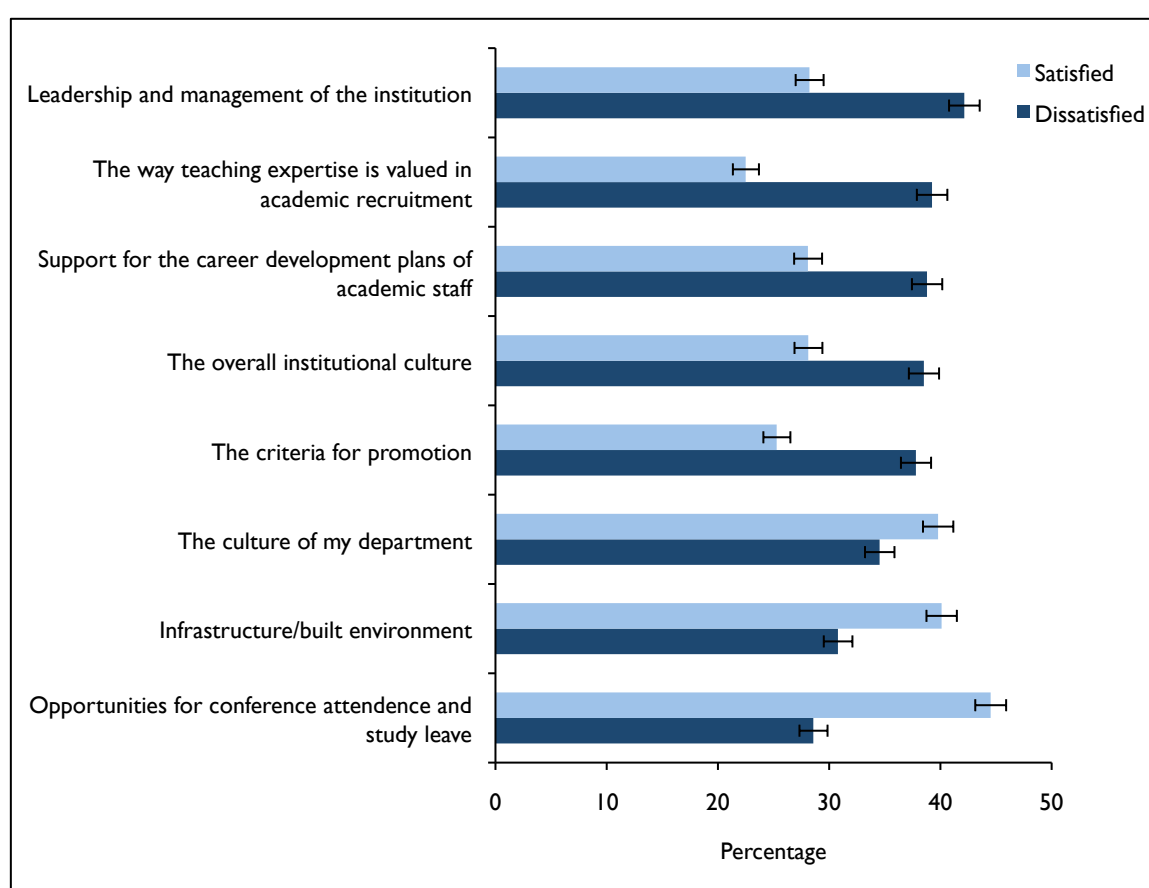
Figure 12: Proportion of respondents satisfied and dissatisfied with various aspects of workplace (first and second, and 4th and 5th points on five point Likert; error bars are 95% CIs).

Levels of dissatisfaction with leadership and management vary substantially across the 19 institutions involved in the study. The highest level of dissatisfaction is 70 per cent and the lowest is just under 30 per cent. Levels of dissatisfaction with overall institutional culture followed a similar pattern across institutions. There was no apparent correlation between levels of satisfaction in these areas and types of institutional affiliation.

Many academics (about 40 per cent) believe they receive little support for their career development plans. Academics are less likely to be dissatisfied with leadership and management as they progress through their careers. Academics at level A (39 per cent), level B (44 per cent) and level C (40 per cent) were more dissatisfied than those in level D or E positions (28 per cent). These findings indicate that there are diverse issues that need

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to be addressed within individual university contexts regarding leadership and management and the influence of this on developing the academic workforce.

With regard to workplace culture, perhaps the most overwhelmingly common theme in the open comments sections of the survey were about excessive administrative demands and a perception of an increasing bureaucratisation of higher education. It was not always clear whether these complaints were aimed at government-imposed measurement activities, the requirements of individual institutions, or perhaps a combination of both. The following comments typify those received:

> *"Over the past two decades, there has been a serious diminution in professionalism as we are compelled more and more to complete accountability/kpi measures, as if jumping over "productivity" hurdles could substitute for professional ethics. The biggest gap [between expectations of academic work and the reality], therefore is that between professional ideals/professional ethics and regulatory/accountability measures that give no credence to professional responsibility or professional judgment."*

> *"It is all stick and no carrot these days. I am passionate about what I do and don't need to be surveilled or threatened with punishments or distracted from real, productive work by the bureaucracy of surveillance, threat and punishment. I would work seven days a week anyway (because I love what I do) but would be more productive if I was left to do what academics have always done."*

Promotion processes

Academics are concerned about the perceived lack of recognition for teaching in the current promotions process. The findings indicate that most academics (88.2 per cent) believe that teaching should be rewarded, whereas only 31.4 per cent believe that teaching is currently rewarded in academic promotions. In contrast, 70.6 per cent of academics are of the view that research activity is currently highly rewarded and 73.8 per cent believe that it should be rewarded. In general the findings reveal that the majority of academics believe that teaching expertise and research activity should be equally valued within the promotions process.
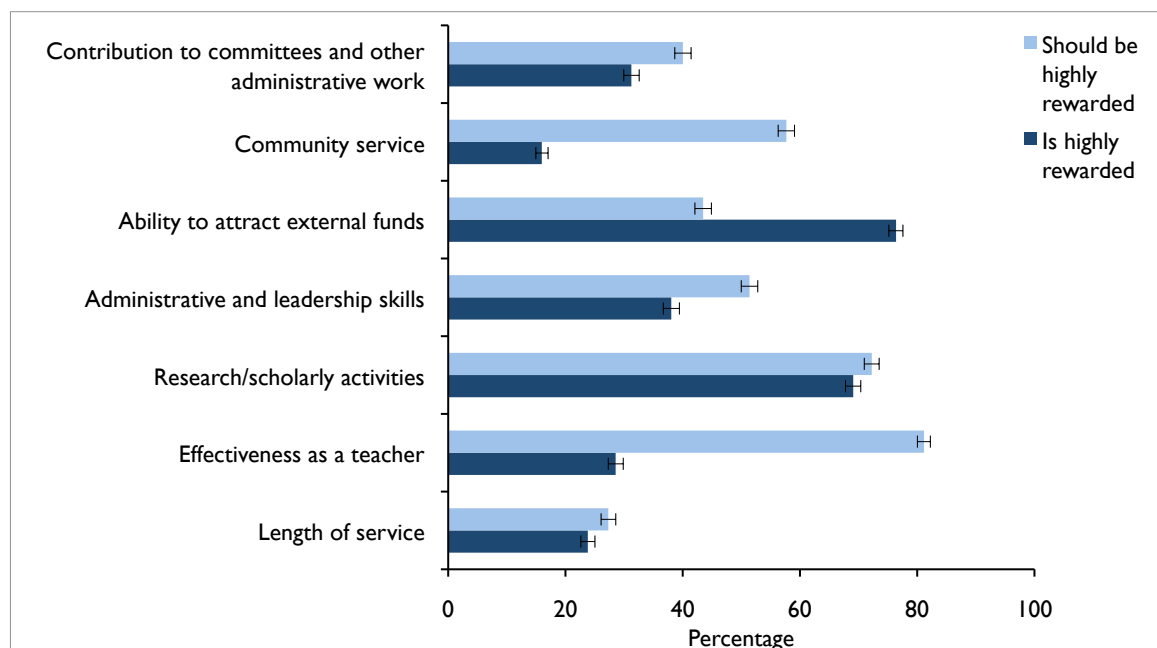
Figure 13: Proportion of respondents believing listed activities *are* and *should be* valued in the current promotions process of their university (error bars are 95% CIs).

These findings were compared with the 1999 CSHE study. The comparisons need to be interpreted with some caution, for the 1999 study only included full-time teaching and

research positions in its analysis of this issue.[1] The trends from the present study are aligned with those from 1999 (Table 5, below). However, far fewer academics now believe that teaching is rewarded by promotions criteria than did so in 1999. Also, in the 1999 CSHE study, staff believed that research activities were more highly rewarded than the ability to attract funding, whereas in 2010 the reverse is the case. This could be due to the influence of the introduction of the Research Training Scheme in 2000 and more recently the introduction of the Excellence in Research for Australia (ERA), as well as the increasing influence of university rankings, on academics' perceptions of their work. A slightly higher percentage of academics in the 1999 CSHE study compared with the current study indicated that research activities, ability to attract funds, administration and leadership, and effectiveness as a teacher *should be* rewarded in promotions.

Table 5: Proportion of respondents believing listed activities *are* and *should be* valued in the current promotions process at their university (comparison of CSHE 2010 and 1999 findings; error bars are 95% CIs).

	CSHE 2010	Lower limit	Upper limit	CSHE 1999	Lower limit	Upper limit
Activities currently rewarded						
Ability to attract external funds	82.8	81.1	84.4	81.9	79.9	83.7
Research/scholarly activities	74.7	72.7	76.5	90.9	89.3	92.2
Administrative and leadership skills	39.8	37.7	42.0	58.9	56.5	61.3
Contribution to committees and other administrative work	31.3	29.3	33.3	51.9	49.4	54.4
Effectiveness as a teacher	29.3	27.3	31.3	43.9	41.5	46.4
Length of service	18.7	17.1	20.5	22.0	20.0	24.1
Community service	14.9	13.4	16.5	29.0	26.8	31.3
Activities which should be rewarded						
Effectiveness as a teacher	82.5	80.8	84.1	94.9	93.7	95.9
Research/scholarly activities	72.4	70.4	74.3	88.9	87.2	90.4
Community service	56.7	54.5	58.9	54.9	52.4	57.4
Administrative and leadership skills	49.6	47.4	51.8	69.9	67.6	72.1
Contribution to committees and other administrative work	40.7	38.5	42.8	44.9	42.5	47.4
Ability to attract external funds	39.0	36.9	41.2	45.9	43.5	48.4
Length of service	24.0	22.2	25.9	16.0	14.2	17.9

Access to and participation in professional development

Academics are generally satisfied with the availability of professional development programs in their institutions. Table 6, below, shows the participation patterns in various forms of training, preparation and support for university teaching. The most common form of training is short courses with just over half of academics having undertaken at some time a short course or courses that either covered a number aspects or a single facet of teaching. Overall, 37.3 per cent of academics have never undertaken training in university teaching, and 72.1 per cent indicate that training is not mandatory in their institution. Calls for more obligatory participation in training for all staff with a teaching role are unlikely to meet a positive response from academic staff. Half of the respondents (50.5 per cent) indicated that they would be very unlikely to consider undertaking an award course in university teaching.

Nonetheless, Table 7 shows moderate to strong levels of endorsement for the usefulness of the training programs in university teaching from staff who have participated in them. Graduate Certificates in Higher Education and similar award programs received slightly weaker endorsement from the staff who have participated in them than other programs, and

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[1] We have also followed this heuristic in our comparative analysis, and note that the identification of fulltime research and teaching as 'mainstream' academic work expressed in the 1999 CSHE study reveals how definitions of academic work have changed over the last ten years.

tenured staff who have undertaken a formal award in university teaching are most likely to think it has not been useful (28.3 per cent, Table 8).

Table 6: Percentage indicating that they had undertaken training in university teaching, and type of course taken by those who had undertaken teacher training. 95% CIs

	Percentage	Lower limit	Upper limit
Was a course in university teaching undertaken? (n=4914)			
Yes, within the past two years	35.4	35.4	34.1
Yes, more than two years ago	30.1	30.1	28.8
No, I have not undertaken any training	37.3	37.3	36.0
Kinds of teacher training undertaken by those who have taken a course			
A general qualification in teaching (Dip Ed, etc)	17.9	16.8	19.1
A short course covering a number of aspects of teaching	51.5	50.0	53.0
A short course on a single facet of teaching (assessment, etc)	58.2	56.7	59.6
An award course specifically in university teaching (Grad. Cert. in Higher Ed., etc)	23.7	22.4	25.0

Table 7: Percentage indicating teaching programs they had undertaken were useful or not useful to them (1st and 2nd and 4th and 5th points on 5 point Likert). 95% CIs

	Not useful	Lower limit	Upper limit	Useful	Lower limit	Upper limit
A general qualification in teaching (DipEd, etc)	16.1	13.7	18.9	70.6	67.3	73.8
A short course covering a number of aspects of teaching	16.1	13.7	18.9	70.6	67.3	73.8
A short course on a single facet of teaching (assessment, etc)	17.1	15.6	18.6	63.1	61.1	65.0
An award course specifically in university teaching (Grad. Cert. in Higher Ed., etc)	25.7	23.0	28.5	59.6	56.5	62.6

Table 8: Percentage indicating an award course in university teaching that they had undertaken was useful or not useful to them (1st and 2nd and 4th and 5th points on 5 point Likert). 95% CIs

	Not useful	Lower limit	Upper limit	Useful	Lower limit	Upper limit
Tenured	28.3	25.1	31.7	57.1	53.4	60.8
Limited term contract of at least one year	28.3	25.1	31.7	57.1	53.4	60.8
Sessional and short term	21.8	14.8	30.8	63.4	53.6	72.1

A majority of academics (74 per cent) indicated that they had undertaken training in research skills and methods during their career, with 29.5 per cent participating in training within the last two years. This is slightly lower than the percentage of academics who have undertaken teacher training in the last two years (35.6 per cent).

Respondents were asked to indicate the importance that they place on various teaching and research awards. Most (82.9 per cent) rated research fellowships that provide more time for research as important to them, with an award for excellence in research valued by slightly fewer (74.4 per cent). This difference perhaps underscores the widespread need for more time for conducting research within academics' work roles. Indeed, research fellowships are valued by large numbers of staff across the different academic career stages and work functions, as are awards for excellence in research. In contrast, fewer academics indicate that they value an award for excellence in teaching (58.7 per cent). This may be expected, given the perception that research is more highly rewarded than teaching within universities' promotions criteria. However, what is striking about these findings is that 43.3 per cent of research-only academics and 45.1 per cent of postdoctoral academics indicate that they highly value an award for teaching excellence. Although slightly fewer academics indicate that they value the other teaching awards and grants they were asked to consider, these findings reveal that some research only academics and postdoctoral staff may also

consider it important to develop their teaching profile. In addition, many teaching-only staff indicated that they highly valued research awards. These results show that many academics seek to develop their expertise beyond their position descriptions, possibly indicating that these staff wish to broaden their work roles. This suggests that sufficient motivation and incentives are present to encourage staff to develop both types of skills.

