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Student equity and employability in higher education

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Executive summary

Ensuring the employability of graduates is fundamental to the modern mission of higher education institutions. Across the Anglo-American world, universities are focussed on improving the graduate outcomes of their students through diverse strategies that include work-integrated learning programs, study abroad experiences, mentoring, and career development services. These strategies are in turn being driven by broader changes to the policy landscape. First, performance-based funding is rising, with governments moving to fund universities on the basis of their completion rates and graduate outcomes, rather than simply student enrolments. Second, information on employment outcomes is increasingly accessible to prospective students, potentially influencing their choice of institution and discipline. This influence is likely to grow as graduate outcome data becomes embedded within global institutional ranking systems, and as student fees continue to rise. Third, the expansion of the higher education sector has led to a decline in the graduate wage premium, credential inflation, and greater student choice, further underlining the need for universities to demonstrate the employability of their graduates.

Many of these developments are relatively new. The establishment of the 'College Scorecard' in the United States (US), through which graduate rates and salaries can be compared by institution, dates from 2015. The Teaching Excellence Framework (TEF) in the United Kingdom (UK), under which institutions must demonstrate sound graduate outcomes in order to raise their student fees, will be introduced in 2017. In Australia, the expanded Quality Indicators of Learning and Teaching (QILT) website includes a new employer satisfaction survey and a redesigned graduate outcomes survey, only commenced in 2016. Universities are increasingly being judged and held accountable for what their students do after graduation day

Given recent policy and funding changes across the US, UK and Australia, we would expect most universities to have increased their strategic focus on employability, defined as 'a set of achievements – skills, understandings and personal attributes – that makes graduates more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy' (Yorke, 2006, p. 8). Previous research, however, highlights that employability is not a neutral concept, and that some student groups benefit more than others from traditional institutional strategies. For example, our own research on 'study abroad' experiences revealed the extent to which such experiences are typically dominated by higher socio-economic, metropolitan students (Harvey & Sellar et al., 2016). Similarly, research shows that work-integrated learning (WIL) experiences, access to careers advisers, and other employability activities are likely to be skewed against students of lower socio-economic status, those with a disability, from regional areas, from non-English speaking backgrounds, or from other under-represented groups (Australian Collaborative Education Network, 2015; Doyle, 2011; Greenbank, 2007; Harvey & Reyes, 2015; Martin, 2012; Simpson & Ferguson, 2013; Urbis, 2011). Inequitable access to employability experiences at university may partly explain why some equity group students typically report poorer graduate outcomes than other students.

Given employability is becoming central to a university education, and given the relatively poor graduate outcomes of some groups of under-represented students, how are universities addressing student equity within their employability strategies? To resolve this question we conducted research that included an analysis of employability policy in higher education across the UK, US and Australia; a desktop analysis of Australian university websites; and a survey of both career managers and student union leaders within Australian public universities. Importantly, our approach enabled both managerial and student views to be captured. While focussed on Australia, our comparative contextual analysis enabled us to understand important similarities and differences across Anglo-American contexts.

Our findings revealed increased institutional activity as expected, but also serious limitations in the way that universities are developing and implementing strategies. Universities are clearly developing employability strategies and positions of senior leadership, though many remain formative. Alarmingly

though, student equity is not a systematic part of most strategies. Few universities collect data on the participation of equity groups within their employability experiences, and any allocation of specific funds to assist under-represented groups is sporadic and rarely monitored or evaluated. Students themselves appear to be marginalised from the development of institutional strategies, and student unions can produce and access very little data on the participation of equity group students in university clubs, societies, or employment. Extra-curricular activities are rapidly being expanded and rewarded, often with minimal consideration of accessibility and equity implications.

If universities do not begin systematically addressing student equity within employability, several risks will grow. The gaps that currently exist in graduate outcomes may well widen, with low socio-economic and some other under-represented students increasingly disadvantaged as employment depends on experiences to which they lack access, beyond the holding of formal credentials. Other gaps will remain masked by attrition data – those who do not complete degrees do not appear in the graduate destination data, but typically have poorer employment outcomes than graduates. In both cases, rather than redoubling their efforts to improve student equity, some universities may see the new policy drivers as an incentive to restrict access to only the most 'employable' and 'retainable' of students. The employability agenda raises questions of where university accountability ends, but also of where it begins.

Our report highlights the need for cultural change at institutional level, as well as substantive changes to process and strategy. All areas of the university must be involved in the employability strategy, and all students engaged. One of the most important employability strategies is to focus on retention and completion. Indigenous, low SES, regional, and remote students have particularly low higher education completion rates (Department of Education and Training, 2016). Higher education institutions have responsibility for students whom they enrol but do not complete, and should be measured accordingly. Governments also need to be cognisant of the relationship between retention and employability, and to consider the employment outcomes of non-completers when developing metrics to measure the performance of institutions.

To this end, the integration of employability activities within mainstream curricula is essential to the promotion of both retention and graduate success among all students. Given changing patterns of enrolment, and the external employment and other time demands on students, retention and graduation strategies must shift from the margins of student life to the classroom (Tinto, 2012, p.6). The development and reward of extra-curricular activities need to be interrogated to ensure that the contributions of diverse students can be recognised, and that those low on time and/or money are not disadvantaged by new, often unstated, criteria of success. Similarly, the relevance of extra-curricular and non-traditional activities to employability needs to be communicated more broadly, particularly to groups of students who may eschew participation in order to focus exclusively on their academic achievement. Greater inclusion of the student voice in the development of institutional strategy is required. Finally, the systematic collection, monitoring and evaluation of student equity data is crucial. While current evidence is limited, it is also quite clear: many students are starting from unequal positions and facing unequal outcomes. Employability strategies therefore need to be evidence-based and explicitly designed to redress student inequity.

Recommendations

For university management

1. Embed student equity within institutional employability strategies. This includes: explicitly tracking the participation of equity group students in both mainstream and extra-curricular activities; supporting the participation of low SES and other equity students through bursaries, scholarships and other incentives; tailoring employability initiatives to specific equity groups where required; monitoring the performance of equity group students against strategic targets, including graduate outcomes; evaluating the institutional employability strategy against student equity criteria, with outcomes tied to funding; and ensuring that careers services, Indigenous centres, equity units, disability services, other student support areas, and student union groups are involved in the coordinated design, implementation and evaluation of employability strategies.
2. Embed employability initiatives within mainstream curricula where possible, including through: integrated career development learning; common employability skills units; and diverse work experience opportunities within degree structures, including various lengths of placement with financial support where relevant.
3. Monitor correlations between extra-curricular participation and measures of achievement, completion, and graduate outcomes.
4. Provide information widely and early to all students regarding the range of extra-curricular activities available and the potential employability benefits of participation.
5. Specifically promote extra-curricular activities to equity groups, especially low socio-economic status (SES) students and students with a disability who appear to be the least likely groups to participate.
6. Connect institutional employability strategies with retention and completion strategies, and monitor equity group performance across all three areas.
7. Dedicate resources to evaluation and further research of student equity issues within employability.
8. As an employer of both students and graduates, include specific equity targets and objectives within the university's own employment practices and strategies.
9. Work with industry and employer groups to address discrimination, unconscious bias, and other barriers to the employment of graduates from some equity groups.

For university careers services

10. Advocate the inclusion of career development planning in mainstream university curricula, and develop resources accordingly.
11. Ensure that student uptake of careers services is monitored and evaluated, including disaggregation by student equity groups where possible.
12. Provide specific training for careers staff on student equity issues, including disparities in participation and outcomes, and cultural and financial barriers to participation in extra-curricular activities. Develop roles for staff with expertise in equity and diversity.
13. Promote careers services broadly, including through Indigenous centres and disability services, and encourage direct referrals for low SES students, Indigenous students and students with a disability, who appear to be particularly low users of careers services.
14. Develop tailored careers programs and support as required, working with Indigenous centres, equity units, and disability services.

For student unions

15. Advocate the integration of employability initiatives into mainstream curricula, consistent with student preferences and requirements.
16. Provide specific training for union staff on student equity issues within employability, including disparities in extra-curricular participation and outcomes. Develop roles for union staff with expertise in equity and diversity as they relate to employability.
17. Promote extra-curricular activities, including the use of careers services and participation in clubs and societies, to all students and emphasise the potential employability benefits of participation. Monitor and evaluate student participation in these activities, including by equity group.
18. Specifically promote clubs and societies to low SES students, students with a disability, Aboriginal and Torres Strait Islander students, and other groups who may be less likely to participate, and ensure accommodations are made to enable and support the participation of all students.

Abbreviations and glossary

Abbreviations

ABS	Australian Bureau of Statistics
ACER	Australian Council for Educational Research
ATAR	Australian Tertiary Admission Rank
ATN	Australian Technology Network of Universities
ATSI	Aboriginal and Torres Strait Islander
BME	Black and Minority Ethnic (United Kingdom)
CLA	Collegiate Learning Assessment (United States)
CV	Curriculum Vitae
DEET	Australian Commonwealth Government Department of Education, Employment and Training (previous name)
DET	Australian Commonwealth Government Department of Education and Training
ERA	Excellence in Research for Australia
FTE	Full-time equivalent
Go8	Group of Eight Universities
GCA	Graduate Careers Australia
HEFCE	Higher Education Funding Council for England
HEPPP	Higher Education Participation and Partnerships Programme
HESA	Higher Education Statistics Agency (United Kingdom)
IRU	Innovative Research Universities
NCES	National Centre for Educational Statistics (United States)
NCUB	National Centre for Universities and Business (United Kingdom)
NESB	Non-English Speaking Background
OFFA	Office for Fair Access (England)
QILT	Quality Indicators for Teaching and Learning
RUN	Regional Universities Network
SES	Socio-economic status
SEIFA	Socio-Economic Indexes for Areas
STEM	Science, Technology, Engineering and Mathematics
TEF	Teaching Excellence Framework (England)
UK	United Kingdom
US	United States (of America)
WIL	Work-integrated learning

Glossary

Employability
We adopt the definition of employability as:

> 'a set of achievements – skills, understandings and personal attributes – that makes graduates more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy' (Yorke, 2006, p. 8).

Equity groups
In Australia, six equity groups have been the focus of targeted support and policy attention in higher education since 1990:

- people from low socio-economic status backgrounds (low SES);
- people from regional and remote areas;
- people from non-English speaking backgrounds (NESB);
- Aboriginal and Torres Strait Islanders (also referred to as Indigenous peoples);
- people with a disability and;
- women in non-traditional areas (Department of Education, Employment and Training, 1990).

Extra-curricular activities
We define these as:

> 'activities and events that students engaged in, which are not part of their formal degree classification such as hobbies, social groups, sporting, cultural or religious activities and voluntary or paid work' (Thompson, Clark, Walker, & Whyatt, 2013, p. 136).

Low socio-economic status (SES) background students
In Australia, the socio-economic status of students in higher education is determined by the geographic location of their home residence. Geographic areas are classified as low SES (bottom 25 per cent of the population), medium SES (middle 50 per cent), or high SES (upper 25 per cent), depending on Socio-Economic Indexes for Areas (SEIFA) data such as average income, employment and education levels for each area.

Student unions
Terminology differs across and within nations, but we use this term broadly within this report to include all student-led organisations that represent students and advocate for their rights and interests (e.g. student unions, student guilds, student associations). Major responsibilities of these organisations include: communicating student views to university administration; providing fora for discussion of student issues; and overseeing student clubs and societies.

Work-integrated learning (WIL)
We adopt a broad existing definition of work-integrated learning as:

> 'an integration of theory and practice knowledge whereby academic learning is aligned with its application in the workplace' (Edwards, Perkins, Pearce, & Hong, 2015, p. 23).

Project background and report structure

Project background

This research project was led by La Trobe University's Centre for Higher Education Equity and Diversity Research and funded through an external research grant provided by the Australian Government Department of Education and Training through the Higher Education Participation and Partnerships Programme - National Priorities Pool 2015. The project was undertaken in collaboration with academics from the Australian Council for Educational Research (ACER), Manchester Metropolitan University (United Kingdom), and the University of Michigan (United States).
The purpose of the project was to investigate the extent to which higher education institutions are developing employability strategies, and the extent to which such strategies are perceived as accessible and relevant to diverse student cohorts, particularly students from low socio-economic status (SES) backgrounds.

This project included:

- a desktop review of student employability strategies and initiatives;
- a desktop review of the role of student unions in equity and employability;
- a national survey of managers of university careers services;
- a national survey of student representatives.

Report structure

Our report begins with a context section in which we: (1) outline the notions of employability, social closure, and different forms of student capital, and explore the current graduate outcomes of the six Australian student equity groups; (2) outline the major drivers of the employability agenda in higher education; and (3) explore major university initiatives around student employability across and beyond the curriculum and examine the equity implications of these initiatives.

We subsequently outline our survey findings in relation to: (1) broad trends around the prioritisation of employability within universities; (2) the related equity implications; (3) the role of careers services in employability and equity; and (4) the role of student unions in employability and equity.

Finally we discuss our major findings, the overall picture emerging from our research, and the implications of these findings extending to university management, careers services, student unions, employers, and governments.

Context

Student equity and employability: cause for concern

Institutional employability strategies are being developed within a context of rising inequity across the Anglo-American world (Marginson, 2016). Within higher education, there remain substantial differences in admission levels, success and completion rates, as well as graduate outcomes across diverse student groups. To this point, the primary focus of student equity concerns has been the level of access, exemplified by the six identified equity groups in Australian higher education which were selected primarily because of their level of under-representation (Harvey, Burnheim & Brett 2016). Increasingly, however, focus is turning to the other end of the student life cycle as the inequity of graduate outcomes is being revealed. Employability strategies will need to address student equity explicitly if students are to be served and institutional reputations preserved.

We begin this section by briefly outlining the notions of employability, social closure, and different forms of student capital, before exploring the current graduate outcomes of the six Australian student equity groups, and the related research explaining reasons for inequities where relevant. This context forms a backdrop to our subsequent explanation of the rise of employability strategies and their implications for student equity. While graduate outcome data continues to form the primary evidential base for employability claims, it is also critical to note the importance of retention and completion. Commencing but not completing a degree clearly affects student employability. Some equity groups have relatively low completion rates, including low SES, regional, and Indigenous students (Department of Education and Training, 2016;), and there are personal, emotional, and financial costs of discontinuing higher education study (Harvey & Szalkowicz, 2015). National and international research suggests that discontinuing students receive little financial benefit from their studies (Tinto, 2012; Long, Ferrier, & Heagney, 2006), and are often demoralised or stigmatised by their experience (Lomax Smith et al., 2011) despite some potential intergenerational benefits of exposure to higher education (Pascarella and Terenzine, 2005). Employment data may mask earlier inequities around attrition and completion, and institutional employability strategies therefore need to be comprehensive, measuring the extent and effect of differential completion rates on subsequent employment data.

In the context of higher education, employability can be broadly understood as the capacity and potential of a graduate to gain employment. The two main categories of employability skills are discipline-specific skills and transferable skills, such as planning, problem solving, and team work. The concept of employability, however, has several different interpretations and a range of associated terminology. The term ‘employability’ is used in the Australia and the UK, whereas the term ‘workplace competencies’ is more common in the US (Yates, 2008). Employability skills are also referred to in Australia as ‘graduate attributes’, ‘capabilities’, and ‘career readiness’. The concept of employability is distinct from that of employment which refers specifically to the acquisition of a job (Yorke, 2006). A highly employable graduate might not secure employment for a broad range of reasons, including labour market factors and personal characteristics or circumstances. Yorke (2006) offers the following working definition of employability:

> ‘a set of achievements – skills, understandings and personal attributes – that makes graduates more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy’ (p. 8).

