

The Jobs and Skills Summit One Year On: Is Australia addressing skills shortages and getting its skills mix right?



Pi-Shen Seet, Edith Cowan University

Agenda

- Background to the 2022 Jobs and Skills Summit (JSS)
- What happened at the JSS
- What has happened since the JSS (and the last Curtin Corner presentation)
- What is going to plan (or not) and why
- What about the future
- Q & A



Why have a Jobs and Skills Summit (JSS)?

- Tripartite/ Stakeholder approach to address shared economic challenges facing Australia
 - Unions
 - Employers
 - Civil society - including universities, vocational education and training (VET) sector
 - Governments



Objectives of the JSS

- Keep unemployment low, boosting productivity and incomes
- Deliver secure, well-paid jobs and strong, sustainable wages growth
- Expand employment opportunities for all Australians including the most disadvantaged
- Ensure women have equal opportunities and equal pay.
- Improve migration settings to support higher productivity and wages
- Maximise jobs and opportunities from renewable energy, tackling climate change, the digital economy, the care economy and a Future Made in Australia
- Address skills shortages and getting our skills mix right over the long term



Employment, Productivity and Incomes

Key Employment statistics - Seasonally adjusted

	Aug-2023	Sep-2023	Monthly change	Monthly change (%)	Yearly change	Yearly change (%)
Employed people	14,104,500	14,111,200	6,700	0.0%	394,300	2.9%
Unemployed people	540,300	520,500	-19,800	-3.7%	11,000	2.2%
Unemployment rate	3.7%	3.6%	-0.1 pts	na	0.0 pts	na
Underemployment rate	6.5%	6.4%	-0.2 pts	na	0.4 pts	na
Participation rate	67.0%	66.7%	-0.2 pts	na	0.0 pts	na
Monthly hours worked in all jobs	1,938 million	1,930 million	-8 million	-0.4%	55 million	2.9%

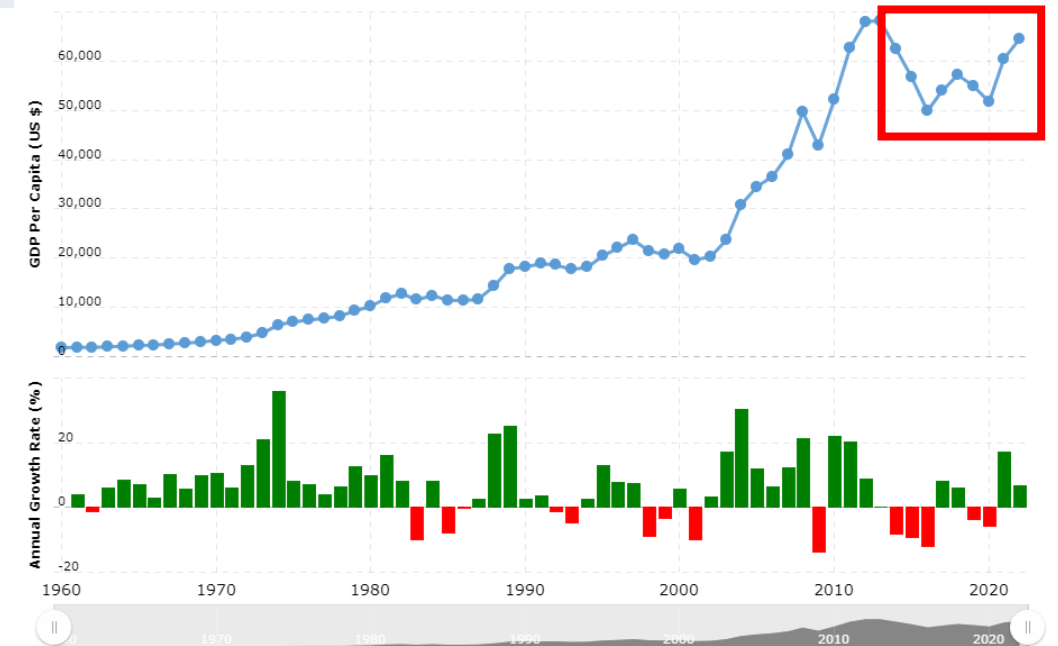
Source: Australian Bureau of Statistics, Labour Force, Australia September 2023

Australia: Productivity and Unit Labour Costs



Source: Macrobond, AMP

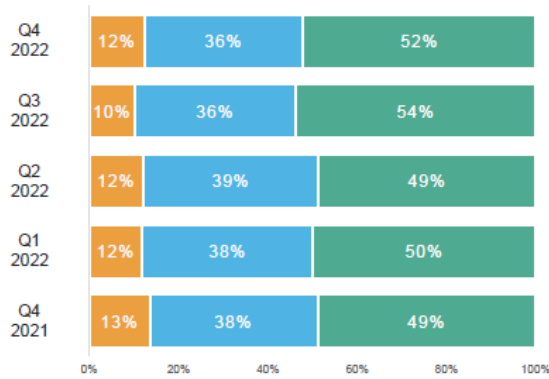
From: 1960 To: 2024 Zoom: 5Y 10Y 20Y 30Y All



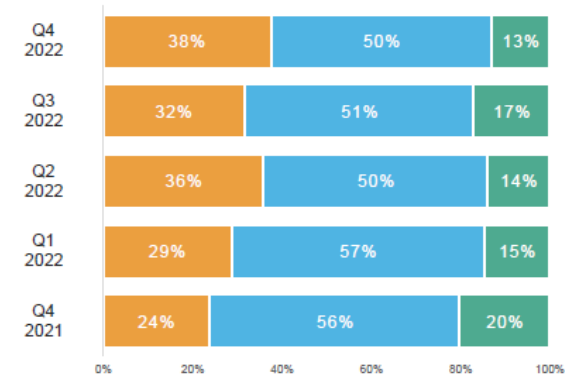
Data Source: World Bank

Secure, well-paid jobs and strong, sustainable wages growth

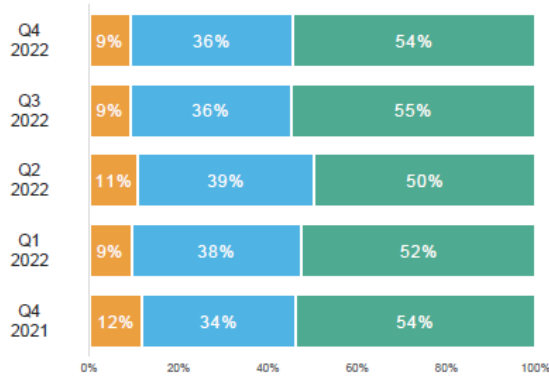
Job security



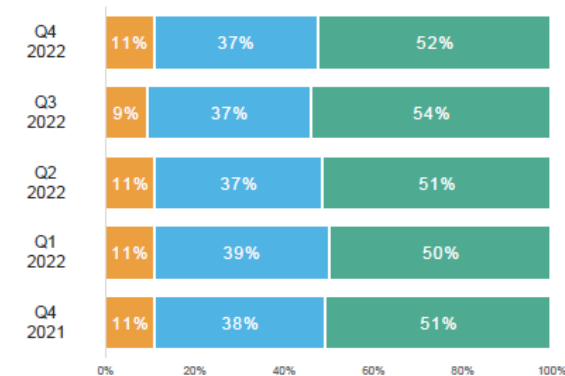
Economic security



Industry security



Organisational security



Not Secure (1-4) Neutral (5-7) Secure (8-10)

Real Wages are set to fall back 15 years

Index of real wages, March 2020 = 100



From June 2022 assumes wages and CPI consistent with the Nov SoMP

Chart: Centre for Future Work • Source: ABS 6401.06345.0, RBA derived • [Get the data](#) • Created with [Datawrapper](#)

Q4. On a scale of 1 - 10, where 1 is not at all secure and 10 is extremely secure, how would you rate your feelings of security with each of the following?
 Australian Workers Q4 2022 (n=1014) // Q3 2022 (n=1000) // Q2 2022 (n = 1037) // Q1 2022 (n = 1016) // Q4 2021 (n = 1010)
 *Indicative only due to small sample size

Expand employment opportunities for all Australians incl most disadvantaged

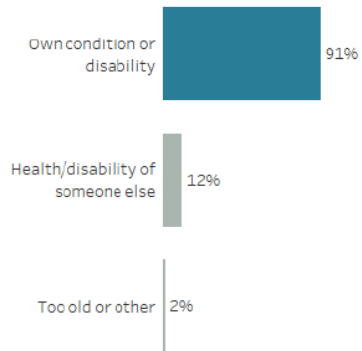
LABOUR FORCE

EMPLOYMENT

59%

of people aged 15–64 with disability who are not in the labour force are **permanently unable to work**.

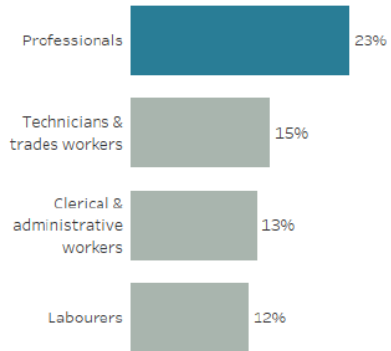
The most common reason given is own condition or disability.



48%

of people aged 15–64 with disability are **employed**. This is lower than those without disability (80%).