The award or grant valued by the fewest participants is a teaching fellowship focused on a contemporary learning/teaching issue (47.5 per cent). This is followed by an ALTC grant or fellowship (52.3 per cent). Teaching only academics are the most likely to consider these valuable (66.7 and 61.4 respectively).

Table 9: Importance placed on various awards and honours for teaching and research, by career stage and work function (percentages)

	Not important	Important
An award for teaching excellence		
Total	*23.4*	*58.7*
Early career	20.1	62.2
Mid career	23.9	57.2
Late career	29.7	54.4
Departmental or faculty management	24.3	61.9
Senior leadership	25.2	61.3
Research-only position	36.5	43.4
Teaching & research position	19.8	62.4
Teaching-only position	16.8	71.0
Postdoctoral position	28.8	45.1
A grant for a learning and teaching development initiative		
Total	*23.4*	*56.4*
Early career	20.4	58.7
Mid career	24.1	55.5
Late career	28.2	52.6
Departmental or faculty management	21.5	62.0
Senior leadership	16.0	61.3
Research-only position	36.8	40.3
Teaching & research position	21.6	59.0
Teaching-only position	11.5	72.1
Postdoctoral position	28.3	43.0
A teaching fellowship focused on a contemporary learning/teaching issue		
Total	*29.6*	*47.5*
Early career	25.7	49.5
Mid career	31.3	46.7
Late career	35.0	43.4
Departmental or faculty management	28.9	53.2
Senior leadership	29.9	45.3
Research-only position	41.7	33.7
Teaching & research position	29.1	48.8
Teaching-only position	13.8	66.7
Postdoctoral position	36.2	31.4
An award for excellence in research		
Total	*11.5*	*74.4*
Early career	8.8	77.1
Mid career	11.9	74.1
Late career	16.2	68.9
Departmental or faculty management	11.9	78.2
Senior leadership	13.4	71.4
Research-only position	6.2	83.3
Teaching & research position	10.7	74.9
Teaching-only position	24.7	55.9
Postdoctoral position	5.0	84.1

Table 9 continued

	Not important	Important
A research fellowship or grant that provides more time for research		
Total	*6.7*	*82.9*
Early career	6.2	83.0
Mid career	6.3	84.3
Late career	8.4	79.2
Departmental or faculty management	6.4	82.7
Senior leadership	10.9	76.5
Research-only position	4.1	87.4
Teaching & research position	5.3	84.7
Teaching-only position	17.5	65.5
Postdoctoral position	1.0	92.7
An Australian Learning and Teaching Council (ALTC) grant or fellowship		
Total	*22.1*	*52.3*
Early career	18.6	55.0
Mid career	23.0	51.4
Late career	29.5	46.2
Departmental or faculty management	19.8	59.4
Senior leadership	25.9	52.6
Research-only position	31.2	38.7
Teaching & research position	20.6	55.0
Teaching-only position	15.6	61.4
Postdoctoral position	25.0	42.5

6.
The influences on satisfaction and dissatisfaction with work and careers

> *"Much of what I value most about academic work—that is, working with ideas, generating new knowledge, and pursuing lines of inquiry for which my scholarly background best equips me—is continually undermined by the techno-bureaucratic nonsense of 'quality' audits and the farcical pretence that perpetual competition, ranking and measuring somehow produces improvements."*

Overall, Australia's academics find their work rewarding and have high levels of intrinsic interest in their disciplines. However, academics also show high levels of stress relating to their capacity to perform their academic work well in the face of changing student expectations and abilities, constraints on research funding, increased class sizes and the increasing bureaucratisation of higher education. Insecure employment is a particular problem for early career staff. The findings outlined below indicate some serious challenges for the future management of the academic workforce: for many staff, the balance between their satisfaction with scholarly pursuits and the pressures of time and a paucity of funding impeding those pursuits, is weighted against the quality of research and teaching they aspire to achieve.

These pressures are understandable in light of the achievements made by the sector in the face of some challenging environmental factors, including: higher education moving to the nation's fourth largest export industry; a rapid expansion in participation increasingly funded from private revenue; a sustained rise in student-staff ratio, from 12:1 to 20:1 over the last 15 years (Universities Australia 2006); increased participation by international students, which has required reconceptualisation of pedagogies and intensive support; as well as the integration of new technologies into mainstream teaching and learning practices. Despite these challenges, productivity has been increasing: Centre for the Study of Higher Education research into the first year experience in 2004 and 2009 has shown a marked and sustained improvement in student perceptions of the quality of teaching (James, Krause and Jennings 2010), and Australian universities have held their own overall, if not advanced, in some of the international research ranking schema.

It may be, however, that the academic workforce is reaching its capacity to 'do more with less.' Only 20.8 per cent of early career staff, 14.2 per cent of mid career staff and 12.9 per cent of late career staff believe the higher education sector seems to be heading in the right direction. In other words, those with the least experience of academic work were the most likely to think that the sector is heading in the right direction. The belief that government is broadly supportive of the sector also appeared to decrease with length of career (Figure 14, below).

Figure 14: Percentage of early, mid and late career academic staff agreeing with propositions about the higher education sector (error bars are 95% CIs).

The questionnaire invited participants to indicate the extent to which they agreed with a large bank of statements probing their satisfaction with a variety of aspects of their work. Their responses are divided into the broad themes of Teaching Environment, Research Environment, Working Conditions and Broad Views, below. Particular attention is given to the substantial variations found between the views of early career (7 or fewer years), mid career (8-20 years) and late career (more than 20 years) staff. The findings from this data-dense part of the survey are reported in point form below, and in full at Appendix 2.

Teaching environment

- Overall, two-thirds of academics express concern about the changing expectations of students. The proportion is much higher among later career academics (72.9 per cent) than early career academics (62.3 per cent).
- 60.4 per cent of academics indicate that they spend too much time teaching basic skills due to student deficiencies.
- Just under half of academics are of the view that academic standards have fallen (46.7 per cent). This view is slightly stronger among late career (54.3 per cent) and mid career academics (49.5 per cent), compared with early career academics (39.4 per cent).
- Academics are divided on the extent to which class sizes are manageable, with 44.1 per cent indicating that they are, and 32.7 per cent that they are not. Similarly academics are split on whether they have the time to teach well, with 36.8 per cent indicating that they do, and 36.0 per cent that they do not.
- 54.2 per cent of academics believe good teaching is valued at their university. However, a substantial 24.6 per cent of academics do not believe teaching is sufficiently valued.
- Late career academics are much less comfortable with the role of IT in their teaching; with 39.9 per cent believing IT-based teaching activities take up too much of their time, compared with 26.9 per cent of early career academics.
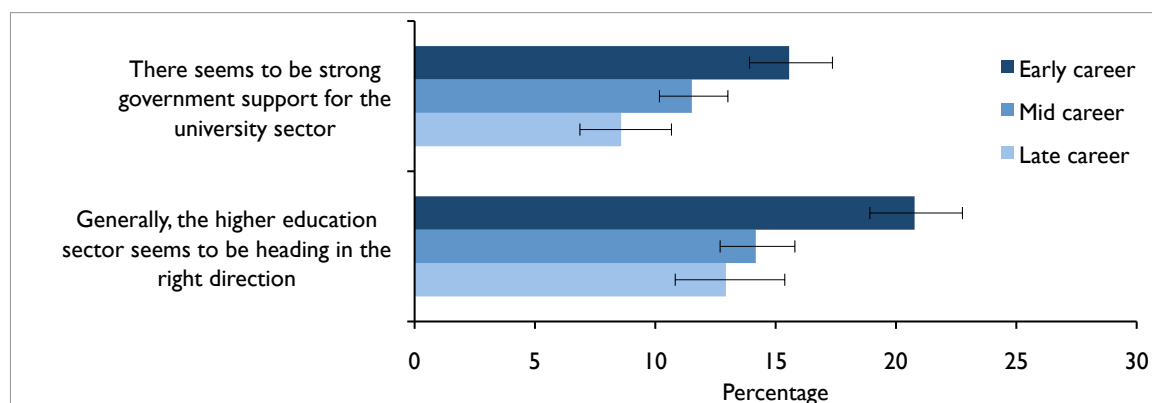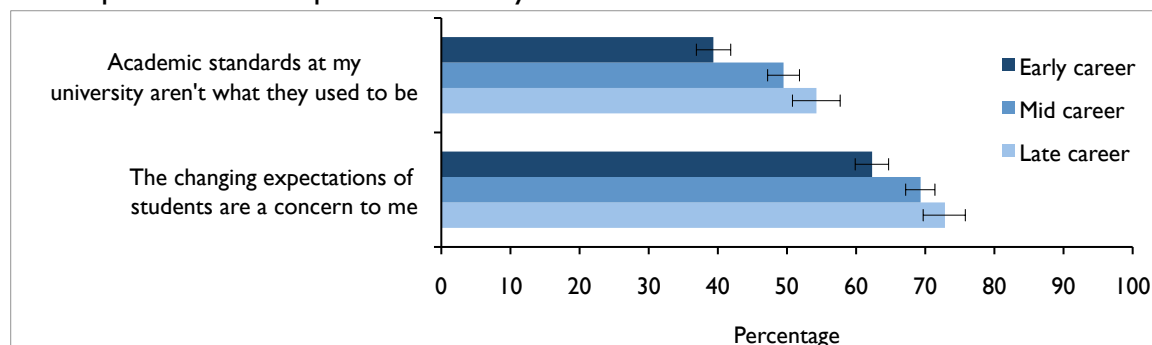

Figure 15: Percentage of early, mid and late career academic staff agreeing with propositions about standards and students (error bars are 95% CIs).

Research environment

- Half of academics surveyed (49.1 per cent) are not confident that they can get research grants, while 28.4 per cent are confident of securing research grants. Similarly, 65.5 per cent do not believe levels of grant funding are adequate, and only 12.4 per cent agree that they are adequate. Between 16 and 17 per cent of mid and late career academics agree that they have enough time for research in comparison with 29.7 per cent of early career academics. 61.5 per cent of academics agree that they have freedom to pursue their own research interests. 42.5 per cent of academics do not believe that they have adequate opportunities to do basic 'blue sky' research, compared with 30.3 per cent of academics who believe that they do have adequate opportunities. Those in the sciences are the most likely to indicate that they have sufficient opportunity to undertake basic or blue-sky research (41.6 per cent) and those in architecture and education the least likely to believe that this is so (18.0 and 18.4 per cent respectively). This group of findings suggest that while the kinds of research projects academics undertake are not constrained by outside forces (i.e. they have 'freedom' to choose their projects), they are constrained by time and funding.
- Only 20.3 per cent of academics believe that there is sufficient time available for their scholarly writing, however, 59.0 per cent are confident that they could publish in good journals.
- Early career academics are a little more likely to think that, overall they find their academic work rewarding (74.7 per cent) than are mid and late career academics (69.8 and 68.5 per cent).
- Career stage is an important factor in the extent to which academics believe that it "is not a good time for any young person to aspire to an academic career in my discipline." The findings indicate that 56.3 per cent of late career academics, 49.5 per cent of mid career and 38.9 per cent of early career academics this that it is not a good time to begin an academic career. The 1999 CSHE study found that 61 per cent of academics believed that it was not a good time for a young person to aspire to an academic career in their discipline, so there appears to have been a small improvement in academics' perception of the attractiveness of the profession.
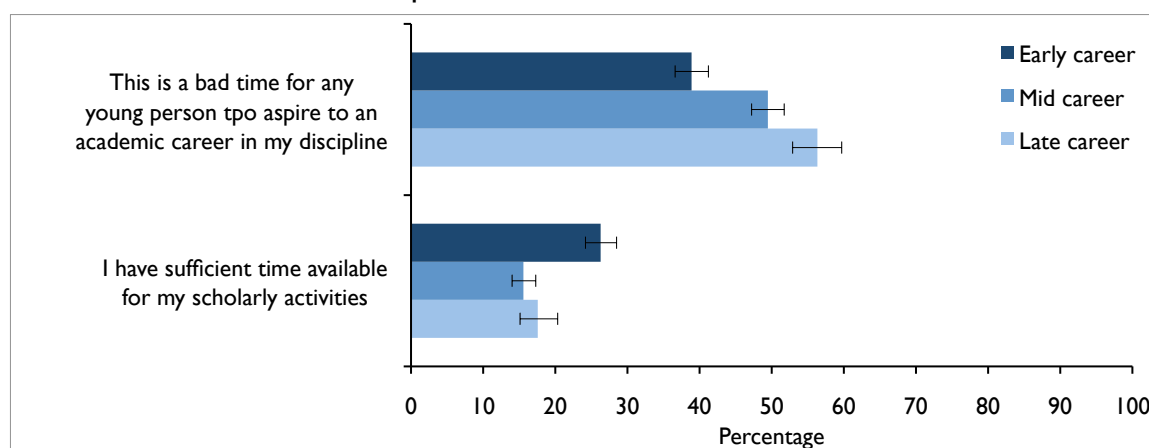
Figure 16: Percentage of early, mid and late career academic staff agreeing with propositions about the academic environment (error bars are 95% CIs).

Many of the open comments responding to a question about the least satisfying aspects of academics' work focus on frustrations with the current research funding system and institutional research culture. These include the difficulty of undertaking blue-sky research, paucity of funding opportunities and the way different forms of research output are rewarded:

"[I want to leave higher education because,] ironically, I would like to be in a position where I can do some independent writing and research. Anywhere other than a university would therefore be preferable."

"There is more pressure to tailor research towards applied outcomes, and a rush towards such outcomes at the expense of basic research. There is less and less tolerance for doing the careful background work in data collection and preparation at the expense of churning out half finished research that is dressed up to be publishable. This sells the research short."

"[There is a] lack of value attached to important forms of academic endeavour which do not 'count' under ERA processes. For example, publishing a journal article counts; but being an Editor of a journal, or refereeing for a journal does not. Eventually, self-interest will erode collegial behaviour and professional engagement."

Work conditions

- There is not a great deal of positive sentiment toward the internal environment of institutions, with 40.9 per cent indicating that they do not think they can speak out on matters of university policy, and 33.5 per cent who believe they can. There is of course some variation between institutions in response to this question. Negative responses ranged between 32.5 and 58.6 per cent by institution, and positive responses between 22.0 and 40.9 per cent. Senior academics are more likely to believe that they can speak out.

- Over half of mid and late career academics *do not* believe that their overall workload is manageable (57.3 and 56.1 per cent), along with 36.9 per cent of early career academics. A similar proportion of early career academics believe that they *do* have a reasonable workload (39.5 per cent), compared to only 24.5 and 27.8 per cent of mid and late career academics.

- Early career academics are somewhat more likely to think that they have a good work/life balance (44.7 per cent) than to think that they do not (34.7 per cent), while around half of mid and late career academics disagree (49.8 and 48.7 per cent). Only 27.2 per cent of mid career academics and 30.2 per cent of late career academics think that they have a good work/life balance.

- Over half of mid and late career academics believe they undertake an unreasonable amount of administrative work (53.4 and 53.2 per cent), compared with just over one third of early career academics (37.1 per cent).

