

20 February 2018

Senator Murray Watt
Chair
Senate Select Committee, Future of Work and Workers
Department of the Senate
PO Box
CANBERRA ACT 2000

Email: futureofwork.sen@aph.gov.au

Dear Senator,

Submission: Inquiry into the Future of Work and Workers

I am writing to provide a brief submission on behalf of the Group of Eight (Go8) to assist in informing the Committee's deliberations in its *Inquiry into the Future of Work and Workers*.

Please note this submission represents the views of the Go8 network; member universities may make their own, more detailed submissions.

The Go8 looks forward to discussing some of the issues raised in person. In brief, the Go8 recommends:

- That a comprehensive national review of post-school education in Australia be established as a national priority
- That a single student identifier be implemented for all students across all post-secondary education in Australia to enable more sophisticated policy analysis and decision making
- The Government re-establish a national capability to provide high-level strategic advice on workforce and employment forecasting issues.

Discussion

The recent edition of the perennial debate in Australia about the quality of university graduates and whether they are sufficiently equipped for the workforce has not delivered any new perceptions or much in the way of insightful analysis.

Data from sources such as the 2017 Employer Satisfaction Survey, available through the Government's *Quality Indicators in Learning and Teaching* (QILT) website, shows high rates — well over 80% — of overall employer

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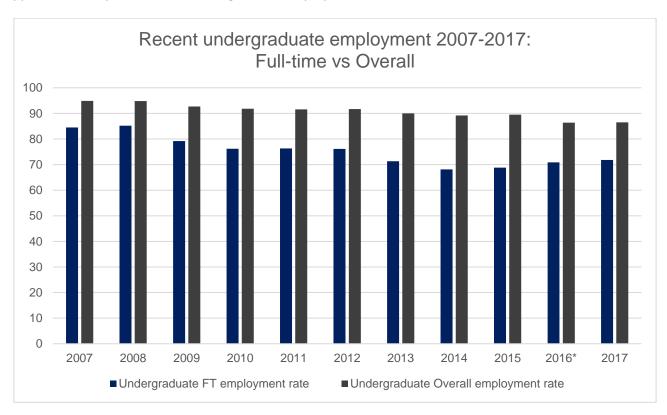
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satisfaction with recent university graduates.¹ This is, of course, contrary to the commentary that suggests university graduates are neither well prepared for the workplace by their university experiences nor highly valued by their employers. In fact they are; on both counts.

The 2017 Graduate Outcomes, also available on QILT, has some sobering information about the Australian graduate employment experience.² In the context of the full-time employment of recent university graduates (up to four months after graduation), it is historically accurate to suggest there are low graduate employment rates. The rate of full-time employment for recent graduates has declined significantly since 2008, coinciding with the general economic downturn across some industries since the Global Financial Crisis: in 2017, 71.8% of recent graduates were in full-time work (a decrease of -12.7% over the decade).³

Data from the Australian Bureau of Statistics show that Australia's employment rate (number of person who have a job as a percentage of the working age population) reached an all-time high of 62.9% in April 2008, a low of 60.5% in late 2014 and has now reached 62% in December 2017. This indicates a recent improvement to the labour market following a period of substantial decline. This recent improvement does not, however, appear to be fully reflected in recent graduate employment rates.



¹ https://www.qilt.edu.au/about-this-site/employer-satisfaction

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² https://www.gilt.edu.au/about-this-site/graduate-employment

³ Over the same period, the overall employment rate for these graduates has also declined, though not as sharply to be 86.5% (compared with 94.9% in 2008).



Source: 2017 Graduate Outcomes Survey *from 2016 the GOS has been delivered by a different provider and there have been some changes in methodology that account for slight movements in data

These patterns also demonstrate that underemployment for recent university graduates has become a significant policy challenge as the proportion of recent graduates available for and seeking to work more hours has increased sharply.4 This is particularly so as the proportion of those working full-time who do not feel their skills and education are being fully effectively utilised appears to be increasing. For example, in 2017, across all study areas over 28% of all recent graduates employed full-time indicated they were working in a job that did not fully utilise their skills and education because there were no suitable jobs in their area of expertise. In the fields of science and mathematics however, this was as high as 40%.