The most common occupations of people with disability are:



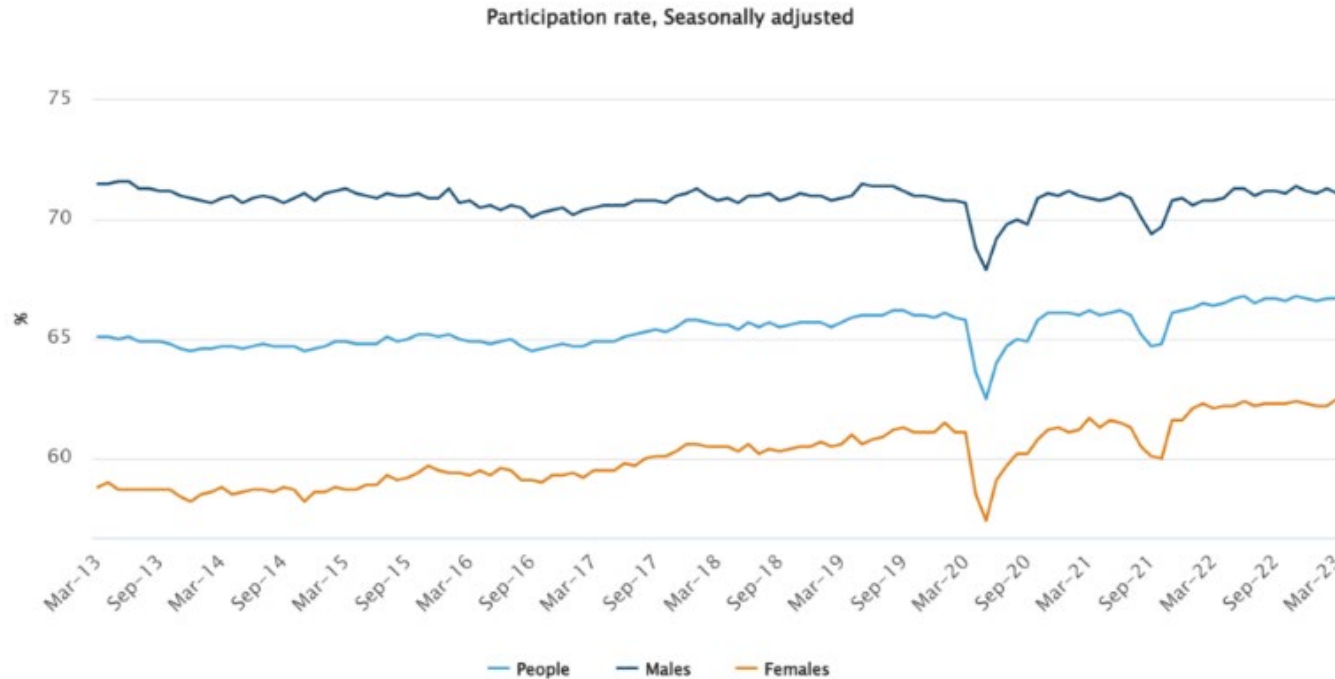
Early data from DCA’s upcoming 2023 Inclusion@Work Index shows that exclusion of Indigenous Australians in the workplace has gotten worse, with **59% of Aboriginal and/or Torre Strait Islander workers experiencing discrimination and/or harassment** in the workplace in 2023, a 9% increase since our last [Inclusion@Work Index in 2021](#).

By comparison, non-Indigenous respondents reported a small drop in levels of discrimination and harassment, with 22% reporting this type of exclusion in 2023 compared with 23% in 2021.

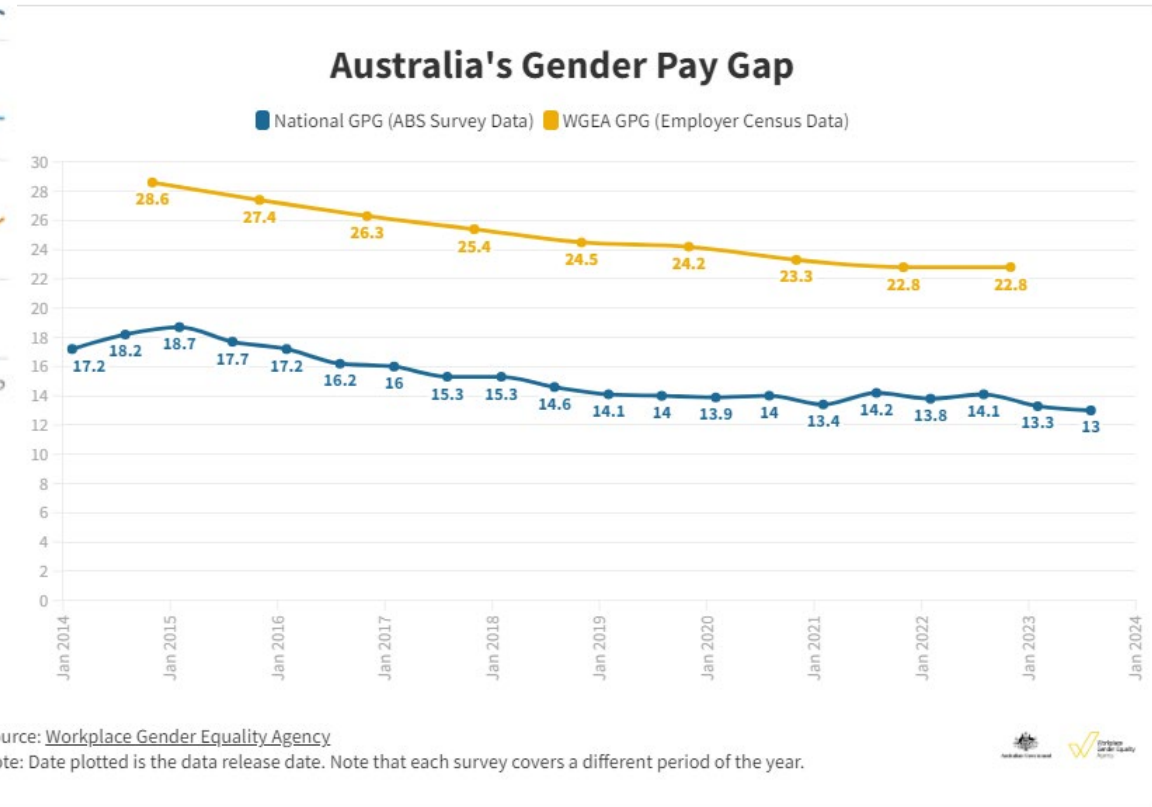
Similar trends appeared in everyday exclusion experiences, with **50% of Aboriginal and/or Torres Strait Islander workers reporting sometimes, often or always being ignored by people at work or being treated as if they didn’t exist** (compared to 24% of non-Indigenous workers) and **49% reported sometimes, often or always being left out of a work social gathering** (compared to 23% of non-Indigenous workers).

51% reported sometimes, often or always having people make incorrect assumptions about their abilities because of their age, culture/ethnicity, disability, gender, Indigenous background, or sexual orientation (compared to 28% of non-Indigenous workers).

Ensure women have equal opportunities and equal pay



Source: Australian Bureau of Statistics, Labour Force, Australia March 2023



Improve migration settings to support higher productivity and wages (1)

ABC The Drum
@ABCthedrum

It is important that we get the red line moving in the right direction because we clearly have a [#skillshortage](#). @ceda_news looked at temporary migration and vocational training the very first time in 1995... 1/2 @dianesmithg #auspol #thedrum

Australian Chamber of Commerce & Industry (ACCI)
@ACCINews

In our submission to the Joint Standing Committee on Migration this week, we urge the Federal Government to make skilled migration more immediately accessible so business can access critical skills through Australia's skilled migration program. Read more > bit.ly/3mtzpuZ



4:53 PM · Aug 14, 2019

Grattan Institute
@GrattanInst

The Federal Government should reset the permanent skilled migration program to favour young, high-skilled workers that bring the biggest economic benefits to Australia.

Our new report by @BrendanCoates @HenrySherrell & @wfmackey. ow.ly/cBBd50EYCKO #auspol #ausecon



7:03 PM · May 30, 2021



2 PM · Apr 8, 2021


“The long run is a misleading guide to current affairs. In the long run we are all dead.” John Maynard Keynes (1923) *A Tract on Monetary Reform*

Improve migration settings to support higher productivity and wages (2)

THE CONVERSATION Academic rigour, journalistic flair

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Migration is a quick fix for skills shortages. Building on Australians' skills is better

Published: April 21, 2021 3:38pm AEST

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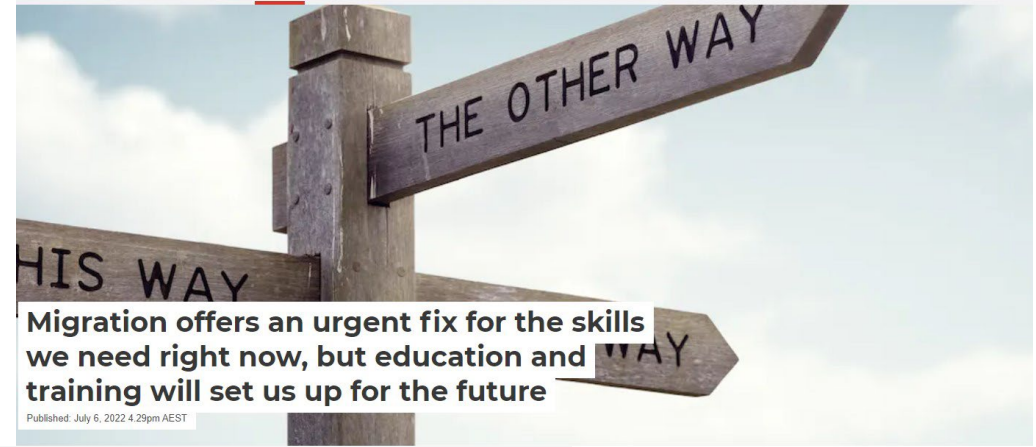
Local training is the best long-term solution to Australia's skills shortages – not increased migration

Published: October 29, 2021 6:11am AEST

THE CONVERSATION Academic rigour, journalistic flair

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Migration offers an urgent fix for the skills we need right now, but education and training will set us up for the future

Published: July 6, 2022 4:29pm AEST

THE AUSTRALIAN Thursday, October 26, 2023 | Today's Paper | Mind Games

and in the longer vacancies. In the n education and ties arising from mate change.

ment, Brendan migrant intake and lled workers.