- Job security is a particular problem for early career academics, with 57.9 per cent disagreeing with the proposition that they have good job security. Frustrations with job security for early career academics were a strong theme throughout the survey, and were a common feature in open comments, discussed further below. However, 61.1 per cent of late career academics believe that they have adequate job security.

- Around half of mid and late career academics indicate that their work is a source of considerable personal stress (49.5 and 47.8 per cent), compared with 38.2 per cent of early career academics. Overall, 44.6 per cent of academics indicated that their work is a source of considerable personal stress; for the 1999 CSHE study this figure was 56 per cent, so there has been some improvement, though this has been off a high base.

- Despite this, over half of mid and late career academics indicate that they are, generally speaking, satisfied with their work (54.1 and 55.2 per cent). Early career academics are even more likely to be satisfied, at 62.2 per cent. Overall, 57.6 per cent indicated satisfaction with their work; for the 1999 study, 51 per cent indicated satisfaction, and an earlier, 1994, CSHE study found 67 per cent were satisfied with their work (McInnis 1996).

- Only 39.9 per cent of academics are satisfied with their level of income, ranging from 34.6 per cent of early career academics to 55.2 per cent of late career academics.

- Around half of academics (51.3 per cent) believe they have autonomy and control over their working lives.
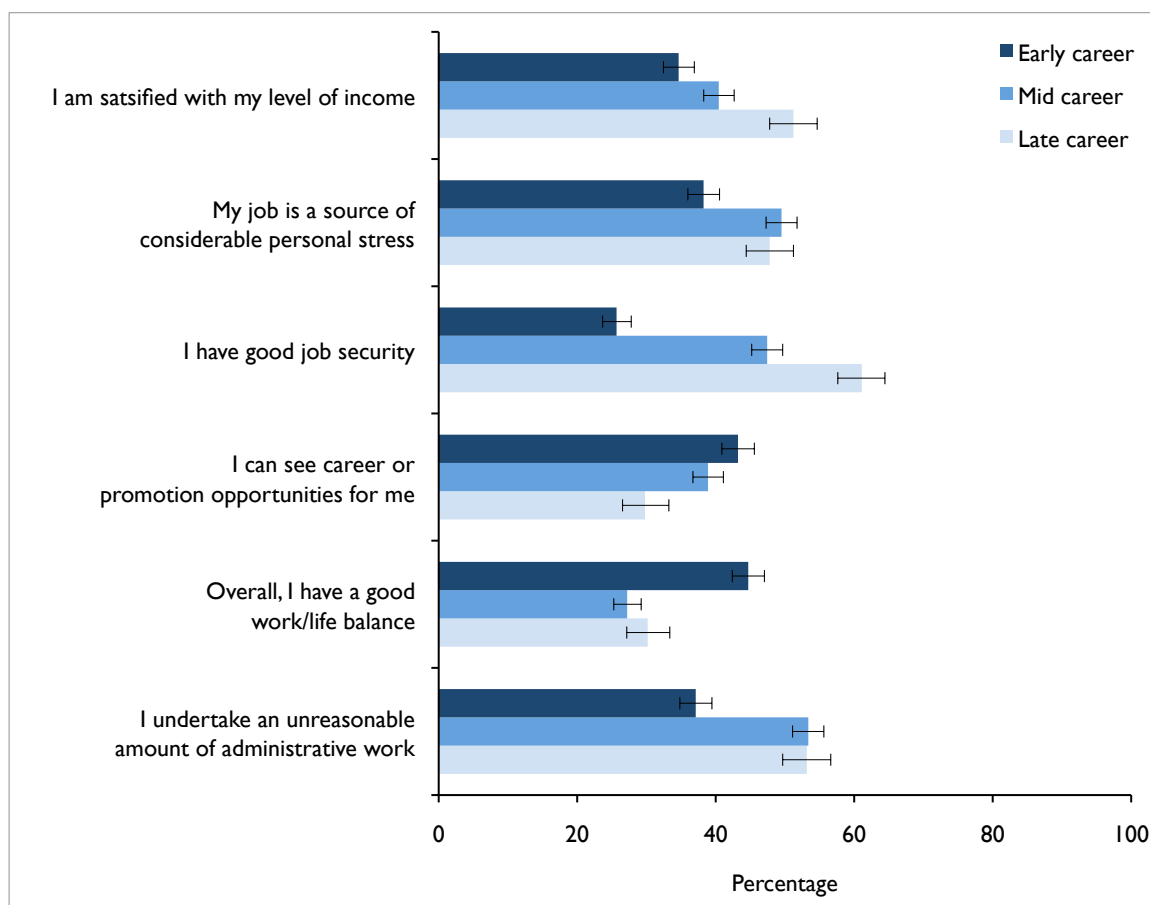
Figure 17: Percentage of early, mid and late career academic staff agreeing with propositions about their work conditions (error bars are 95% CIs).

Balancing the diverse demands of academic work

The findings above show that a number of academics are finding their work roles, and workload, challenging. Respondents were asked to provide open-ended comments about the aspects of their work that they found the least satisfying. Many of these comments are focused on the difficulty of balancing responsibilities as teachers, researchers and colleagues. The following comments typify those on workload:

> *"The job hours are on average 70 hours a week and I usually work one or both days each weekend. At the moment it is Saturday night at around 7pm and I am fully engaged in work, about to read one of my PhD students' theses, and this will go on until at least midnight. A very typical weekend."*

> *"We have intensified teaching and bureaucratic responsibilities while our performance is assessed predominantly on research output. At a time when research is increasingly demanded and recognised through measuring units of output, this has the effect of creating enormous anxiety, pushing people to do 'rapid' research that therefore results in perhaps more research outputs (numerically) but the quality of these is highly compromised. As a worker I find this a very unhappy and unrewarding experience.*

> *"As a standard research and teaching academic there is not the time to conduct both teaching and research to the high level you would wish. Both are compromised by high workloads, time spent chasing and applying for small amounts of research funding, and a high level of administration (endless paperwork)."*

The views of early career academics

"I have virtually no control and limited autonomy in my current position (lecturer level B), there is minimal support from management and permanent staff numbers are so low, collegiality is challenging. Income is one of the lowest in the university sector. We are so overloaded with administrative work and marking that there is little time left over for truly intellectually stimulating work."

Early career academics are of particular relevance to this project, for they represent the future of the academic workforce and are the group who will be central to the provision of higher education and research as the Baby Boomers reach retirement. Early career academics have perspectives on academic work and careers that are quite distinct from their older colleagues, and these views warrant consideration.

Compared with mid- and late career academics, early career academics are:

- Less concerned by student expectations and deficiencies than other academics;
- More likely to believe their class sizes are manageable and that they have the time to teach well;
- More positive about the academic standards of their universities;
- More likely to believe that their workload is reasonable and that administrative demands are reasonable;
- Much more likely to indicate that they have a good work/life balance;
- Less likely to find their work stressful;
- More likely to be generally satisfied with their work;
- Somewhat more likely to find their work rewarding;
- Less concerned with the impact of it-based activities on their time.

However, early career academics are *much less likely* to be satisfied with their income and job security: 40.6 percent of early career academics are dissatisfied with income, compared with 28.4 per cent of late career academics; and 57.9 per cent of early career academics are dissatisfied with their job security, compared with 23.6 per cent of late career academics.

Early career academics are also less likely to feel that they can speak out on matters of university policy. Despite this, they are less likely than later career academics to think this is a bad time for a young person to aspire to an academic career, and more likely (although still at low levels) to think that the sector is heading in the right direction.

As shown in the previous section, young academics are by far the most likely to be intending to leave the higher education sector, or to move to an overseas university. Thus, while their general satisfaction with academic life is high, the equally high levels of dissatisfaction with job security, institutional context and income may impinge on the ability of universities to attract and retain younger, early career academics.

Within the group of early career academic staff dissatisfied with their income and job security, those on short-term or casual contracts show the highest levels of dissatisfaction. Relative levels of satisfaction with various aspects of academic work for casual and short term contract early career academics, and long term contract and tenured early career academics, are illustrated in the figure below.
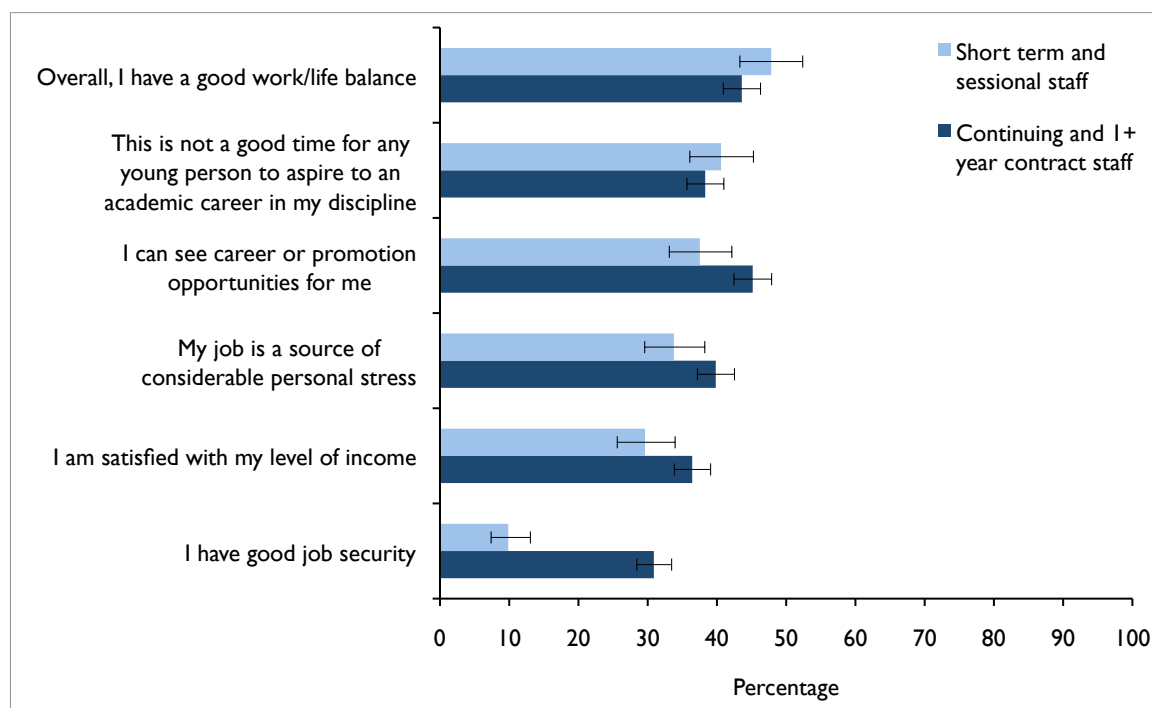
Figure 18: The views of early career staff (those working in higher education for seven or fewer years). Short-term and sessional staff, and continuing and long contract staff (error bars are 95% CIs).

7.
Casual/sessional academics and those on short-term contracts

> *"I received three commendations for excellence in teaching in my time, but there were no opportunities for me to move beyond casual work. I was lurching from contract to contract and filling out time sheets. I had better working conditions at my first job at Hungry Jacks."*

The study asked targeted questions of the 622 casual and sessional academics and 181 short-term contract staff in relation to various aspects of their work and employment arrangements. The persistent theme stressed repeatedly by these academics in the open comments is the need to offer improved job security, especially for academics who are effectively working as ongoing employees of their institutions.

Sessional academics

Demographic characteristics

Little is known about Australia's sessional academic workforce. Exact figures on the numbers of sessional academics employed by universities are not kept by DEEWR, and the characteristics of sessional and casual academics are therefore unavailable. A number of institutions who took part in the survey do not keep a database of sessional academics and were only able to provide email addresses for invitations to participate based on recent payroll record. Others could not isolate sessional academics at all. The demographic characteristics for survey participants who work in a sessional or casual capacity, tabulated below, are therefore both valuable and somewhat problematic. They provide a rare snapshot of the sessional academic workforce, though we do not have reliable population-level data against which to benchmark the findings.[2]

Almost two-thirds of the sessional academics surveyed were female, and just over two-thirds were born in Australia. While most were at Level A (64.6 per cent) many were at more senior levels. Almost two-thirds (63.9 percent) were in teaching only positions. There was a large spread of age groups, with more than half over the age of 40. Only 48.9 per cent were currently studying: far less than fits the often prevalent assumption that most sessional academics are HDR students.

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[2] Confidence intervals, and similarly evaluations of statistical significance, presuppose a random sample with a normal distribution. Due to the difficulties in administering the survey to sessional staff, outlined above, we cannot be confident that the sessional sample is truly random. These data should be treated as indicative only and interpreted with caution.

Table 10: Characteristics of surveyed sessional academics.

Characteristic		Sample %	Upper limit	Lower limit
Sex	Female	63.7	59.7	67.5
	Male	36.3	32.5	40.3
ATSI	Yes	1.3	0.7	2.6
Place born	Australia	67.0	63.2	70.6
	Overseas	33.0	29.4	36.8
Age group	20-29	22.2	19.1	25.7
	30-39	20.9	17.8	24.3
	40-49	24.7	21.5	28.4
	50-59	20.9	17.8	24.3
	60+	11.2	8.9	14.0
Highest qualification	Bachelor	23.5	20.2	27.0
	Masters	35.5	31.8	39.4
	Other postgraduate	18.1	15.2	21.4
	PhD	22.9	19.8	26.5
Currently studying	No	51.1	47.1	55.1
	Yes	48.9	44.9	52.9
Course	Bachelor	3.5*	1.9	6.4
	Masters	13.5*	10.0	18.0
	Other postgraduate	10.6*	7.6	14.8
	PhD	72.3*	66.8	77.2
Position	Teaching only	63.9	59.9	67.7
	Teaching and research	26.4	23.0	30.2
	Research only	7.1	5.3	9.5
	Postdoctoral	2.1	1.2	3.6
Years in position	< 1 year	13.6	11.0	16.8
	1 year - 23 months	24.2	20.8	28.0
	2 years - 35 months	15.3	12.5	18.6
	3 years - 47 months	13.6	11.0	16.8
	4 years - 59 months	6.5	4.7	8.9
	5 - 9 years	17.1	14.2	20.5
	10+ years	9.7	7.5	12.5
Level	Level A	64.6	59.9	69.0
	Level B	27.2	23.2	31.7
	Level C	4.1	2.6	6.5
	D and above	4.1	2.6	6.5
Field	Agriculture etc.	2.1	1.2	3.6
	Architecture and building	2.4	1.4	4.0
	Creative arts	10.4	8.2	13.2
	Education	13.2	10.7	16.2
	Engineering etc.	3.8	2.5	5.6
	Food, hospitality etc.	0.7	0.3	1.7
	Health	17.5	14.6	20.8
	Information technology	4.6	3.2	6.6
	Management and commerce	14.6	11.9	17.6
	Mixed field programs	0.2	0.0	1.0
	Natural and phys. sciences	7.9	6.0	10.3
	Society and culture	22.8	19.6	26.3

* Note: Proportions for qualification currently studying is of the group studying only. N=282

Type of work undertaken

The most common forms of work undertaken by sessional academics are tutoring (79.9 per cent) and lecturing (55.0 per cent), and a substantial proportion also have a teaching coordination role (19.1 per cent).

