The value of policy relevant research in education, training, jobs and skills*

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Abstract

This article is an edited version of an invited address to the 2023 Australian Labour Market Workshop. The author draws on his four decades of experience in academia and government, to highlight some major changes that have occurred in the Australian labour market and the education and training system and associated key policy issues that have arisen as a result. These changes raise the following questions. How can we better match labour supply with labour demand? Is our tertiary education system providing the skills we need? Are our migration settings supporting the enhancement of labour market outcomes? The article highlights why the current environment in Australia is well placed to pursue evidence-based policy solutions to these questions. In particular, the establishment of Jobs and Skills Australia (JSA) is a significant development in the history of evidence-based policy making in the areas of labour markets, education and training. The early work of JSA has already shed significant light on these key policy questions and opens up a path to an evidence-based national jobs and skills roadmap.

* This article is based upon Peter Dawkins’ invited address to the Australian Labour Market Research Workshop in December 2023, in which he was asked to draw on his forty years of experience of working in Australia as a researcher, teacher, research institute director, public policy advisor, senior public servant, university vice-chancellor, and, most recently, leading the establishment of Jobs and Skills Australia as its Interim Director and Acting Commissioner.

† I am grateful to David Turvey and his colleagues in JSA’s senior leadership team for discussions about the matters canvassed in this article, and to JSA colleagues who have undertaken research described in this article. Thanks also to participants in the 2023 Australian Labour Market Research (ALMR) Workshop for their comments and questions. A special thank you, also, to Kate Johnston of JSA, for her assistance in the development of my presentation to the ALMR workshop and the preparation of figures and tables for this article.

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Introduction

This article is an edited version of my address to the Australian Labour Market Research Workshop in December 2023. I was invited to discuss the value of policy relevant research, drawing upon my experience over the last four decades, in both academia and government, in relation to the Australian labour market and the education and training system. Most recently, I led the establishment of Jobs and Skills Australia as its Interim Director and Acting Commissioner from December 2022 to October 2023.

First, I make some observations about the changes in the Australian labour market and the education and training system since I arrived as an immigrant from the UK in 1984. In the process, I draw out some key policy questions that arise from the current landscape.

Second, I comment on the importance of evidence-based policy as someone who has been a champion of it, both as a researcher and as a policy maker.

Third, I make some observations about Jobs and Skills Australia (JSA), the establishment of which is a very positive development in the history of evidence-based policy in education, training, jobs and skills. JSA has been established with a core focus on providing evidence-based policy advice about Australia’s skill needs and the adequacy of the national skills training system in meeting those needs.

Fourth, I draw some conclusions about the value of policy relevant research in education, training, jobs and skills.

Changes in the Australian labour market, education and training since the 1980s

There have been many changes in the Australian labour market, and education and training system, since the 1980s. There are three that I would like to highlight.

First, we have moved from a world of substantial unemployment to one of full, or at least close to, full employment. This makes a big difference to the focus of policy as well as to the focus of research.

When I was the director of the Melbourne Institute at the University of Melbourne, in the late 1990s and early 2000s, unemployment was Australia’s major economic policy challenge. It was in the range of 7 to 10 per cent, and the central focus of our research agenda at the Institute. It also led to huge interest in our welfare system and research about welfare dependency.
Now we are in a world of 3 to 4 per cent unemployment, which is a wonderful turnaround, and is reminiscent of the 1960s. Looking back at the 1960s gives cause to be optimistic that we might be able to reduce unemployment further to the 2 to 3 per cent range. But the current high rate of employment shifts the emphasis of policy away from unemployment as the core problem, to skills shortages and the improvement of matching supply and demand as the job to be done.

Second, in the 1980s only 30 per cent of young people completed year 12. That has now grown to over 80 per cent. Tertiary education is now central to supporting young people to move from school to work, whereas in the 1980s it was an add-on for only about half the population.

Third, while a large immigration program was, and continues to be a core feature of Australian population dynamics, the composition of immigration has changed substantially from a focus primarily on permanent migration to a primary focus on temporary migration and also a substantial increase in the proportion of migrants who are international students. This dominance of temporary migration, or ‘guest workers’, has come under major scrutiny by the recent review of the migration system and the government’s response, which has foreshadowed a significant change in migration policy settings.