Despite the positivity of institutional mission statements, the role of employability within the university has been critiqued as a form of 'social closure'. Social closure theory offers a framework for understanding the behaviours of agents in the student employability arena, from access to higher education through to graduation and beyond (Ball, Davies, David, & Reay, 2002; Parkin, 1979). Much of the social closure literature is based on Bourdieu's concepts of social and cultural capital, higher accumulations of which enable middle and upper class families to maintain their position in the social hierarchy (Bourdieu & Passeron, 1977; Bourdieu, 1986). Social capital refers to the sum of the resources that individuals or groups can access through social relationships (Bourdieu & Wacquant, 1992), while cultural capital refers to the proficiency in, and familiarity with, dominant cultural codes and practices (Aschaffenburg & Mass, 1997). If these forms of capital help individuals to succeed within education systems then these systems will serve to reproduce class privileges and social hierarchies (Bourdieu & Passeron, 1977).

Social closure describes the tendency of privileged groups to 'restrict access to resources and opportunities to a limited circle of eligibles' (Parkin, 1979, p. 44). Within higher education, the concept translates to some students being locked out of the opportunities and networks that are available to more privileged students (Lehmann, 2012). Of most relevance to the current research project is the restricted access some groups have to employability experiences during higher education, particularly extra-curricular activities. Social closure theory also helps to explain unequal access to higher education in general and to the most rewarding employment opportunities after graduation. The theory underlines the conceptual complexity of 'employability' and the need for institutions to think carefully about what, and who, might be rewarded within their employability strategies.

Bourdieu's views on education reproducing privilege have been challenged in light of increasing evidence of intergenerational and educational mobility (Goldthorpe, 2007) and for a lack of attention to differences within socio-economic groups (Archer, 2007). The theoretical focus on cultural and social capital has also been criticised for emphasising what under-represented students 'lack'. This emphasis means the diverse skills, strengths, and experiences of these students are often overlooked and undervalued. Yosso (2005) argues that socially marginalised groups possess various forms of capital that often go unrecognised, including aspirational, navigational, social, linguistic, familial, and resistant capital. It has been shown how student diversity can be harnessed to improve teaching and learning quality, for example by exposing students to novel ideas and social situations (Association of American Colleges and Universities, 2016). Others have discussed 'classism' as a pervasive feature of higher education, along with the disputed assumption that under-represented students are more 'needy' than their peers (Bletsas & Michell, 2014).

Analysing employability through the lens of social closure theory may encourage universities to expand the forms of student capital that are rewarded, and to interrogate the extent to which their employability strategies are effectively promoting social mobility. Indeed, social closure theory can provide insight into the potential risks of employability strategies to perpetuate or even exacerbate student inequity. As our subsequent analysis of the Australian student equity groups highlights, graduate outcomes are highly unequal and, for many groups, little relative progress has been made over several decades. Inequity is intractable, partly because of the reproductive nature of social privilege within and beyond the university. Employability strategies will therefore need to address student equity explicitly and comprehensively, both within and outside of university structures.

Students from low socio-economic status (SES) backgrounds

Socio-economic classifications are central to higher education equity policies across Australia, the United Kingdom, and the United States. In Australia, low SES students comprise the equity group that receives the most targeted funding and resources from the Commonwealth Government, such as through the Higher Education Participation and Partnerships Programme (HEPPP). Place of residence is used to determine SES, with geographic areas classified as low SES (bottom 25 per cent of the population), medium SES (middle 50 per cent), or high SES (upper 25 per cent). In the UK, the Higher Education Statistics Agency (HESA, 2015d) uses seven socio-economic classifications based on parental occupation, with performance indicators measuring proportion of students from groups four to seven admitted by institution. In the US, there is no universally agreed definition of SES in higher education research or policy. Researchers often define SES as a composite measure of parental income, occupation, and educational attainment (American Psychological Association, 2016; Sirin, 2005). In policy making decisions, income is the most commonly used proxy for SES. The US Department of Education typically follows the US Census Bureau's formulation, where 'low-income' refers to the bottom 20 per cent of family incomes, 'high-income' refers to the top 20 per cent, and 'middle income' refers to the remaining 60 per cent (DeSilver, 2014). Family income is also an important factor in eligibility for financial assistance such as the federal Pell Grant for low-income college students.

Students from low SES backgrounds participate in higher education at lower rates than their peers across Australia, the US and UK (Harvey, Andrewartha & Burnheim, 2016; Perna, 2013; Zwysen & Longhi, 2016). In Australia, for example, people from low SES backgrounds comprise 25 per cent of the overall population but only 17.6 per cent of the undergraduate student population (Harvey, Sellar et al., 2016). Low SES students are under-represented within higher status institutions, particularly within the most elite institutions – the Group of Eight in Australia, the Russell Group in the UK, and the Ivy League in the US (Harvey, Andrewartha, Burnheim, 2016; Parker, 2016; Perna, 2013). These students are also highly concentrated in disciplines associated with lower salaries, such as education and nursing (Richardson, Bennet, Roberts, 2016), and in some disciplines with relatively low labour market demand (Blasko, Brennan, Little & Shah, 2002).

Importantly, low SES students are also less likely to complete higher education than their more advantaged peers (Harvey, Andrewartha, et al., 2016). An Australian cohort analysis found that approximately 68 per cent of low SES students who commenced their degree in 2006 had completed their degree by 2014, compared with 78 per cent of high SES students (Department of Education and Training, 2016). Compared to their more advantaged peers, reasons for attrition for students from equity groups revolve more around finances, family obligations, and 'getting by', and less around issues of choice and lifestyle (Edwards & McMillan, 2015). Low SES students are also disproportionately likely to receive low Australian Tertiary Admissions Ranks (ATARs), the ranking of a student's secondary education performance relative to his or her peers, which is a factor associated with increased university attrition (Edwards & McMillan, 2015; Harvey, Andrewartha, Burnheim, 2016). Commencing but not completing a degree, or taking longer to complete a degree due to time away from study, places an increased financial burden on low SES students and places them at further disadvantage relative to their peers.

Despite these disadvantages, low SES students who are retained through to graduation have similar employment rates and starting salaries to their graduate counterparts in Australia (Edwards & Coates, 2011; Li, Mahuteau, Dockery, Junankar, & Mavromaras, 2016). Partly, this equivalence is likely to be the result of discipline choice, with low SES students more likely to undertake nursing, teaching and other professional courses that are relatively vocational. In the US, a more extreme phenomenon of 'career undermatching' has been documented to describe the trend of low SES graduates transitioning into careers that are less stimulating than desired, below their skill set and

qualifications, and offer relatively low pay and fewer opportunities for advancement (Pliska, 2016). Furthermore, low SES graduates are less likely to be working if they are Indigenous, have a disability, are from a non-English speaking background (NESB), or are women in technical areas (Richardson et al., 2016). Low SES students are also severely under-represented at postgraduate level, the level of study associated with the highest potential rewards. In Australia, this group constitutes only 10.5 per cent of the total postgraduate cohort and only 8 per cent of the PhD cohort (Harvey & Andrewartha, 2013).

Students from regional and remote areas

In Australia, regional and remote students comprise a separate equity group with group membership based on area of residence. Regional and remote students are more likely to be from low SES backgrounds than their metropolitan counterparts (Burnheim & Harvey, 2016; Edwards & McMillan, 2015; James, Baldwin, Coates, Krause, & McInnis, 2004; Harvey, Andrewartha, & Burnheim, 2016). In the UK, HESA groups local geographic areas into quintiles based on the proportion of young people participating in higher education (HESA, 2015c). In the US, geographic area or region is not a formally recognised method of classifying student disadvantage. However, researchers have argued that students from both inner-city and rural populations are important under-represented groups, due to lower levels of education access sometimes found in these communities (Carter, 2005; McDonough, Gildersleeve, & Jarsky, 2010).

Australians from regional and remote areas have lower rates of participation in higher education than their metropolitan counterparts, and are particularly under-represented in higher status disciplines and institutions, and at postgraduate level (Burnheim & Harvey, 2016). These participation trends reflect differences in selection processes, academic performance, and student preferences, with some equity students choosing lower status institutions or disciplines where they feel they will 'fit in' (Greenbank, 2007). Students from remote and regional backgrounds also have lower completion than their metropolitan counterparts. Approximately 60 per cent of students from remote backgrounds who commenced their degree in 2006 had completed their degree by 2014, compared to 69 per cent of students from regional backgrounds, and 75 per cent of metropolitan students (Department of Education and Training, 2016). Those who do graduate, however, have slightly better employment rates and initial salaries overall (Edwards & Coates, 2011; GCA, 2015a; Li et al., 2016). Again, the relatively strong short-term graduate employment outcomes are partly attributable to regional graduates being more likely to work in education, health and community services than other graduates (Richardson, et al., 2016).

Students from non-English speaking backgrounds

Participation across different ethnic, racial, and cultural groups is a concern of higher education policies across Australia, the UK and the US. In Australia, students from non-English speaking backgrounds (NESB) comprise a single equity group. This category refers to domestic students who: were born overseas; have been in Australia for less than ten years; and who speak a language other than English at home (Martin, 1994). The NESB category comprises a large number of diverse ethnic sub-groups and lingual minorities with varying degrees of advantage and disadvantage. In the UK, the category of 'black and minority ethnic' (BME) distinguishes between British people from five ethnicities: Black (typically from African or Caribbean backgrounds), Pakistan, India, Bangladesh, and China. In the US, a primary policy focus is on African-Americans and Latinos/Hispanics, both of whom are significantly more likely than white students to come from low income families (Bond Hill, 2016).

In all three nations there is considerable intersection between low SES background and ethnic minority status (Alon, 2007; Bond Hill, 2016; Zwysen & Longhi, 2016).

As a broad category, non-English speaking background (NESB) students have been well-represented in Australian higher education since the mid-1990s. This category includes students from refugee backgrounds, however, who continue to be severely under-represented in higher education, with limited access to the social capital to navigate educational pathways (Ben-Moshe, Bertone & Grossman, 2008; Tregale & Bosanquet, 2011). In the UK, most ethnic minorities are over-represented in higher education, but under-represented in more prestigious universities and courses (Modood, 2012; Zwysen & Longhi, 2016). In the US, the primary focus is on African Americans and Latinos, who are significantly more likely than white students to come from low income families (Bond Hill, 2016). African-Americans and Latinos have traditionally been, and continue to be, under-represented in American higher education (Harvey & Reyes, 2015). African-Americans and Latinos are also concentrated in under-resourced, open-access universities and publicly funded community colleges (Mettler, 2014; Bond Hill, 2016).

Differences in employment outcomes by ethnicity/race are observed across all three nations. In Australia, NESB graduates are less likely to secure employment than graduates from English speaking backgrounds (GCA, 2015a; Li et al., 2016; Mestan & Harvey, 2014). These lower employment rates are not explained by greater participation in postgraduate study – NESB graduates participate in full-time postgraduate study at similar rates to graduates from English speaking backgrounds (Mestan, & Harvey, 2014). NESB graduates who secure employment have lower salaries than graduates from English speaking backgrounds (GCA, 2015a; Li et al., 2016; Mestan & Harvey, 2014). This inequity is suggestive of discrimination in the labour market. The earnings disadvantage appears to be largely driven by female NESB graduates who earn 15 per cent less than female graduates from English-speaking backgrounds (Li et al., 2016). Australian NESB graduates are less likely to be working if they have a disability, are from regional or low SES backgrounds, or are women in technical areas (Richardson et al., 2016).

In the UK, ethnic minority graduates are less likely to be in full-time paid employment (74.5 per cent) compared with white graduates (80.1 per cent) (HESA, 2015b). In the US, the unemployment rate is higher for African Americans (13 per cent) and Latinos (12 per cent) than for white college graduates (8 per cent) at one year after bachelor degree completion. The median annual salary is slightly lower for African Americans and Latinos than white full-time workers, and this disparity increases in the years following degree completion (Cataldi et al., 2014).

Aboriginal and/or Torres Strait Islander students

Aboriginal and/or Torres Strait Islanders (also called Indigenous Australians) comprise a separate equity group in higher education. These students are identified through self-disclosure on enrolment. Indigenous Australians are more likely to come from low SES backgrounds than non-Indigenous Australians (Behrendt et al., 2012).

Indigenous Australians are also severely under-represented in higher education, comprising 1.4 per cent of university enrolments compared to 2.2 per cent of the working-age population (Behrendt, Larkin, Griew, & Kelly, 2012). Indigenous participation is clustered across three main discipline areas - society and culture, health, and education (Anderson, 2016). Indigenous Australians are less likely to complete university than non-Indigenous students. Approximately 47 per cent of Indigenous students who commenced their degree in 2006 had completed their degree by 2014, compared to

74 per cent of non-Indigenous students (Department of Education and Training, 2016). Indigenous students who are retained through to graduation have positive employment outcomes overall (GCA, 2015a; Edwards & Coates, 2011). Closer examination of Indigenous graduate salaries and employment patterns, however, shows that: Indigenous graduates earn less than non-Indigenous graduates; Indigenous graduates are more likely to be employed by not-for-profit organisations than other graduates; and Indigenous graduates are more likely to be working in education, health and community services than other graduates (Richardson, et al., 2016).

Students with a disability

Students with a disability comprise one equity group that covers a broad range of mental and physical conditions with varying degrees of severity. In Australian higher education, these students are identified through self-disclosure questions. Students can indicate: whether they have a disability, impairment or long term medical condition which might affect their studies; the area of impairment (hearing, learning, mobility, vision, medical, other); and whether they would like to receive advice on support services, equipment, and facilities that might assist them (Brett, 2016). Disability is also identified by student self-assessment in the UK and US (HESA, 2014a; National Centre for Education Statistics, 2012). Students are not obliged to disclose their disability status and might choose not to do so for fear of discrimination and stigma. Higher education institutions in all three nations have a duty to make reasonable adjustments to their services so that students with a disability are not placed at a substantial disadvantage. Common forms of assistance include: assistive software or equipment; learning materials in an alternate format; accessible parking, classrooms, laboratories and walkways; sign interpreters; and note-takers (Drage, 2012).

People with a disability participate in higher education at much lower rates than the general population. Approximately 20 per cent of the adult population experience disability in Australia, the UK, and the US (Australian Bureau of Statistics, 2014; Office for National Statistics, 2015; US Census Bureau, 2012). The proportion of the undergraduate student population who experience disability is much smaller at approximately 5 per cent in Australia (Department of Education and Training, 2014), 10 per cent in the UK (Papworth Trust, 2014), and 11 per cent in the US (National Centre for Education Statistics, 2012). Students with a disability are particularly under-represented within certain types of institutions. In Australia, metropolitan institutions enrol a lower proportion of students with a disability than regional institutions (4.8 per cent and 6.7 per cent respectively) (Koshy & Seymour, 2015). In the US, students with a disability are less likely to attend four-year colleges than two-year, community colleges (Brand, Valent, & Danielson, 2013).