Table 11: Types of work undertaken by sessional academics. (Participants were invited to indicate as many areas as appropriate.)

What kind of work do you do?	Sample %	Upper limit	Lower limit
Tutoring/small group teaching	79.9	76.6	82.9
Demonstrating/practical teaching	27.7	24.3	31.3
Clinical teaching	6.9	5.2	9.2
Student support	19.8	16.8	23.1
Lecturing	55.0	51.1	58.9
Research	38.3	34.5	42.1
Coordination of teaching	19.1	16.2	22.4

The primary theme that is repeated throughout the open comment sections by sessional academics was the desire for more secure employment conditions. These claims are supported by the nature of the contracts participants reported holding, with 64.0 per cent indicating that their sessional work was comprised of a reasonably regular series of short term contracts. For reasons not clear from this study, these effectively 'continuing' academics are clearly not offered more stable, long-term contracts. Only 18 per cent reported their work to be irregular or sporadic one-off contracts, and another 18 per cent reported their work being on an occasional hourly basis.

Reasons for sessional work

The largest response group (21.3 per cent), indicate that they work in a sessional capacity because no ongoing academic positions are available to them, and another 18 per cent that they are undertaking this kind of work to prepare for an academic career. 20.1 per cent said that they use sessional work as a source of income while studying. Again, these findings contradict many prevalent assumptions about sessional academics as young HDR students supplementing scholarship income.

Table 12: Types of work undertaken by sessional academics. (Participants were only able to choose one response.)

What is your *main* reason for your current employment arrangements?	Sample %	Upper limit	Lower limit
Another professional development reason	1.5	0.8	2.8
As a contribution to my profession/discipline	10.6	8.4	13.3
Earning an income while studying	20.1	17.1	23.5
Employment of this kind just suits me	10.8	8.6	13.5
Moving into retirement	2.1	1.2	3.6
No ongoing academic career options are available	21.3	18.2	24.7
Supplementing income from other work	4.1	2.8	6.0
Personal and family reasons	6.5	4.8	8.8
Preparation for an academic career	18.0	15.2	21.2
Staying in touch with developments in my field	2.1	1.2	3.6
Other	2.8	1.7	4.4

In open comments, sessional academics typically speak of the difficulty in making the transition from sessional work to an ongoing academic career. For sessional academics, lack of job security is not just about being able to plan a meaningful career path, but about the lack of constancy of the work, and the stress this puts on finances and personal life plans:

"Working as a sessional, I cannot commit myself fully to an academic career, although I want to. I've been teaching the same curriculum for 4 years and have won awards for it, and yet I still rely on student numbers to find out how much I'll be earning from semester to semester."

"It's very difficult to maintain a collegial environment in a sessional "walk in walk out" arrangement. Can't really access any uni support for research, writing and publishing as a sessional. No ability to supervise as a sessional. NO job security at all as a sessional. I am told only weeks out from classes starting whether I am to be the person teaching that semester or not."

"I am glad to have had the chance to work as a sessional lecturer so soon after completing my PhD, but I feel stalled in my career. I want very much to have a continuing position, where I can start to plan for longer-term projects and promotion, and feel that I am part of the community of the institution."

"I feel largely invisible and unacknowledged, much as a plumber coming in to change a washer and leave."

Short-term contract academics:

Demographic characteristics

Academics on short-term contracts (limited term contracts of less than one year) are very likely to hold a PhD (63.1 per cent) and unlikely to be concurrently studying (20.3 per cent). Half of the academics on short-term contracts are over 40 years of age. More than one in five have been in their current position for over five years. This group, then, seems to encompass many of the 'lost generation' of academic staff: those who have become academics during the past 15 years, and have not been able to secure a tenured position.

Table 13: Characteristics of academics on limited contracts of less than one year (95% CIs).

Characteristic		Sample %	Upper limit	Lower limit
Sex	Female	58.0	50.5	65.2
	Male	42.0	34.8	49.5
ATSI	Yes	2.3	0.9	5.8
Place born	Australia	61.4	54.0	68.2
	Overseas	38.6	31.8	46.0
Age group	20-29	13.5	9.1	19.4
	30-39	35.7	28.9	43.1
	40-49	21.1	15.6	27.8
	50-59	20.5	15.1	27.1
	60+	9.4	5.8	14.7
Highest qualification	Bachelor	9.7	6.1	14.9
	Masters	15.9	11.2	22.0
	Other postgraduate	11.4	7.5	16.9
	PhD	63.1	55.7	69.8
Currently studying	No	79.7	73.1	84.9
	Yes	20.3	15.1	26.9
Course	Bachelor	3.1*	0.6	15.7
	Masters	9.4*	3.2	24.2
	Other postgraduate	18.8*	8.9	35.3
	PhD	68.8*	51.4	82.0
Position	Teaching only	21.6	16.2	28.2
	Teaching and research	25.0	19.2	31.9
	Research only	42.0	35.0	49.4
	Postdoctoral	9.7	6.1	14.9
Years in pos.	< 1 year	25.8	19.7	33.0
	1 year - 23 months	23.3	17.5	30.4
	2 years - 35 months	12.9	8.6	18.9
	3 years - 47 months	11.7	7.6	17.5
	4 years - 59 months	4.3	2.1	8.6
	5 - 9 years	14.1	9.6	20.3
	10+ years	8.0	4.7	13.2
Level	Level A	43.9	36.6	51.4
	Level B	38.6	31.6	46.1
	Level C	12.3	8.2	18.0
	D and above	5.3	2.8	9.7
Field	Agriculture etc.	7.4	4.4	12.3
	Architecture and building	0.6	0.1	3.2
	Creative arts	1.7	0.6	4.9
	Education	5.7	3.1	10.2
	Engineering etc.	3.4	1.6	7.3
	Food, hospitality etc.	0.6	0.1	3.2
	Health	29.1	22.9	36.3
	Information technology	3.4	1.6	7.3
	Management and commerce	6.9	4.0	11.6
	Mixed field programs	0.6	0.1	3.2
	Natural and phys. sciences	26.3	20.3	33.3
	Society and culture	14.3	9.9	20.2

* Note: Proportions for qualification currently studying is of the group studying only. N=282

Type of work undertaken

Over 80 per cent of the academics on short-term contracts undertake research, and nearly half lecture. An even greater proportion of short-term contract academics (76.8 per cent) than of casual academics indicate that their work is essentially ongoing: a reasonably regular series of short-term appointments. Again, these data point to this group being the so-called 'lost generation': generally PhD qualified, continuously employed, research active academic staff also undertaking lectureships who, while otherwise fitting the profile of the 'traditional' academic, are on short-term contracts with little job security.

Table 14: Types of work undertaken by academics on limited contracts of less than one year (95% CIs). (Participants were invited to indicate as many areas as appropriate.)

What kind of work do you do?	Sample %	Upper limit	Lower limit
Tutoring/small group teaching	41.8	34.8	49.2
Demonstrating/practical teaching	18.6	13.6	25.0
Clinical teaching	6.2	3.5	10.8
Student support	20.3	15.1	26.9
Lecturing	47.5	40.2	54.8
Research	80.2	73.7	85.4
Coordination of teaching	22.6	17.1	29.3

Table 15: Patterns of employment for academics on limited contracts of less than one year (95% CIs). (Participants were invited to indicate as many areas as appropriate.)

What best describes your employment arrangements?	Sample %	Upper limit	Lower limit
A reasonably regular series of short term contracts	76.8	69.8	82.5
Irregular or sporadic one-off contracts	21.4	15.9	28.2
Occasional work on an hourly basis	1.8	0.6	5.1

Reason for short-term contract work

Nearly half of those on short-term contracts undertake contract-based work because there are "no ongoing academic career options are available," and 14.6 per cent are undertaking short-term contract work as a preparation for an academic career The next most common response (14.6 per cent) was that they saw this kind of work as preparation for an academic career. Only 7.3 per cent indicate that they undertake this kind of work because it suits them.

Table 16: Types of work undertaken academics on limited contracts of less than one year (95% CIs). (Participants were only able to choose one response.)

What is your *main* reason for your current employment arrangements?	Sample %	Upper limit	Lower limit
Another professional development reason	3.9	1.9	7.9
As a contribution to my profession/discipline	7.9	4.7	12.8
Earning an income while studying	3.9	1.9	7.9
Employment of this kind just suits me	7.3	4.3	12.1
Moving into retirement	2.2	0.9	5.6
No ongoing academic career options are available	47.2	40.0	54.5
Supplementing income from other work	0.6	0.1	3.1
Personal and family reasons	3.9	1.9	7.9
Preparation for an academic career	14.6	10.2	20.5
Staying in touch with developments in my field	2.8	1.2	6.4
Other	5.6	3.1	10.0

A large proportion of those on contracts of less than one year indicate that their job is a source of considerable personal stress (44.9 per cent). This was similar to the proportion of other academics (47.1 per cent), but much higher than for sessional academics (29.4 per cent).

Through the open comments, academics provide insight into the effects short-term contracts, particularly in research, are having on their work and personal lives. The following comments are typical:

> *"I've raised over AU $5 million over the past 5 years, published in international high impact journals, built an excellent international reputation. I currently have a multimillion-dollar grant. And I have a 2 month contract."*

> *"Very, very minimal job security in research work, especially in a university setting (as institutes will generally have some charity money to 'tide' a lab over until a new grant is secured). If a group is unsuccessful in grant applications, the whole group is gone – up to 20 people. Individually, each person is on contracts so it is hard to plan life from year to year. Too much pressure."*

> *"There is disparity between the long term commitment that I am obliged to give to my academic supervisors so that their research goals can be achieved and their reluctance to secure my employment with them by providing me with a longer term contract."*

> *"Constant concern about where my next parcel of funding will come from… Not having a continuing position and about to have second child, I am facing the impossibility of continuing as an academic at my current level. This means I am likely to have to leave the sector altogether, despite being highly skilled, trained and competent. The universities seem quite happy with this situation as it has been this way for well over a decade."*

Implications of the findings on sessional and short-term academics

Short-term and sessional academics do not fit the profile that is commonly assumed: young postgraduate students earning a living while studying. Many short-term and sessional academics are already PhD qualified, and many work in roles that are ongoing in all but name. Nor are they predominantly young people, who may expect a period of insecure employment before moving into more permanent positions. Over half are aged over 40, and are therefore likely to have families and other adult responsibilities.

While the flexibility offered to employers by casual and short-term contracts is in many instances an advantage, the evidence here points to an overuse of these forms of employment. Earlier sections of this report outlined levels of dissatisfaction with job security and income experienced by early career academics, and the propensity for these academics to consider moving to an overseas institution or out of higher education in Australia. The lack of job security and dissatisfaction with remuneration indicated by short-term and sessional academics explain why this 'lost generation' of academic staff, who undertake traditional academic work without the usual benefits of job security and the ability to plan a meaningful career, consider leaving.

8.
The views of academics on replenishing, developing and maintaining the academic workforce

> *"In my school several good and promising colleagues have left over the past few years because of their disenchantment with woeful faculty-level management, and oppressive managerial interventions into the teaching programme. Fixing the management culture of this institution is the single factor that would be most useful. We recruit good people, but management sometimes drives them away."*

Respondents were asked to offer their views regarding how universities could replenish, develop and maintain the academic workforce. About a third of the responses refer to the more obvious solution of increasing funding to universities in order to employ more academic staff, decrease workloads, increase salaries and offer better job security. Around five per cent of the respondents indicate that the matter is too complex and difficult to address. The remaining comments focus on issues concerning institutional recognition and support for the diverse work roles and career development needs of academic staff.

Many of the academics' comments clearly reflect the diversity of academic work roles and responsibilities. Comments such as "we can't all be expected to do everything" reveal the frustration that many academics feel about aligning their academic roles within a one-size-fits-all model of academic work. It was clear that very few academics believed that they can balance the teaching/research/administration roles to the level that is expected within their universities. Typical comments included:

> *"Respect the fact that we are not all equally able to attract funds, conduct research, supervise young researchers, teach at the highest level, be administrators and actively participate in many meetings. Treat us as individuals, each of whom has something to offer."*

Many academics stated that universities can do more to recognise the different contributions of academic staff. This word, 'recognition', featured many times in the responses. The term is used by respondents not only to highlight the need for recognition of diverse work roles within universities' promotion processes, but also recognition in terms of creating a more collegial work environment within departments/schools/faculties. Many of the comments from academics focus on increasing mentoring opportunities for early career researchers, to support them in remaining within the profession and developing their careers. The following quote is typical of the comments made:

> *"There must be recognition that it takes time to find one's feet in the system and when the teaching expectation … is unreasonable, it is impossible for [early career academics] to feel the satisfaction of doing a good job teaching or to maintain any real focus on research possibilities… Getting large grants requires a track record of smaller publications and grants, and there is zero room allowed for this in the [early career academics] workload. There is a real paradox in that universities say that they reward research, but carry on (at least in the case of my department in my school) a culture that offers little support for building a research career and offers an unrealistic teaching load in order to keep costs down and bring in money from students."*

In addition, many academics state that there are few opportunities for them to discuss and plan their careers with their departmental heads. Some indicate that they have not taken part in any academic performance reviews in their current workplace. Others emphasised the importance of professional development to improve managers' skills in mentoring and developing academic staff, and in particular managing the different phases of an academic career:

> *"Must develop management's skills in performance and professional development of staff - individuals just have to work it out for themselves and hence when it comes to promotion time they have a poor plan in place to actually achieve it."*

> *"Promoting people with good research/teaching skills into management roles without providing adequate support and training, creates problems for them and their staff."*

By far the strongest comments are reserved for management of universities. Academics indicate that over-managerialism in universities has resulted in low morale within the academic workforce. There is a perception that universities have lost sight of the main game – with many academics expressing their frustration that increased time spent on administrative tasks for accountability and auditing purposes means that they have less time available for their academic work. Typical comments include:

> *"Academics are expected to do more and more of the day-to-day administration that is frustrating and draws significant amounts of time away from our real work and duties in academia."*

> *"Improve leadership and management at all levels; consider whether the high number of senior bureaucrats is needed so that more resources flow to the teaching and research coalface."*

> *"Management systems need to be restructured - management needs to conceive of itself as serving the academic community, not monitoring it."*

In order to redress this, many academics suggested that universities could restructure work practices, so that professional staff can undertake more administrative duties, where appropriate, allowing more time for academics to focus on their academic work.

The views of sessional academics

> *"Support the young academics it already has - give PhD students and newly graduated PhDs more training in skills they will need (like teaching), and make opportunities and support available for them to gain academic employment. It's hard to get an academic job without a good record of publications and teaching experience, but it's very hard to develop those things without getting academic employment!"*

The comments from casual and sessional academics on how to best develop, maintain and replenish the academic workforce focus on three key areas:

- Provide more secure employment for sessional academics, especially those who are effectively ongoing employees of the institution.
- Find ways to reward good teachers just as good researchers are rewarded, and respect the strengths that academics with different skills bring to their work.