Authors: Pi-Shen Seet Professor of Entrepreneurship and Innovation, Edith Cowan University; Janice Jones Associate Professor, College of Business, Government and Law, Flinders University


Disclosure statement: The authors do not work for, consult, own shares in or have any other relationship with any organization that could benefit from this article.

HOME / NATION / POLITICS

Quick jobs fix: import more skills, Brendan O'Connor says

EXCLUSIVE By GREG BROWN CANBERRA BUREAU CHIEF Follow @gregbrown_TheOz

11:59PM JULY 3, 2022 232 COMMENTS



Improve migration settings to support higher productivity and wages (3)

From: Brendan Coates <brendan.coates@grattaninstitute.edu.au>
Sent: Friday, 8 July 2022 12:59 PM
To: Pi-Shen SEET <p.seet@ecu.edu.au>; janice.jones@flinders.edu.au
Cc: Tyler Reysenbach <tyler.reysenbach@grattaninstitute.edu.au>
Subject: Reference to Grattan work on migration and wages

Hi Pi-Shen, Janice

I'm writing about the reference to Grattan's stance on the link between migration settings and wages growth in Australia in your recent piece in *The Conversation*.

On the other hand, the [trade unions](#), [Reserve Bank](#) and [Grattan Institute](#) have argued that going back to the previous migration settings may only reinforce the negative effects of minimal real wage growth for Australian workers. It's also likely to reinforce the [exploitation](#) and [underemployment](#) of migrants.

<https://theconversation.com/migration-offers-an-urgent-fix-for-the-skills-we-need-right-now-but-education-and-training-will-set-us-up-for-the-future-186374>.

We haven't argued that returning to previous migration settings would hurt the wages of Australian workers overall. In fact our view is that border closures will have done little to affect wages growth at the aggregate:

Closed borders may well have boosted the employment prospects and wages of locals in sectors where temporary migrants – especially students and working holiday makers – have made up a large share of the workforce. That's likely to have benefited younger Australians, especially those working in hospitality.

*But the fact there are fewer migrants in Australia now than before the pandemic is **unlikely to have had much impact on the employment prospects and wages of Australian workers overall.***

<https://theconversation.com/australia-is-missing-500-000-migrants-but-we-dont-need-visa-changes-to-lure-them-back-182322>

The piece you link to from former CEO John Daley speculates about the potential impact of migration (especially temporary migration) on younger, lower-skilled Australian workers. It's also written prior to the pandemic so isn't addressing the issue of border closures at all.

We'd really value you dropping that reference in the piece which positions us as arguing that reopening the borders and re-establishing migration flows will lead to lower wages growth overall.

Best wishes

Brendan
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Improve migration settings to support higher productivity and wages (4)

From: Pi-Shen SEET

Sent: Friday, 8 July 2022 2:19 PM

To: Brendan Coates <brendan.coates@grattaninstitute.edu.au>

Cc: Tyler Reysenbach <tyler.reysenbach@grattaninstitute.edu.au>; janice.jones@flinders.edu.au; john.watson@theconversation.com

Subject: RE: Reference to Grattan work on migration and wages

Hi Brendan

Thanks for your email and the points raised.

Your point that “border closures will have done little to affect wages growth at the aggregate” may well be true. However, that is not the argument in our article and neither is it the main focus in our article which is about the tensions between increasing immigration versus the development of skills and training in Australia.

We do not refer at all to any impact on Australian border closures on wages except in terms of changing the dynamic of migration with other similar developed nations like the US, UK and Canada, that had different approaches.

The reason why we cited John Daley’s paper is that it was presented at the annual 2019 RBA conference that focussed on ‘Low Wage Growth’ (<https://www.rba.gov.au/publications/confs/2019/#:~:text=Sydney%2C%204%E2%80%935%20April%202019,issue%20of%20low%20wage%20growth>) that brought together central bankers, academics and industry professionals and it done before border closures and during the “previous migration settings”.

John Daley was the discussant to a paper presented by Courtney Bell and Christian Dustmann on “Immigration and Wage Growth: The Case of Australia” in which that **“overall, these studies do not provide much evidence that immigration is hurting locals’ wages. Where immigration is found to have a significant effect on average wages, it is generally estimated to be positive. Insofar as negative effects are found for some subpopulations, they are typically not robust to changes in empirical specification. However, some authors have argued that particularly vulnerable segments of the labour force may be susceptible to impacts of specific visa programs that may not have been captured by existing empirical studies.”**

We believe, as we think John Daley did, that the effect on subpopulations and some of the limitations of the studies mentioned in the Bell and Dustmann paper should not be ignored

Improve migration settings to support higher productivity and wages (5)

He raised concerns with Breunig et al. (2017)'s study "as the shape of Australia's migration system has shifted significantly over the past six years, towards younger, less-skilled migrants", in particular using Census data from 2001 to 2011, but he stressed the main problems were the unreliable data sources or underreporting of data and differences between location, which is why we have focussed on the argument of which he summarised as "Many believe that Australian migration is highly skilled and has nothing to do with the underpayment of minimum wages. That might have been true in the past, but it's less true now." And "it is possible that the scale of this influx to the labour market is depressing wages and increasing under-employment specifically for low-skill younger workers."

From the record of the subsequent discussion, one participant noted that Breunig et al. (2017) study "only investigated wage outcomes of Australian-born residents and not of the entire population of Australian residents (including immigrants)". Another participant noted that while underreporting is unlikely to be the main source of bias, the approach used by the Australian study may "instead be vulnerable to biases resulting from 'downgrading' – the observation that higher-skilled immigrants often fill low skilled, low wage occupations."

Importantly, John Daley also raised a few more issues as follows:

"Once underpayment takes hold in a material minority of cases in a particular labour market, it can change how other employers behave. If a dishonest employer underpays, then they can offer prices that undercut an honest employer who does pay minimum wages. So if in a particular industry a significant number of employers employ and underpay many migrants, then they pressure all the other employers in the industry to do the same– and to underpay non-migrants as well."

"If underpayment of temporary migrants is a general story– and I repeat, we don't have the data to know for sure– does it matter? At the very least it questions some of the assumptions made by those trying to assess the economic effects of migration. If a material number of people are being paid less than the minimum wage, there's a good chance that they're not going to show up in the data being analysed. Wage growth in low-end jobs may be even lower than the statistics suggest, because wages in these roles are systemically under-reported."

"a little over 20 per cent of the workforce are paid at minimum wages, suggesting that 'low skill' employment at or below minimum wages could be big enough to matter."

As for the John Daley piece being "speculative", I believe that he has backed up with argument with valid reference to studies conducted under the "previous migration settings" and with data that is credible, albeit that then, as now, "it is impossible for data sources on the Australian labour force to pick up all of this phenomenon." He also ended with some policy implications to change the "previous migration settings", namely "some visa conditions need to be rethought. Some conditions effectively give employers enormous bargaining power, and facilitate underpayment of wages And policy makers should consider alternative conditions that would serve the same public policy purposes, but give employers less bargaining power." **The RBA governor's comments in 2021, 2 years after the 2019 conference, also suggests that the RBA did not believe that this line of argument was "speculative".**

It may be that the Grattan Institute has re-done its modelling to take into account some of the concerns John Daley raised and if you could point those out to us, that will be most appreciated and we will review our argument in light of that.

Thank you and best regards.