People with a disability are much less likely than their peers to be actively engaged in the labour market after graduation (Brett, 2016). In Australia, rates of employment are particularly low for people who require assistance with core activities (Brett, 2016). Australian graduates with a disability are less likely to be working if they are also Indigenous, regional, low SES, from a non-English speaking background, or women in a technical area (Richardson et al., 2016). Consistent trends are evident in the UK, where graduates with a disability are less likely to be in full-time paid work (72.0 per cent) compared with graduates with no known disability (80.2 per cent) at 3.5 years after graduation (HESA, 2015b). Students with a disability are less likely than their peers to continue to postgraduate study. Students with a disability comprise 10-11 per cent of undergraduates but only 5-6 per cent of postgraduates in the UK and US (National Centre for Education Statistics, 2012; Office for Fair Access (OFFA), 2016).

Women in non-traditional subject areas

Women in non-traditional subject areas, such as information technology and engineering, comprise an equity group in Australian higher education. This group has received little research and policy attention, however, since initial national targets for female participation were achieved - 40 per cent in most non-traditional fields and 15 per cent in engineering. There are no national policies for women in non-traditional areas and equity performance data on this group have not been published since 2005 (Gale & Parker, 2013). While women were historically under-represented in higher education, they now outnumber men at undergraduate level across the three nations (Bell, 2016). Despite this overall trend, women are persistently under-represented in information technology and engineering. In Australia, the UK, and the US, women comprise less than 20 per cent of undergraduate students in these two disciplines (Bell, 2016; HESA, 2014b; National Science Board, 2014).

While women remain under-represented in some STEM disciplines, some Australian data show that female graduates from STEM disciplines might be as likely as their male counterparts to be employed (Li et al., 2016). There are some notable gender differences in employment outcomes, however, with women rating their STEM qualifications as less important to their jobs than men (Li et al., 2016). Furthermore there is a sizeable gender wage gap which persists after controlling for field of education and a range of personal and occupational factors (Cataldi et al., 2011; Corbett & Hill, 2012; GCA, 2015a). There is some international evidence that women who graduate from some male-dominated disciplines find it easier than their male counterparts to obtain employment. In the UK, for example, women comprise only 17 per cent of information technology graduates and 15 per cent of engineering graduates but obtain 27 per cent and 25 per cent of graduate scheme places in these fields, respectively (Association of Graduate Recruiters, 2016).

The rise of employability in higher education

Higher education in the Anglo-American world is both expansive and expensive. The growing sector, sustained by rising student fees, public subsidies and market competition, supports an increasingly skills-based economy. The employability of graduates has therefore become a central concern of universities, governments, employers, and students alike. The following section provides a brief overview of the recent growth of higher education and the skills-based economy, and outlines the major drivers of the employability agenda. This agenda is then outlined in detail, with exploration of the major university initiatives around student employability across and beyond the curriculum. For each initiative, we examine major equity implications, focusing specifically on the six identified student equity groups within Australian higher education. Comparisons with the United Kingdom and United States are drawn throughout to highlight the international nature of inequity, likely future developments in Australia, and the need for further comparative research.

Across Australia, the United Kingdom, and the United States there have been dramatic increases in higher education participation over the past few decades (HEFCE, 2015; NCES, 2016; Norton & Cakitaki, 2016). The 2009 introduction of the demand-driven system in Australia, for example, led to larger and more diverse student cohorts as universities were freed to enrol unlimited numbers of undergraduate students in most disciplines (Norton & Cakitaki, 2016). Contemporaneously, Australian universities have faced competition from more non-university higher education providers (Norton & Cakitaki, 2016). Despite increased higher education participation, there are still consistent links between higher qualifications and improved employment opportunities and salary levels (GCA, 2015d; HESA, 2015a; United States Bureau of Labor Statistics, 2009). These links might be partially explained by skill-based technological change which has maintained demand for graduate labour

(O'Leary & Sloane, 2016; Valetta, 2016). There are complex issues of skills mismatch and over-qualification, however, with evidence of more graduates being employed in non-graduate jobs (O'Leary & Sloane, 2016), and a flattening wage premium for employees with higher education degrees (Valetta, 2016).

Higher education institutions face pressure from employer bodies to ensure that graduates are sufficiently skilled and capable of undertaking the roles of the new economy. Labour markets are rapidly changing, becoming more competitive and internationalised (Department of Education and Training, 2015). Employers expect graduates to be both technically skilled and versatile, and they have considerable influence over universities. The influence of employer groups is visible in the increasing reliance of higher education institutions on industry partnerships and collaborations, itself partly driven by government funding priorities. Industry partnerships are now a larger component of the Excellence in Research for Australia (ERA), an evaluation of research produced against national and international benchmarks (Australian Research Council, 2016). While universities have traditionally been rewarded on the basis of research outputs, from 2017 the ERA will include the amount of research income a university receives from industry and other end-users as a measure of engagement (Commonwealth of Australia, 2016).

Strategic links are also being forged between higher education institutions and employer bodies for the purpose of professional accreditation. For example, in 2016, Universities Australia and Professions Australia published joint principles on the respective roles of universities and professional accreditation bodies 'to ensure graduates are best qualified for the professions they seek to enter' (Professions Australia, 2016). Finally, employer satisfaction is increasingly considered itself as a metric of university performance. In Australia, there is now a national measure of employer satisfaction within the Quality Indicators for Teaching and Learning (QILT) suite of higher education surveys. The Employer Satisfaction Survey, first piloted in 2013-14, measures the satisfaction of workplace supervisors with the technical and generic skills of recent university graduates (Oliver, Freeman, Young, Yu, & Verma, 2014). Despite growing influence on the sector, employer groups typically remain relatively unsatisfied with the quality of university graduates. A 2012 survey across nine countries found that employers and education providers differed on the extent to which they felt that graduates were prepared for entry-level positions (Mourshed, Farrell, & Barton, 2012). In the US, 87 per cent of educational providers and 49 per cent of employers thought graduates were prepared for the job market, while in UK the respective figures were 61 per cent of educational providers and 26 per cent of employers. Student employability strategies within higher education will doubtless continue to adapt to the demands of employers given their rising influence on university rankings, funding, and student choice.

Higher education institutions are also facing direct pressure from students, especially in the context of rising fees. Tuition fees for bachelor degrees at public institutions in Australia, the UK, and the US are among the highest in the developed world (OECD, 2016). In the UK, the cost of doing a bachelors degree tripled from around £3,000 to a maximum of £9,000 in 2012. Rising undergraduate fees are further exacerbated by a move to transfer professional degrees to postgraduate level (e.g. Melbourne model see Potts, 2012) and a broader growth in postgraduate education driven by credential inflation and demands of the skills-based economy. With higher fees and mounting student loans comes an expectation that higher education will improve employment prospects and salaries (Selingo, 2015). Student enrolment decisions will be influenced by new comparators of institutional employability: the College Scorecard in the US, the National Student Survey in the UK and the Quality Indicators for Teaching and Learning (QILT) in Australia, introduced partly to allow students to make side-by-side comparisons of graduate employment outcomes for institutions and disciplines (QILT, 2016). Employability outcomes will therefore affect enrolment numbers and

institutional revenue, while at the extreme end, further threats to revenue may even arise from the lawsuits of unsatisfied students. In 2016, an American student successfully sued a Swedish university for the cost of her tuition fees after the course undertaken was deemed 'almost worthless' by the nation's higher education authority (Ali, 2016; Thalassites, 2016).

Government funding is a third major driver of employability strategies within higher education. Aside from the previously mentioned revisions to research funding, government funding is increasingly being linked to student outcomes rather than simply enrolments. In England, one of the government's stated policy objectives for the Teaching Excellence Framework (TEF) is to balance the focus on research excellence with an increased focus on teaching excellence. The TEF will link the funding of teaching in higher education to quality, using the metrics of progression statistics, student satisfaction and, importantly, employment outcomes (Higher Education Funding Council for England, 2016). In the US, there has been a significant move from enrolment-based funding towards more performance-based funding. Approximately 35 of 50 states have adopted, or are preparing to adopt, performance-based funding in higher education on the logic that the enrolment-based model 'does not necessarily provide incentives for institutions to help students successfully complete degree programs' (National Conference of State Legislatures, 2015). While performance-based models differ across each state, they share the principle of rewarding institutions with financial bonuses based on whether they meet specific performance goals tied to state priorities (e.g. graduation rate, retention rate, job placement).

Finally, and partly as a consequence of these external pressures, universities themselves are increasingly self-motivated to develop and measure employability strategies. Employability is more difficult to quantify than traditional measures of access, participation, retention, and completion, and institutions have therefore traditionally used short-term graduate employment outcomes as a proxy for student employability. Some Australian graduate outcome data are available for graduates at: four months after course completion (GCA, 2015a); three years after course completion (GCA, 2015c); five years after course completion (Edwards & Coates, 2011); as well as post-graduate destinations (GCA, 2015d). In the UK, graduate outcome data are collected at six months after graduation (HESA, 2015a) and a follow up sample is carried out approximately 3.5 years after graduation (HESA, 2015b). In the US, the 2007-08 bachelor degrees cohort has been followed up one year after graduation (Cataldi, Green, Henke, Lew & Woo, 2011) and four years after graduation (Cataldi, Siegel, Shepherd, & Cooney, 2014). Findings from these surveys demonstrate clear and persistent geo-demographic differences in rates of higher education access, completion, and outcomes. While necessary, graduate outcome data is clearly insufficient for universities to understand their own contribution to the employability skills of their students.

In part, the need for greater understanding of the institutional 'value-add' around employability led to the introduction of the Collegiate Learning Assessment (CLA) in the US. The CLA is a standardised test designed to measure the contribution of a university or college to students' critical thinking, analytic reasoning, problem solving, and written communication skills. Research shows that these higher-order skills are the most important to employers but are difficult to infer from academic results (Zahner, Kornhauser, Benjamin, Wolf, & Steedle, 2012). The CLA can be used to determine an institutional 'value-added' score by calculating the difference between the scores of students in their first year and senior year of study. The 2011 publication, 'Academically Adrift', was one of the first to make use of CLA results and found that, on average, students made only limited gains in learning (Arum & Roksa, 2011). Other studies have found larger gains in student learning, however, and the CLA instrument has 'sparked considerable research, critique, defense, and unresolved controversy' (Horsh, 2012, p. 57). Further work will be required to identify the specific contributions of

universities, and the effectiveness of different institutional strategies to develop the employability of students.

There are many critiques of the growing employability agenda in higher education, and of the driving forces behind it. The extent to which higher education should focus on improving student employability is itself highly contested. Some argue that the higher education sector is shifting unhelpfully from its traditional role of providing a broad education base to the narrower role of preparing students to enter the workforce (Berrett, 2015). By this view, higher education should remain more broadly focussed on developing student knowledge, intellectual curiosity, critical analysis, and independent thought (Matthews, 2016; Simons, 2016). As previously outlined, a broader critique focusses on 'social closure', highlighting the way that universities serve to exacerbate inequity and reinforce stratification through their focus on promoting employability, cultural capital, and 'soft' skills, to which the most privileged students have access (Lehmann, 2012). Credential inflation is leading to increased demand for soft skills as a way for employers to distinguish between graduates with similar qualifications.

More specifically, elements such as performance-based funding (sometimes referred to as outcomes-based funding), despite being championed by important reform entities such as the Bill and Melinda Gates Foundation, have also been deemed ineffective and/or inequitable. In a recent report by the Century Foundation, Hillman (2016) argues that American states using performance-based funding models have not out-performed other states, and in some cases have experienced decreases in the number of degrees produced. In the UK, opponents of the Teaching Excellence Framework are concerned that funding universities according to their employment outcomes risks masking the influence of inputs, and exacerbating stratification across the sector (Scott, 2015). Selective universities, it is feared, could become even more concerned about the likely 'employability' of their prospective students and shape their admissions criteria accordingly.

While it is beyond the scope of this report to address these broader critiques of employability and the purposes of higher education in detail, it is important to note that institutional decisions around graduate employability can have broader implications for admissions, aspirations, curriculum, retention, reputation, and student satisfaction. Consequently, approaches to employability have the capacity to affect student equity across whole institutions and the sector more broadly. Moreover, research confirms that existing graduate outcomes are uneven, with many equity group students facing higher rates of attrition, unemployment, and uncertainty. Inequities of employability are pervasive, and whatever the strength of broader critiques, the employability agenda is being driven by a confluence of funding, institutional, employer, and student pressures which are only likely to strengthen. It is therefore timely to analyse the current relationship between employability and student equity across the higher education sector, and to suggest ways by which institutions and governments might adapt their strategies to serve a more diverse range of students.

Employability strategies within higher education

Universities develop the employability skills of their students through both mainstream curriculum initiatives and extra-curricular activities. Mainstream initiatives typically include work-integrated learning; core teaching units that cover soft skills such as communication, problem-solving, and global citizenship; placements, practicums and service learning; development of portfolios and co-curricular records of achievement; and career development programs. Beyond these initiatives, universities generally provide services such as: on-campus employment opportunities for students; careers services that assist students to identify external employment and volunteering roles, and to improve their likelihood of appointment through interview preparation, resume advice, and

mentoring; study abroad and foreign language opportunities; participation in clubs, societies, union roles, and other student-led activities; networking events with employers; and mentoring opportunities with alumni. Together, these approaches often form a broader employability strategy that includes institutional targets around participation and outcomes. Retention and completion initiatives can also be considered central to institutional employability strategies, since non-completers typically have much poorer employment outcomes than graduates (e.g. US Bureau of Labor Statistics, 2016).

Mainstream curricula

There are several ways in which employability skills can be fostered through mainstream curricula. One widespread approach involves embedding transferable skills into a set of common (core) employability-skill units, usually occurring at the beginning of degree programs (Yorke & Knight, 2006). For example, all undergraduate students might take common units to develop skills such as cultural intelligence, sustainability, and design and innovation (e.g. Charles Darwin University). Another approach is embedding employability skills throughout discipline-specific units. For example, global citizenship skills might be embedded into a business unit, and innovation skills might be embedded into a nursing unit (e.g. La Trobe University, 2016c).

A further element of employability is career development learning, where students learn specifically about career development and management. Career development learning can be embedded into specific subjects – an approach that is becoming increasingly common in the UK – or delivered through more general curriculum integration (Watts, 2006). The model can depend in part on whether the degree is vocational in nature. In the UK, some institutions link career development learning closely with personal development planning (Watts, 2006), which is a common component of undergraduate programs (Thomas & James, 2007). This type of planning is designed to help students to: understand how learning relates to a wider context; improve general study and career management skills; and articulate personal goals and accomplishments (Thomas & James, 2007). An empirical link has been found between developing graduate profiles, portfolios, and records of achievement, and improved graduate outcomes (Kinash et al., 2015).

The umbrella term of ‘work -integrated learning’ (WIL) is often used in Australian higher education to describe:

> ‘an integration of theory and practice knowledge whereby academic learning is aligned with its application in the workplace’ (Edwards, Perkins, Pearce, & Hong 2015, p. 23).

Similar concepts include ‘work based learning’ in the UK and ‘cooperative education’ in the US (Edwards et al., 2015). There are two broad categories of WIL - direct work experience and on-campus exposure to industry practice. Direct work experience can be gained through work placements, clinical placements, and internships. During ‘sandwich’ degrees, students undertake a work placement over a full year in between years of university study. These one-year work placements are designed to build industry-specific skills, transferable employability skills, and business connections. The UK saw an increase in the popularity of sandwich degrees between 2010 and 2015. Graduates of sandwich degrees have a higher employment rate than other graduates in the UK (82 per cent compared with 74 per cent) (Wickware, 2016). More broadly, there is empirical evidence for a positive relationship between improved employability and graduate outcomes, and participation in work experience, internships, and placements (Kinash et al., 2015).