Many of the graduates from fields with lower rates of full-time employment such as this also have higher rates of progression to postgraduate study as they seek to make themselves more attractive to potential employers.

When mapping employment patterns such as these against the number of undergraduate completions from Australian universities over time, broader labour market effects become clearer.

In recent years, underemployment in the Australian workforce has become a clear policy challenge. This time of higher underemployment in the Australian labour market has also coincided with a significant increase in the number of graduates entering it. Over the period 2007-2016 there has been a 32% increase in the number of award course completions; this equates to 1.94 million university graduates leaving Australian universities and entering in the Australian labour market.

The challenges for the labour market appear to be focused on the ability to ensure Australia's highly trained and educated graduates can access employment opportunities in fields for which they have skills and ability. It is important to recognise also that these may not always be the same as the direct field of the degree program they studied.

The field of science and mathematics has seen a reduction in the rate of full-time employment for recent graduates of -16.6% over 2007-2017, yet employers frequently indicate they need more graduates with these skills to fill key roles. These graduates are clearly available.

⁴ Underemployment defined as the situation for a person is underutilised which may be by being employed less than full-time when they are willing and seeking full-time work, or more hours while working part-time or casual hours; as well as in the case of a person who is underutilised through their skills/expertise/education not inadequately used in their employment. A more formal definition is: the condition in which people in a labor force are employed at less than full-time or regular jobs or at jobs inadequate with respect to their training or economic needs.

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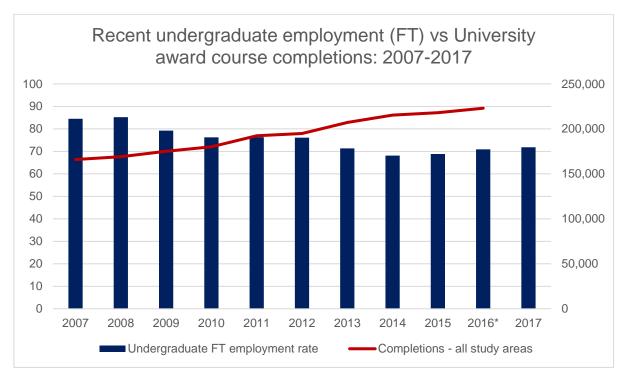
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Source: 2017 Graduate Outcomes Survey

In addition, the proportion of graduates in work and who feel their skills and education are not fully utilised in their work is increasing. Of those recent graduates reporting that they are working in a full-time job that does not fully utilise their skills or education, over 63% reported it was due to labour market factors.

For those in overall employment it was over 55%.5

This is particularly true for graduates in key disciplines; notably Natural and Physical Sciences and other narrow fields in the STEM disciplines as well as fields such as psychology, health services and support (includes aged care – a field in which Australia has a successful immigration program), law and communication among others.

This represents a significant 'gap' in the productive capacity of the Australian economy.

The social devaluation and public maladministration of Australia's vocational education and training (VET) sector has likely exacerbated many of the issues raised here. It is a priority in the national interest that this be rectified without delay.

The necessity for an independent commission to review Australia's post-school education framework is more evident when viewed in the context of the evidence presented in this Submission. The work of a national review body would include the need to ensure opportunity, enhanced provision, transparency and clarity of

⁵ In the Graduate Outcomes Survey, 'overall' employment includes full-time, part-time and casual employment as a proportion of those available for work.

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information, improved student choice, diversity across institutions, all framed against the full range of knowledge and skills that are demanded for Australia's economic future and delivered through all post-school education qualifications.