- Provide early career academics with mentoring, training in skills such as grant writing, and give them some certainty of continued, or at least medium-to-long term, employment.

The impact of job insecurity on academics, in terms of stress, inability to apply for grants and conference opportunities, and the difficulty of planning and making basic life decisions, are by far the most common theme in the open comments of sessional academics. Typical comments include:

> *"As a sessional tutor and marker I have little autonomy or control over working life and I have no job security whatsoever. I only have work for approximately six months each year and often have to wait until classes have almost started to know whether I have any work or not. When I have work, I work many hours a week and yet only earn a part-time income. The uncertainty, exploitation and poor income have driven me to train in another profession."*

Comments often compare the low rate of pay compared with other employment options:

> *"I earn more working as a nurse working on the ward, and the uni is paying me 'casual rates'!! I feel like I am doing my charity work for the week. I'm working for love, certainly not the money! What I earn for two casual days, I could make in one nursing shift."*

When sessional academics comment on how their university views them and their work, words such as "disrespected" and "dispensable" are often used. Many academics refer to the lack of loyalty their institution shows to them as an employee, while demanding unpaid marking and overtime, constant availability to students outside of paid work days, and waiting for work during breaks from semester to semester. Comments include:

> *"The lack of job security and satisfactory income, lack of supportive and collegial environment are all disappointments for me in the academic milieu. Even though the people I work with closely are wonderful, the university rhetoric does not match my experience."*

In addition, some believed that universities could reward sessional academics more for their work in teaching and research:

> *"I've worked as casual academic for ten years with the same university - Since my position is not permanent superannuation is at a mere 9% due to this status of 'casual' staff. The major gap is that the research I do is not funded and for the papers of mine that are published I get no financial reward while the university itself is rewarded. Unfair situation - not even a lump sum."*

Many of the comments from sessional academics mirrored the concerns of academic staff in general, namely the need for more and better mentoring and career development.

9.
Possibilities for replenishing and strengthening the academic workforce

On most measures, Australia's academic community has been highly productive and impressively adaptive during the past 10-15 years. Much has been achieved. Higher education has been built into the nation's fourth largest export industry. Academics have successfully grappled an expansion in participation not fully funded from public revenue and the consequences of a dramatic rise in student-staff ratio, from 12:1 to 20:1 over the last 15 years (Universities Australia 2006). Increases in the number and proportion of international students have necessitated a reconceptualisation of pedagogies and intensive support. The academic community has also undertaken a transformation of approaches to teaching and learning, centred on the integration of new technologies for learning, and in a number of universities curricula have been substantially overhauled.

Australian universities have quite effectively 'done more with less'. For academics, this overused cliché has some substance. By any measure, productivity has increased despite the challenges of increased participation and fluctuations in funding levels (Universities Australia 2011). There is little evidence, for example, of any decline in the quality of teaching and learning despite the rise in the student-staff ratio. In fact, the opposite may be the case. Efforts across the higher education sector to enhance teaching and learning and the student experience appear to have had positive effects. Centre for the Study of Higher Education research into the first year experience in 2004 and 2009 has shown a marked and sustained improvement in student perceptions of the quality of teaching when compared with the more negative attitudes of the 1990s (James, Krause and Jennings 2010). Equally, on the research front, Australian universities seem to have maintained high quality output. For example, they appear to have held their own overall, if not advanced, in some of the international research ranking schema, putting aside the imperfections of the metrics used. Australia's aggregate performance in the 2010 Shanghai Jaio Tong University's Academic Ranking of World Universities (ARWU), for example, improved slightly over that of 2009 and a number of universities made major advances in their individual positions in the rankings.

However, these achievements may have been won at the expense of nurturing the nation's long-term capacity for higher education teaching and research. This study reveals significant challenges for the Australian academic workforce. Three issues stand out: first, anticipated retirements, career changes and possible overseas departures suggest a major shortfall in supply may be imminent if sufficient new staff are not employed. Second, an extended period of casualisation of academic employment (in research, short and medium term contracts prevail; in teaching, sessional work is the norm) has created a gap in the development provided for younger, and to some extent mid-career, academics. Third, many academics in mainstream teaching and research positions are overwhelmed by their workloads and the range of their responsibilities, and are concerned that the opportunities for creativity, innovation and originality are being eroded. These three issues have significant implications for the continued quality and relevance of teaching and research in Australian higher education.

It is likely that the performance capacity of the academic profession, as it is presently structured, is nearing (or has reached) its limits. Without change, the national objectives for participation and equity, among other important sector-wide priorities, may not be realized. A systematic response is therefore needed to the unmanaged growth in the expectations on academic staff and the unplanned diversification of academic roles that has taken place, a response that explicitly acknowledges a transitional stage has been reached in the creation of

a more heterogeneous profession and that establishes the processes for building new recruitment, appointment and promotion policies.

Already, the Australian academic profession is more differentiated than is acknowledged in national and institutional policies and academic roles are more diverse than many academics themselves may recognise. However, the evolution of the nature and purposes of the profession and its implicit diversification have been incremental and largely unplanned. A consequence of this piecemeal approach is the attitudes and pressures on academic staff highlighted by the present study. A fundamental change in thinking is needed.

The pressure for the academic profession to evolve will increase in the next decade as the character of Australia's tertiary education changes. The federal policy settings for expansion and social inclusion that emerged from the Review of Australian Higher Education (Bradley et. al. 2008) will significantly change the character of universities, particularly at the school-VET-higher education interface. If the goals set in the Bradley review, including a demand-driven funding system, come to fruition, then the tertiary sector of the future, and thus the context for academic work and for conceptualising the nature of academic work, will be one in which there is greater diversity in undergraduate education, and in the nature of the providers, the modes of delivery and curricula. Universities must be more socially inclusive by offering access to a larger, more diverse group of people. They must also utilise and capitalise upon new forms of learning and new forms of access to information. These imperatives require the missions, governance structures, forms of organisation and work activities of universities to be modified. The nature of academic work across a more diverse and differentiated higher education sector, one geared towards achieving universal participation, will need to be reflected in the personnel policies of higher education institutions.

Developing a blueprint for regeneration

Strategic responses are urgently needed both nationally and from individual institutions to address the challenges of recruiting academic staff and reconfiguring the expectations for academic work. These responses need to focus on strategies for the immediate recruitment of younger academics, new approaches to the allocation and distribution of academic work roles within staffing structures and new approaches to the ways in which academic work is conceived and valued, and how achievements are recognised and rewarded.

Historical conceptions of academic work are not adequate for the future needs of Australian universities. As an overarching principle, employment policies and practices should be shaped both by what society now requires of higher education institutions and the likelihood that forecast staffing shortfalls will increasingly create a 'seller's market' for academic workers. Institutions will need to offer fairer, more secure, and better remunerated working conditions if potential academics are not to be lost to other professions or to overseas universities.

In a higher educational sector in which institutional diversity is desirable, institutional responses to the present situation can be expected to differ considerably, and policy at the national level needs to allow for institutional differences: a uniform approach is undesirable and unlikely. The following principles are therefore not a prescription for change. However, these points flag key issues and possibilities for consideration both nationally and at each institution.

Twelve principles to guide planning for the future academic workforce

Principles relating to the national approach to higher education

1. **Stability in higher education policy directions benefits workforce planning**. Policy instability limits the capacity of institutions to establish long-term staffing plans. The Bradley Review of Higher Education has offered a set of broad aims for the sector. The challenge is to develop a long-term blueprint for higher education funding that establishes a stable, predictable future for institutions to facilitate better institutional planning

2. **There is a need to establish better pre-conditions for more stable forms of employment.** While a certain level of casualisation within the academic workforce is both necessary and desirable for efficiencies and effectiveness (including for providing opportunities for HDR candidates and adjunct staff), the prevalence of casual and short-term contracts has to some extent undermined the sustainability of the profession. Job insecurity limits people's capacity to manage their personal finances and make important life plans. Further, young and early career academics need to be able to envisage, and to navigate, clear career paths unencumbered by the stress of job insecurity. Industrial regulation designed to limit the impact of casualisation (for example the HECE) has in fact institutionalised and legitimised practices of casual and short-term employment. Subsequent funding policies (notably the HEWRRs) have further entrenched such practices. While some effort has been made at the national level to decouple industrial practices from funding allocation formulae, there remains the need to establish better pre-conditions for more stable forms of employment. Institutional innovation in this area should be encouraged and supported

3. **Institutions should cautious about replicating national funding formulae at the academic unit level.** It is, of course, the responsibility of institutions and not of government to direct and manage universities' internal funding, yet national higher education funding mechanisms can have a direct and potentially adverse influence on employment practices. Internal funding allocation to academic units tends to mirror allocative mechanisms at the national level, for this is a rational institutional strategy. The consequences, however, are experienced at grassroots level in the differential treatment and value attached to research and teaching and the work of staff in roles that have differing balances and emphases. Monitoring the effect of national funding allocation formulae on unit-level staffing decisions needs to be made a greater priority in the assessment and development of national policy. In particular, the shift to demand-driven funding of university teaching in 2012 will warrant careful observation, as the popularity of courses may not match national priority areas (for example, mathematics and education), and the viability of less 'popular' areas of study could be jeaopardised by market-driven internal funding mechanisms.

4. **Support for early career academics should be made a national priority.** The present ARC Postdoctoral Fellowship Scheme meets a specific need for retaining talented early career researchers, however it is insufficient to providing the kind of tenure-track opportunities needed for staff with a broader remit of work roles. Consideration should be given to developing a national early career academic scheme aimed at replenishing the academic workforce. This could be in the form of a two- or three-year postdoctoral fellowship, and include: time and funding to support the development of a research profile; professional development opportunities in training for university teaching and other academic work roles; assistance in developing grant applications and undertaking community engagement activities, and mentoring from senior academics.

5. **A better understanding of the nature of sessional and short-term academic work is needed.** The volume and character of the work undertaken by casual/sessional and short-term contract academics needs to be better understood. The present project makes a novel contribution to this work but we remain uncertain of the real numbers of sessional staff within the sector and have no basis on which to benchmark our findings. Further, it is likely that the patterns of casual/sessional work are not well understood even within institutions due to the extensive devolution of appointment processes of this kind. Academic workforce planning would be assisted if more were known of the actual size of the casual/sessional and short-term

workforce and the distribution of work roles of casual and sessional staff. Data of this kind might be collected through DEEWR's statistical reporting processes, while acknowledging the additional burden this would create for institutions. As well as understanding the extent and nature of casualisation, further work is needed to map the characteristics of these staff; their career plans and work preferences; the reasons for institutions using casual labour; and the extent to which casual labour is under- or over-utilised.

Principles pertaining to restyling the research-teaching nexus and raising the status of teaching

6. **The primacy of the research-teaching nexus in academic work should be maintained**. There is a widespread belief that a teaching-research nexus of value to students is embedded in, and springs from, the work of individual academics. In reality, little is known about the ways in which research informs or enhances teaching and learning. In practical terms, the present settings often throw research and teaching into direct competition for academics' time: productivity and effectiveness in one area is achieved at the expense of the other, at least in part. The research-teaching nexus remains a powerful concept that should differentiate university education from other forms of education and training. This need not mean, however, that all academics are conducting research or are teaching in their area of research. New ways of ensuring that learning is actively connected to research within institutions is integral to maintaining the quality and meaning of a higher education.

7. **Appropriate career pathways and promotion opportunities for teaching-specialist academic work should be ubiquitous across the sector.** Extensive efforts have been made to incorporate teaching performance within promotion policies yet academic staff continue to believe that teaching is not valued as highly as research. One reason for this may be that promotion decisions do not fully reflect the intent and spirit of promotion policies. If so, this suggests that entrenched academic cultures are the obstacle here. Ensuring that excellence in teaching is defined and recognised and is a viable path to progressing through a successful career will be an essential element in achieving an effective differentiation of academic work roles, leading to more satisfying career pathways which are not dependent on traditional notions of academic work.

Principles shaping human resources policies within institutions

8. **A more sophisticated distribution of academic work roles than the conventional classification of teaching-only, teaching-and-research and research-only positions is needed.** The present norms of teaching and research positions (often tenured), teaching-only positions (often sessional) and research-only positions (often fixed term), are overly rigid, and do not provide adequate scope for career development for teaching-specialist and research-specialist staff. Positions styled as 'research intensive' and 'teaching intensive' partly address the problem but still fail to capture the full diversity of roles. Institutional innovation and diversity in approaches to work roles is needed, and for this reason it may be inappropriate to introduce a national typography of academic work. However, institutional diversity and innovation in supporting teaching- or research-specialist career paths need not inhibit the movement of staff between institutions, as experience and expertise in the core academic duties of teaching, research, administration and engagement will remain essential across the sector, regardless of the way individual institutions choose to divide, reward, promote or classify these skill areas. Human Resource directors clearly have a major responsibility to work within their institutions to devise new strategies and new models of academic employment tailored to the missions of their institutions and to continue to share practices and initiatives across institutions. Human Resource directors also are in position to lobby for changes in national policy settings wherever these might impinge detrimentally on workforce regeneration.

9. **The casualisation of academic work needs to be reversed, and casual/session and short-term contract staff load shifted to longer term and ongoing forms of employment**. To ensure that projected growth in student participation, and the

retirement of older staff, do not result in worker shortages, institutions should explore strategies for shifting casual and short-term staff load to long-term and ongoing contracts. As a general rule, recruitment and associated costs should not be entirely devolved to the faculty or department level, where there is little financial capacity to carry downturns. Institutional employment policies should ensure that some of the cost/risk of shifting staff load toward ongoing and long-term employment and away from casualised and short-term employment is carried by the institution. This applies to casual teaching staff when their teaching roles are likely to be needed from year to year, and to casual and short-term contracted research staff where there is a reasonable expectation of an ongoing need to employ staff members across multiple grants or funding allocations. Casualisation and short-term contracts are too often used at the department level to shift wage-related risk onto the employee.

Principles guiding further specialisation and professionalisation in university leadership and administration

10. **A better understanding of the nature and extent of administration activities associated with national and institutional benchmarking and quality audit requirements is needed.** The perception that academic staff are undertaking unnecessary amounts of administrative and basic data entry work is widespread. A better understanding of the nature and extent of administration activities associated with national and institutional benchmarking and quality audit requirements is needed, leading to business process reform. Reporting requirements can indeed be onerous and a sore point for academics regardless of the legitimacy of their purposes. Institutions and government need to work collaboratively on administrative workload matters to avoid negative effects on the quality of academic work, and the attractiveness of the academic profession in Australia. A structured approach to reporting is needed, for example the creation of data warehouses that can be used to generate a broad range of reports. Similarly, the workload associated with reporting on publications is unnecessary when ample data is available on publications and citation that can be accessed by professional staff. There should be an ongoing monitoring of accountability and auditing processes to ensure that they have minimal impact on the time available for teaching and research.