Some studies suggest that embedding multiple, shorter periods of work experience in a degree can be more effective at improving employment outcomes than a single, longer placement (Silva et al., 2016). Large organisations often use these types of work placements as a principal part of their graduate recruitment processes (Yorke & Knight, 2006). The nature and value of shorter-term placements and internships, however, varies across disciplines. Recent experimental research found that internship experience increased the likelihood of gaining a job in the business field by 14 per cent (Nunley, Pugh, Romero, & Seals, 2016). Some courses, such as engineering in Australia, require specific industry placements for professional accreditation (Edwards et al., 2015).

'Service learning' has also been growing in popularity within higher education since 1990, particularly in the US (Carrington, 2011). Service learning occurs outside of the classroom and is defined as a 'teaching and learning strategy that integrates meaningful community service with instruction and reflection to enrich the learning experience, teach civic responsibility, and strengthen communities' (Learn and Serve America National Service Learning Clearinghouse, 2016). In Australia, students within education and health sciences courses are often required to undertake similar unpaid practicum placements within schools and health agencies as a condition of registration.

Students can also gain industry exposure in the classroom. This on-campus exposure includes: the integration of activities into units to simulate a work environment; and industry-sponsored projects where students work in teams to develop solutions to a problem (Edwards, et al., 2015). These initiatives often form variations of problem-based learning and enquiry-based learning approaches now common across university curricula. Research suggests, however, that it is more difficult to acquire employability skills through classroom teaching than direct work experience (Mason, Williams, & Cranmer, 2009).

On the whole, embedding employability skills into mainstream curricula has greater potential to reach all students, including equity students, than focussing on extra-curricular activities (Thomas & Jones, 2007). In addition, some common (core) employability-skill units can be used as a means of harnessing equity and diversity in the classroom. All undergraduate students might complete, for example, a common unit on cultural intelligence, which covers issues such as working as a professional in diverse environments (e.g. Charles Darwin University, 2016). Embedding career development learning into specific subjects may be particularly beneficial for low SES students who can have greater difficulty seeing the relevance of their degree to future career opportunities (Doyle, 2011), and can under-estimate the importance of extra-curricular activities to future job prospects (Greenbank & Hepworth, 2008).

There are nevertheless substantial issues of accessibility with compulsory work placements, clinical placements, and internships. Australia's National WIL Strategy identified the need to address practical barriers to access such as the extra costs associated with participation, managing caring and other competing responsibilities, and location, re-location, age, and visa requirements (Australian Collaborative Education Network, 2015).

The length of the placement is a key equity consideration for low SES students. Low SES students can be discouraged or precluded from undertaking sandwich degrees, for example, as they require an additional year in education (albeit at a lower fee rate in the UK) and not all placements provide a living wage. In some cases, students have to leave their current employment to allow time to participate in placements, and then face the challenge of finding new employment when the placement ends. In addition to practical barriers, low SES students might have fewer social

connections within highly skilled professions and thus do not have the same breadth of access to work experience opportunities as their peers (Clarke, Begum, & Wright, 2012).

Other equity groups can also face unique barriers to participating in work experience. Students with a disability might require reasonable adjustments or accommodations to participate in work placements, such as specialist equipment or assistance from an interpreter, and employers might be reluctant to make these accommodations. Female students in male-dominated areas often have more negative experiences in work placements or internships than their male counterparts. Female students can be treated in gender stereotypical ways, for example, leading them to question their fit with the professional culture and their career choice (Seron, Silbey, Cech, & Rubineau, 2015).

Service-learning is integrated into the curriculum and might therefore be more accessible to all students than extra-curricular volunteer work and community service. Service-learning programs are widespread across different types of institutions in the US, including major research universities, small liberal arts colleges, and community colleges. As service learning occurs outside the classroom, however, it must be thoughtfully designed to be inclusive of all students. For example, the clustering of students with a similar disability in certain service activities needs to be avoided (Carter, Sweden, & Moss, 2012).

Compared to direct work experience, there are fewer equity implications associated with on-campus industry experience. On-campus exposure to industry practice has a greater likelihood of reaching all students and does not require additional financial, travel, and time commitments. Furthermore, all students gain industry exposure regardless of personal access to social and professional networks. As previously outlined though, the employability benefits of on-campus experience are often less than direct workforce placements (Mason, Williams, & Cranmer, 2009).

Extra-curricular activities

Participation in extra-curricular activities has also been empirically linked with improved employability and graduate outcomes (Kinash et al., 2015) by providing students with an 'extra string to their bow' (Thompson et al., 2013). Definitions of 'extra-curricular' activities vary across nations and institutions but can be broadly described as:

> 'activities and events that students engaged in, which are not part of their formal degree classification such as hobbies, social groups, sporting, cultural or religious activities and voluntary or paid work' (Thompson, Clark, Walker, & Whyatt, 2013, p. 136).

Common extra-curricular activities include: external paid and volunteer work; overseas experience; use of university careers services; and participation in student clubs and societies (Kinash et al., 2015; Perna, 2013; Yorke & Knight, 2006). Extra-curricular activities have been linked with improved communication, leadership, creativity, and self-promotion skills (Lua, Hsu, Acosta, & Hsu, 2014).

In general, participation in extra-curricular activities is linked with improved employability and graduate outcomes. Qualitative research with successful, employed alumni found that social networks made through extra-curricular activities helped graduates find jobs and progress within their chosen careers (Stuart, Lido, Morgan, Solomon, & May, 2011). Employers typically see extra-curricular participation as a useful means of determining keys skills and competencies; predicting

cultural fit with the organisation; and distinguishing between candidates with similar qualifications and attainment levels (Stuart et al., 2011).

Participation in extra-curricular activities is becoming increasingly important as a mark of distinction, given the large number of graduates holding similar levels of degree attainment. Participation can be recorded as part of modified or supplemented academic transcripts and/or within student portfolios of achievements while studying. Australia's Curtin University, for example, introduced the Curtin Extra Certificate in 2014 where students record their participation in approved extra-curricular activities (Curtin University, 2016). The certificate can be shared with prospective employers and used to support applications for scholarships and further study. In a similar manner, many UK higher education institutions offer extra-curricular 'employability awards'. Examples include the Employability Points scheme at the University of Kent (2016) and the Big Essex Award at the University of Essex (2016). Other initiatives focus more narrowly on specific employability skills. Australia's Victoria University, for example, established the Student Leadership Program which provides unique and free professional development opportunities focussed on leadership skills (Victoria University, 2016). This program allows participants to receive recognition of their extra-curricular participation on their academic transcripts (Victoria University, 2016).

Increased recognition of extra-curricular participation means that 'optional' activities are in fact becoming mandatory for some graduates to succeed in a competitive marketplace. A new front of inequity is thus emerging. The employability benefits certainly differ depending on the type of extra-curricular activity (Lua et al., 2014), the nature and frequency of participation (Thompson et al., 2013), and student characteristics (Blasko et al., 2002). However, there are clear geo-demographic patterns of participation across extra-curricular activities in general, as well as within specific types of extra-curricular activities. Overall participation in extra-curricular activities is more common among students attending higher status institutions (Blasko et al., 2002; Martin, 2012; Rivera, 2011; Walpole, 2003). Even within higher status institutions, high SES peers spend more time participating in these activities than their middle and low SES counterparts (Martin, 2012). Low SES students spend less time participating in various extra-curricular activities because they are more likely to: spend more time undertaking paid work (Stuart et al., 2011); be narrowly focussed on academic performance and getting a 'good degree'; and under-estimate the importance of extra-curricular activities (Greenbank & Hepworth, 2008). Being equipped with traditional forms of social and cultural capital, high SES students can be more strategic about their participation and translating their extra-curricular experiences into positive signals for employers.

Graduates with certain types of extra-curricular experiences are favoured by employers (Blasko et al., 2002; Rivera, 2011). In the US, for example, elite businesses favour activities that are 'associated with white, upper-middle class culture' (Rivera, 2011, p. 83). These are activities that: display accomplishment (rather than activities that 'anyone could do'); are expensive in terms of foregone earnings and travel costs; and require dedicated involvement over long periods of time (Rivera, 2011). This preference shows how:

> 'extracurricular activities have become credentials of social and moral character that have monetary conversion value in labor markets' (Rivera, 2011, p. 71).

In Australia, it is also important to understand the way that volunteering is understood and rewarded, as a specific form of capital (Yosso, 2005). For example, Indigenous and NESB students do not necessarily identify with the concept of 'volunteering' in the same way as their peers and thus voluntary contributions of these groups might be particularly under-reported (Walsh & Black, 2015).

Many students contribute to their families or communities in ways that are either unmeasured or unrewarded by universities.

Employment during study

Employment during study typically leads to more successful graduate outcomes, especially when this employment is related to career goals (Sagen et al., 2000). The employability benefits can depend on the nature of the work and the number of hours involved. Volunteering and community service involves students 'giving freely of [their] time to help others through organizations' (Cnann, Smith, Holmes, Haski-Leventhal, Handy, & Brudney 2010, p. 71). This type of unpaid work has been associated with increased leadership ability, self-confidence, critical thinking, interpersonal skills, knowledge of different races and cultures, and understanding of local community issues (Astin, Volelgesang, Ikeda, & Yee, 2000).

Employability can also be promoted through paid employment. Australian research found that graduates who had undertaken paid work in the final year of study were significantly more likely than their peers to be working several months after graduation (Richardson, Bennet, & Roberts, 2016). For some student groups, however, more hours of paid work has been associated with worse academic performance and graduate employment outcomes (Callender, 2008; Martin, 2012). Many higher education institutions provide jobs on campus for students, a practice that is particularly prolific in the US. Employment on campus can ease the conflict between work and study schedules. Students are often employed on a casual basis as peer tutors, mentors, residence advisors, and student ambassadors.

Both paid and unpaid employment opportunities may nevertheless be mediated by class, ethnicity, and other factors. For example, students with higher social status, extensive social networks, and financial security are more likely to volunteer. Research at one Australian university found that low SES students were half as likely as other students to participate in voluntary work placements (Harvey & Reyes, 2015). High and middle SES students also participate in the types of volunteering activities that are more highly regarded by employers. Culturally and linguistically diverse students and Indigenous students do not necessarily identify with the concept of 'volunteering' or associate this term with the voluntary contributions they make within their communities (Walsh & Black, 2015). Therefore the voluntary contributions of these student groups are under-reported and often insufficiently valued. There remains a need for universities and employers to consider other forms of capital, e.g. familial capital (Yosso, 2005), when considering curriculum, acknowledgement of service, and potential of employment applicants.

Engaging in paid work during semester/term time can also negatively affect employability and graduate employment outcomes for low SES students. Low SES students are more likely to: work out of financial necessity; work during semester; and work more hours per week during semester time. More hours worked means less time for academic study, and/or participation in extra-curricular activities, and has been associated with worse academic performance (Callender, 2008; Martin, 2012). Students also view the type of work undertaken out of necessity to be less relevant to study and career goals. For this reason, some institutions have developed specific modules to help students recognise the skills developed during paid employment and the relevance of this experience to study and future career aspirations (Thomas & Jones, 2007).

Employment on campus can ease the conflict between study and work schedules, which is particularly beneficial for low SES students (Horwedel, 2008). Some universities also provide

'working bursaries' for students living on campus where students work in kitchens and gardens in exchange for residence (Porter, 2016 March 20). Many institutions also provide graduate development programs, offering rotations through different departments (e.g. La Trobe University, 2016b). These programs are typically small and highly competitive, with students selected on the basis of academic performance.

Overseas experience

Overseas experience is associated with improved employability and graduate outcomes. Studying abroad has been found to improve communication skills, understanding of moral and ethical issues, and student satisfaction (Luo & Jamieson-Drake, 2015). Employers, academics, and students also associate international experience with increasing employability by providing opportunities for developing new networks, experiential learning, language acquisition, and cultural understanding (Crossman & Clarke, 2010). Students who spent time studying, working, or volunteering overseas during their degree have better academic results, lower unemployment rates, and higher average salaries at six months after graduation (Universities UK, 2016).

Low SES students are less likely than their peers to travel overseas during their studies. Barriers to participation include: the costs associated with travel; lack of awareness of exchange opportunities; and lack of knowledge about the financial support available (Harvey, Sellar et al., 2016). The prestigious Group of Eight, Russell Group, and Ivy League institutions have both the lowest proportions of equity students and the highest overall proportion of students participating in overseas exchange programs (Daly, 2011). In particular, community colleges in the US have very few students participating in overseas exchange programs (Dessoff, 2006). Even within the same institutions, low SES students are less likely than middle and high SES students to study overseas doing their undergraduate degree (Harvey & Reyes, 2015; Harvey, Sellar et al., 2016; Universities UK, 2016).

Some other equity groups are also less likely to undertake study abroad or 'outbound mobility' placements. In Australia, regional students are less likely than their metropolitan counterparts to participate in long-term overseas study exchange programs (Harvey, Sellar et al., 2016; Salisbury, Umbach, Paulsen & Pascarella, 2009). Available evidence suggests that students with a disability are also less likely to go overseas during their studies. In the US, only 273 post-secondary institutions tracked the disability status of study abroad students in 2014. Students with a disability comprised 9 per cent of the student population but only 5.7 per cent of study abroad students (Mobility International USA, 2015). The majority of these students had a 'learning disability' (44 per cent), followed by 'mental disability' (26 per cent), and 'other' disability (21 per cent). Less common were 'sensory disability' (5 per cent), and 'physical disability' (5 per cent).

Accessing university careers services

Students can seek additional career development and employability support through university careers services. Commonly provided services include: careers information and advice; assistance preparing a curriculum vitae (CV); job interview training; and managing employer relationships and events. Careers services are typically the main source of employment advertising for students. In general, students in higher education prefer personalised one-one-one career advice that 'takes into account their interests, values, strengths and weaknesses'; is provided by someone with experience in their desired industry; and is complemented with online resources (Urbis, 2011, p. 39).

Better resourced institutions can more easily provide the personalised careers services preferred by students. Research from the UK found considerable variation between institutions regarding student satisfaction levels with careers services (National Centre for Universities and Business, 2015). Better resourced institutions can also more easily develop highly desired relationships with industry. Some employers, for example, are reluctant to attend careers events at institutions that have large numbers of students from disadvantaged and minority backgrounds (Morey et al., 2003).

Students from equity groups are less likely to seek out careers services than their peers. In Australia, low SES, NESB, and Indigenous students are the least likely groups to consider university resources, such as careers services, as methods to improve their employability (Richardson et al., 2016). In general, these students focus more on study and work experience in an effort to improve their employability and less on other avenues and sources of support. Some research suggests that low SES students are also less aware of university careers services and less confident than their peers about accessing these services (Greenbank & Hepworth, 2008).