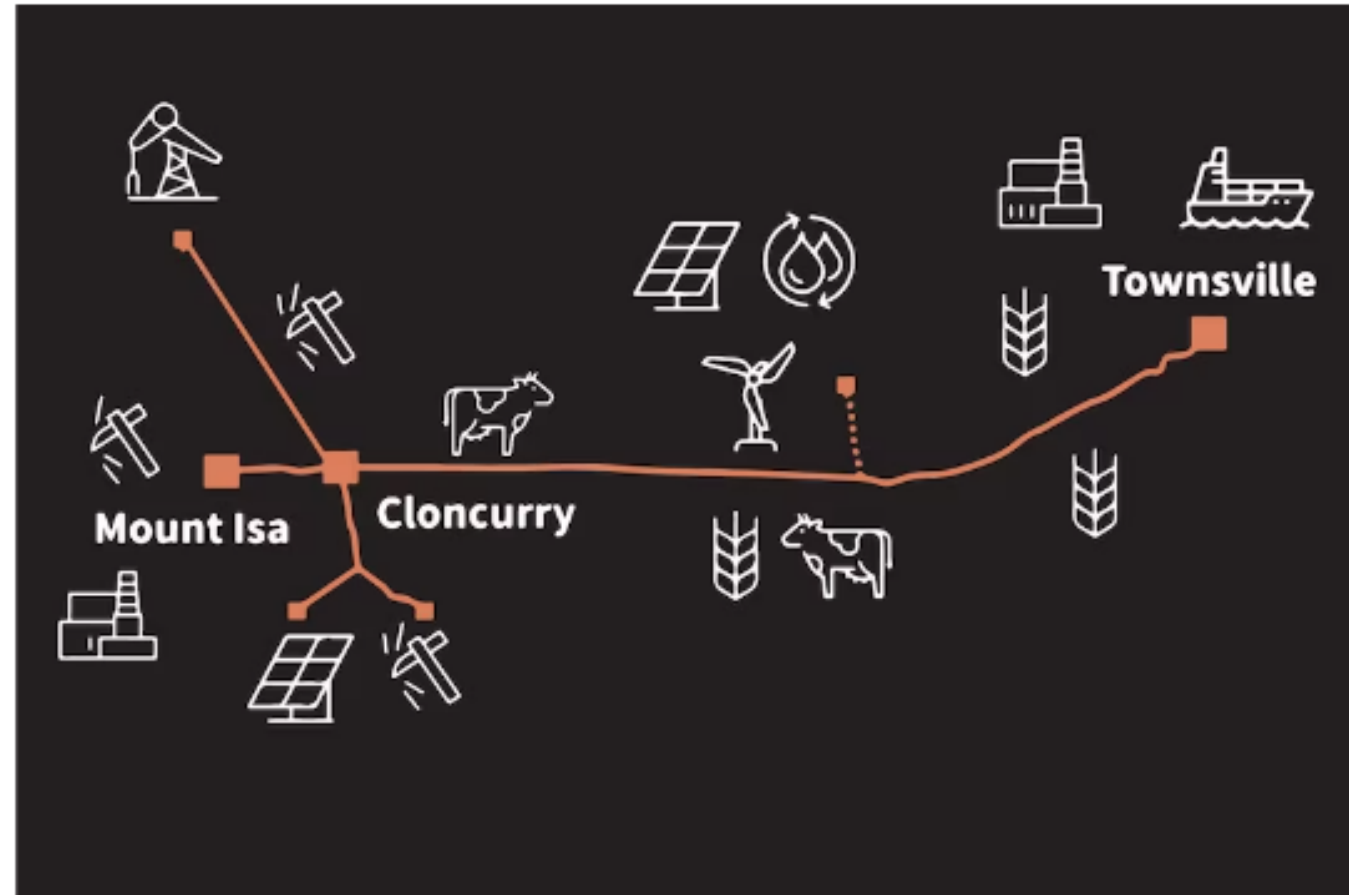
Pi-Shen

Maximise jobs and opportunities from renewable energy, tackling climate change, the digital economy, the care economy and a Future Made in Australia (1)

'Daunting shortage' of skilled workers looms over giant, renewable energy projects

ABC North Qld / By Mia Knight and Baz Ruddick

Posted Wed 31 May 2023 at 4:50am, updated Wed 31 May 2023 at 7:44am



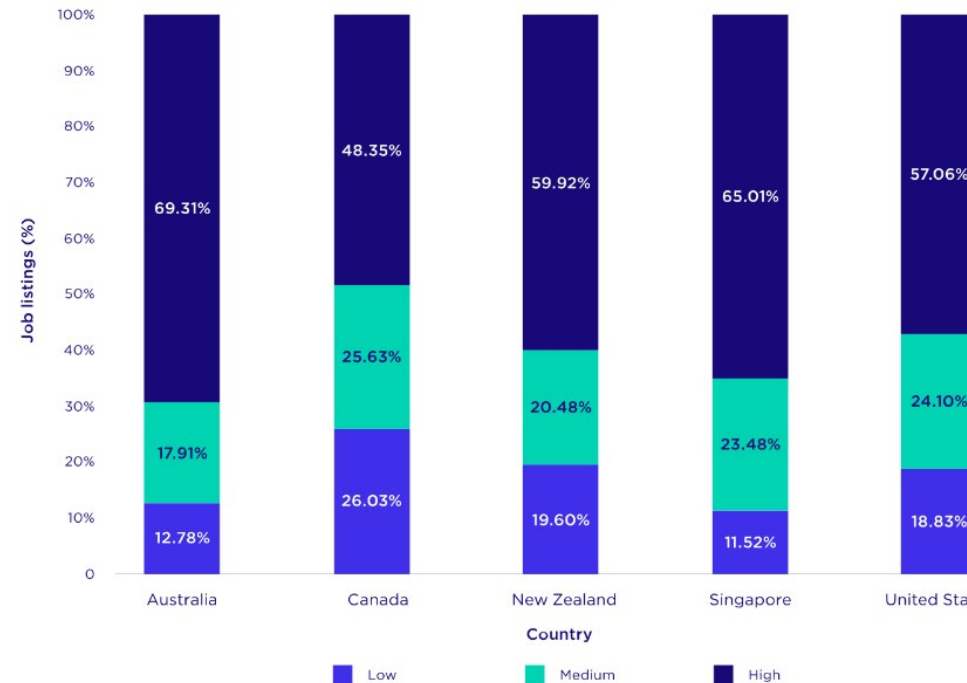
The Queensland government says it will invest \$5 billion in CopperString 2032. (Supplied: CopperString 2.0)

Maximise jobs and opportunities from renewable energy, tackling climate change, **the digital economy**, the care economy and a Future Made in Australia (2)

Table 21: Demand for cutting edge skills in Australia and th

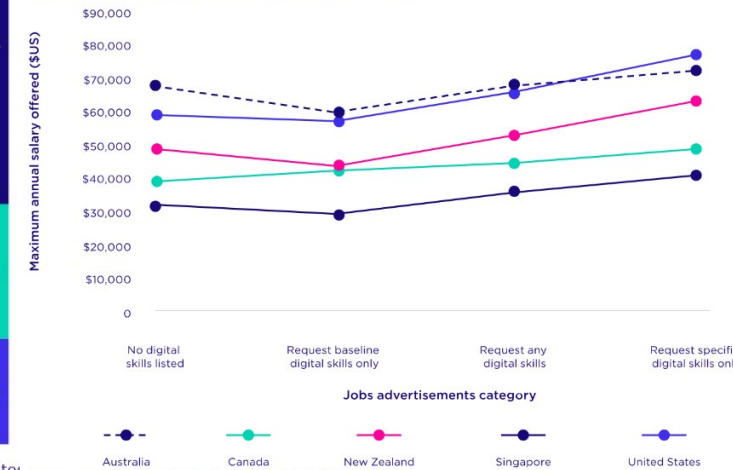
Australia	
Skill Name	Growth over 2013 – 20 [%]
Artificial Intelligence (AI)	4,412
IT Automation	3,817
Internet of Things (IoT)	3,645
Application Programming Interface (API)	780
Machine Learning (ML)	724
Natural Language Processing (NLP)	537
Distributed Computing	516
Data Visualisation	482
Software Development Methodologies	450
Big Data	384

Figure 69: Composition of jobs requiring digital skills, by job skill level



Sources: Burning Glass Technologies data, 2019, NSC analysis.

Figure 70: Maximum salary offered in job advertisements



Sources: Burning Glass Technologies data, 2019, NSC analysis

Maximise jobs and opportunities from renewable energy, tackling climate change, the digital economy, **the care economy** and a Future Made in Australia (3)

Aged care: Expected shortfall of at least 110,000 aged care workers by 2031. This rises to 400,000 by 2050⁴, making it difficult to meet the basic standards of care recommended by the Royal Commission.

Disability care: Estimated shortage of NDIS workers last year was 120,000.⁵

Childcare: Estimated shortage of childcare workers as of May 2022 was 16,000⁶



This skills shortage is being driven by three key challenges which inter-relate and compound one another:

- 1. Increased demand for services:** Australia's expanding – and ageing – population means demand for care is up. The number Australians aged over 65 is expected to grow from 16% in 2021, to 20% by 2031⁷; the number of NDIS participants is projected to increase by 84% by 2030⁸; and the number of employed people in child carer roles is expected to increase by 30% between 2021 and 2025.⁹ Moreover, the services required are increasingly for people with more complex needs (both physically and psycho-socially), and the demand for in-home aged and disability care is also growing.^{10,11}
- 2. Ageing workforce:** High proportions of care workers will reach retirement age in the next decade. For instance, the median age of staff working in community aged care is 55 while 44% of disability workers are aged over 45 years.^{12,13} The physical demands of traditional care work can make it hard for a workforce that is moving towards the older age, and failing to attract new younger workers into the care workforce.
- 3. Poor value proposition:** Care sector roles are typically low paid, have limited job security due to increasing casualisation of the workforce, and have highly demanding roles. Requirements for qualifications and training are also variable across these sectors and these factors contribute to a poor employee value proposition for attracting and retaining workers.^{14,15,16}

Search by keyword...

> Skills Ready
Choose some options

> Training options
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> Industry area
Education and Community Services x

> Sub study area
Choose some options

> Qualification level
Certificate I x | Certificate II x | Certificate III x
Course in x | Skill set x

> TAFE colleges
Choose some options

> Private providers
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10

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★ FREE

Introduction to Early Childhood Education and Care Job Ready Skill Set ▶

State ID : AE818

Get a head start on your career in childcare – FEE FREE!

If you love working with children, and would like to contribute to the education of our future generations, working in early childhood education and care could be the career for you!

★ FREE

Provide Individual Support Skill Set ▶

State ID : AE384

FREE training to kickstart your career in caring – FEE FREE!

This skill set will give you an introduction to working in a range of community, residential and healthcare settings and provide support in a home or care setting for aged care or disability support.

★ FREE

Work in Community Care Skill Set ▶

State ID : AE618

FREE training to kickstart your career in caring – FEE FREE!

There's many job opportunities in the field of community care, which includes healthcare support and specialist areas such as social support. The Work in Community Care skill set will give you a great starting point to get into the industry, as it covers important areas such as first aid, communicating with diverse people, and customer service in a community care setting.