11. **There is a need for the development of a new and specialised kind of professional staff.** At present, academic staff undertake many tasks that are in essence administrative, and peripheral to core academic duties around teaching and research. Such tasks may include: reporting activities for audits and performance measurements (of publications, grant histories, etc); preparation of grant applications; and subject coordination tasks (such as data entry for grading and other administration). While these tasks do require staff with a deep understanding of elements of the disciplines and the nature of academic work, the development of a new and specialised kind of professional staff could assist in many aspects of academic work.

12. **Further professional development is needed at senior levels for academic staff moving into department and faculty leadership roles.** Specialised professional development is needed to improve managers' skills in mentoring and developing academic staff.

We are aware of the tension running through the findings, analyses and suggestions in this report: while there is an urgent need to recognise and legitimise the ubiquity of 'non-traditional' modes of academic work, much of the present dissatisfaction with these new modes of work stems from the absence of traits closely aligned to traditional roles. To some extent, this is because the way academic work is currently valued is based on outmoded notions. However, there are deeper reasons. Traditional, tenured academic positions offer the prospects of autonomy, diverse and enriching experiences across research, teaching and service, job security (perhaps even a job for life) and well-defined career and promotion possibilities and pathways. Even if these beliefs are partly illusory, traditional academic positions are where status is on offer and where the central business of universities is played out. In contrast, new modes of academic work are often much less autonomous and are

likely to be exclusively based in one of teaching or research, offering little scope for community engagement and for involvement in institutional decision-making through committee work and so on. They are certainly not secure jobs for life, are unlikely to follow clear career pathways, and may be comprised of punctuated periods in different work roles and even different institutions.

Addressing the levels of dissatisfaction experienced by academics in non-traditional roles requires more than de-normalising the idea of tenured, 'jack-of-all trades' academic work or simply giving more legitimacy to other forms of work, although these steps are important. Presently some of the non-traditional modes of academic work are at best unfair and at worst exploitative, as many of the comments from academics included throughout this report attest. New modes of academic work may not have the same high levels of autonomy as those in the traditional model and in many new roles the balance between research, teaching and service will be highly uneven. However, flexibility is needed and there seems little point in developing narrowly exclusive positions dubbed 'teaching-only' and the like, for these tend to define roles partly by what they are not. Recognising that individuals will have different balances and emphases across career stages is key, as is recognising that all academics should be able to envisage and navigate satisfying career pathways, even if these are non-linear. For example, when 'teaching intensive' academics retain currency in their discipline by contributing to scholarly journals or presenting at conferences, these contributions need to be recognised and rewarded within staff work roles, rather than viewed as work 'beyond the call of duty'. Likewise, where research-intensive staff make contributions to teaching, or wish to follow lines of enquiry outside of their funded projects, these activities should be appropriately accommodated and recognised.

The traditional model of academic work evolved to serve the knowledge generation and knowledge dissemination needs of society. The unbundling of academic work is an evolutionary stage in the way in which universities are organized to fulfill their social mission. This process will not be successful if a diverse range of contributions are not placed on equal footings within the policies and cultures of universities.

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Appendix 1:
Method and sample composition

The Centre for the Study of Higher Education (CSHE) was commissioned to undertake this project by the Department of Education, Employment and Workplace Relations (DEEWR). The project examines the changing character of academic work and explores the implications of these changes for the academic workforce of the future, and the quality of teaching, research and community engagement. The study is based on an online survey of 5525 Australian academics, documenting their current work roles and activities, what attracted them to academia, their career objectives and immediate intentions — including how long they foresee they will work in higher education and in Australian universities in particular — and what factors contribute to their work satisfaction, commitment and personal decisions regarding continuing to work in the profession.

The sample

An invitation to participate in the project was sent to the Vice Chancellor of each Australian public university via the Australian Vice-Chancellor's Committee. The invitation garnered a very positive response with many Vice Chancellors expressing their enthusiasm for the project, however a number were of the view that they could not participate due to other pressures on staff time, in particular the Sustainable Research Excellence survey of staff time being undertaken by DIISR.

In all, nineteen universities decided to participate in the project. These were:

- Australian Catholic University
- Deakin University
- James Cook University
- Monash University
- RMIT University
- Southern Cross University
- The Australian National University
- The Flinders University of South Australia
- The University of Melbourne
- The University of New England
- The University of Queensland
- The University of Western Australia
- University of Ballarat
- University of Canberra
- University of Southern Queensland
- University of Tasmania
- University of Technology, Sydney
- University of the Sunshine Coast
- Victoria University

Seventeen universities chose to take part in a census, in which all academic staff, including sessional staff, were sent an invitation to take part in the survey. Two institutions chose to take part via a stratified random sample of 20 per cent of their academic staff—again, this was due to concerns about staff workloads.

Each institution nominated a contact person to facilitate distribution of the invitation to participate. Some institutions provided the CSHE with a de-identified email list, others chose to distribute the email internally. All institutions provided the CSHE with a detailed data sheet containing selected characteristics of the staff to be invited so that the project team could assess the prospective sample, compare it to DEEWR population data, and check that the profile was correct.

The survey instrument

The survey instrument was developed by the authors with reference to the project brief as well as to four previous studies:

- *The Work Roles of Academics in Australian Universities*, a survey conducted in 1999, and a previous CSHE study (McInnis-CSHE 1999).
- *Occupational Stress in Australian University Staff,* a survey conducted in 2000 (Winefield, Gillespie, Stough, Dua, Hapuarachchi and Boyd 2003).
- *Changes In Academic Work* (Anderson, Johnson and Saha, 2002).

- *The changing academic profession* (CAP) survey, conducted in 2007 (Coates, Dobson, Goedegebuure and Meek 2009).

After consultation with the project steering committee on the focus and direction of the survey questions, the survey instrument was formatted for online delivery and uploaded to the internet using the SurveyMonkey program.

Administration of the survey

An email invitation to complete the online questionnaire was distributed to all academic staff, including sessional and casual staff, at the participating institutions (with the exception of the two institutions which requested a 20 per cent sample). The email invitation included a hotlink to the online survey instrument and details of the University of Melbourne ethics clearance for the project. Invitations were sent out over a staggered period during early July 2010. Participants were sent two reminders. The survey was closed in the first week of August 2010.

Response rate and sample characteristics

5525 responses were received, representing an overall response rate of 16 per cent and an average institutional response rate of 18.3 per cent.

In all, 2458 continuing staff, 662 limited term contract staff and 622 sessional staff responded to the survey (627 respondents did not indicate their contract type). The characteristics of the fulltime and fractional fulltime (FT and FFT) staff in the sample had an extremely close fit to that of the population of the sampled institutions as reported to DEEWR for its 2009 statistics collection, particularly in terms of level of employment, work function, contract type and age distributions (Table A1.1). Female respondents outweighed male respondents in our sample, as is generally the case for survey responses. There was also some variation at the institutional level, but it was decided that this was unlikely to affect findings due to the nature of the survey questions, and the extremely representative distribution of work-specific characteristics.

Little is known about the characteristics, or even size, of the sessional staff population at Australian universities – although this project goes some way toward redressing this issue. We are thus unable to report on the degree to which our sample of sessional staff is representative of the population.

Characteristics of the total sample are provided at table A1.2.

Table A1.1: Comparison of staff population (DEEWR selected statistics 2009) and staff sample at participating institutions on selected characteristics (FT and FFT academic staff only).

Demographic characteristics		Population %	Our Sample %	
Above Senior Lecturer		23.9	22.7	
Senior Lecturer (Level C)		22.1	21.4	
Lecturer (Level B)		32.0	34.8	
Below Lecturer (Level A)		22.1	21.1	
Research-only position		32.2	32.4	
Teaching & research position		64.0	60.4	
Teaching-only position		3.7	7.3	
Tenurial Term		60.3	56.9	
Limited term		39.7	43.1	
Sex	Female	43.1	53.3	
	Male	56.9	46.7	
Age	< 25	0.9	1.5	
	25–29	6.0	6.3	
	30–34	11.8	12.4	
	35–39	13.2	13.6	
	40–44	13.6	13.6	
	45–49	15.7	14.3	
	50–54	15.0	16.0	
	55–59	12.5	12.0	
	60–64	8.3	7.5	
	> 64	3.1	2.8	

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Analysis and reporting

Because of the close fit of the sample characteristics to the population, it was decided not to weight the data for institution. Although weighting is becoming common in projects in this area, we believe it offers little to be gained, in terms of representivity, but much to be lost, in terms of precision. In any case, where interesting variations between institutions were found, these are reported.

In this paper, findings are reported as proportions. In reporting the precision of these inferences an estimation-based approach was used by providing 95 per cent confidence intervals, following the method recommended for proportions by Newcomb and Altman (2000). Confidence intervals are particularly useful where differences between groups are small, as the width of the interval conveys precision (for example, an interval from 10% to 30% offers a less precise estimate of the true population percentage than an interval that extends from 15% to 25%). The 95% confidence intervals acknowledge the chance (at 5%) that the population value is not contained in the interval. Estimation is rapidly replacing significance testing as the preferred approach across the disciplines (Fidler, Cumming, Burgman, and Thomason, 2004). Estimation encourages a more sophisticated interpretation of data by drawing attention to the size of effects and the presence of trends, rather than encouraging simplistic accept/reject decisions based on statistical significance. However, when statistically significant relationships are reported in the text, these are at the $p < 0.05$ level (corresponding to the 95% confidence intervals). Statistical significance can be read directly from the 95% confidence intervals such that when 95% confidence intervals (on independent group data) overlap by less than one quarter of the average of their total widths, the difference between the two estimates is statistically significant at $p < 0.05$ (Cumming and Finch 2005).

Table A1.2: Professional and personal characteristics of the sample.

Professional characteristics	n	%	Personal characteristics	n	%
Institution			**Sex**		
Australian Catholic University	202	3.7	Female	2424	53.1
Deakin University	403	7.3	Male	2143	46.9
James Cook University	196	3.5	**ATSI**	42	0.9
Monash University	790	14.3	**Where Born**		
RMIT University	107	1.9	Australia	2962	61.8
Southern Cross University	103	1.9	Overseas	1831	38.2
The Australian National University	260	4.7	**OS birthplace**		
The Flinders University of South Australia	279	5.0	African nations	107	5.9
The University of New England	120	2.2	Asia (unspecified)	39	2.2
The University of Western Australia	371	6.7	China and Hong Kong	65	3.6
The University of Melbourne	252	4.6	Eastern Europe	39	2.2
The University of Queensland	1126	20.4	Mainland EU nations	258	14.2
University of Ballarat	98	1.8	Japan	11	0.6
University of Canberra	133	2.4	Middle Eastern nations	28	1.5
University of Tasmania	271	4.9	New Zealand	286	15.8
University of Southern Queensland	158	2.9	Other European nations	4	0.2
University of Technology, Sydney	419	7.6	Pacific islands	10	0.6
University of the Sunshine Coast	45	0.8	Scandanavian nations	12	0.7
Victoria University	192	3.5	South Asia	98	5.4
Total	5525	100.0	South East Asia	83	4.6
Contract type			Sth and Ctr. American nations	34	1.9
Continuing position (full time)	2246	45.9	UK and Ireland	550	30.4
Continuing position (part time)	212	4.3	US and Canada	187	10.3
Ltd term (at least one year) FT	1257	25.7	**Highest qualification**		
Ltd term (at least one year) PT	380	7.8	Bachelor	330	6.9
Ltd term (less than one year)	181	3.7	Masters	836	17.5
Sessional/casual contract	622	12.7	Other postgraduate	347	7.3
Field			PhD	3257	68.3
Agric., env. and related studies	165	3.6	**Place where highest qual. gained**		
Architecture and building	53	1.1	Australia	3728	78.7
Creative arts	220	4.8	Overseas	1006	21.3
Education	432	9.4	**Currently studying**		
Engineering and related technologies	244	5.3	No	3703	78.2
Food, hosp. and personal services	4	0.1	Yes	1046	22.1
Health	1197	26.0	**Course, if currently studying**		
Information technology	143	3.1	Bachelor	20	2.1*
Management and Commerce	446	9.7	Masters	130	13.4*
Mixed field programmes	43	0.9	Other postgraduate	152	15.7*
Natural and physical sciences	800	17.3	PhD	666	68.8*
Society and culture	864	18.7			
Career stage			* Denotes proportion of the 1006 staff currently studying only		
Early (7 or less years)	1778	38.8			
Mid (8 to 20 years)	1967	42.9			
Late (more than 20 years)	843	18.4			

Appendix 2:
Expanded tables for Section 6

Table A2.1 Proportion of respondents and agreeing with statements in response to the question: "What draws you to working in universities? In other words, what aspects of academic life do you value most, even if these may not be a feature of your current position?" Lower and upper limits are for 95% CIs.

Career stage	Disagree %	Lower limit	Upper limit	Agree %	Lower limit	Upper limit
The changing expectations of students are a concern for me						
Early	16.4	14.7	18.4	62.3	59.9	64.7
Mid	13.8	12.3	15.5	69.3	67.2	71.4
Late	10.2	8.3	12.5	72.9	69.7	75.8
Unstated	13.2	10.2	16.8	64.4	59.6	68.9
TOTAL	14.0	13.0	15.0	67.2	65.8	68.5
I spend more time than I would like teaching basic skills due to students deficiencies						
Early	20.0	18.0	22.1	57.6	55.0	60.2
Mid	18.2	16.4	20.1	62.6	60.3	64.9
Late	17.9	15.3	20.8	59.7	56.1	63.1
Unstated	19.1	15.5	23.4	62.3	57.2	67.0
TOTAL	18.8	17.7	20.0	60.4	58.9	61.8
My class sizes are manageable						
Early	27.9	25.5	30.5	49.2	46.5	52.0
Mid	37.0	34.6	39.4	39.2	36.8	41.7
Late	35.0	31.6	38.6	43.8	40.2	47.4
Unstated	25.7	21.2	30.7	48.0	42.6	53.4
TOTAL	32.7	31.3	34.2	44.1	42.5	45.6
I have the time to teach well						
Early	28.6	26.2	31.1	42.2	39.6	44.9
Mid	42.4	40.0	44.8	31.6	29.4	33.9
Late	38.7	35.2	42.2	35.3	32.0	38.8
Unstated	28.9	24.4	34.0	44.2	39.0	49.5
TOTAL	36.0	34.6	37.5	36.8	35.3	38.3
Academic standards at my university aren't what they used to be						
Early	31.9	29.6	34.3	39.4	36.9	41.9
Mid	27.3	25.3	29.4	49.5	47.2	51.8
Late	25.1	22.2	28.2	54.3	50.8	57.7
Unstated	29.4	25.2	34.1	45.7	40.8	50.6
TOTAL	28.6	27.3	30.0	46.7	45.2	48.1
IT-based teaching activities consume too much of my time						
Early	45.3	42.6	48.1	26.9	24.5	29.4
Mid	37.4	35.0	39.8	35.0	32.7	37.4
Late	32.5	29.1	36.1	39.9	36.3	43.5
Unstated	38.2	33.1	43.6	29.5	24.8	34.7
TOTAL	39.1	37.6	40.7	32.8	31.3	34.3
Good teaching is valued in my university						
Early	22.0	20.0	24.0	54.7	52.3	57.1
Mid	26.8	24.8	28.9	53.5	51.2	55.8
Late	26.0	23.1	29.1	54.1	50.7	57.5
Unstated	22.2	18.4	26.5	55.6	50.7	60.3
TOTAL	24.6	23.4	25.8	54.2	52.8	55.6

Table A2.2 Proportion of respondents disagreeing and agreeing with statements in response to the question: "What draws you to working in universities? In other words, what aspects of academic life do you value most, even if these may not be a feature of your current position?" Lower and upper limits are for 95% CIs.