Equity students are less likely to access 'bolted on' career development support because of limitations of location and timing. One multi-campus, Australian university examined the geo-demographic profile of students who attended career workshops over the 2013 academic year (Simpson & Ferguson, 2013). The majority of workshops ran for one to two hours, were scheduled between 9am and 5pm, and were offered on the main, metropolitan campus as opposed to the smaller, regional campuses. Low SES students were significantly less likely than high SES students to attend more than one workshop. Students based on regional campuses comprised only 4 per cent of workshop participants despite comprising 29 per cent of the student body.

Low participation is especially problematic as equity students may often have the most to gain from careers services, especially when advice and support is tailored to their needs and experiences. Low SES students, for example, may have greater difficulty seeing the relevance of their degree to future career opportunities and may be less aware of the types of skills and experiences that are valued by employers (Doyle, 2011). Urbis (2011) examined career development for potentially disadvantaged groups, and found that:

> 'young people with a disability are the least well-served of all young people in terms of career development' (p. 65).

These students can require highly specialised and individualised careers services and often face unfounded assumptions about their capabilities. Refugees and new migrants often have limited work experience, weaker English skills, and might be less familiar with the concept of 'career pathways', the Australian labour market, and cultural norms in the workplace. An awareness of, and sensitivity to, cultural differences was found to be particularly important. Indigenous students, for example, tend to share a greater level of responsibility for their career development with other people, including families, teachers, elders, community, and Indigenous mentors within universities.

Greater consideration of student equity in the delivery of careers services is crucial if universities are to avoid reproducing existing inequalities. One approach could be employing more career practitioners with expertise in student equity and diversity. McIlveen, Everton, and Clarke (2005) highlight the importance of 'Careers and Equity' positions to 'signal the nexus between career development and the provision of services to alleviate disadvantage' (p. 66).

While a lack of resources is a restriction, McIlveen et al. (2005) contend that:

> 'it is the responsibility of the careers service to engage with university organisational dynamics to bring about social justice initiatives, rather than rely on a top down approach to waiting for direction and resources' (p. 69).

More broadly, research suggests a need for universities to work with employers to address discriminatory practices, including unconscious bias, implicit or explicit racism, and isomorphic hiring tendencies; and to increase employer understanding of equity and diversity issues. Universities are themselves large employers, and also hold significant leverage over many employers and professional bodies. Data suggest discrimination against, and under-employment of, certain graduates, particularly NESB and disability students. As universities become more accountable for the post-graduation outcomes of their students, it will be in their interest to work directly with employment and professional bodies to minimise unconscious (and conscious) bias.

Participation in student organisations

Students can develop a range of skills through involvement in student unions and governance organisations. While the structures and operations differ in Australia, the UK, and the US, the main function of these organisations is to advocate for the rights and interests of students. There are two main ways in which students can be involved - as official office bearers and through participation in affiliated clubs and societies.

Official student representatives are typically elected by fellow students. Major responsibilities include: representing students and communicating student views to university administration; providing fora for discussion of student issues; and overseeing student clubs and societies. In the US in particular, student activism has long been an important component of higher education. Student activism has also been found to be a vehicle for student learning. For example, student activism develops leadership and critical thinking skills and improves understanding of social responsibility and democratic processes (Barnhardt & Reyes, 2016; Kezar, 2010).

There are many different types of student clubs and societies which can be cultural, political, spiritual, musical, sport, special interest, and discipline-related. Participation in various student organisations is used by employers as evidence that graduates are 'well rounded' and have a range of positive skills and attributes (Radloff, 2010). Higher levels of campus involvement has been associated with increased student satisfaction (Martin, 2012), interpersonal and organisational skills (Blasko et al., 2002; Sagen, Dallam, & Laverty, 2000), and communication and self-promotion skills (Lau, Hsu, Acosta, & Hsu, 2014). Through participation in clubs and societies, students can interact with a diverse range of students and develop highly sort-after skills, such as teamwork and planning. Exposure to a range of activities improves students' understanding of their own interests, strengths, and aptitudes which leads to more informed career decisions (Radloff, 2010). The employability benefits derived from participating in student organisations can depend on discipline area. Involvement in student organisations increases the employment success of students in the behavioural sciences (e.g. education, psychology, social work), whereas internship-type experiences are more important for students in the life sciences (e.g. engineering, nursing) (Sagen, Dallam, & Laverty, 2000).

As with most extra-curricular activities, however, some students are more likely to be involved in student organisations than others. High SES students tend to be more involved in campus social and recreational activities than middle or low SES students (Martin, 2012). This trend reflects the

'privilege of ease' these students have due to accumulated social and cultural capital, as well as access to leisure time. High SES students often find it easier to navigate campus life and can spend more time in clubs and societies and less time in paid work (Martin, 2012).

Summary

Equity issues pervade the notion of employability. Existing graduate outcomes highlight differential performance across student groups, with students from some non-English speaking backgrounds, those with a disability, and those from low SES backgrounds recording relatively low levels of graduate employment, postgraduate study, and/or access to high status professions. This graduate outcome data reflects a wealth of research highlighting differential access to employment opportunities and experiences, both within and beyond university. Graduate destination data, however, is skewed by the fact that it does not capture outcomes for people who do not complete their degree. Indigenous, low SES, regional, and remote students have particularly low higher education completion rates. Moreover, evidence suggests that many existing employability initiatives of universities are likely to be discriminatory and/or unhelpful for certain groups of students. Cultural capital is required and valued, while other forms of capital are marginalised. Students and graduates are expected to demonstrate their 'cultural fit' with employers, but the culture into which they must fit is rarely interrogated. In light of this research, it is clear that new institutional employability strategies are required, to which student equity and diversity are central. In the research analysis that follows, we investigate the extent of strategic activity, and the perceptions of university staff and students on the nature, effectiveness and equity of that activity.

Findings

In order to understand how Australian universities are developing employability strategies, and to what extent those strategies are focussed on equity, we surveyed both the managers of university careers services and a range of student union representatives. Of the 37 Australian public universities invited to participate, 29 career managers (or equivalent) responded to the survey, while 54 student union representatives (usually presidents or general secretaries) responded from 31 student organisations nationally. Survey questions covered issues of employability and equity such as: employability strategies; tailored career development support; participation in extra-curricular activities; and graduate employment. We also conducted desktop reviews of both university websites and student union websites to further examine the extent of focus on issues of employability and equity. The full methodology and survey instruments can be found in the Appendices of this report.

The following section outlines our findings from the surveys and desktop reviews, with subsequent discussion of the broader implications for universities and governments.

Prioritisation of employability

Our surveys found the role of higher education in improving student employability to be somewhat contentious. Survey respondents provided their views on whether higher education should prioritise improving student employability or broader learning (see Table 1).

Table 1: Should higher education prioritise employability or broader learning?

	Proportion of responses	
Response categories	**Managers of careers services** (n = 25 valid responses)	**Student representatives** (n = 45 valid responses)
Focus equally on the two objectives	56%	37%
Prioritise employability	32%	40%
Prioritise broader learning	12%	23%

Slightly more than half of the managers of careers services thought that higher education should be equally focussed on improving student employability and broader learning. A common expression among managers was that both objectives went *'hand-in-hand'*. It was felt that a broad education-base could improve employment prospects, when the appropriate support was provided. Consistent with this viewpoint, several managers discussed the need to better integrate employability skills within mainstream curricula. One manager of a careers service commented:

> *'The focus needs to be divided… students are telling us that employment outcomes are vital. However, successful graduates should be knowledgeable, and instilled with the value of lifelong learning'.*

Slightly more than one third of the student union representatives felt that higher education should be equally focussed on both objectives. A common expression among these students was that the two objectives were *'not mutually exclusive'*. One student commented:

> *'Developing learning capabilities and intellectual rigor should improve a student's use as a potential employee. Focussing purely on practical skills may make them more job ready, but less flexible and adaptable'.*

Some students specified that, while both objectives were equally important, professional degrees should have an employability focus and generalist programs should have a broader educational focus. Several students emphasised the importance of providing students with choices to meet their various needs. One student, for example stated that:

> *'I think students should be able to choose a course or study method that fits their own objectives'.*

Both managers of careers services and student representatives were more likely to prioritise improving employability over broader learning. Several student representatives, for example, commented that the main reason that students go to university is *'to get a job at the end of it'.* Survey respondents holding this opinion reported that an employability focus was becoming increasingly necessary given the current economic and job market trends. One manager commented that:

> *'The majority of students are attending university, now in a tight labour market, to upskill and find work at the end of their degree'.*

Only a small proportion of managers felt that higher education should prioritise broader learning over employability. Several managers felt that a focus on broader learning was an outdated approach. One manager, for example, commented:

> *'Long gone are the days of the majority of people enrolling into a degree for the love of an education or to increase knowledge'.*

A larger proportion of students than managers felt that broader learning should be the priority. One student commented that:

> *'Universities should be focussed on teaching students their subject matter of their degree. It is an employer's responsibility to train them for the job.'*

While there was some debate around the extent to which higher education should focus on employability, our research found that employability was a clear and consistent university priority. Our desktop review found that, for example, approximately three quarters of universities considered issues of employability in their Strategic Plans (see Table 2).

Table 2: Desktop review of student employability strategies and initiatives

Priority level	Indicators	Proportion of universities (n = 37)
Practical focus:		
University has developed employability resources	Employability good practice guides; workshops; forums; online resources; awards; and/or courses, units, certificates.	100%
Strategic focus:		
Strategic Plan considers employability	Strategic Plan considers issues of employability, graduate attributes, career readiness, etc., and/or transition to employment	76%
Strategic Plan prioritises employability	Employability is a clear thread throughout Strategic Plan or one of five or fewer priority areas	30%
Strategic Plan includes 'employability' in lexicon	Strategic Plan specifically refers to 'employability'	30%

The surveys provided further evidence of employability as a university priority. Approximately half of the universities had a member of senior management with specific responsibility for student employability (see Table 3). Some of the senior positions had broad areas of responsibility, for example the Deputy Vice-Chancellor (Education), and some of these positions had a more direct and narrow focus on employability, for example the manager of career development services. Only one of these senior positions included the word 'employability' in the position title, Pro Vice-Chancellor (Employability and Postgraduate Coursework).

Table 3: Is there a member of senior management responsible for student employability?

Response	Proportion of responses (n = 29)
Yes Position titles: • Deputy Director, Student Engagement • Deputy Vice Chancellor (Education and Students) • Deputy Vice Chancellor (Education) • Deputy Vice Chancellor (Students and Education) • Director, Student Recruitment • Director, Student Success • Manager, Career Development Services • Manager, Employment and Career Development Services • Manager, Student Transitions and Careers • Pro Vice Chancellor (Employability and Postgraduate Coursework) • Pro Vice Chancellor (Student Engagement and Equity) • Registrar • Vice President (Engagement)	45%
No	45%
Unsure	10%

A little more than one third of universities had a formal employability strategy for students. The commitment to student employability appeared to differ by university group, although findings should be interpreted with caution due to the small number of universities within each group. Universities from the Australian Technical Network and the Innovative Research Universities were the most likely to have a member of senior management with specific responsibility for student employability (100 per cent and 60 per cent respectively) and were the most likely to have a formal Employability Strategy for students (50 per cent and 60 per cent respectively). Universities from the Regional Universities Network were the least likely to have a member of senior management with specific responsibility for student employability (20 per cent) or a formal Employability strategy (20 per cent).

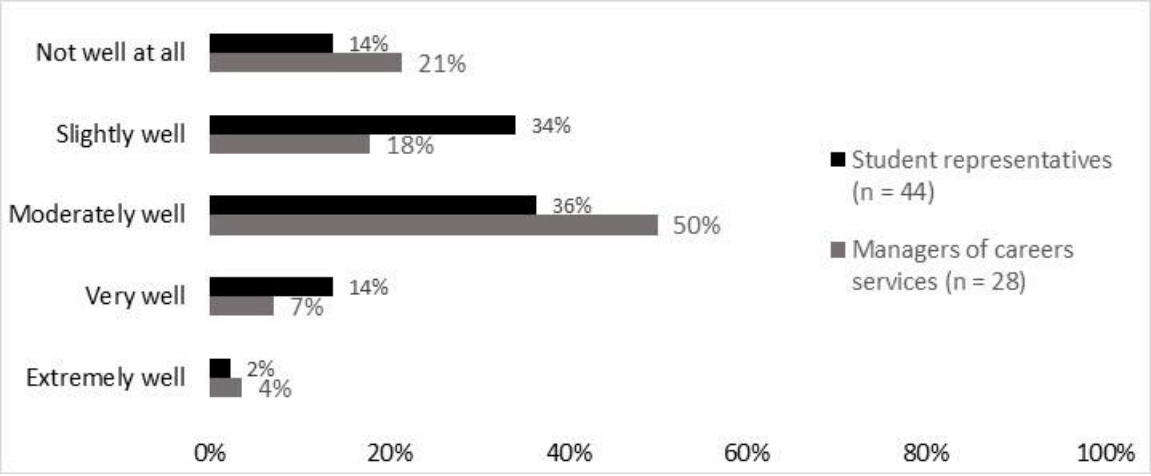
The equity implications

While improving employability was consistently a university priority, there was little focus on the employability of students from equity groups. Survey respondents commonly recognised the need for greater university-wide commitment to combined objectives of equity and employability. One manager explained that:

> *'[Universities are] addressing employability and also addressing equity but [I'm] not sure they are connecting the two'.*

Only 11 per cent of managers and 16 per cent of student representatives felt that their universities were promoting the employability of students from equity groups either 'very well' or 'extremely well' (see Figure 1).

Figure 1: How well is your university promoting the employability of students from equity groups?



Graduate outcomes by equity group

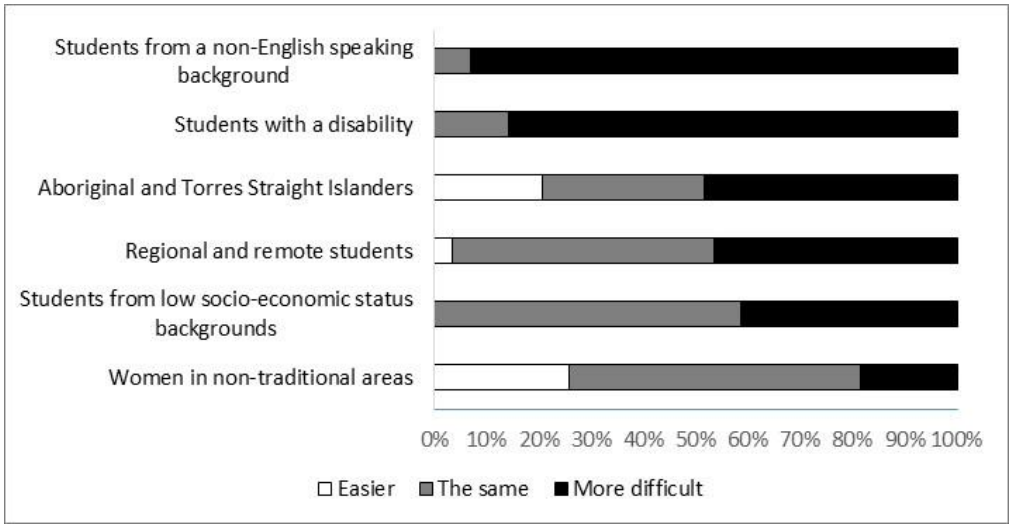
Graduate outcomes were routinely monitored by university careers services. Our survey found that approximately 70 per cent of managers of careers services monitored graduate outcomes, primarily through national graduate destination surveys. Less commonly, several ad hoc methods were also used to monitor graduate outcomes, such as: alumni networks and events; LinkedIn searches; and stand-alone graduate surveys managed independently by schools or faculties.