Some key policy questions that arise from the current landscape are:

i. How can we better match labour supply with labour demand?
ii. Is our tertiary education system providing the skills that are needed?
iii. Are our migration settings supporting the enhancement of labour market outcomes?

These questions are a core theme of this article.

Evidence-based policy

There has been a great deal written about evidence-based policy. I have been involved in two substantial publications on this theme (Productivity Commission, 2010; Dawkins and Payne, 2022). The first was based on a conference convened by the Productivity Commission, 2010; Dawkins and Payne, 2022.)

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1 Since delivering this address, unemployment has crept up, following a big hike in interest rates as a result of an outbreak of inflation sparked by supply shocks associated with COVID-19 and the war in the Ukraine. There is, however, speculation that interest rates might be reduced again this year and it is to be hoped that a soft landing followed by less restrictive monetary policy, combined with a range of strategies to improve the operation of the labour market, will enable unemployment to go down again.
In 2009 the Productivity Commission defined evidence-based policy as “a process that transparently uses rigorous and tested evidence in the design, implementation and refinement of policy to meet designated policy objectives.” (Productivity Commission, 2010 Vol 2 p.3).

At the Productivity Commission Conference, Head (2010) argued that three things are needed for evidence-based policy to operate successfully:

i. high quality information data bases on relevant topics
ii. cohorts of professionals with skills in data analysis; and
iii. political incentives for utilising evidence-based analysis in government decision-making processes.

In a 2022 monograph celebrating the 60th anniversary of the Melbourne Institute, with my co-editor Abigail Payne, we observed that:

“On these three counts, the current environment in Australia would appear to be quite hopeful. There are more extensive high quality information bases available now than ever before. There are also many professionals with skills in data analysis in universities, government, and the private sector. There are also reasons to be hopeful about the political incentives for utilising evidence-based analysis.” (Dawkins and Payne, 2022, p.12).

As evidence about optimism around the political environment, we highlighted the 2022 Jobs and Skills Summit, as representing keen interest in identifying evidence-based solutions to Australia’s skills challenges. The subsequent establishment of Jobs and Skills Australia, whose role is a major focus of this article, I believe represents a significant development in evidence-based policy making in Australia.

Further to the three preconditions for evidence-based policy, the Productivity Commission argued that eight principles should be adopted:

i. carefully define the problem;
ii. consider all options for addressing it;
iii. rigorously assess the quality of existing evidence;
iv. consider the counterfactual issues;
v. consider attribution issues;
vi. consider selection bias, optimism bias, model misspecification and other sources of bias in evaluation;
vii. account for all the effects across the community and the economy; and
viii. use a cost benefit framework.
(Productivity Commission, 2010 Vol.2 p.10)

This is a good checklist for those engaged in evidence-based policy. One more that could be added, based on the early experience of Jobs and Skills Australia, is deep stakeholder
engagement. If evidence-based policy is to be successful, a strong dialogue with key stakeholders in industry and governments is important, not just to ensure that they consider research evidence, but also that researchers gain the benefit of the on-the-ground experience of key stakeholders.

Jobs and Skills Australia

Towards an Evidence-Based National Jobs and Skills Roadmap

Jobs and Skills Australia (JSA) was established in November 2022 with a core mission to provide advice on Australia’s skills needs and the adequacy of the skills system in meeting those needs.

In 2023 JSA developed a conceptual framework for shaping its work program, which is presented in Figure 1 as a pyramid. It is based on the idea that JSA, in partnership with its key stakeholders, develop an evidence-based National Jobs and Skills Roadmap, which is therefore positioned at the pinnacle of the pyramid.

Figure 1. Towards an Evidence-Based National Jobs and Skills Roadmap

Source: Jobs and Skills Australia, Jobs and Skills Report, October 2023.
The next layer of the pyramid is strategic advice into the key pillars of the national skills system, especially the vocational education and training (VET) sector, the higher education sector and the migration system, in partnership with Jobs and Skills Councils and with tripartite consultation with business, unions, education and training providers and state and territory governments and other Commonwealth Government agencies. This includes major in-depth studies of key issues, such as the skills and workforce implications of the clean energy transformation (Jobs and Skills Australia, 2023a) and the skills and workforce needs of the early childhood education and care sectors, which is the subject of a current study.