The West Australian for 190 years

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OPINION

Pi-Shen Seet: Fee-free TAFE courses will only fix part of skills shortage

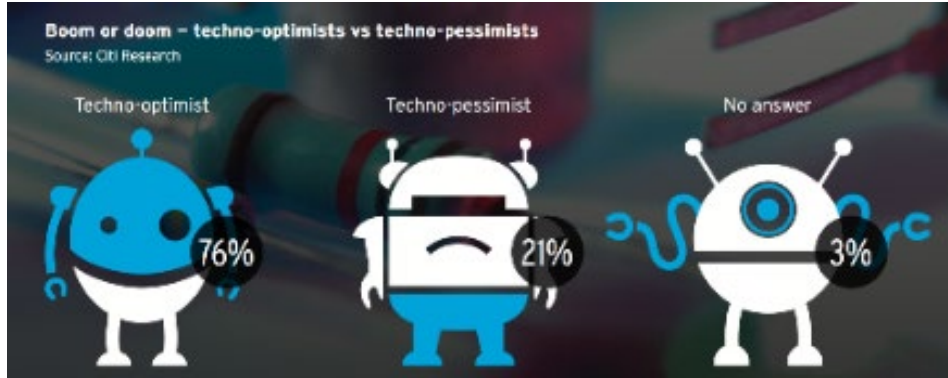
Pi-Shen Seet | The West Australian
Tue, 10 January 2023 2:00AM | [Comments](#) | [+](#)

Maximise jobs and opportunities from renewable energy, tackling climate change, the digital economy, the care economy and **a Future Made in Australia (4)**

- Prime Minister’s Industry 4.0 Taskforce & Skills for Australia

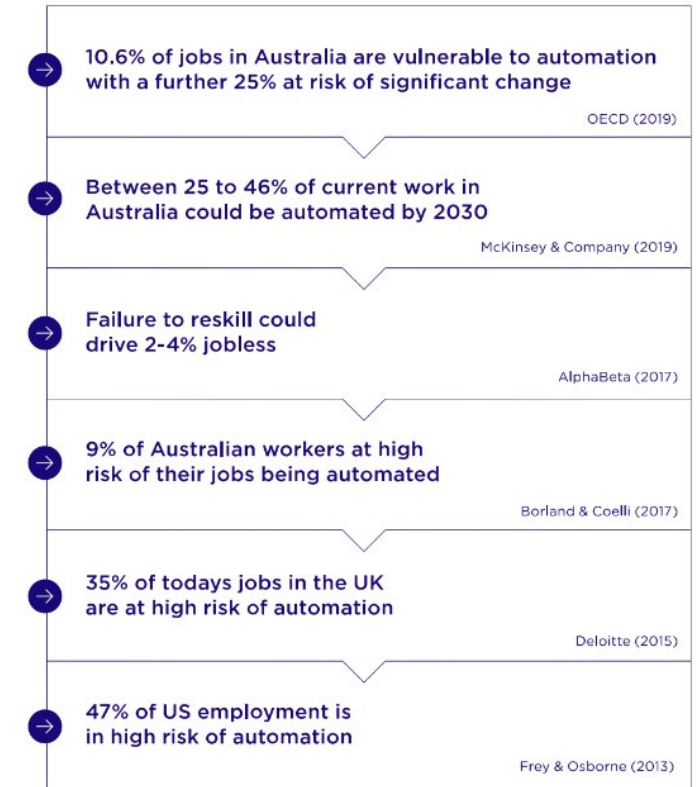
Digital skills	Project coordination skills	Soft skills
Industry 4.0 programming and software engineering	Product management	Creativity
Data science	Multi-project management	Design
Data/ big data analytics	Supply chain and support services	Innovation
Visualisation	Logistics	Leadership
Internet of Things		
IT architecture		
Security		

Address skills shortages and getting our skills mix right over the long term (1)



Australian Government | National Skills Commission
The state of Australia's skills 2021: now and into the future

Divergence in future of work models



- Increasing Lack of Consensus

- These technologies offering limitless new opportunities versus those who see major job dislocation (ICAANZ et al., 2016; Dolphin, 2015).

- “The fourth industrial revolution has the potential both to increase economic growth and to alleviate some of the major global challenges we collectively face.” (Schwab, 2016: 35)
- “Invention since 2000 has centered on entertainment and communication devices that are smaller, smarter, and more capable, but do not fundamentally change labour productivity or the standard of living in the way that electric light, motor cars, or indoor plumbing changed it.” (Gordon 2012: 9)

Source: NSC analysis

Address skills shortages and getting our skills mix right over the long term (2)

Top 10 occupations at most risk of automation

- dressmaker or tailor
- clothing patternmaker
- upholsterer
- sewing machinists
- jewellers
- mail sorters
- mail clerks
- stone processing machine operator
- furniture finisher
- graphic pre-press trade workers.

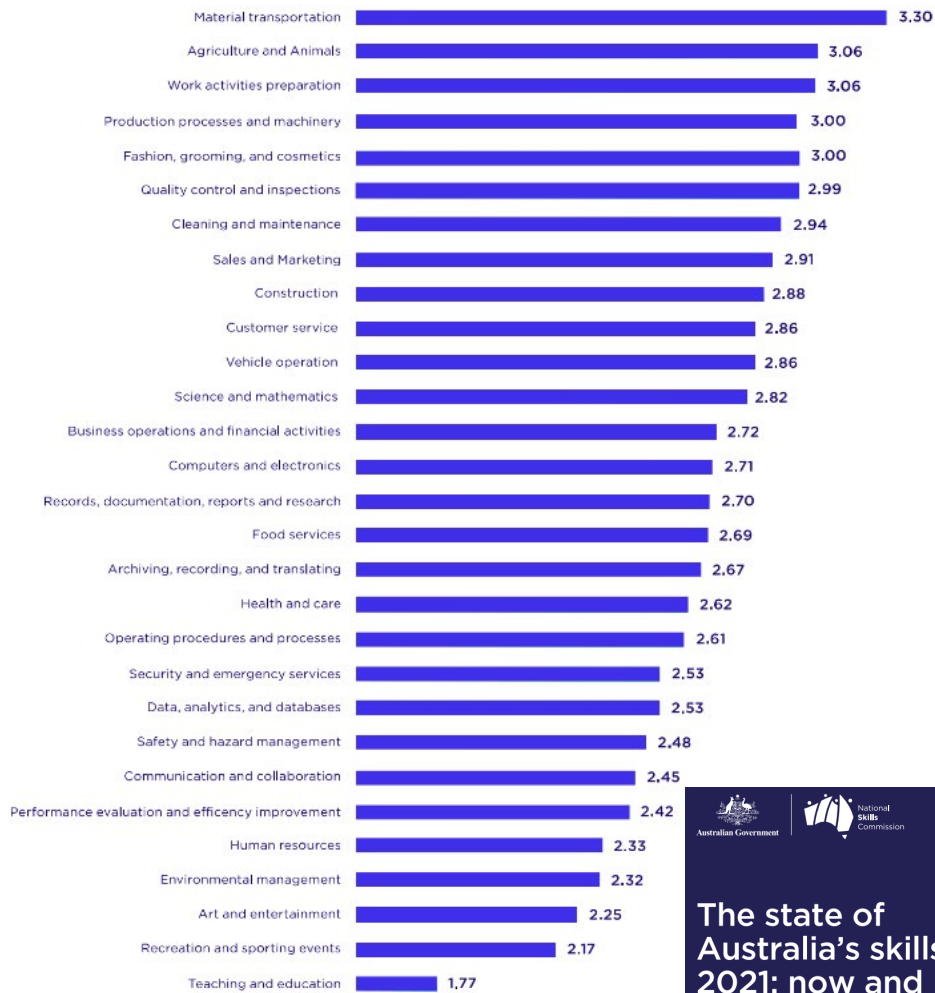


Top 10 occupations least likely to be automated

- university lecturer
- ministers of religion
- education psychologist
- nurse educator
- education advisers and reviewers
- ICT trainers
- actor
- entertainer or variety artist
- judicial and other legal professionals
- early education (pre-primary school) teachers

Address skills shortages and getting our skills mix right over the long term (1)

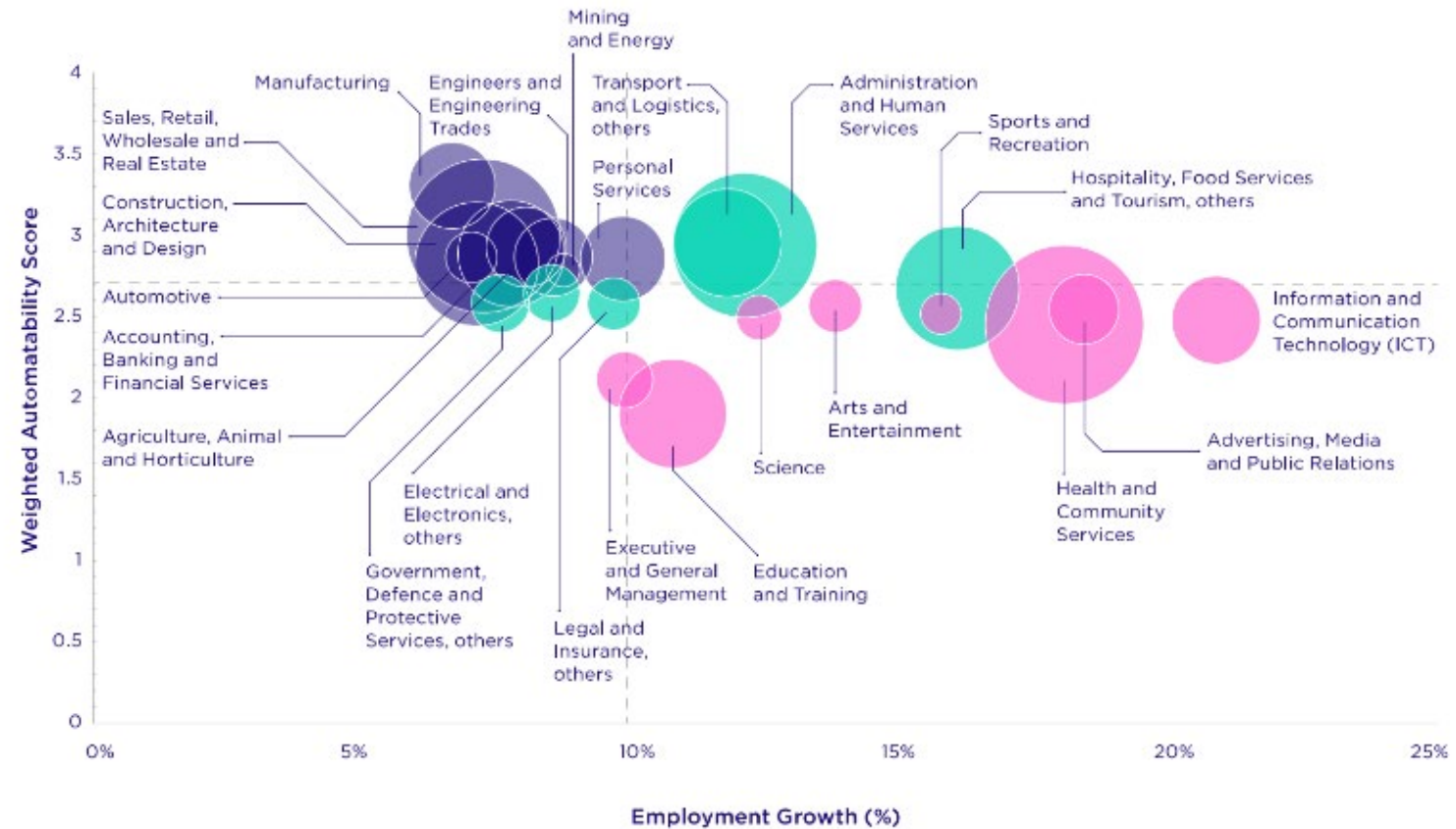
Figure 75: Weighted automatability score of specialist tasks by their skills cluster family