Career stage	Disagree %	Lower limit	Upper limit	Agree %	Lower limit	Upper limit
I'm confident I can get research grants						
Early	48.9	46.4	51.3	23.7	21.7	25.9
Mid	49.9	47.6	52.2	29.8	27.8	31.9
Late	49.3	45.9	52.8	33.7	30.5	37.0
Unstated	45.8	41.0	50.7	30.0	25.8	34.7
TOTAL	49.1	47.6	50.5	28.4	27.1	29.7
I'm confident I can publish in good journals						
Early	24.2	22.2	26.3	52.9	50.5	55.3
Mid	19.9	18.2	21.8	62.5	60.3	64.7
Late	20.4	17.8	23.3	63.7	60.3	66.9
Unstated	19.3	15.8	23.4	58.7	53.9	63.3
TOTAL	21.4	20.3	22.6	59.0	57.6	60.4
Levels of grant funding are adequate						
Early	62.1	59.7	64.5	11.9	10.4	13.6
Mid	68.9	66.7	71.0	11.2	9.8	12.7
Late	69.2	65.9	72.3	13.9	11.6	16.4
Unstated	55.7	50.7	60.5	17.1	13.7	21.1
TOTAL	65.5	64.1	66.9	12.4	11.5	13.4
I have enough time for research						
Early	51.5	49.1	53.9	29.7	27.6	32.0
Mid	70.2	68.1	72.3	16.3	14.7	18.0
Late	70.2	67.0	73.2	16.7	14.3	19.4
Unstated	51.0	46.2	55.7	29.3	25.1	33.8
TOTAL	62.1	60.7	63.4	22.1	21.0	23.3
Overall I find my academic work rewarding						
Early	8.9	7.6	10.3	74.7	72.6	76.7
Mid	11.1	9.8	12.6	69.8	67.7	71.8
Late	12.7	10.6	15.2	68.5	65.3	71.6
Unstated	11.3	8.7	14.6	74.7	70.5	78.5
TOTAL	10.6	9.8	11.5	71.8	70.5	73.0
I have freedom to pursue my own research interests						
Early	21.1	19.2	23.1	57.7	55.3	60.1
Mid	18.6	16.9	20.5	63.3	61.1	65.4
Late	17.8	15.3	20.6	67.4	64.1	70.5
Unstated	20.9	17.3	25.1	56.9	52.1	61.6
TOTAL	19.5	18.4	20.7	61.5	60.1	62.9
This is not a good time for any young person to aspire to an academic career in my discipline						
Early	40.0	37.7	42.3	38.9	36.6	41.2
Mid	29.6	27.5	31.7	49.5	47.2	51.7
Late	27.7	24.7	30.9	56.3	52.9	59.7
Unstated	34.1	29.8	38.8	43.4	38.8	48.2
TOTAL	33.3	32.0	34.7	46.4	44.9	47.8
I have adequate equipment and support to do my research						
Early	31.8	29.5	34.1	44.9	42.5	47.4
Mid	35.9	33.7	38.1	41.2	39.0	43.5
Late	35.6	32.3	38.9	41.1	37.7	44.5
Unstated	25.1	21.1	29.5	46.9	42.1	51.8
TOTAL	33.5	32.1	34.8	43.0	41.6	44.4

Table A2.2 continued

Career stage	Disagree %	Lower limit	Upper limit	Agree %	Lower limit	Upper limit
There is sufficient time available for my scholarly writing						
Early	51.4	49.0	53.9	26.3	24.2	28.5
Mid	68.1	66.0	70.2	15.6	14.0	17.3
Late	66.7	63.4	69.9	17.6	15.1	20.3
Unstated	48.0	43.1	52.9	24.3	20.3	28.7
TOTAL	60.5	59.1	61.9	20.3	19.2	21.5
I have adequate opportunities to do basic, blue-sky research						
Early	39.1	36.7	41.6	30.9	28.6	33.3
Mid	46.0	43.6	48.3	28.5	26.5	30.7
Late	44.9	41.4	48.5	31.9	28.6	35.3
Unstated	34.7	30.0	39.7	33.3	28.7	38.3
TOTAL	42.5	41.0	43.9	30.3	29.0	31.7

Table A2.3 Proportion of respondents disagreeing and agreeing with statements in response to the question: "What draws you to working in universities? In other words, what aspects of academic life do you value most, even if these may not be a feature of your current position?" Lower and upper limits are for 95% CIs.

Career stage	Disagree %	Lower limit	Upper limit	Agree %	Lower limit	Upper limit
My overall workload is reasonable and manageable						
Early	36.9	34.6	39.1	39.5	37.3	41.8
Mid	57.3	55.1	59.5	24.5	22.6	26.5
Late	56.1	52.7	59.5	27.8	24.8	30.9
Unstated	36.0	31.8	40.4	38.8	34.4	43.3
TOTAL	48.0	46.6	49.3	31.7	30.4	33.0
Overall, I have a good work/life balance						
Early	34.7	32.5	37.0	44.7	42.4	47.0
Mid	49.8	47.6	52.0	27.2	25.3	29.2
Late	48.7	45.4	52.1	30.2	27.2	33.4
Unstated	33.2	29.1	37.6	41.8	37.4	46.3
TOTAL	42.8	41.4	44.1	35.2	33.9	36.5
I can see career or promotion opportunities for me						
Early	32.6	30.4	34.8	43.2	40.9	45.6
Mid	38.7	36.6	40.9	38.9	36.7	41.1
Late	48.1	44.5	51.8	29.8	26.6	33.2
Unstated	36.7	32.2	41.3	38.3	33.8	43.0
TOTAL	37.7	36.4	39.1	39.0	37.7	40.4
I undertaken an unreasonable amount of administrative work						
Early	36.9	34.6	39.2	37.1	34.8	39.5
Mid	24.6	22.7	26.6	53.4	51.1	55.6
Late	25.3	22.4	28.5	53.2	49.7	56.6
Unstated	34.2	29.8	38.9	41.0	36.4	45.8
TOTAL	29.9	28.6	31.2	46.5	45.1	48.0
I have good job security						
Early	57.9	55.6	60.2	25.7	23.7	27.8
Mid	36.1	34.0	38.3	47.4	45.2	49.7
Late	23.6	20.8	26.7	61.1	57.6	64.4
Unstated	47.5	42.9	52.2	31.4	27.3	35.9
TOTAL	42.9	41.5	44.3	40.5	39.1	41.9

Table A2.3 continued

Career stage	Disagree %	Lower limit	Upper limit	Agree %	Lower limit	Upper limit
My job is a source of considerable personal stress						
Early	38.2	35.9	40.5	38.2	36.0	40.6
Mid	26.9	25.0	28.9	49.5	47.3	51.7
Late	27.9	25.0	31.1	47.8	44.4	51.2
Unstated	31.8	27.7	36.3	42.2	37.7	46.8
TOTAL	31.5	30.2	32.8	44.6	43.2	46.0
Generally speaking I am satisfied with my job						
Early	14.8	13.2	16.6	62.2	59.9	64.4
Mid	19.2	17.5	21.0	54.1	51.9	56.3
Late	20.4	17.8	23.3	55.2	51.8	58.5
Unstated	15.9	12.8	19.5	59.0	54.4	63.5
TOTAL	17.6	16.5	18.6	57.6	56.2	58.9
I am satisfied with my level of income						
Early	40.6	38.3	42.9	34.6	32.5	36.9
Mid	34.8	32.7	36.9	40.4	38.3	42.7
Late	28.4	25.4	31.6	51.2	47.8	54.6
Unstated	36.4	32.0	41.0	37.7	33.3	42.3
TOTAL	35.9	34.6	37.3	39.9	38.6	41.3
I feel that I have autonomy and control over my working life						
Early	19.2	17.5	21.1	55.1	52.7	57.4
Mid	27.4	25.4	29.4	48.6	46.4	50.8
Late	28.2	25.3	31.4	50.5	47.1	53.9
Unstated	25.0	21.2	29.2	50.0	45.4	54.6
TOTAL	24.4	23.3	25.7	51.3	49.9	52.7

Table A2.4 Proportion of respondents disagreeing and agreeing with statements in response to the question: "What draws you to working in universities? In other words, what aspects of academic life do you value most, even if these may not be a feature of your current position?" Lower and upper limits are for 95% CIs.

Career stage	Disagree %	Lower limit	Upper limit	Agree %	Lower limit	Upper limit
Generally, the higher education sector seems to be heading in the right direction						
Early	41.7	39.3	44.0	20.8	18.9	22.8
Mid	54.7	52.5	56.9	14.2	12.7	15.8
Late	61.2	57.8	64.4	12.9	10.8	15.4
Unstated	46.5	41.8	51.1	20.6	17.1	24.6
TOTAL	50.5	49.2	51.9	16.8	15.8	17.9
There seems to be strong government support for the university sector						
Early	52.9	50.5	55.3	15.6	13.9	17.4
Mid	66.7	64.6	68.7	11.5	10.2	13.0
Late	73.7	70.6	76.5	8.6	6.9	10.7
Unstated	53.1	48.4	57.7	16.3	13.2	20.1
TOTAL	61.9	60.5	63.2	12.8	11.9	13.8
I feel that I have freedom to speak our on matters of university policy						
Early	40.7	38.3	43.1	30.1	27.9	32.4
Mid	42.2	40.0	44.4	32.8	30.7	34.9
Late	39.8	36.5	43.2	42.4	39.1	45.8
Unstated	38.6	34.0	43.4	33.2	28.8	37.9
TOTAL	40.9	39.6	42.4	33.5	32.2	34.9

Appendix 3:
Replenishing the academic workforce:
A comparison of the CSHE 2010 survey of academic staff
and the National Research Students Survey

Concurrently with this project, the CSHE and the Australian Council for Educational Research (ACER) jointly undertook a project for DEEWR investigating the career plans and motivations of Higher Degree Research students (HDR), and in particular the degree of interest HDR candidates have in pursuing an academic career on completion of their degree (Edwards, Bexley and Richardson 2010). This second project was based on a large-scale survey of Australian HDR students. The National Research Student Survey (NRSS) was conducted in June 2010 across 38 of the 39 universities Australia. In total 11,710 HDR candidates responded to the NRSS; representing 25.5 % of HDR students at the surveyed institutions.

Together, these two projects provide a broad basis upon which to assess the future demand and supply for academic staff in Australia (while recognizing that HDR students are not the only supply source for the future academic workforce, and that movements between pother profession and academic work, and migration, also play a role). This is particularly important in the context of concerns raised by Hugo (2005a, 2005b, 2008; Hugo and Morriss, 2010), in particular, about the demographic issues facing this increasingly ageing workforce. Further, policy developments stemming primarily from the Bradley and Cutler reviews in 2008 (Bradley, et al., 2008; Cutler, 2008) have added pressure to the demographic challenges facing the academic workforce as a result of Government targets for increasing undergraduate enrolments in Australian universities (Birrell and Edwards, 2009; Edwards, 2010; Edwards, et al., 2009; Edwards and Smith, 2010).

Here, we discuss the findings of the NRSS in terms of their relevance to the current project, exploring commonalities between the two, as well as challenges presented by their findings for the maintenance and replenishment of the academic workforce in Australia.

Key findings from the NRSS of relevance to the present project

Many of the key findings from the NRSS had much in common with those from the present study. In particular, the concerns of HDR students and early career academic staff are closely aligned:

- The vast majority (83 per cent) of HDR candidates have at some time seriously considered an academic career.
- 54.1 per cent of all HDR candidates have medium to long term plans to pursue an academic career.
- However, while 62.8 per cent of HDR candidates indicated they would ideally like to move straight into an academic job after completing their research degree, only 51.8 per cent indicated that they believed this to be a realistic goal. That is, nearly 30 per cent of those who indicated that they would like to commence an academic career on completion of the HDR believe that finding an academic job was not realistically achievable.
- The main reason an academic career was considered an unrealistic aspiration tended to be a perceived lack of availability of academic positions, and lower salaries than those offered in other professions.
- In comparison with other careers they have considered, an academic career is viewed by research candidates (regardless of their future career plans) as preferable to other careers on a number of key factors such as development of new knowledge, interest and challenge, and job satisfaction.

- The two areas where HDR candidates do not believe an academic career compares well with other possible careers are the availability of positions and salary.

Tale A3.1: Findings from the NRSS: Comparing an academic career to other career options, by selected occupational factors and intended career (source: Edwards, Bexley and Richardson 2010).

	Academic work is *better or substantially better*		Academic work is *worse or substantially worse*	
	Aspiring academics	Others	Aspiring academics	Others
Availability of positions	23.6	18.9	50.2	52.0
Salary	27.8	24.0	45.0	48.9
Workload	34.2	27.3	27.3	33.3
Job security	45.0	40.1	22.4	27.4
Prospects for career advancement	48.3	32.4	16.8	28.3
Work/life balance	63.0	48.6	14.8	23.2
Travel opportunity	60.8	52.3	10.8	17.5
Flexibility	69.3	54.0	8.3	16.4
Prestige	59.7	49.4	8.0	12.4
Autonomy	64.3	43.6	7.2	19.3
Collegiality (networks with peers)	59.9	50.0	6.1	10.7
Contribution to community	68.2	46.2	4.7	15.6
Interest/challenge	79.6	50.7	4.6	17.4
Job satisfaction	71.1	35.6	4.5	20.2
Development of new knowledge	85.2	72.5	4.0	6.2

These findings are in line with sentiments expressed by early career academic staff. While academic staff are primarily drawn to academic work by scholarly values of research, inquiry and teaching (Section 4), early career staff are particularly dissatisfied with income (40.6 percent, compared with 28.4 per cent of late career staff), and with job security (57.9 per cent, compared with 23.6 per cent of late career staff).

The other key issue for workforce planning raised by both the NRSS and academic surveys is the proportions of young people intending to move overseas. The NRSS found that of the 62.8 per cent of HDR candidates who ideally hoped to gain an academic position on graduates, 36.6 per cent wanted that position to be overseas, and when participants were asked about their realistic plans, of the 51.8 per cent who thought they would gain an academic position, 30.7 per cent thought this was likely to be overseas. Of the careers proposed by participants as realistic goals upon graduates, it was those who aimed to be academics who were most likely to expect that this work would take place overseas (Table A2).

Similarly, the survey of academic staff found that close to 13.5 per cent of academics under 30 and 7.7 per cent of academics between 30 and 39 plan to leave Australian higher education for an overseas institution in the next five to ten years. In the longer term, 39.9 per cent of academics aged 20-29, and 34.9 per cent aged 30-49, intend to move to an overseas institution.

Table A3.2: Findings from the NRSS: Region of work anticipated by type of work (source: Edwards, Bexley and Richardson 2010).