The Commonwealth Government has negotiated a National Skills Agreement with the states and territories. Jobs and Skills Australia is well placed to provide advice on the implementation and outcomes of this agreement. It has also commissioned the Australian Universities Accord panel, chaired by Mary O’Kane, to produce a report on reforms needed to improve the higher education system. Their interim report (Department of Education, 2023) also sees an important role for Jobs and Skills Australia in providing ongoing evidence to inform the reform process.²

The Commonwealth Government has also reviewed the migration system (Department of Home Affairs 2023a). The review, chaired by Martin Parkinson, identified five objectives one of which was “building Australia’s prosperity by lifting productivity, meeting labour supply needs and by supporting exporters” (Department of Home Affairs, 2023a, p.3.) It recommended major reform and proposed an important role for Jobs and Skills Australia, in “providing critical information, data and input to allow consideration of whether migration is an appropriate and necessary solution to domestic skills needs and training gaps” (Department of Home Affairs 2023a, p.4).³

The next layer of the pyramid is labour market and skills analysis. This layer includes, for example, the measurement and analysis of skills shortages, the measurement and analysis of job vacancies and forecasting future skills demand. There are a range of regular publications which present these analyses and data updates, as well as analysis of one-off projects.

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2 Since delivering this address, the final report of the Accord panel has been released (Department of Education, 2024) and outlines a suggested major reform agenda for the decades ahead. It identifies a significant role for Jobs and Skills Australia in the monitoring of progress of such a reform agenda. It also proposes the establishment of an Australian Tertiary Education Commission as a public sector steward for the tertiary education system, which if adopted has the potential to be another major stimulus to the development and implementation of evidence-based policy.

3 Shortly after my address, the Minister for Home Affairs released its Migration Strategy for Australia (Department of Home Affairs, 2023b), strongly based on the review’s recommendations and confirmed that “the key body for advising on Australia’s skill needs, Jobs and Skills Australia, will help ensure local workers’ skills and job opportunities are prioritised, and the migration system is guided to areas of best use” (Department of Home Affairs, 2023b, p.81).
Expanding the evidence base is the next layer. As part of JSA’s commitment to continuous improvement, it has an ongoing focus on enhancing the data base for analysis of the supply and demand for skills and the operation and impact of the skills system. Examples of recent and current projects are the development of the VET National Data Asset (VNDA) and the development of a national skills taxonomy.

The bottom layer of the pyramid is enabling activities, which includes, amongst other things, deep stakeholder engagement.

**Analysing Skill Shortages**

A key role for JSA is analysing skill shortages and developing the annual Skills Priority List. In its first year of operation, significant progress has been made in understanding skill shortages by adapting a typology developed by labour market economist, Sue Richardson, (Richardson, 2007).

Table 1 outlines the categories of skill shortage proposed by Richardson (2007), and how JSA has adapted this typology and used available data to categorise actual skills shortages (Jobs and Skills Australia, 2023a).

The first two categories are where the main prospect for filling the shortages (other than by attracting migrants from overseas) is to train more workers, as the existing stock of trained workers are heavily utilised and there are few applicants for available jobs.

The third category (the suitability gap) is where there are substantial numbers of qualified applicants for available jobs, but many of them are not hired by employers, as they are not thought to be suitable for the available jobs. Interrogation of employers seeking to fill these vacancies reveals that the problem is often a lack of work experience and employability skills.