Source: NSC analysis, 2021



Figure 79: Automatability compared with growth of occupations in Accelerated Digitisation scenario 2020-2028



Source: NSC analysis, 2021

Address skills shortages and getting our skills mix right over the long term (2)

- Reduced need for some jobs but main issue = changing the nature of existing jobs and in doing so has **expanding the range of tasks**, such as problem-solving and collaboration, creating the need for additional skills and knowledge.
- While **larger firms implement in-house training** to help fill gaps, including those that exist in VET courses, **smaller firms tend to hire workers with the required skill set**.
- **Specialist technology-related skills** are important from a range of engineering disciplines, as well as software development and computer programming
- **Importance of generic non-technical skills** and competencies to include team working, creativity and problem-solving to explore and deploy technologies effectively in workplaces.
- **Consensus among technology innovators and employers on the need to enhance skill development for disruptive technology. But when considering specific technologies, there is substantial uncertainty about the skills needed and how the training should be delivered.**
 - **Continual learning, Lifelong learning, Regular Upskilling, etc...**
- **Some employers reported difficulties in finding public and/or private providers with the capacity to provide education and training in specific disruptive technologies.**

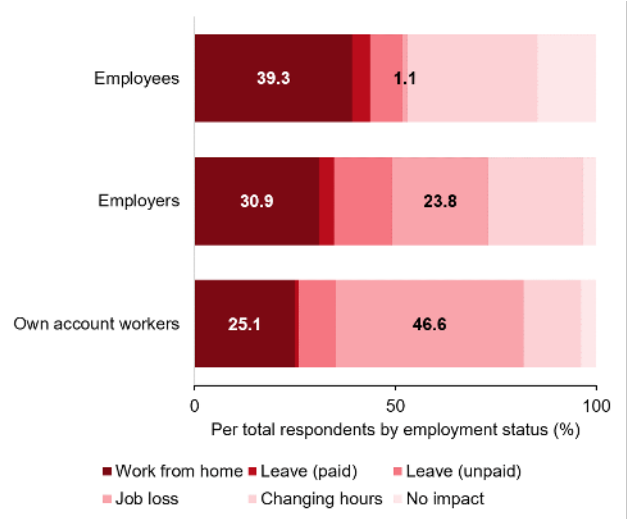


Seet, P-S, Jones, J., Spoehr, J., Hordacre, A-L. 2018. *The Fourth Industrial Revolution – Implications of Technological Disruption for Australian VET*. NCVER, Adelaide, SA. (ISBN: 978-1-925717-20-4) <https://www.ncver.edu.au/research/h-and-statistics/publications/all-publications/the-fourth-industrial-revolution-the-implications-of-technological-disruption-for-australian-vet>

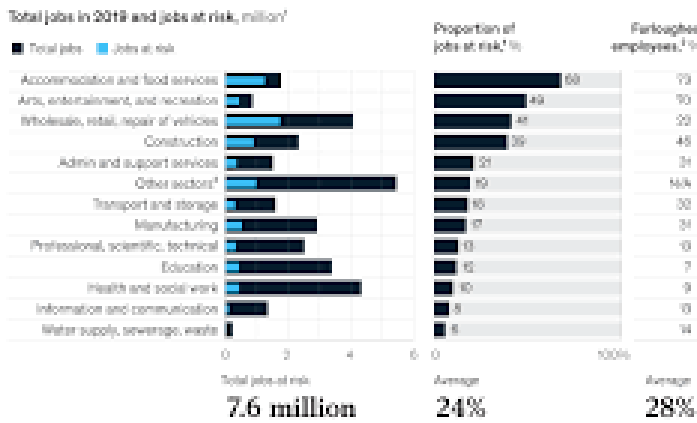
JCIPP and the Future of Work

Date	Topic/ Presenter	Prime Minister	Major Events
October 2018	Future of Work: What are the Issues? (John Phillimore)	Scott Morrison	Leadership spill in August 2018
August 2019	Future of Skills and the Fourth Industrial Revolution (Pi-Shen Seet)	Scott Morrison	May 2019 LNP Federal Election win
October 2023	The Jobs and Skills Summit One Year On: Is Australia addressing skills shortages and getting its skills mix right? (Pi-Shen Seet)	Anthony Albanese	2020-2022 COVID-19 pandemic; closed borders; WFH; Zoom 2021 EU launches Industry 5.0 Feb 2022 Ukraine war May 2022 Labour Federal election win Sep 2022 National Skills Summit Oct 2022 ChatGPT launched Sep 2023 Employment White Paper Oct 2023 National Skills Agreement

COVID-19 Pandemic's Impact on Skills, Training and Work



The impact across sectors is highly uneven, as shown by both furloughed employees and jobs at risk.



¹Other than retail, wholesale, hotels, or restaurants in hotels or other accommodation, health and social work, education, information and communication, arts, entertainment and recreation, transport and storage, manufacturing, professional, scientific, technical, education, health and social work, information and communication, water supply, sewerage, waste.

IMPACT OF COVID-19 ON JOBS

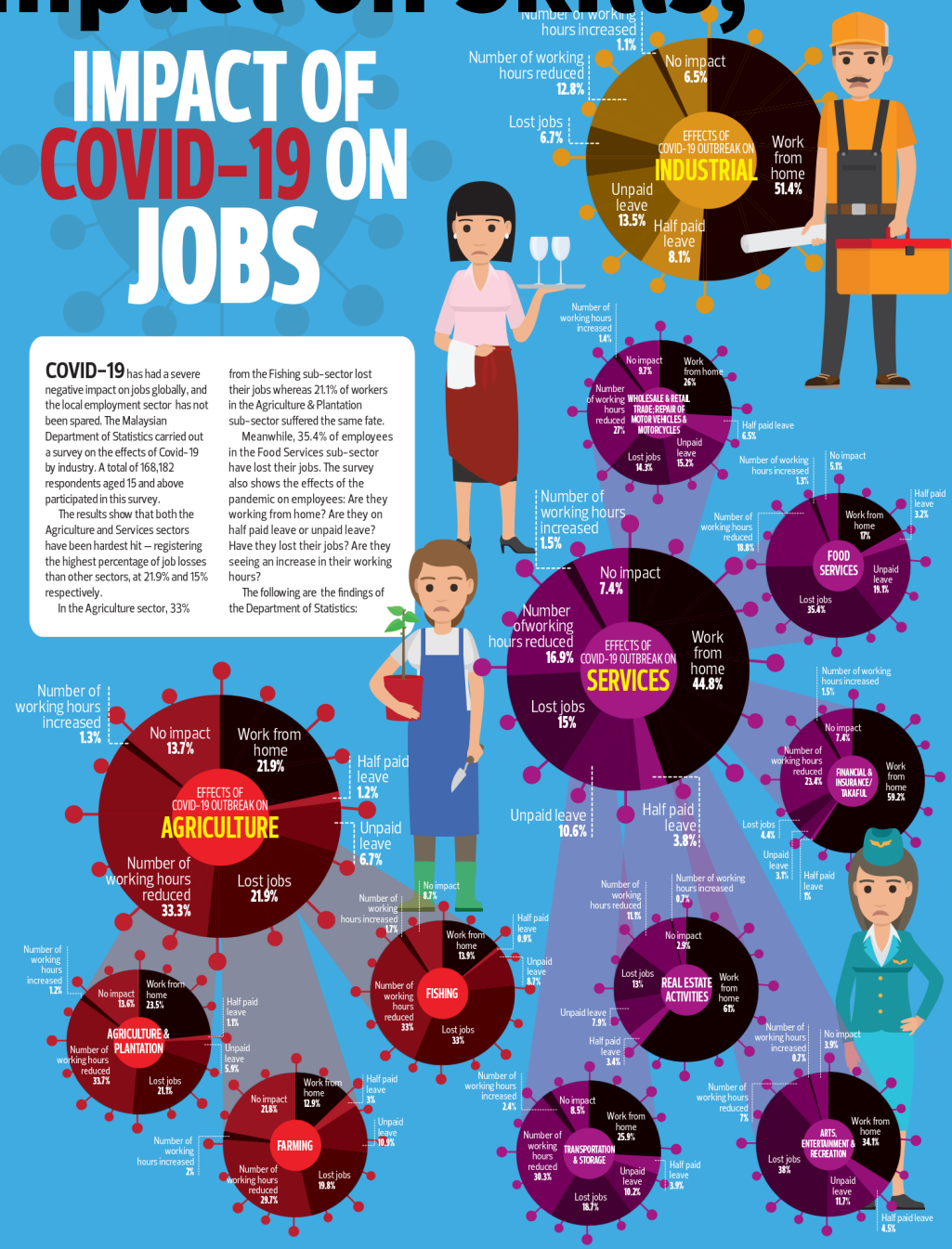
COVID-19 has had a severe negative impact on jobs globally, and the local employment sector has not been spared. The Malaysian Department of Statistics carried out a survey on the effects of COVID-19 by industry. A total of 168,182 respondents aged 15 and above participated in this survey.