	Intention (%)	Location (% of those intending)	
		Australia	Overseas
Ideal immediate career plan			
Academic position (incl postdoc)	62.8	63.4	36.6
Further formal study	4.5	69.6	30.4
Research work outside a university	14.9	63.4	36.6
Non-research professional work	15.9	71.6	28.4
Other	1.9	56.1	43.9
Total locational intentions for ideal immediate plans		64.9	35.1
Realistic immediate plans			
Academic position (incl postdoc)	51.8	69.3	30.7
Further formal study	4.1	83.7	16.3
Research work outside a university	12.8	77.4	22.6
Non-research professional work	27.6	82.9	17.1
Other	3.7	84.7	15.3
Total locational intentions for realistic immediate plans		75.2	24.8
Medium-long term plans			
Academic position (incl postdoc)	54.1	56.8	43.2
Further formal study	1.8	57.7	42.3
Research work outside a university	18.9	57.7	42.3
Non-research professional work	23.0	67.9	32.1
Other	2.1	78.4	21.6
Total locational intentions for medium-long term plans		60.0	40.0

Appendix 4:

The survey instrument

How can Australia develop and maintain its academic workforce?

What drew you to work in universities? What are the sources of satisfaction and dissatisfaction for you? How committed are you to continuing to work in universities?

What can be done to help replenish the Australian academic workforce?

This survey, commissioned by DEEWR, seeks the views of people who are in academic positions about academic work and the academic profession. Our aim is to identify the core factors relating to the motivation of people to remain in higher education and the factors that might lead to them considering other careers or pursuing academic work overseas.

We appreciate the demands on your time but your response will be very helpful in shaping national and institutional approaches to developing and maintaining Australia's academic workforce. We estimate the questionnaire takes only 15-20 minutes to complete. Your participation in this survey is entirely voluntary and your responses will remain anonymous.

Please note:
1. The questionnaire is designed to be relevant to a broad cross-section of people who are in academic positions, including continuing, limited term contract and sessional staff. Some of the questionnaire items may therefore be of more or less relevance to particular individuals.

2. We understand that surveys of this kind, by their nature, simplify complex issues. For this reason, opportunities are provided for you to offer related comments if you wish.

This survey is part of a project being undertaken by the Centre for the Study of Higher Education (CSHE) at the University of Melbourne, led by Professor Richard James. If you have any concerns about any aspect of your participation in the project you can contact the University of Melbourne's Ethics team, quoting the Ethics Project ID number 1033553 at:
Executive Officer, Human Research Ethics
The University of Melbourne
Ph: 03 8344 2073 Fax: 03 9347 6739

If you are willing to participate in this project, please commence below. (If cookies are enabled on your browser, you may exit the survey (button on top right hand corner) and you will be automatically returned to the current page when you return. For this feature you must use the same computer.)

YOUR PERSONAL AND PROFESSIONAL ORIENTATION

What draws you to working in universities? In other words, what aspects of academic life do you value most, even if these may not be a feature of your current position?

	1 Don't value at all	2	3	4	5 Value highly
Status of the academic profession in the public eye	○	○	○	○	○
Autonomy and control over working life	○	○	○	○	○
Job security	○	○	○	○	○
Opportunities for productive community engagement	○	○	○	○	○
Opportunities to travel	○	○	○	○	○
Genuine passion for a field of study	○	○	○	○	○
Opportunity to contribute to developing new knowledge	○	○	○	○	○
Chance to do basic, blue sky research	○	○	○	○	○
Chance to work in a supportive and collegial environment	○	○	○	○	○
Good or satisfactory income	○	○	○	○	○
Opportunities for intellectually stimulating work	○	○	○	○	○
Opportunities to research, write and publish	○	○	○	○	○
Opportunities to supervise research students	○	○	○	○	○
Passion for teaching	○	○	○	○	○

Of the things you value most in academic work, are there major gaps between these ideals and your present work?

What is the main factor that originally drew you to working in universities?

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Your role and time distribution

My interests are...

○ Primarily in research

○ Primarily in teaching

○ In both teaching and research, but leaning towards teaching

○ In both teaching and research, but leaning towards research

○ Primarily in leadership and administration

Please roughly estimate the percentage of time you typically spend on the following, and what an ideal or preferred distribution of time would be for you:

	Typical time distribution (%)	Preferred time distribution (%)
Research %	[▾]	[▾]
Teaching %	[▾]	[▾]
Supervision of research candidates %	[▾]	[▾]
Community engagement/knowledge transfer %	[▾]	[▾]
Leadership, management and administration%	[▾]	[▾]
Routine administration (eg record-keeping requirements)%	[▾]	[▾]

Sources of satisfaction and dissatisfaction

To what extent do you agree with the following statements about your work in universities?

	1 Strongly disagree	2	3	4	5 Strongly Agree	N/A
The changing expectations and engagement of students are a concern for me	○	○	○	○	○	○
I spend more time than I would like teaching basic skills due to student deficiencies	○	○	○	○	○	○
My overall workload is reasonable and manageable	○	○	○	○	○	○
Overall, I have a good work/life balance	○	○	○	○	○	○
I'm confident I can get research grants	○	○	○	○	○	○
I'm confident I can publish in good journals	○	○	○	○	○	○
Levels of grant funding are adequate	○	○	○	○	○	○
I have enough time for research	○	○	○	○	○	○
My class sizes are manageable	○	○	○	○	○	○
I have the time to teach well	○	○	○	○	○	○
Overall I find my academic work rewarding	○	○	○	○	○	○
I can see career or promotion opportunities for me	○	○	○	○	○	○
I undertake an unreasonable amount of administrative work	○	○	○	○	○	○
I have good job security	○	○	○	○	○	○
I have freedom to pursue my own research interests	○	○	○	○	○	○
My job is a source of considerable personal stress	○	○	○	○	○	○
This is not a good time for any young person to aspire to an academic career in my discipline	○	○	○	○	○	○
Academic standards at my university aren't what they used to be	○	○	○	○	○	○
Generally, the higher education sector seems to be heading in the right direction	○	○	○	○	○	○
There seems to be strong government support for the university sector	○	○	○	○	○	○
Generally speaking I am satisfied with my job	○	○	○	○	○	○
IT-based teaching activities consume too much of my time	○	○	○	○	○	○
I have adequate equipment and support to do my research	○	○	○	○	○	○
There is sufficient time available for my scholarly writing	○	○	○	○	○	○
I feel that I have freedom to speak out on matters of university policy	○	○	○	○	○	○
Good teaching is valued in my university	○	○	○	○	○	○
I have adequate opportunities to do basic, blue sky research	○	○	○	○	○	○
I am satisfied with my level of income	○	○	○	○	○	○
I feel that I have autonomy and control over my working life	○	○	○	○	○	○

The MOST satisfying or rewarding aspect of my academic work or career is:

[   ]

The LEAST satisfying or rewarding aspect of my academic work is:

[   ]

Your institution's policy settings

Thinking of your institution, please indicate the extent to which you agree that you are satisfied with these factors:

	1 Not satisfied	2	3	4	5 Very satisfied
The criteria for promotion					
Infrastructure/built environment					
The culture of my department					
The overall institutional culture					
Leadership and management of the institution					
Opportunities for conference attendance and study leave					
Support for the career development plans of academic staff					
The way teaching expertise is valued in academic recruitment					

What are some key steps your university could take to develop and maintain its academic workforce?

What do you think the current promotions processes of your university highly reward and what should be highly rewarded? (Tick any that apply)

	Is highly rewarded	Should be highly rewarded
Length of service		
Effectiveness as a teacher		
Research/scholarly activities		
Administrative and leadership skills		
Ability to attract external funds		
Community service		
Contribution to committees and other administrative work		

Professional development opportunities

There has been much discussion in the sector in recent years about the nature and extent of the professional development and training undertaken by academic staff, particularly for university teaching roles. The survey seeks your experience and views on the availability and relevance of such programs.

How would you rate the availability at your institution of professional development programs for university teaching?

○ 1 Very poor   ○ 2   ○ 3   ○ 4   ○ 5 Very good   ○ Not sure

Have you undertaken training in university teaching? (Tick any that apply)

☐ Yes, within the past two years   ☐ Yes, more than two years ago   ☐ No, I have not undertaken any training

If so, was this training mandatory?

○ Yes   ○ No

For each type of training you have undertaken, please indicate how useful that training was for you:

	1 Not at all useful	2	3	4	5 Very useful	Not under-taken
An award course specifically in university teaching (for example, a Graduate Certificate in Higher Education or University Teaching)	○	○	○	○	○	○
A general qualification in teaching (e.g. GradDipEd, DipEd, BEd)	○	○	○	○	○	○
A short course covering a number of aspects of teaching	○	○	○	○	○	○
A short course on a single facet of teaching (i.e. assessment, online learning)	○	○	○	○	○	○

If you do not hold a Graduate Certificate in University Teaching (or similarly titled award) would you consider undertaking such a course in the future?

○ Yes, definitely   ○ Maybe   ○ No, very unlikely

Have you undertaken training in research skills and methods at any time during your career? (Tick any that apply):

☐ Yes, within the past two years   ☐ Yes, more than two years ago   ☐ No, I have not undertaken any training

How would you rate the availability of training in research skills or methods in your institution?

○ 1   ○ 2   ○ 3   ○ 4   ○ 5   ○ Not
Very poor   Very good sure

How important to you would the following be?

	1 Not at all important	2	3	4	5 Very important
An award for teaching excellence	○	○	○	○	○
A grant for a learning and teaching development initiative	○	○	○	○	○
A teaching fellowship focused on a contemporary learning/teaching issue	○	○	○	○	○
An award for excellence in research	○	○	○	○	○
A research fellowship or grant that provides more time for research	○	○	○	○	○
An Australian Learning and Teaching Council (ALTC) grant or fellowship	○	○	○	○	○

Your career plans

Within the last five years, have you considered any major career or position changes? Did you take concrete action to make such changes? (Tick any that apply)

	Considered	Concrete action taken
No, I have not considered making any major changes in my job	☐	☐
Yes, to take an academic position in another higher education/research institute within Australia	☐	☐
Yes, to take an academic position in another country	☐	☐
Yes, to take a management position in your, or another, higher education/research institution	☐	☐
Yes, to move to work outside higher education/research institutes	☐	☐
Yes, to retire	☐	☐

If you considered changes, what were your main reasons?

[   ]

What are your short-term intentions (before the end of 2012) and long-term intentions (in five to ten years)? (Tick any that apply)

	Short-term intention	Long-term intention
To continue in my current role and position	☐	☐
To seek promotion within my current institution	☐	☐
To an academic position in another higher education/research institute within Australia	☐	☐
To an academic position in another country	☐	☐
To a management position in your, or another, higher education/research institution	☐	☐
To work outside higher education/research institutes	☐	☐
To retire	☐	☐

What are the main reasons behind these intentions?

[   ]

If planning to stay in higher education in Australia, please indicate the extent to which the following are priorities for you:

	1 Low priority	2	3	4	5 High priority	N/A
Increasing my international standing	○	○	○	○	○	○
Finding more time for research	○	○	○	○	○	○
Raising my publication profile	○	○	○	○	○	○
Moving into a leadership role	○	○	○	○	○	○
Gaining promotion	○	○	○	○	○	○
Increasing my consultancy work	○	○	○	○	○	○
Focusing more on teaching	○	○	○	○	○	○
Decreasing my work hours	○	○	○	○	○	○
Undertaking more community engagement related to my academic work	○	○	○	○	○	○
Improving my work/life balance	○	○	○	○	○	○
Improving my job security	○	○	○	○	○	○

What is your highest priority with regard to your academic work?

[ ]

✱ What is your current contract type?

○ Continuing position (full time)

○ Continuing position (part time)

○ Limited term contract of at least one year (full time)

○ Limited term contract of at least one year (part time)

○ Sessional/casual contract

○ Limited term contract of less than one year

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For short term and sessional staff

What best describes your employment arrangements?

○ A reasonably regular series of short term contracts

○ Irregular or sporadic one-off contracts

○ Occasional work on an hourly basis

What kind of work do you do? (Tick any that apply):

☐ Tutoring/small group teaching

☐ Demonstrating/practical teaching

☐ Clinical teaching

☐ Student support

☐ Lecturing

☐ Research

☐ Coordination of teaching

What is your main reason for your current employment arrangements? (please choose the most important reason):

○ Earning an income while studying

○ Supplementing income from other work

○ Employment of this kind just suits me

○ No ongoing academic career options are available

○ Preparation for an academic career

○ Another professional development reason

○ As a contribution to my profession/discipline

○ Staying in touch with developments in my field

○ Moving into retirement

○ Personal / family reasons

○ Other

Please indicate the extent to which you agree with the following statements:

	1 Strongly disagree	2	3	4	5 Strongly agree	N/A
I have an appropriate disciplinary background for the work I am doing	○	○	○	○	○	○
I am satisfied with the level of remuneration I receive for my work	○	○	○	○	○	○
I receive adequate professional support and direction in my work	○	○	○	○	○	○
This work has potential for career progression	○	○	○	○	○	○
I can see career opportunities for me as an academic	○	○	○	○	○	○
Overall, the expectations of me exceed my position	○	○	○	○	○	○

Other comments about your employment arrangements:

Demographic information

Finally, we do need some demographic details on you to inform our analyses.

Age in years:

Sex:

○ Male   ○ Female

Do you identify as Aboriginal or Torres Strait Islander?

○ Yes   ○ No

Where were you born?

○ Australia   ○ Overseas

If not born in Australia,

Where were you born?

How many years have you resided here?

Institution

Select one from the drop-down menu

.

Discipline (DEEWR Broad Field of Education classification)

☐ Natural and physical sciences   ☐ Education

☐ Information technology   ☐ Management and commerce

☐ Engineering and related technologie   ☐ Society and culture

☐ Architecture and building   ☐ Creative arts

☐ Agriculture, environmental and related studies   ☐ Food, hospitality and personal services

☐ Health   ☐ Mixed field programmes

Narrow field (DEEWR Narrow Field of Education classification)

Select one from the drop-down menu

.

Level of employment

○ Levels D and E (Associate Professor; Professor)   ○ Level B (Lecturer)

○ Level A

○ Level C (Senior Lecturer)

In what year were you first appointed at this level?

Experience

Years working in higher education

Years in current position

What best describes your academic position? (Please tick only one)

○ Teaching & research position

○ Research-only position

○ Teaching-only position

○ Departmental or faculty management

○ Senior leadership

○ Postdoctoral position

Highest qualification:

○ PhD

○ Masters

○ Other postgraduate

○ Bachelor

Where was this qualification obtained?

○ Australia

○ Overseas

Are you studying at the moment?

○ Yes

○ No

If so, what are you studying?

○ PhD

○ Masters

○ Other postgraduate

○ Bachelor

Other (please specify)

You've reached the end of the questionnaire. Thank you for your time. Please click 'Submit' below.

If you wish to receive a copy of any public reports arising from this research, please enter you email address below (email address will be removed from your responses prior to coding and your survey responses will not be traceable to you)

Email address