The Go8 recommends:

- That a comprehensive national review of post-school education in Australia be established as a national priority
 - That this review includes an emphasis on the structures and factors that affect graduate employment

A significant policy shortcoming in Australia is the lack of a single, unique, identifier for all students across Australia's post-secondary education framework. While higher education students in receipt of a Commonwealth loan are allocated a Commonwealth Higher Education Student Support Number (CHESSN) and VET students are allocated a Unique Student Identifier, neither of these is comprehensive across the relevant sectors. Of course, overseas students have a different number from the Provider Registration and International Student Management System. A single, unique, number allocated to all post-secondary students regardless of their sector would have enormous benefits in informing policy development and decision making as students will increasingly move between qualification levels and sectors over the lifetime of learning.

The Go8 recommends:

That a single student identifier be implemented for all students across all post-secondary education in Australia to enable more sophisticated policy analysis and decision making.

In June 2016 the Productivity Commission released a Research Paper titled Digital Disruption: What do governments need to do? This report focused on the disruptive potential of emerging technologies and the capacity of the nation to deal with those technologies as well as also providing a context for work in the future in areas of productivity enhancement and digital transformation. Among the findings of the Commission were that on one hand, digital disruption could significantly affect the types and nature of the jobs created and replaced in the future; and on the other, that simply increasing the number of graduates in STEM disciplines is unlikely to resolve the rates of adoption of digital technologies by firms.

The Commission also noted the need to deliver problem-solving skills for the technology-rich environments of the future. Enhancing the skills of working in areas such as this is critical to workplace success. In the face of accelerating workplace chance, including brought through digital and other disruption, problem-solving, analytical, creative and critical thinking are key for workers. The development of these skills is focused on the

⁶ Digital Disruption: What do governments need to do?; June 2016; Productivity Commission; Australian Government; https://www.pc.gov.au/

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university context, particularly through inter-disciplinary teaching and research that is delivered in world-class institutions such as the Go8.

As the Productivity Commission noted, however, Government will need to balance these outcomes for highly skilled workers with the fact that technological change that increases the demand for them is also a factor in widening the wage distribution for society. This in turn presents Government's with challenges that need to be tackled in terms of the post-school education system with respect to vocational skills training, development and attainment as well as — critically — the broader issues in respect of taxation and transfer policy.

The Go8 recommends:

 The Government re-establish a national capability to provide high-level strategic advice on workforce and employment forecasting issues.

This recent work by the Commission and many other efforts that preceded it have led to an imperative in Australia to enhance the national capability in the STEM disciplines. Over the period 2007-2017, more than 387,000 new graduates have graduated from an Australian university with a degree in a STEM discipline; the Go8 universities collectively delivered over 44% of these graduates (and up to 56% in some fields).

- The total for STEM is more than those in other stated national priority areas of Health (which includes nursing), and over 130,000 more than Education (which includes initial teacher training).

While there are substantial numbers of STEM graduates entering the labour market, those graduates broadly, also have high rates of underemployment – or to put it another way, among the lowest rates of full-time employment for all recent graduates. The Productivity Commission has also noted that the Australian labour market is not generally strong for STEM graduates and there is a clear national policy need to understand the reasons why this is in an economy that that is increasingly reliant on those skills and in which business groups state the need for more STEM graduates.

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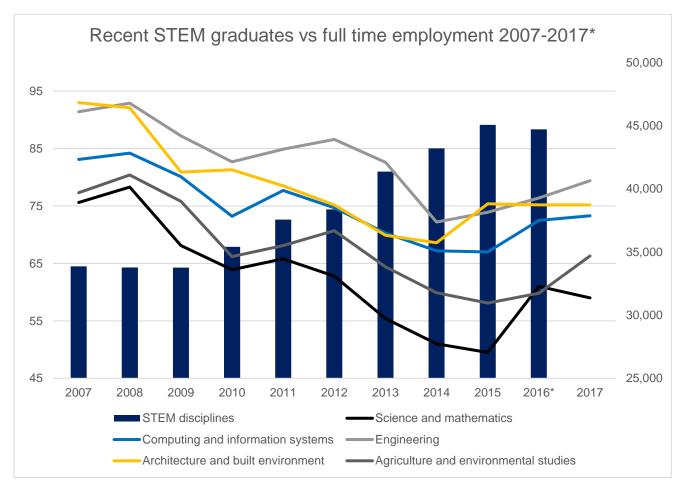
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Source: 2017 Graduate Outcomes Survey and Department of Education and Training 2016 Student Data (this data only goes to 2016). The 2016 student data is similar at the broad fields to those used in the GOS but may vary at the detailed field; i.e. some fields may not be identified in one but be included in the other.