The fourth category (the retention gap) is where there is a high level of employees leaving jobs, and insufficient applicants to fill the resultant vacancies, suggesting that something needs to be done to keep employees in the jobs for longer.
Table 1. The causes of skills shortages

<table>
<thead>
<tr>
<th>Professor Sue Richardson’s 2007 skills shortages classification</th>
<th>JSA adaptation of this framework</th>
</tr>
</thead>
<tbody>
<tr>
<td>In a 2007 paper for the National Centre for Vocational Education Research (NCVER), Professor Sue Richardson suggested a scheme for classifying skills shortages:</td>
<td>JSA has adapted this framework to develop a typology which has 4 similar categories to Professor Richardson:</td>
</tr>
<tr>
<td>- <strong>Level 1 (or Level 2) shortage</strong>: shortage of people who have the essential technical skills who are not already using them, and either a long training time (Level 1) or short training time (Level 2) to develop the skills.</td>
<td>- <strong>Longer training gap</strong>: there are fewer than average qualified applicants per vacancy with above average qualification requirements [apprenticeship, Certificate IV or above in the AQF].</td>
</tr>
<tr>
<td>- <strong>Quality gap</strong>: there are sufficient people with the essential technical skills who are not already using them and who are willing to apply for the vacancies, but they lack some qualities that employers consider are important.</td>
<td>- <strong>Shorter training gap</strong>: there are fewer than average qualified applicants per vacancy with below average qualification requirements [Certificate III or below].</td>
</tr>
<tr>
<td>- <strong>Skills mismatch</strong>: there are sufficient people who have the essential technical skills who are not already using them, but they are not willing to apply for the vacancies under current conditions.</td>
<td>- <strong>Suitability gap</strong>: there are above average qualified applicants per job, but a low proportion of suitable applicants compared with the number of qualified applicants.</td>
</tr>
<tr>
<td>- <strong>Retention gap</strong>:</td>
<td>- <strong>Retention gap</strong>: there is above average job mobility (employees leaving these jobs), potentially reinforced by a low number of total new applicants per vacancy.</td>
</tr>
</tbody>
</table>

Source: Jobs and Skills Australia.

Table 2 shows how JSA used this typology to analyse data about the top 20 occupations in demand nationally, to categorise them accordingly (Jobs and Skills Australia, 2023a).

Table 2. Top 20 occupations in demand nationally

<table>
<thead>
<tr>
<th>Classification of skills shortages</th>
<th>Occupations (from top 20 occupations in demand nationally)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Longer training gap</td>
<td>- Early Childhood (Pre-primary School) Teachers</td>
</tr>
<tr>
<td>Few qualified applicants per vacancy, bachelor degree, Certificate IV or above, or apprenticeship required</td>
<td>- Occupational Therapists</td>
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<td></td>
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<tr>
<td>Shorter training gap</td>
<td>- Retail Managers</td>
</tr>
<tr>
<td>Few qualified applicants per vacancy, Certificate I to III or less required</td>
<td></td>
</tr>
<tr>
<td>Suitability gap</td>
<td>- Advertising, Public Relations and Sales Managers</td>
</tr>
<tr>
<td>Many qualified applicants per vacancy, but few suitable applicants per qualified applicant</td>
<td>- Construction Managers</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Retention gap</td>
<td>- Human Resource Professionals</td>
</tr>
<tr>
<td>Above average job mobility (below average rates of retention), potentially reinforced by a low number of total new applicants per vacancy</td>
<td>- Chefs</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 2. continued

<table>
<thead>
<tr>
<th>Classification yet to be determined</th>
</tr>
</thead>
<tbody>
<tr>
<td>• General Practitioners and Resident Medical Officers</td>
</tr>
<tr>
<td>• Software and Application Programmers</td>
</tr>
<tr>
<td>• Motor Mechanics</td>
</tr>
</tbody>
</table>

Source: Jobs and Skills Australia, Jobs and Skills Report, October 2023.

The occupations listed in the Longer Training Gap category include some important occupations in the health sector, such as nurses and physiotherapists, and in the trades, such as electricians and metal fitters. Retail managers were the one occupation in the top twenty in-demand occupations who should be able to be trained relatively quickly.

In the Suitability Gap category, the listing of civil engineering professionals and construction managers indicates this is an important issue in the construction sector, alongside professionals and managers in advertising, public relations and marketing. When other occupations outside the top twenty that fall in this category are added, for example, other types of engineers and IT professionals, there appears to be a problem in a range of occupations that require a tertiary degree and where substantial numbers of students are graduating but finding it difficult to be employed because of a lack of employability skills and work experience. This suggests a need for the higher education sector to work together with industry to obtain the necessary work experience and employability skills for their students, through such initiatives as degree apprenticeships.