The surveys revealed that there was no systematic monitoring of the graduate outcomes of equity groups, beyond the limited amount of equity data available through national graduate destination surveys. One manager of careers services stated that:

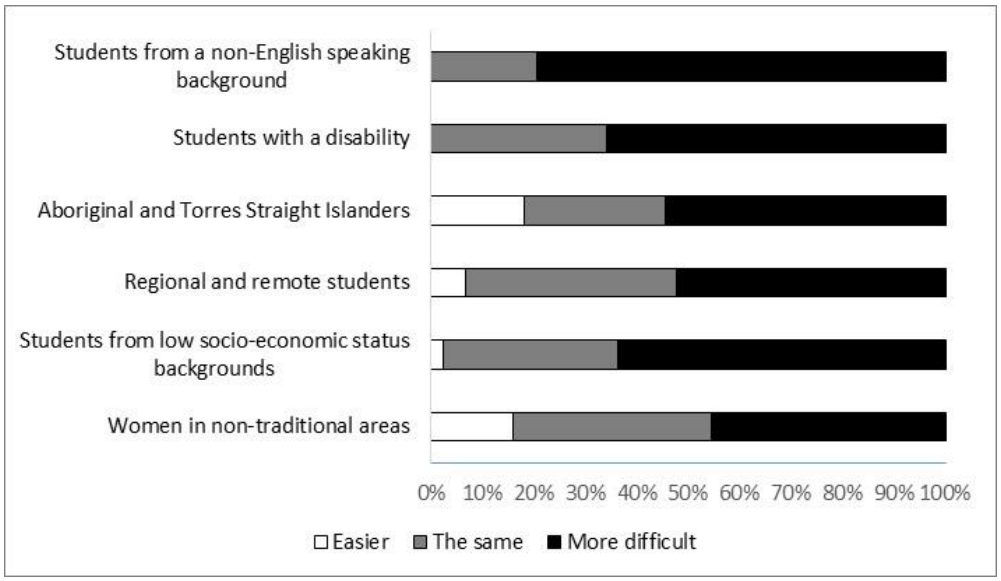
> *'The only information we have on their employment status is that collected in the national survey. It would include gender and those from an Aboriginal and Torres Strait Islander background but I believe that they would be the only equity groups that could be examined through the national survey.'*

While graduate outcomes of equity groups were not specifically monitored, survey respondents were aware of geo-demographic differences in employment outcomes. The majority of survey respondents reported that NESB graduates and graduates with a disability found it more difficult than their peers to secure employment (see Figure 2).

Figure 2: Do graduates from equity groups find it easier or more difficult to secure employment?
(n = 29 managers of careers services)



(n = 44 student representatives)



Survey respondents identified two main reasons for the reluctance of some employers to recruit NESB graduates. The two main reasons were: discriminatory employer attitudes and beliefs; and (the perception of) relatively poor English language and communication skills of graduates. One student commented that:

> *'All too often a student/graduate is overlooked due to cultural background, accent, name etc without being given a chance.'*

Survey respondents identified two main reasons for graduates with a disability finding it more difficult than their peers to secure employment after graduation. The two main reasons were: recruitment processes, especially job interviews, disadvantaging graduates with a disability, including those who have mental health issues; and employers being unwilling to make reasonable accommodations for people with a disability. One manager was particularly concerned that universities were not fulfilling their responsibility of improving the employability of students with a disability and stated:

> *'There seem to be increasing numbers of students coming into university with significant disabilities and debilitating health conditions. If universities are accepting these students there is a moral obligation to provide adequate resources to support their learning and success. There is also a moral obligation to support them into fulfilling careers. In my observation and experience, universities are not doing this.'*

Managers of careers services reported that female graduates from STEM fields can be specifically *'sought out'* by employers because of their relatively low numbers. About 80 per cent of managers reported that female graduates from non-traditional subject areas found it the same as, or easier than, their peers to secure employment. One manager commented that:

> *'Engineering and geology female students have been snapped up by employers because they are female'.*

Universities were actively targeted by external employers wanting to recruit students or graduates. All surveyed managers of careers services reported that their university was targeted by external employers wanting to recruit students or graduates. Approximately half of the universities were targeted by employers wanting to recruit students from particular disciplines, most commonly business, commerce, and engineering. About one third of the universities were targeted by employers wanting to recruit students from at least one of the equity groups – most commonly Indigenous students and students with a disability. As one manager explained:

> *'[It is] usually government departments and some large corporates who have equity targets for recruitment'.*

One manager expressed concern that some of these equity targets were tokenistic. This manager stated:

> *'What [employers] really want is a disabled, indigenous, STEM woman to tick all of their boxes in one!'.*

Only one surveyed university was specifically targeted by employers wanting to recruit students and graduates from low SES backgrounds.

The relationships between industry employers and universities differed by university type. Universities belonging to the Australian Technology Network were more likely to be targeted by employers wanting to recruit students by equity group rather than by discipline. In contrast, non-aligned universities were more likely to be targeted by discipline than equity group. The other university types were equally likely to be targeted by discipline and equity group.

The survey findings revealed the opportunity for universities to coordinate and manage employer relationships more strategically. Approximately one third of managers reported that a major barrier to establishing effective relationships with employers was the lack of university staff with direct responsibility for cultivating these relationships. The lack of central coordination of employer relationships and the *'silo mentality'* within universities also made it difficult to build employer relationships.

Universities themselves were a major employer of students and graduates. Approximately 80 per cent of managers reported that their university managed programs aimed at employing current students or graduates on campus. Students were offered casual employment in a range of support roles, including peer tutors, mentors, residence advisors, student ambassadors, and assisting at university events. Equity was not often a primary consideration in the employment of students on campus. Only one third of these institutional employment programs had specific objectives to employ students or graduates from equity groups – most commonly Indigenous and low SES students. At one university, regional students could be employed as *'digital interns'* through the university's marketing department. Another university had established a program *'purely'* for employing students from low SES backgrounds on campus but had since expanded the program to all students.

Mainstream curricula

The surveys provided some evidence of employability being embedded into mainstream curricula. Approximately 25 per cent of the managers of careers services reported that their service was involved in designing and delivering career development learning, with students learning about career development and management as part of the curricula. The benefit of embedding career development into the curricula in order to reach all students, including students from equity groups, was commonly recognised. One manager commented that:

> *'Heavily embedding career development learning or employability seminars within curriculum [is] assessable [and] provides a strong reach into programs and courses'.*

The need for greater integration of employability into mainstream curricula was commonly identified. Approximately one third of managers of careers services reported that greater integration of employability into the mainstream curricula would benefit all students, including students from equity groups. For example one manager stated that:

> *'More work on employability within the curriculum, from first year right through to graduation, with meaningful assessment items, will allow ALL students, regardless of equity or background to succeed'.*

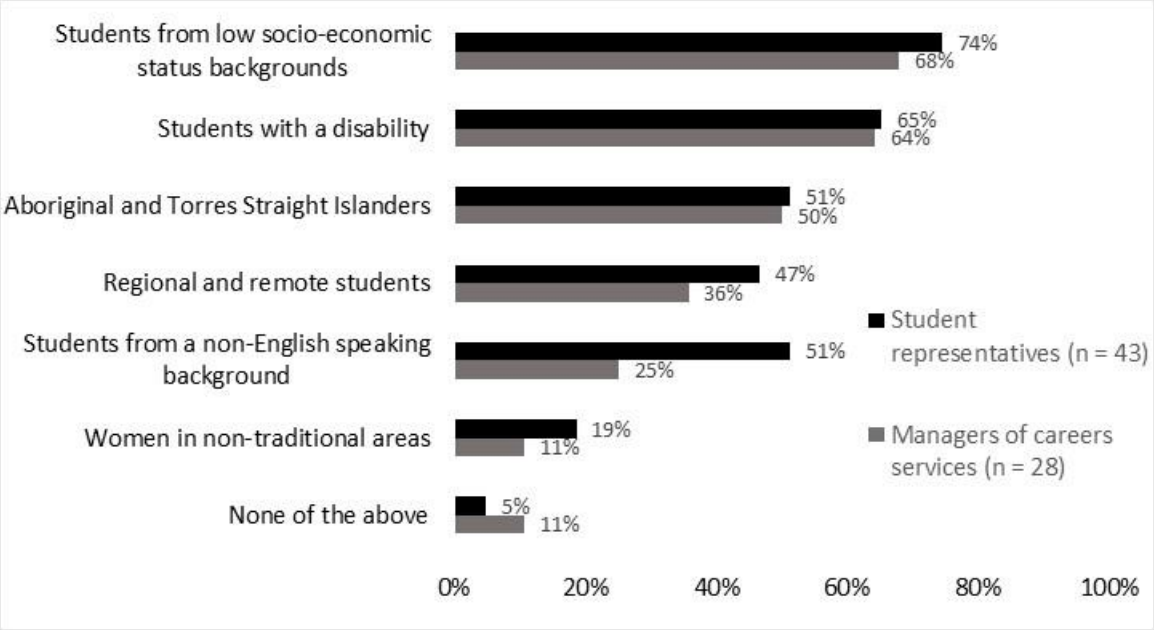
The need for a university-wide and multi-pronged commitment to the inclusion of employability within mainstream curricula was identified. One manager, for example, stated that equity groups would benefit from:

> *'[an] integrated careers framework in [the] curriculum, more opportunities for WIL in every discipline, better industry links - this is not the job of the Careers Service only - it should be university wide!'.*

Extra-curricular activities

The surveys provided evidence that not all student groups are able to participate equally in extra-curricular activities that can increase their employability, such as volunteering, work experience, and overseas exchange. The majority of survey respondents reported that low SES students and students with a disability were less likely than their peers to participate in extra-curricular activities (see Figure 3).

Figure 3: Which equity groups are less likely to participate in extra-curricular activities?



Two barriers to extra-curricular participation were consistently identified for low SES students - financial constraints and time constraints. These constraints were often related to having greater paid work and carer responsibilities. One manager explained that:

> *'We have high percentages of low SES students who have financial difficulties and carer duties that require them to focus on non-university activities, like high amounts of paid work, which impacts on their ability to engage with any extra-curricular activities.'*

In addition to financial and time constraints, a small minority of survey respondents identified other barriers for low SES students. Several survey respondents referred to the tendency for low SES students to narrowly focus on academic achievement and mentioned the importance of informing students that employers look favourably on extra-curricular participation. One manager, for example, stated that:

> *'[I] haven't found any student less likely to participate once they have had pointed out that extra-curricular is an imperative/standard expectation in terms of professional and personal identity'.*

Other barriers, however, were also identified, such as low SES students having restricted access to professional networks for work experience opportunities.

For students with a disability, it was recognised that the level of participation was highly dependent on the nature of the disability and the type of extra-curricular activities. Some of the reduced participation for students with a disability was attributed to social barriers, especially concerns about exclusion and discrimination during extra-curricular activities. One manager commented that:

> *'Students with disabilities are also less inclined to participate as they lack the confidence to negotiate these arrangements due to concerns of discrimination.'*

Physical limitations were another consideration for this group. One manager commented that:

> *'Students with a disability might also find it more difficult to get involved in such activities although that would depend greatly on the nature of their disability and how it affects them daily.'*

For regional students, it was recognised that geographic isolation and off-campus study made it difficult to source local work experience opportunities. In relation to work placements during study, one manager explained that:

> *'Distance is a barrier for participation for many students as is [the] cost involved in taking time off work and family commitments'.*

Student representatives were more likely than managers of careers services to report that NESB students do not participate as much as their peers in extra-curricular activities. These students attributed the lower level of participation to poor English language skills, either real or perceived.

Although it was widely acknowledged that some equity groups have lower participation in extra-curricular activities, support to encourage their participation was not consistently available. The most common type of support that was available was targeted financial support to encourage students in financial hardship to participate in extra-curricular activities. This financial support was available at approximately 40 per cent of universities, most commonly for low SES students participating in work placements and overseas exchange programs.

The role of careers services

While every university had their own careers service, the size of these services differed considerably. University careers services ranged in size from two to 35 full-time equivalent (FTE) staff members, with an average size of 11 FTE staff members (and a median size of 9.5 FTE staff members). On average, universities in the Australian Technology Network had atypically large careers teams (average of 25 FTE staff) and universities in the Regional Universities Network had atypically small careers teams (average of five FTE staff).

Careers services had a direct role in improving student employability. All of these services provided practical support, in the form of helping students with curriculum vitae (CV) checks and job interview training, as well as providing general careers information (see Table 4).

Table 4: What types of career development support does your service provide?

Most commonly provided support	**Proportion of careers services** (n = 29)
Curriculum Vitae (CV) checks	100%
Job interview training	100%
Careers information	100%
Employer fairs	69%
Placement services	52%
Sector briefings	52%

The survey found that only 48 per cent of the careers services monitored the service uptake of any of the equity groups. About one quarter of the managers reported that an inability to identify students from equity groups restricted their capacity to promote services to these groups and monitor their service uptake. In particular, managers of careers services reported that it was difficult to identify low SES students in order to monitor their service uptake and tailor careers services to them. While SES information (i.e. place of residence) is recorded in student information systems, the managers of careers services did not appear to have access to this information. One manager, for example, stated that:

> *'We would like to provide services to students from a low socio economic background but we don't have access to identify these students, so we're unable to say whether or not they are already accessing services'.*

The survey results suggested that students from equity groups are low users of careers services. Several managers suggested that students from equity groups find it more difficult than their peers to directly and proactively engage careers services, despite being the most likely to benefit from these services. One manager commented that:

> *'Often the students who need the most support are unlikely to proactively initiate a relationship with the careers service'.*

Indigenous students and students with a disability appeared to be particularly low users of careers services. It was suggested that these students might prefer to seek career development support through Indigenous centres and equity units. Careers Services appeared to operate in isolation from Indigenous centres, equity units, and other areas of the university. In relation to Indigenous students, one manager stated that:

> *'I suspect that existing students may not feel like the careers service can or does tailor to their needs, or they may not know where to begin with using our services, or they may already be well served by our [Indigenous] program'.*

The careers services provided some tailored support to the equity groups (see Table 5). Students from non-English speaking backgrounds were the equity group most likely to be provided with tailored careers support. Slightly more than one half of the services tailored careers support to students from non-English speaking backgrounds, often targeting language and cultural issues.

Women in non-traditional subject areas were the equity group that received the least amount of tailored careers support.