The results show that both the Agriculture and Services sectors have been hardest hit – registering the highest percentage of job losses than other sectors, at 21.9% and 15% respectively.

from the Fishing sub-sector lost their jobs whereas 21.1% of workers in the Agriculture & Plantation sub-sector suffered the same fate.

Meanwhile, 35.4% of employees in the Food Services sub-sector have lost their jobs. The survey also shows the effects of the pandemic on employees: Are they working from home? Are they on half paid leave or unpaid leave? Have they lost their jobs? Are they seeing an increase in their working hours?

The following are the findings of the Department of Statistics:



Industry 5.0



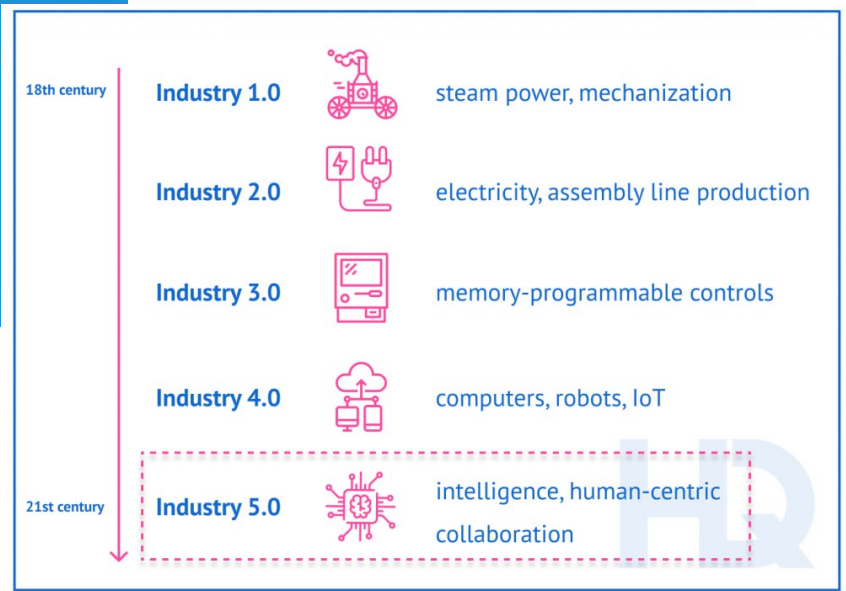
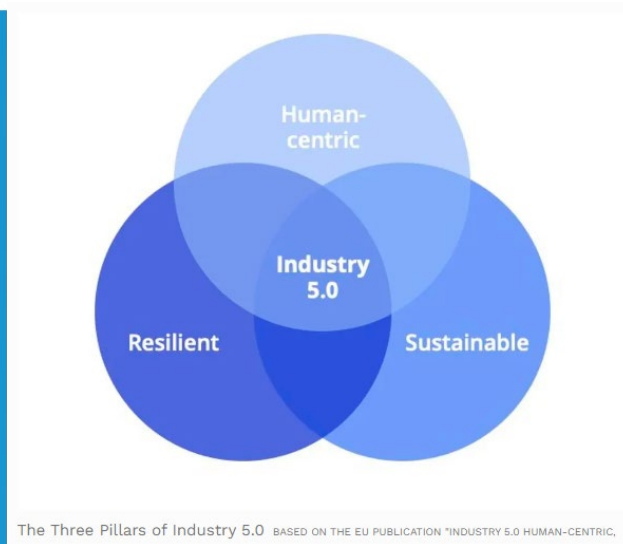
**Industry 5.0:
A Transformative
Vision for Europe**

ESIR
Policy Brief

Independent
Expert
Report

Research and
Innovation

- Education
- AI & digitalisation
- Circular economy
- Digital economy
- Network thinking
- Skills
- Equality
- Youth
- Sustainable Development Goals
- Climate and Environment
- Energy
- Transport
- Governance
- Citizen engagement



- Industry 4.0 lacks key design and performance dimensions that will be indispensable to make systemic transformation possible:
 - an inherently social dimension, demanding attention to the wellbeing of workers, the need for social inclusion and the adoption of technologies that do not substitute, but rather complement human capabilities whenever possible; and
 - a mandatory environmental dimension, which leads to the promotion of transformation that eliminates the use of fossil fuels,

Generative AI, AGI ... (1)

- <https://chat.openai.com/>
- <https://www.smh.com.au/technology/i-m-a-revolutionary-ai-bot-i-wrote-this-article-to-explain-how-i-work-20221206-p5c411.html>
- <https://openai.com/blog/chatgpt/>
- <https://www.oneusefulthing.org/>
- <https://twitter.com/emollick/status/1643029453852012546>



But, but, what about common sense?

TIME

I have a book, 9 eggs, a laptop, a bottle and a nail. Please tell me how to stack them onto each other in a stable manner.



ChatGPT
It would be difficult to stack all of these objects on top of each other in a stable manner [...] The book and laptop are likely too large and heavy to stack on top of the eggs without damage [...] Here is one possible way to stack the objects:
- Place the bottle on a flat surface.
- Carefully balance the nail on top of the bottle.
- Place the eggs on top of the nail, making sure they are balanced and not tilting to one side [...]

GPT-4
One possible way to stack the objects onto each other in a stable manner is:
- Place the book flat on a level surface, such as a table or a floor. The book will serve as the base of the stack and provide a large and sturdy support.
- Arrange the 9 eggs in a 3 by 3 square on top of the book, leaving some space between them. The eggs will form a second layer and distribute the weight evenly. [...]

Unlike traditional coding jobs, the prompt engineering role is targeted to anyone with basic programming skills and familiarity with large language models such as ChatGPT or Bard. Frank Rumpenhorst - Picture Alliance via Getty Images

BY NIK POPLI | APRIL 14, 2023 9:30 PM EDT

A new kind of AI job is emerging—and it pays six-figure salaries and doesn't require a degree in computer engineering, or even advanced coding skills.



Ferokok wajar diberi maklumat tepat
Maklumat tepat harus diberikan kepada perokok untuk mengubah tabiat merokok mereka.
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32°C Partly sa... 5:14 PM

Generative AI, AGI ... (2)

Occupations with the highest AI exposure fell into 3 categories, informers, carers and coordinators

Felten identified an occupation’s exposure to generative AI by constructing a measure of how well AI can accomplish skills that make up the occupation.

This was done by linking 10 AI applications like abstract strategy games and reading comprehension to 52 human abilities like inductive reasoning and written communication. For example, an AI application like language modelling, i.e. Chat-GPT, is associated with skills like written expression and information ordering.

A higher exposure score does not mean that the occupation will disappear. Instead that it is most likely to see upheaval as AI is implemented.

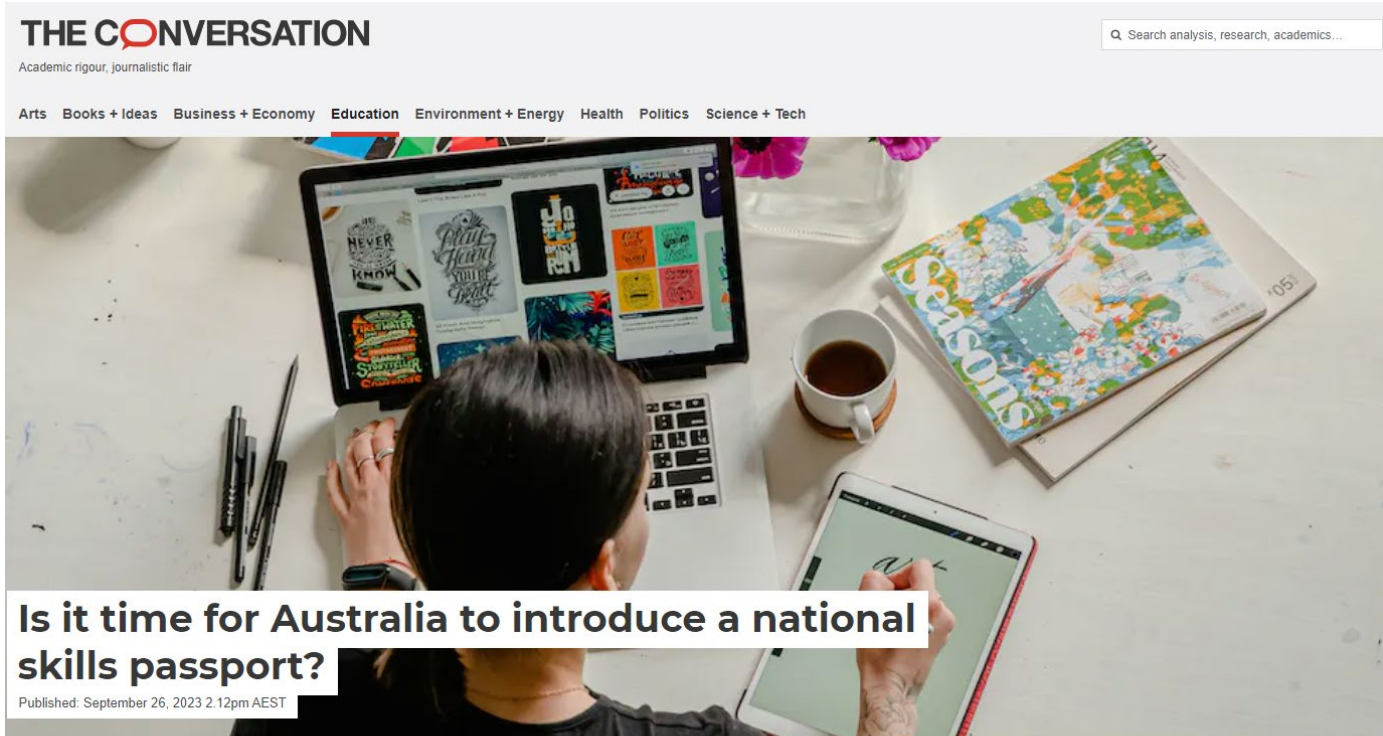
Mandala repeated this analysis for Australian occupations, then used ABS data to determine the characteristics of the occupations that are most exposed. The exposed occupations fell into 3 categories: informers, carers and coordinators.