The Retention Gap category includes, amongst others, childcarers and aged and disabled carers. Wages and working conditions appear to be a major impediment to retaining sufficient workers to avoid substantial shortages. Moves have been made to start addressing these issues, especially for aged care workers.

Alongside the various policy implications referred to above, another significant issue relating to skill shortages, confirmed by JSA research (Jobs and Skills Australia, 2023a), is that occupations in shortage tend to be disproportionately in areas where there is occupation gender segregation, such as electricians and childcare workers. This acts to restrict a large part of the population from which workers with requisite skills can be recruited. Actions to make the work of an electrician more attractive to women, for example, would not only help enhance equality of opportunity between genders, but also help to address skill shortage issues.

Development and Analysis of the VET National Data Asset

JSA has been working with the Australian Bureau of Statistics (ABS) on the development of the new VET National Data Asset (VNDA) as part of the PLIDA (person level integrated data asset) initiative of the ABS. This creates a greatly enhanced capability for JSA and others conducting research and analysis about the impact of VET qualification completion on students’ employment, social and economic outcomes. Figure 2 shows how the VNDA combines VET activity data with a range of government administrative datasets,
including personal income tax data and income support data, to enable analysis of how VET graduates fare in the labour market and the extent to which they move into or out of reliance on income support. In principle, this data asset could be expanded to enable a similar analysis of students and graduates of the higher education system.

Figure 2. VET National Data Asset (VNDA)

Source: Jobs and Skills Australia.

Figure 3 illustrates the longitudinal nature of the data and how it can be used to examine changes in the student’s employment, income and income support status after a VET course completion.

Figure 3. VNDA methodology
Table 3 presents some published cross tabulations from the VNDA data on the employment status of VET graduates from selected Certificate II and Certificate III qualifications (Jobs and Skills Australia, 2023b). For example, data reveal that 87.5 per cent of VET students who completed a Certificate III in Individual Support were employed after completion (a 34.5 percentage point uplift compared with their employment status before undertaking the qualification). The Certificate III in Early Childhood Education and Care, Certificate III in Education Support, Certificate II in Hospitality and Certificate III in Spoken and Written English are the other qualifications in the top five courses with the highest employment change rates after training. Table 3 also indicates that most completers from these courses are women.

### Table 3. Courses with highest employment change rates after training

<table>
<thead>
<tr>
<th>Program Title</th>
<th>Field of Education</th>
<th>Employed after training (%)</th>
<th>Employment change (pp)*</th>
<th>Female completers (%)</th>
<th>Median age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate III in Individual Support</td>
<td>Society and Culture</td>
<td>87.5</td>
<td>34.5</td>
<td>80.9</td>
<td>35</td>
</tr>
<tr>
<td>Certificate III in Early Childhood Education and Care</td>
<td>Society and Culture</td>
<td>84.5</td>
<td>31.1</td>
<td>96.4</td>
<td>28</td>
</tr>
<tr>
<td>Certificate III in Education Support</td>
<td>Education</td>
<td>86.8</td>
<td>29.0</td>
<td>92.9</td>
<td>38</td>
</tr>
<tr>
<td>Certificate II in Hospitality</td>
<td>Food, Hospitality and Personal Services</td>
<td>65.0</td>
<td>26.7</td>
<td>60.5</td>
<td>21</td>
</tr>
<tr>
<td>Certificate III in Spoken and Written English</td>
<td>Mixed Field Programmes</td>
<td>45.3</td>
<td>26.2</td>
<td>79.5</td>
<td>35</td>
</tr>
</tbody>
</table>

Source: Jobs and Skills Australia, Person Level Integrated Data Asset (PLIDA), VET National Data Asset (VNDA) Phase 1 – Measuring the outcomes of Vocational Education and Training (VET) students (2021), ABS DataLab.

Notes: *pp denotes percentage points.