Table 5: Tailored careers support by equity group

To which groups does your service tailor careers support?	Careers Services (n = 29)	Examples provided
Non-English speaking background	55%	Conversation and networking café Australian workplace culture
Disability	48%	Annual disability and careers forums Extended and individual career consultations Accessible venues and careers information
Indigenous	48%	Indigenous graduate training schemes
Low SES	48%	Peer mentoring
Regional and remote	38%	Online careers information Skype consultations Digital internships
Women in non-traditional areas	34%	Specific industry events e.g. women in engineering

The majority of managers saw value in providing more tailored careers services. Approximately half of the managers noted, however, that introducing more targeted and tailored interventions would require additional staff and funding. One manager explained that:

> *'With more resources, we could ask the students in these various equity groups about what support they need and then develop specific programs'.*

Managers suggested that it would be useful to provide a range of tailored support including: staff members with direct responsibility for increasing the employability of students from equity groups; improved links with industry; better marketing of 'good news stories' about successful graduates from equity groups; and improved monitoring of graduate outcomes for equity groups. One manager summed up the need for a multi-pronged approach:

> *'[We need] a strategic plan for supporting equity groups, dedicated staff work plan goals to supporting these groups, and measurable KPIs to track progress, better marketing and outreach to equity groups, more tailored and intrusive/proactive service provision.'*

The different career development needs and experiences of equity groups were well recognised by survey respondents. It was suggested that NESB students would benefit from more support to develop both written and conversational English language skills, including specific preparation for effective communication in the workplace. Several managers felt that careers service staff would benefit from more cultural awareness training to better assist this group. The importance of cultural understanding and sensitivity regarding Indigenous students, and the need for more culturally appropriate career development support, was also commonly recognised.

One careers service manager stated:

> *'I have had feedback that these students prefer information, education and service provision in spaces created for and by Aboriginal and Torres Strait Islander peoples'.*

It was suggested that careers services could better assist students with a disability if there were more staff available to adopt a one-on-one case management approach, especially for high-needs students. Digital technology was recognised as a method to counter the geographical isolation of regional students. One manager noted that:

> *'A challenge is making all services available to all people, so using technology has become a way around this'.*

The career development needs and experiences of some other disadvantaged and minority groups were also recognised. In particular, several managers referred to the unique career support needs of first-in-family students. These managers mentioned that this group might benefit from extra support navigating the labour market and building their '*knowledge of the working world*'.

While most managers saw value in providing more tailored careers services, a small minority of managers were concerned about the risk of stigmatisation by targeting specific groups. One manager reported that this risk could be avoided by embedding career development within degrees which have high proportions of equity students. This manager commented that:

> *'Students feel stigmatized if they are identified for tailored support and there is low [careers service] engagement, hence the holistic approach of career development embedded in targeted courses with high equity group representation…'.*

The role of student unions

Student union representatives reported that they had little input into student employability strategies. Only 4 out of the 31 student unions reported having input into the student employability strategy at their university (13 per cent). These student unions yielded this influence by having student representatives sit on, and actively participate in, various boards and committees that guide the employability strategies. This input was provided at multiple levels including Academic Board, Education Committee, Student Experience Committee, Teaching and Learning Committee, and Faculty level teaching and learning boards. One student union president also mentioned that:

> *'The student union is regularly contacted for the student view-point from multiple levels within the university structure, from collaboration and cross promotion with the front-line staff in the Student Careers office, right up to liaising with and lobbying the VC and the University Senate.'*

While input into employability strategies was uncommon, three quarters of the student representatives felt that student unions should seek to influence these strategies.

Our research identified many different ways in which student unions directly improve student employability. Students can be actively involved in student unions in a variety of positions, most commonly as paid office bearers, volunteers, on casual contracts, and as unpaid office bearers. Our desktop review of 43 student union websites identified 61 positions within student unions that were associated with student employability (see Table 6).

Table 6: Student union positions associated with employability

Officer type	Count	Proportion of student unions (n= 43)
Activities/social engagement	18	42%
Environmental	17	40%
Clubs and societies	7	16%
Sports	6	14%
Education	6	14%
Advocacy	4	9%
Community engagement	2	5%
Vocational education	1	2%

The employability skill with which student unions were most commonly associated was leadership. The two most valuable opportunities for building employability skills were: volunteering; and participating in clubs and societies (see Table 7).

Table 7: How does the student union improve student employability?

Response categories	Proportion of student representatives (n = 52 responses)
By developing specific skills:	
Leadership	23%
Teamwork	10%
Communication	10%
By providing opportunities:	
Volunteering	25%
Joining Clubs and societies	21%
Organisational governance	17%
Networking with employers	12%

Student representatives identified a range of employability skills that are specifically developed through participation in clubs and societies (see Table 8).

Table 8: How do student clubs and societies improve employability?

Skills developed	Proportion of student representatives (n = 49 responses)
Management and governance	20%
Event organisation	20%
Leadership	18%
Planning and organisation	18%
Social and networking skills	12%
Teamwork	10%
Communication	8%

Only a small minority of student unions directly provided any of their own careers services (4 out of 31 student unions, 13 per cent). The services provided by these unions included job interview training, CV checks, and providing careers information. The survey found that there was little interaction between student unions and careers services. Only about one third of student unions directly interacted with careers services at their university. This interaction was typically minimal and included: cross-promotion of employment opportunities, including advertising student union positions through careers services; some direct referrals between student unions and careers services; and organising joint volunteering and leadership programs and other events. While the student unions rarely provided their own careers services, three quarters of the student representatives felt that student unions should provide at least some basic careers services (see Table 9).

Table 9: To what extent should the student union provide careers services?

Response category	**Proportion of student representatives** (n = 36 valid responses)
To a great extent – the student union should provide a full range of careers services	*6%*
To some extent – the student union should provide some careers services depending on resource availability and where duplication is avoided	*39%*
To a minimal extent – The student union should provide basic careers advice and careers events only	*31%*
Not at all – that is the role of university careers services and not the student union	25%

The main barriers limiting the capacity for student unions to provide careers services were financial and organisational in nature (Table 10).

Table 10: What barriers are there to the student union providing careers services?

Response category	**Proportion of student representatives** (n = 36 valid responses)
Lack of funding to recruit staff with suitable experience and/or training in career development	47%
Lack of demand for additional careers services due to existing services and/or small campus sizes	31%
Lack of funding for associated costs e.g. set up, infrastructure, industry connections	25%
Difficult to coordinate and integrate within the organisational structure of the university	14%

Student unions demonstrated a strong commitment to equity and diversity in general, by providing all students with the support to succeed at university, and recognising and embracing student differences. Our desktop review of 43 student unions identified 100 positions that were associated with equity and diversity (see Table 11). The two equity groups on which the student unions appeared to focus the most attention were: Indigenous students; and students with a disability. Approximately one third of student unions had specific Indigenous officers and one quarter had disability officers. Outside of the equity groups, women's officers and LGBTIQ officers were relatively common. No unions had officers specifically representing low SES students.

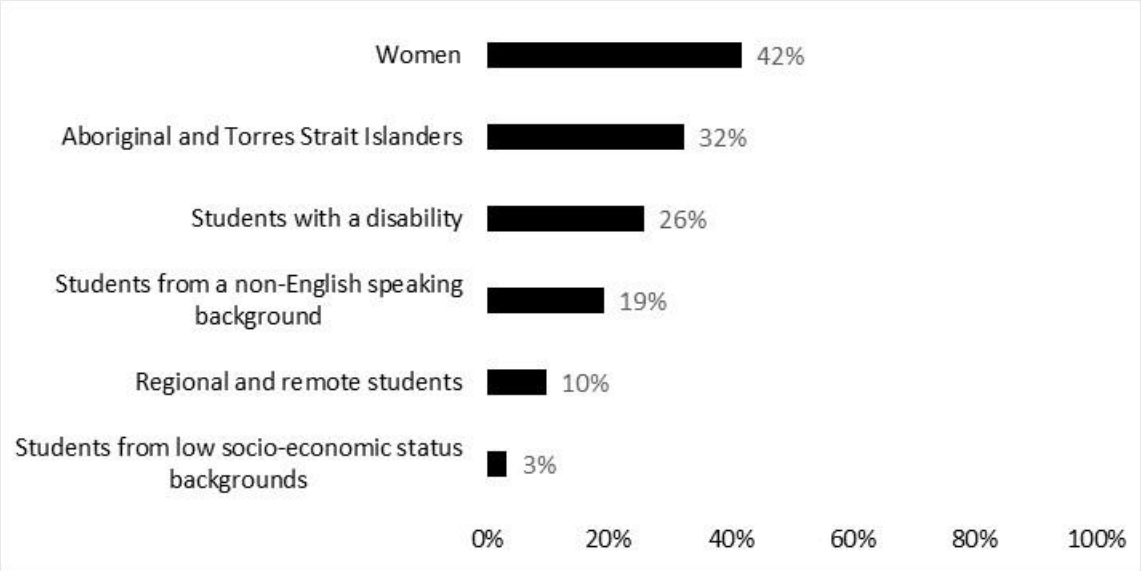
Table 11: Student union positions associated with equity and diversity

Officer type	Count	Proportion of student unions (n= 43)
Welfare	21	49%
Women (general)	18	42%
LGBTIQ	17	40%
Aboriginal and Torres Strait Islander / Indigenous*	15	35%
Disability*	11	26%
Ethnocultural	4	9%
Equity and diversity	4	9%
Regional*	3	7%
Social justice	3	7%
Mature age	2	5%
Non-English speaking background*	1	2%
Accessibility	1	2%
Low socio-economic status*	0	0%
Women in non-traditional subject areas*	0	0%

** higher education equity group*

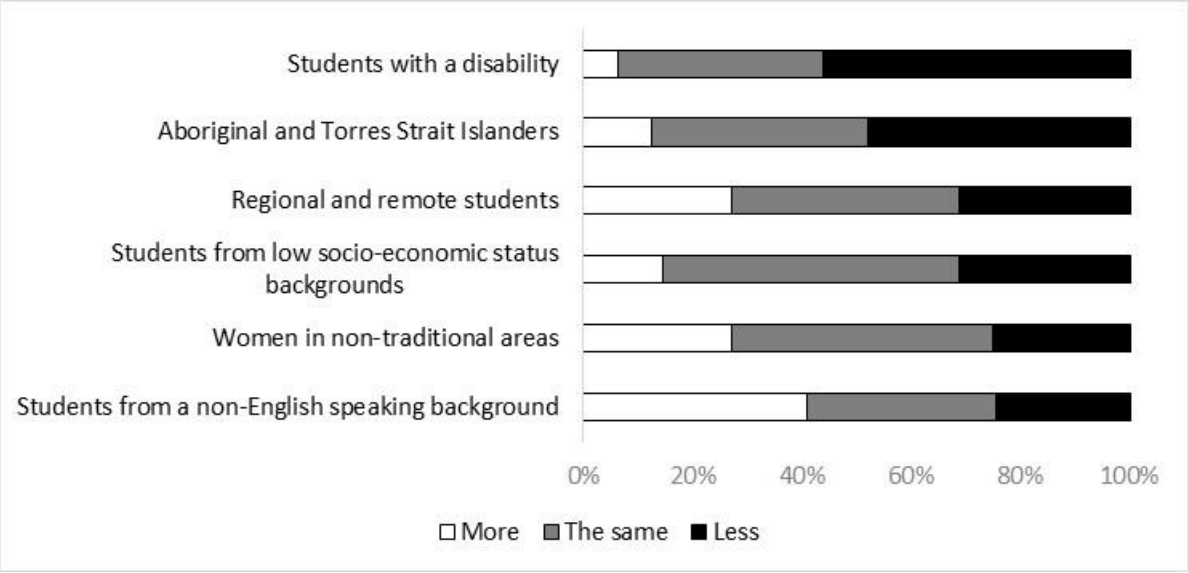
Only 48 per cent of student unions monitored how many office bearer positions were held by students from any of the equity groups. The overall representation of women was most commonly monitored, followed by the representation of Aboriginal and Torres Strait Islander students (see Figure 4).

Figure 4: Does the student union monitor how many positions are held by students in these groups? (n = 31 student unions)



Only 6 per cent of student unions monitored how many students from any of the equity groups participated in clubs and societies. While not systematically monitored, the majority of survey respondents reported that students with a disability participated less than their peers in clubs and societies due to both social and physical barriers (see Figure 5).

Figure 5: Do the equity groups participate more or less than their peers in clubs and societies?



About one-third of student representatives reported that low SES students were less likely than their peers to participate in clubs and societies due to paid work commitments and time constraints. One student commented that:

> *'Students who are juggling work, study and poverty are less likely to have the time and energy to dedicate time to what at first glance [can] be (and *is* in part) frivolous socialising and CV buffing'.*

Discussion and conclusion

As expected, pressures from governments, students, employers, and a competitive sector are driving Australian universities to develop formal employability strategies. Around three quarters of universities now include a focus on employability within their strategic plans, including widespread references to graduate attributes, career readiness, and transition to employment. Similarly, around half of universities include a member of senior management with specific responsibility for student employability. We would expect these numbers to grow even further in coming years, as institutional employability performance becomes more embedded within national and international rankings, public funding mechanisms, and student decision-making processes.

Both staff and student representatives typically maintained that universities should focus on employability equally with, or to a greater extent than, 'broader learning' objectives. There was some tension between these two notions, but most survey respondents appeared to adopt a broad definition of employability that included communicative, problem-solving and other transferable skills, and that was largely complementary to broader learning objectives. Our survey respondents reflected often on the cost of student fees, the highly competitive labour market, and the responsibility of universities to support tangible outcomes beyond credentials.

Student equity, however, was perceived as marginal to institutional employability strategies. At operational level, the lack of connection between the missions of employability and equity appears to stem from two specific, related issues:

- a 'silo mentality' within universities, including apparent disconnect between university management, careers services, equity units, Indigenous centres, and student unions;
- a lack of relevant data to inform linked employability and equity strategies, including no systematic monitoring of the extra-curricular participation or graduate outcomes of equity groups.

Underpinning these specific issues is a broader lack of understanding of the way that employability strategies affect different student groups, and of the urgent need for universities to address inequitable graduate outcomes. While careers managers and student unions were themselves usually aware of the existence and gravity of inequity, responses suggested a lack of understanding at higher management levels, which translated to approaches that treat employability as a neutral and unproblematic concept.

Very few staff and student respondents thought that their university was promoting the employability of students from equity groups very well or extremely well. Most believed that students from non-English speaking backgrounds, with a disability, and/or from low SES backgrounds found it more difficult to secure employment, beliefs which are consistent with the (limited) graduate outcome data. Many respondents argued the need for greater integration of employability into mainstream curricula, and the need for holistic university approaches rather than relying overly on careers services. Marginalisation of equity was evident not only in preparatory programs but within universities' own employment programs. Universities are themselves major employers, and it was notable that only one third of survey respondents believed that their institution's own employment programs had specific objectives to employ students or graduates from equity groups.

The importance of mainstream, holistic approaches was also underlined by specific findings around careers services. Data were not routinely collected on the geo-demographic characteristics of students accessing university careers services. Anecdotal evidence from our survey respondents,

however, indicated that equity students were less likely than their peers to use these services. Students with a disability and Indigenous students appeared to be particularly low users, suggesting that their career development needs might not be well-met. Previous research by Urbis (2011) also found that:

> 'young people with a disability are the least well-served of all young people in terms of career development' (p. 65).

The reduced uptake of students with a disability and Indigenous students might be partly attributable to disconnect between university careers services, equity units, and Indigenous centres, as well as student concerns about preconceptions. As Urbis (2011) reported:

> 'Young people with a disability and Indigenous young people do not want employers, career development services, school teachers or employment agencies to make assumptions about what they can and cannot achieve' (p. 17).

Many universities offered tailored careers services to one or more of the six equity groups, and careers managers supported the development of nuanced programs, for example for Indigenous students and those with a disability. Approximately half of the managers noted, however, that introducing more targeted and tailored interventions would require additional staff and funding.