These figures, combined with the graduate employment – and underemployment – data in the 2017 GOS show there does not appear to be any shortage of quality STEM graduates: over the period 2014-16 there were more than 92,000 domestic bachelor degree graduates in the disciplines of natural and physical science and engineering and related technologies.⁷

This reinforces the point that the common rhetoric that graduates in STEM disciplines are in short supply is inaccurate and not necessarily supported by the evidence. In some STEM disciplines these recent graduates have full-time employment rates lower than 60% and the highest rates of progression to full-time study as they seek to make themselves more attractive among other, more experienced job seekers.

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⁷ Across these disciplines, more than half graduated form a Go8 institution.



This developing problem of diminishing clarity in the link between education and employment was highlighted by the Productivity Commission in its five-year Productivity Review: Shifting the Dial released in October 2017.8 In the chapter on the Future of Skills and Work, the Commission canvassed many of the issues raised in this submission including the problem of declining student employment outcomes.

It is clear university graduates are entering a labour market that has been increasing challenging over the past decade.

In a recent report on the national jobs market, employment advertising website Adzuna note that the Australian labour market is now characterised by an environment where unemployment is low and remains relatively flat, while job vacancies continue to rise. Against this background, according to Raife Watson, CEO of Adzuna, "...the number of students finishing their studies outstrips graduate specific roles 20 to 1 nationwide. Many graduates will need to apply for non-graduate roles, in an industry outside their discipline, just to get their foot in the jobs market."9

Of those graduate positions advertised on Adzuna, 50% are in the healthcare industry, with each jurisdiction presenting a differing picture of the level of for graduate positions ('competitors' 46 per role in South Australia and 20 per role in New South Wales). Within jurisdictions too, there is some evidence of differential outcomes: job seekers in Sydney are 2.5 time more likely to find a job than those in regional NSW and nearly three times as many job seekers compete for a role in regional NSW as in Sydney.

There is also some evidence of the over-education of the Australian labour force at the macro-level as well as some components of it at the micro-level. By this, it could be argued that Australia has not sufficiently valued the foundation of its skills-based workforce - the vocational education and training sector - and instead over-emphasised the bachelor degree as the primary mechanism through which post-school education is gained.

This is a possible basis for increasing rates of underemployment discussed earlier.

This emphasis in Australia has coincided with growing and regular suggestions of a skills shortage or a skills mismatch. Yet the data each year demonstrates graduates being employed in full time (and other) roles at decreasing rates and a greater proportion of employed university graduates report not utilising their skills or education. This supports the conclusion of an influential US study that showed the prevailing arguments of skills shortages were largely unfounded: the prevailing situation in the US job market, as in most developed economies, is skills mismatches where the average worker / job candidate has more education than the job requires.¹⁰

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Shifting the Dial: 5 Year Productivity Review; October 2017 Productivity Commission; Australian Government; https://www.pc.gov.au/

⁹ Jobs Market Improves, But New Graduates Outstrip Vacancies 22-1; Adzuna; October 2017: https://www.adzuna.com.au/blog/2017/10/03/jobs-market-improves-new-graduates-outstrip-vacancies-20-1/

¹⁰ Cappelli, P; Skills gaps, skills shortages and skill mismatches: Evidence for the US; Working Paper, August 2014; National Bureau of Economic Research; Cambridge MA



The Go8 has consistently advocated over the past 12 months for each of these initiatives to be adopted and implemented in Australia. Coherence across all post-school education is essential and it is equally essential that Australia places necessary priority on ensuring that our very substantial national human capital infrastructure is leveraged to maximum benefit in our current and emerging economies.

I look forward to the opportunity to discuss this submission with you.

Yours sincerely

VICKI THOMSON CHIEF EXECUTIVE