Care needs to be taken in interpreting these findings, as they are from preliminary analysis and represent descriptive statistics only. To understand the drivers of these results, we need to consider the VET graduates’ previous experience, skills and other endowments. Sophisticated multivariate analysis of this longitudinal data may help reveal the range of factors that give rise to these results.

Exploratory work has been undertaken to compare outcomes achieved by students with similar characteristics, as well as incorporating key variables such as location, part-time work and caring arrangements into the VNDA methodology. Table 4 presents some cross tabulations from the VNDA data on those courses that are associated with the highest exit rates from income support. For the Certificate II in Applied Digital Technologies, 50 per cent of students pre-training relied on income
support, and this decreased to about 20 per cent after course completion. The other four courses with the highest exit rates were: Certificate III in Community Services; Certificate IV in Community Services; Certificate I in Spoken and Written English; and Certificate II in Skills for Work and Vocational Pathways.

Table 4. Courses with highest income support exit rates

<table>
<thead>
<tr>
<th>Program Title</th>
<th>Field of Education</th>
<th>Income support reliance rate (%)</th>
<th>Income support exit rate (pp)</th>
<th>Student with disability (%)</th>
<th>&lt; Year 12 attainment (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate II in Applied Digital Technologies</td>
<td>Information Technology</td>
<td>87.5</td>
<td>34.5</td>
<td>80.9</td>
<td>35</td>
</tr>
<tr>
<td>Certificate III in Community Services</td>
<td>Society and Culture</td>
<td>84.5</td>
<td>31.1</td>
<td>96.4</td>
<td>28</td>
</tr>
<tr>
<td>Certificate IV in Community Services</td>
<td>Society and Culture</td>
<td>86.8</td>
<td>29.0</td>
<td>92.9</td>
<td>38</td>
</tr>
<tr>
<td>Certificate I in Spoken and Written English</td>
<td>Mixed Field Programmes</td>
<td>65.0</td>
<td>26.7</td>
<td>60.5</td>
<td>21</td>
</tr>
<tr>
<td>Certificate II in Skills for Work and Vocational Pathways</td>
<td>Mixed Field Programmes</td>
<td>45.3</td>
<td>26.2</td>
<td>79.5</td>
<td>35</td>
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</tbody>
</table>

Source: Jobs and Skills Australia, Person Level Integrated Data Asset (PLIDA), VET National Data Asset (VNDA) Phase 1 – Measuring the outcomes of Vocational Education and Training (VET) students (2021), ABS DataLab.

Notes: *pp denotes percentage points.

Again, care needs to be taken in interpreting these results and sophisticated multivariate analysis will provide more insights. But, a priori, these results are suggestive of significant value in these courses in helping people to exit income support payments.

Towards an Australian Skills Taxonomy

JSA inherited the Australian Skills Classification (ASC) from the National Skills Commission. The ASC is Australia’s first attempt to develop a comprehensive stocktake of the range of skills that are required across all occupations in the Australian labour market.

As outlined in Figure 4, JSA has been using the ASC to map the skills that are required in the curriculum of tertiary education institutions that enable graduates to successfully move into different qualifications. In turn, the idea is that it should be possible to identify the additional skills people will need to develop as they move from one occupation to another and thus inform the education and training system and their providers about the content of credentials and qualifications that can assist labour market mobility.
The Interim Report of the Universities Accord (Department of Education, 2023) saw considerable value in this work and recommended further development in the context of their interest in the idea of an Australian Skills Passport, to provide greater focus and transparency in tertiary education curriculum and assessment on the skills that students obtain. This in turn should help to improve the efficiency of matching people to jobs and the labour market and support their job mobility by making it clearer what additional skills they need to move into new jobs requiring additional skills.

Figure 4. Using the Australian Skills Classification to identify skills taught in the curriculum

After consulting with key stakeholders, JSA has identified the opportunity to improve the way skills in demand are defined by developing a National Skills Taxonomy from the learnings of the ASC. The purpose, scope and principles underpinning the new taxonomy will be determined in partnership with industry and key stakeholders of the tertiary education system. The key issues identified in this consultation are presented in Figure 5.