Sources: Felten et al. (2023) How will language modelers like ChatGPT Affect Occupations and Industries?

Sources: Foundation of Young Australians (2016) The New Work Mindset; Mandala analysis

September 2023 Employment White Paper



Is it time for Australia to introduce a national skills passport?

Published: September 26, 2023 2:12pm AEST

Antoni Shkraba/Pexels

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As part of the [new employment white paper](#), the federal government has announced it is thinking seriously about a national skills passport.

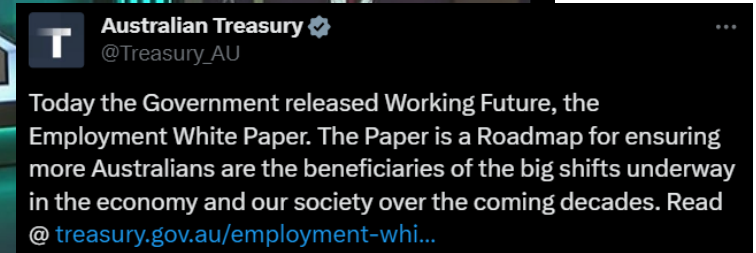
It has [set aside A\\$9.1 million](#) to prepare a business case for the passport to “help workers promote their qualifications and businesses find more skilled workers”.

What might this involve? And is it a good idea? As our research shows, skills

Authors

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-  **Janice Jones**
Associate Professor, College of Business, Government and Law, Flinders University

- Digital platforms that improve signals between employers and employees e.g. skills passports can build trust and help unlocking human capital through technology acceptance
 - Seet, P.-S., Jogulu, U., Cripps, H. and Nejati, M. (2023), "Transforming self-perceived self-employability and entrepreneurship among mothers through mobile digital sharing economy platforms: an exploratory case study", *Personnel Review*, Vol. 52 No. 3, pp. 492-520. <https://doi.org/10.1108/PR-04-2019-0217>



October 2023 National Skills Agreement (1)

THE CONVERSATION

Academic rigour, journalistic flair

Arts Books + Ideas Business + Economy Education Environment + Energy Health Politics Science + Tech



Australia has a new National Skills Agreement. What does this mean for vocational education?

Published: October 19, 2023 11.23am AEDT

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This week, national cabinet signed off on a [National Skills Agreement](#). This is a A\$12.6 billion funding agreement determining federal and state funding for vocational education and training over the next five years.

More than a year in the making, the agreement also promises a new era of cooperation between governments, the vocational education and training sector, business and the community.



The National Skills Agreement needs time in the policy spotlight and it must include these 3 things

Published: March 22, 2023 6 12am AEDT

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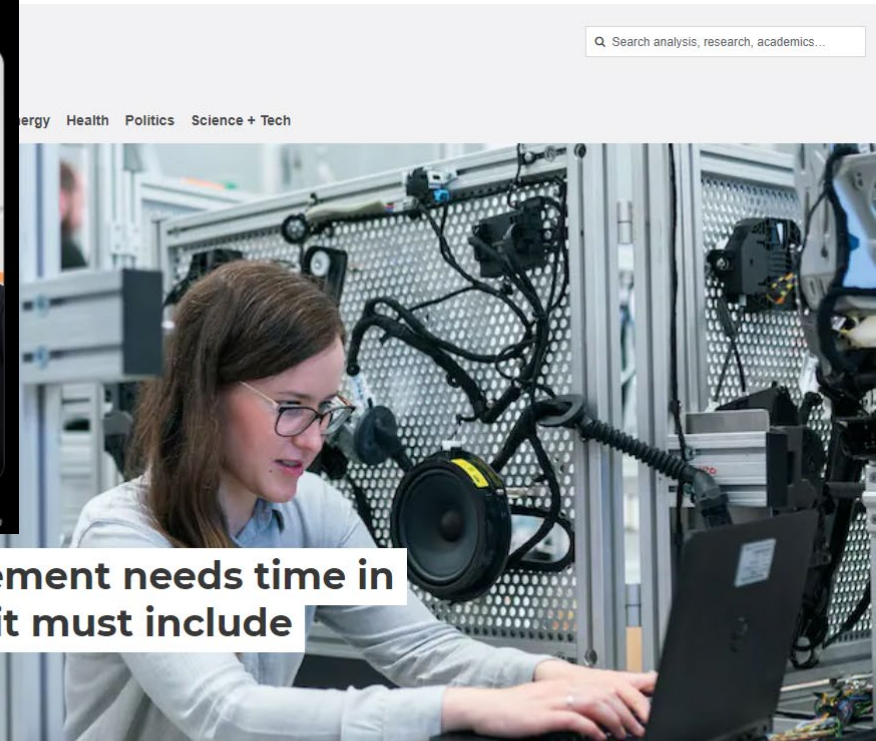
2

44

Australia continues to grapple with acute skills shortages. Businesses are struggling to find workers with the skills they need. Meanwhile, workers struggle to get jobs because of the mismatch between available training and occupations.

There is currently a high-profile debate about the university sector's role in this via the [Universities Accord](#) review process.

But the role of vocational education and training is not getting the same level of



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October 2023 National Skills Agreement (2)

- Of \$12.6 billion over 5 years (2024-2028), \$3.6 billion is new
 - “flexible funding” to state and territories to meet national priorities including:
 - gender equality, Closing the Gap and net zero in vocational education and training
 - sustaining essential care services such as child and aged care
 - developing Australia’s sovereign capability or ability to make things ourselves, food security and technological capability and
 - improving regulation of VET qualifications.
- The remainder of the funds will address some reforms recommended by the Productivity Commission and previous reviews. These include:
 - establishing a national network of TAFE Centres of Excellence and strengthening collaboration between TAFEs, universities and industry
 - improving vocational education and training completions, including for women and others who face completion challenges.

AUSTRALIA

Australian Unions @unionsaustralia · Oct 17
Media release: Unions welcome Albanese Government's landmark National Skills Agreement

media release **ACTU**
australian council of trade unions

Tuesday, 17 October 2023

Unions welcome Albanese Government's landmark National Skills Agreement

The ACTU welcomes the Albanese Government's announcement of a National Skills Agreement with State and Territory Governments to invest billions in new funding for vocational education and training.

The landmark five-year agreement will pave the way for total Commonwealth, State and Territory Government investment in skills and training to exceed over \$30 billion.

Importantly, the agreement prioritises expanding TAFE capacity and supporting working people to gain the skills they require for emerging industries, including clean energy and the care sector.

The National Skills Agreement comes after a decade of federal underfunding and neglect of the VET sector by the former Coalition Government, which contributed to a collapse in apprentices and increasing numbers of working people being locked out of employment opportunities. This was devastating for working people and has led to the record skills shortage that Australia is currently experiencing.

The new nationally coordinated strategy will result in greater collaboration between TAFEs, universities, Jobs and Skills Councils, and industry.

Business Council of Australia @BCAcomau · Oct 17
The Business Council welcomes the Government's five-year National Skills Agreement.

It is vital that we have a strong **skills** system that delivers Australians the **skills** and competencies they need to drive a more dynamic and productive economy.
bit.ly/3RXvAAB

Media release **BCA**
Business Council of Australia

Business welcomes national skills agreement

Tuesday, 17 October 2023,

The Business Council of Australia welcomes the Government's five-year National Skills Agreement that will see an additional \$3.7 billion invested into Australia's vocational education and training sector, Business Council chief executive Bran Black said.

"It is vital that we have a strong skills system that delivers Australians the skills and competencies they need to drive a more dynamic and productive economy, and provide people with opportunities for new and higher paying jobs.

"It is important that National Cabinet has come together to develop a strategic and cooperative skills agenda that will help address the reforms needed in our vocational education and training (VET) sector.

"Australia's VET system must play a key role in developing the critical skills needed to meet our current and future workforce needs, build new industries and grow the economy. In doing this, it must work closely with business to ensure that training places align with the skills needed in the workforce.

[Read more via link in caption](#)

2 1 2 304

Is Australia addressing skills shortages and getting its skills mix right?

- Positive signs

- Federal government adopting a tripartite/ stakeholder-driven approach to solving complex problems e.g. cross-industry units, skill sets and qualifications, and their adoption across multiple industries,
- NSA brings new money to address outstanding issues raised by many of the VET/ Skills reviews in the last 2 decades e.g. rebuild TAFEs, improve VET completions
- Openness to using technological solutions e.g. National Skills Passport



- Not so positive signs

- Industry/ Employers still focussing short-term, under-investing and adopting an externality mindset and not co-investing
- Risk aversion to important high-end skills; fall-back on migration/ outsourcing
- Traditional approaches dominate - unclear investment in innovative flexible, life-long learning initiatives e.g. micro-credentials
- Lack of other measures for disadvantaged e.g. long-term unemployed, remote and regional areas, indigenous Australians
- Ongoing competition between states and territories
- “Head in the Sand” and stakeholders have gone back to “new” normal without making important changes to the business models.



Thank you

Q&A

Pi-Shen Seet, Edith Cowan University
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Professor of Entrepreneurship and Innovation

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