Several groups were also identified as under-represented within extra-curricular activities, including students with a disability and low SES students. With disability, it was recognised that the level of participation was highly dependent on the nature of the disability and the type of extra-curricular activities. Some of the reduced participation for students with a disability was attributed to social barriers, especially concerns about exclusion and discrimination, and to physical limitations. For low SES students, the primary barriers to extra-curricular participation were, unsurprisingly, perceived as time and money. Low SES students were less likely to participate in extra-curricular activities, consistent with previous research from the US and the UK (Martin, 2012; Stuart et al., 2011). Financial and time constraints were identified as the largest barriers to participation, often associated with increased paid work commitments, which is also consistent with international studies (Martin, 2012; Stuart et al., 2011). A further, important barrier was also identified as a lack of information and/or understanding. Many equity group students remain unaware of the importance of extra-curricular performance to employability, beyond academic achievement. As extra-curricular participation increasingly becomes a mandatory rather than optional part of employability, universities will need to educate their students about this reality, as well as addressing more tangible barriers to participation.

For student union representatives, a clear perception of our survey respondents was that they had little input into institutional employability strategies and would appreciate greater consultation. Student associations themselves rarely provided their own careers services, but a number of office bearers were dedicated to issues central to student employability. Respondents maintained that student unions contributed to employability primarily through their promotion of leadership skills, volunteering, and clubs and societies. While respondents believed inequities of participation clearly existed, they also had access to little data around the specific participation of equity group students, for example in clubs and societies. Student unions typically provide a number of paid and unpaid roles that are specifically associated with equity and diversity, and respondents were consistent in their strong advocacy and support for student equity. However, student voices appear largely marginalised from the development of mainstream institutional employability strategies, and student unions typically lack the necessary data and resources to increase their influence.

The overall picture emerging from our research is concerning. As graduate outcomes remain highly uneven and reflect the inequities well-documented by broader research, many institutional employability strategies may be offering little to reduce these inequities. Indeed, some strategies may even be exacerbating student inequity by: focussing overly on particular types of capital, e.g. cultural capital, for example through employer-driven activities that emphasise 'cultural fit' and networking, and the exclusive recognition of particular types of 'volunteering' and other contributions; rewarding and/or requiring extra-curricular participation, to which some groups have limited access; reflecting isomorphic tendencies, by which (often relatively homogeneous) university staff and/or employers reward people who resemble themselves, without sufficient attention to diversity; uncritically promoting experiences which are expensive and/or time-consuming, such as outbound mobility, without consideration of how to ensure participation by those low on time and/or money; marginalising the student voice within the development of institutional strategy; and failing to inform diverse groups of students of the importance of extra-curricular and new, non-traditional, requirements for attainment of post-graduation employability.

Implications of these findings extend to university management, careers services, student unions, employers, and governments. Our major recommendations include: increased strategic collaboration between different university areas; increased data collection in relation to employability and equity; increased integration of employability into mainstream curricula; and increased promotion and support for the extra-curricular participation of equity groups. Beyond these specific recommendations, we advocate a broader cultural change in which the centrality of student equity to employability is acknowledged and addressed. Institutional employability strategies that are established uncritically may well contribute to 'social closure' and exacerbate existing inequities among student groups. Universities will need to develop sophisticated strategies in which different forms of student capital are acknowledged, resources are tailored to student needs, and both mainstream and extra-curricular initiatives are accessible and designed to support an increasingly diverse range of students.

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Appendix A: Method

Two national desktop reviews

We conducted a desktop review of university websites and publicly available documentation to determine the extent to which employability was a priority within higher education in Australia. We reviewed university strategic plans and also searched for evidence of a practical focus on employability, such as good practice guides, workshops, forums, online resources, awards, and/or courses, units, certificates.

We conducted a desktop review of student union websites associated with the 37 Australian public universities. The main aim of this review was to identify positions within student unions associated with the equity groups and/or employability. The review identified 43 separate unions, associations, and guilds for undergraduate students, with some multi-campus universities having multiple student organisations. The review also identified six unions for postgraduate students and five unions for international students, both of which fell outside the scope of the current project.

Two national surveys

We surveyed managers of careers services about university employability strategies, equity strategies, and service structures and activities (see the Appendix for the survey questions). The survey comprised 38 questions and was administered via the Qualtrics online survey tool. Survey items covered issues of employability and equity such as: employability strategies; tailored career development support; users of careers services; participation in extra-curricular activities; employment on campus; relationships with employers; and graduate employment.

The manager of the careers service (or equivalent) at each of the 37 Australian public universities was invited to participate in May and June 2016. Email addresses were sourced from university websites. A total of 29 out of the 37 managers responded to the survey, representing a 78 per cent response rate. Survey responses were obtained from universities with campuses across all states and territories of Australia. Survey responses covered a range of university types, including technology focussed; research-intensive (known as the 'Group of Eight'); innovative research; and regional universities. See Table 12 for survey responses by university group.

Table 12: Managers of careers services: survey responses by university group

University group	**Responded**	**Did not respond**	*Total*
Non-aligned universities	9	3	*12*
Group of Eight (Go8)	6	2	*8*
Innovative Research Universities (IRU)	5	1	*6*
Regional Universities Network (RUN)	5	1	*6*
Australian Technology Network (ATN)	4	1	*5*
Total	*29*	*8*	*37*

We surveyed student union representatives about university employability strategies, equity strategies, and student union structures and activities (see the Appendix for the survey questions). The survey comprised 33 questions and was administered via the Qualtrics online survey tool. Survey items covered issues of employability and equity such as: employability strategies; the role of

the student union; relationships between unions and careers services; participation in extra-curricular activities; clubs and societies; and graduate employment.

A total of 164 student representatives across all Australian public universities were invited to participate in August 2016. The invitation database covered all 37 public universities and included 43 different student organisations. Invitations were emailed to representatives from university student unions, associations, and guilds. Email addresses were sourced from student organisation websites for presidents, vice-presidents, general secretaries, and equity officers.

A total of 54 out of 164 student representatives responded to the survey, representing a 33 per cent response rate overall. Survey respondents included representatives from 31 out of the 43 student organisations (72 per cent). Presidents and general secretaries were the most likely to respond to the survey. Survey respondents came from all university types, including technology focussed; research-intensive (known as the 'Group of Eight'); innovative research; and regional universities. See Table 13 for respondent details.

Table 13: Student union representatives: survey responses by position and university type

Position in student union	**Responded**	**Did not respond**	*Total*
President	20	23	*43*
Vice-President	11	33	*44*
General Secretary	10	15	*25*
Equity officer	11	37	*48*
Other	2	2	*4*
Total	*54*	*110*	*164*
University group			
Non-aligned universities	9	37	*46*
Group of Eight (Go8)	14	37	*51*
Innovative Research Universities (IRU)	21	13	*34*
Regional Universities Network (RUN)	4	7	*11*
Australian Technology Network (ATN)	6	16	*22*
Total	*54*	*110*	*164*

Appendix B: Survey questions

Survey of managers of career development and employability services

Question	Response type
Your university and careers service	
Is there a member of senior management at your university who has specific responsibility for student employability?	Yes, please specify this person's position title: _____ No Unsure
Does your university have a formal **Employability Strategy** for students?	Yes No Unsure
What is your position title?	short text
Approximately how many full-time equivalent (FTE) staff are employed in your careers service?	___ FTE staff Unsure
Career development support	
What are the main types of career development support that your service provides?	CV checks Job interview training Employer fairs Careers information Sector briefings Placement service Other please specify:
Does your service provide career development support specifically tailored to any of these groups?	Students from low socio-economic status backgrounds Regional and remote students Students from a non-English speaking background Aboriginal and Torres Strait Islanders Students with a disability Women in non-traditional areas Other groups please specify_____ None of the above
If applicable, what specific support is provided to any groups you identified above?	free text
What challenges are there, if any, in being able to provide tailored careers services support for any of these groups?	free text
What specific needs, if any, might it be valuable to address for equity groups subject to resources becoming available?	free text
Service users	•
Does your careers service specifically monitor how many service users are from the above equity groups?	Yes please specify which groups_____ No Unsure
Which equity groups, if any, are particularly low users of the careers service? Why might this be the case?	free text
Extra-curricular university activities	
Thinking specifically about extra-curricular university activities aimed at increasing employability - such as volunteering, work experience, overseas exchange programs - which student groups do you think might be less likely than their peers to participate?	Students from low socio-economic status backgrounds Regional and remote students Students from a non-English speaking background Aboriginal and Torres Strait Islanders Students with a disability Women in non-traditional areas Other groups please specify _____ None of the above
If applicable, why do you think any of the groups you identified might be less likely to participate?	free text
Does your university have any initiatives in place to specifically encourage students from equity groups to participate in extra-curricular university activities (e.g. bursaries)?	Yes No Unsure
If applicable, please briefly describe any relevant initiatives.	free text
Employment	

Does your university run any specific programs aimed at employing current students or graduates on campus?	Yes No Unsure
If applicable, please briefly describe the programs aimed at employing current students or graduates on campus.	free text
If applicable, do any of these programs have any specific objectives to employ students/graduates from equity groups?	Yes please specify which groups_____ No Unsure
Relationships with external employers	
Do any external employers actively target your university with the goal of recruiting current students or graduates?	Yes No Unsure
If applicable, from which student groups or disciplines have employers expressed an interest in recruiting students/graduates?	free text
What barriers, if any, exist with regard to establishing effective relationships with employers?	free text
Equity and employment	
In your experience, do these student groups find it easier, the same, or more difficult than their peers to secure employment after graduation?	Students from low socio-economic status backgrounds (easier, the same, more difficult) Regional and remote students (easier, the same, more difficult) Students from a non-English speaking background (easier, the same, more difficult) Aboriginal and Torres Strait Islander (easier, the same, more difficult) Students with a disability (easier, the same, more difficult) Women in non-traditional areas (easier, the same, more difficult)
In general, which student groups find it the **most** difficult to secure employment after graduation?	free text
Why do you think any groups identified above find it more difficult to secure employment?	free text
What methods, if any, do you use to follow up on the employment status of graduates *in general*?	free text
What methods, if any, do you use to follow up on the employment status of graduates *from equity groups*?	free text
The last word	
There is some debate around the extent to which higher education should be focussed on improving a student's employability and job prospects versus promoting a student's learning and knowledge more broadly. In your opinion, where do you think the focus is best placed?	free text
In general, how well do you think your university is promoting the employability of students from equity groups?	not at all well, slightly well, moderately well, very well, extremely well
What more, if anything, could your university do to increase the employability of students from equity groups?	free text
We may wish to follow-up with some survey respondents to obtain further information about issues of employability and equity. Do you give us permission to contact you again?	*Yes* *No*
If yes, please provide your preferred contact details.	
Please make any final comments about employability and equity here.	free text

Survey of student union representatives

Question	Response type
Student union positions	
What is your position in the student union?	Short text
Does the student union include students in the following positions?	Student officer bearers - paid Student officer bearers - unpaid Students as volunteers Students on casual contracts Students in another capacity, please specify: ___
Does the student union have positions with specific responsibility for the following student groups?	Students from low socio-economic status backgrounds Regional and remote students Students from a non-English speaking background Aboriginal and Torres Strait Islanders Students with a disability Women Other minority or disadvantaged groups (please specify):_____ None of the above
Does the student union specifically monitor how many positions are held by students from the following groups?	Students from low socio-economic status backgrounds Regional and remote students Students from a non-English speaking background Aboriginal and Torres Strait Islanders Students with a disability Women Other minority or disadvantaged groups (please specify)_____ None of the above
Roles and objectives	
There is some debate around the extent to which higher education should be focussed on improving a student's employability and job prospects versus promoting a student's learning and knowledge more broadly. In your opinion, where do you think the focus is best placed?	free text
In what ways, directly and indirectly, do you think the student union helps to improve student employability?	free text
Do you think the student union should seek to influence the university's student employability strategy?	Yes No Unsure
Does your student union currently have input into the university's student employability strategy?	Yes No Unsure
If applicable, in what ways does your student union currently have input into the university's employability strategy?	free text
Clubs and societies	
In what ways do you think participating in a student union club or society might improve a student's employability and job prospects?	free text
Does the student union specifically monitor how many students from disadvantaged or minority groups participate in clubs and societies?	Yes, please specify which groups: No Unsure
In your experience, do the following student groups participate more or less than their peers in student union clubs and societies?	Students from low socio-economic status backgrounds (more/same/less)

	Regional and remote students (more/same/less) Students from a non-English speaking background (more/same/less) Aboriginal and Torres Strait Islanders (more/same/less) Students with a disability (more/same/less) Women in non-traditional areas (more/same/less)
If applicable, why are any groups you identified less likely to participate in clubs and societies?	free text
In what ways does the student union encourage students from disadvantaged or minority groups to join clubs and societies?	free text
Careers services	
In what ways, if any, does the student union interact with the university's Careers Service?	free text
Does the student union itself directly provide any careers services (e.g. CV checks, Job interview training, Employer fairs, Careers information, Sector briefings, Placement service)?	Yes [display 'Careers services (cont.)' page] No Unsure
Is there a position with particular responsibility for student careers services within the student union (e.g. a careers officer)?	Yes, please specify their title:_____ No Unsure
To what extent do you think the student union itself should directly provide careers services?	free text
What barriers are there to the student union being able to provide careers services to students?	free text
What careers services would be beneficial for the student union to provide if additional resources were available?	free text
Careers services (cont.) [Page only displayed if 'Yes' to student union providing careers services]	
What types of careers services does the student union offer?	CV checks Job interview training Employer fairs Careers information Sector briefings Placement service Other please specify:
Does the student union provide careers services specifically tailored to any of these groups?	Students from low socio-economic status backgrounds Regional and remote students Students from a non-English speaking background Aboriginal and Torres Strait Islanders Students with a disability Women in non-traditional areas Other groups please specify_____ None of the above
If applicable, what specific support is provided to any groups you identified above?	free text
Extra-curricular university activities	
Thinking specifically about extra-curricular university activities aimed at increasing employability - such as volunteering, work experience, overseas exchange programs - which student groups do you think might be less likely than their peers to participate?	Students from low socio-economic status backgrounds Regional and remote students Students from a non-English speaking background Aboriginal and Torres Strait Islanders Students with a disability

	Women in non-traditional areas Other groups please specify: _____ None of the above
If applicable, why might the groups you identified be less likely to participate?	free text
What support, if any, does the student union offer for extra-curricular career development activities (e.g. subsidies, bursaries)?	free text
Equity and employment	
In your experience, do these student groups find it easier, the same, or more difficult than their peers to secure employment after graduation?	Students from low socio-economic status backgrounds (easier, the same, more difficult) Regional and remote students (easier, the same, more difficult) Students from a non-English speaking background (easier, the same, more difficult) Aboriginal and Torres Strait Islander (easier, the same, more difficult) Students with a disability (easier, the same, more difficult) Women in non-traditional areas (easier, the same, more difficult)
In general, which student groups find it the **most difficult** to secure employment after graduation?	free text
Why might the groups identified above find it more difficult to secure employment?	free text
The last word	
In general, how well do you think your university is promoting the employability of students from equity groups?	not at all well, slightly well, moderately well, very well, extremely well
What more, if anything, could your university do to increase the employability of students from equity groups?	free text
We may wish to follow-up with some survey respondents to obtain further information about issues of employability and equity. Do you give us permission to contact you again?	Yes No
If yes, please provide your preferred contact details.	
Please make any final comments about employability and equity here.	free text