4 This became a recommendation in the Universities Accord Final Report (Department of Education, 2024).
The shift in focus to start from first principles in the development of a new Australian Skills Taxonomy is a good example of where deep stakeholder engagement in the research process can have an important impact on evidence-based policy development.

**International Students and the Labour Market**

JSA’s core role is to advise government and key stakeholders on Australia’s skills needs and the adequacy of the national skills system in meeting those needs, especially VET, higher education, and migration. One important and relevant policy issue is how international students fare in the Australian labour market, both during study and after graduation and the extent to which they are able progress to permanent residency in order to increase the stock of skills in Australia. This topic is relevant to each of the three key pillars of the national skills system.

Figure 6 presents data from the graduate outcomes survey on the employment outcomes of international higher education students. It is clear from this data that despite higher completion rates and domestic labour market pressures, international student graduates tend to lag behind domestic student graduates in securing work in the Australian labour market, especially those who have completed postgraduate coursework.
Figure 6. Percentage of graduates in full-time employment four to six months after finishing their studies (not necessarily in an occupation aligned to field of study)

In other data from the graduate outcomes survey, international student graduates of higher education also report that their skills are under-utilised in the Australian labour market more than domestic student graduates. When asked why they think this is the case, the most common response is that they do not have permanent residency and the second most common response is that they do not have enough work experience.

The data in Figure 6 relates to higher education international students. There are a different set of issues that relate to VET students, where there have been major concerns that a significant proportion use VET study to gain entry to Australia. Some providers that supply courses in areas that are not necessarily critical to Australia’s skill shortage need to be placed under greater scrutiny.

This is a matter that has resulted in a recent policy initiative to remedy this situation. Areas of critical shortage, such as the trades, do not at present attract international students, because the work requirements of apprenticeships are not permitted by student visas. Given the shortage of trades such as electricians that are going to be critical in the transition to net zero, this may need to be looked at alongside other measures.

Figure 7 provides some historical context to the pathway to permanent residency for international student visa holders.
PETER DAWKINS

The value of policy relevant research in education, training, jobs and skills

Figure 7. Share of student visa-holders who have received a permanent visa, by year of first student visa approval


It reveals that successive cohorts of international students since 2007 have been less successful in gaining permanent residency, and that it takes longer for those who do.

The Migration Review and new Migration Strategy (Department of Home Affairs, 2023a and 2023b) seeks to reform the migration system in a way that would give increased clarity to international students about their pathway to permanency.

It is clear, however, that as well as uncertainty about visa status, lack of work experience is a significant issue, in areas like engineering and IT. This is a problem shared, perhaps to a slightly lesser extent, by domestic Australian students, as highlighted in section 4.2 above.

Given JSA’s role in advising government, both about the education and training system and migration settings, continuing research in this area will be important to support good policy.\(^5\)

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5 Since the address, there have been some significant changes in the profile of the intake of international higher education students for the 2024 academic year that has caused concern for a significant number of Australian universities. This appears to have resulted, at least in part, from changes in Chinese domestic policy favouring some Group of Eight Universities, as well from the tightening of student visa allocations. This has caused a heightened focus on the issue of how best to manage and regulate international education in Australia and its interaction with migration policy.
Conclusions

Let me draw out some conclusions about the value of policy relevant research on education, training, jobs and skills.

First, I have highlighted some key significant changes in the labour market and educational context over the last four years that give rise to some important modern policy issues incorporating the following three questions. How can we better match labour supply with labour demand? Is our tertiary education system providing the skills we need? Are our migration settings supporting the enhancement of labour market outcomes?

Second, policy relevant research is critical to helping answer such questions. Australia is in a strong position to take advantage of such research, given the increasing quantity and quality of data bases that can be used for this research and the number and quality of well-trained analysts to interrogate the data. And there are good signs in the current policy environment that such analysis will be an important input into the decision-making process about such questions.

One of these signs is the establishment of JSA, a very significant development in evidence-based policy making. The three questions highlighted above are central to the research work of JSA in its engagement with key stakeholders and with the research community, as it develops a national jobs and skills roadmap.

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6 The Australian Labour Market Workshop to which my address was presented included a number of papers relevant to these questions.
References


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