



Skills shortages

ACS foundational public policy position

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Purpose

ACS foundational public policy positions are designed to act as guides for ACS' government, industry and media engagement.

These are the guidelines and goals for ACS in different domains, covering ACS' beliefs, principles and broad public policy goals. These will inform our work with government, media and industry and provide a baseline for ACS to work from.

These positions are created in consultation with our members and advisory boards, and are subject to change over time as conditions change.

Contents

Purpose.....	2
1. Preamble.....	3
2. Historical positions and previous work	3
3. Principles	5



1. Preamble

Addressing skills shortages is a key priority for Australia's continued economic and social development.

Australian governments, industry, and education and research institutions need to better understand the recurring shortages of technology-based skills that are endemic in the Australian economy, and which were thrown into stark relief during COVID.

We need to analyse the likely demand for technology-based skills and to combine this with an assessment of the current capacity of the Australian education sector and industry to meet this future demand.

This analysis must be combined with assessments of mechanisms to lift Australia's supply capacity and the related supply gaps that might need to be met via immigration of skilled workers

This would provide the knowledge base needed for sustained, bipartisan measures to increase Australia's skill development capacity, and to identify additional required measures.

2. Historical positions and previous work

Australia has suffered from a long-term shortage of capital, much of which it has needed to import from overseas via foreign investment. In a somewhat related fashion, Australia has, and will continue to, suffer from shortages of skills in technology-based industries.

In this context, industry bodies, including the ACS, have worked with governments over many decades on a range of initiatives to address shortfalls in the supply of skilled labour.

The reasons for skills shortages are complex, interconnected, and long-standing. The major solutions employed over many years have been to address these problems by finding various ways to increase the attractiveness of IT and other relevant courses to young people, and to import the required skilled labour to meet the shortfall in local supply.

Various government and industry initiatives have been tried, in attempts to get some increase in the domestically produced supply of these tech-based skills. These have often achieved partial or even substantial success. But where these have been dependent upon government support (financial and non-financial)



the tyranny of the electoral cycle means over time governments lose interest, and financial support stops long before it delivers the expected change.

Because the issue of skills shortages is a long-term characteristic of the Australian economy, the first thing that needs to be understood is that any group of solutions will need to be long term in nature. Bipartisan support will be required for sustained initiatives, and to ensure impactful change can be achieved.

A range of other groups are likely to support further work in this area. Notably, the Australian Technology Council has published research on this issue and used it to urge government action. A long-standing advocate in this space is the AIIA. There will be others.



3. Principles

1. **The government, in close collaboration with industry, needs to perform a comprehensive gap analysis of the industry skills requirement and supply capacity of those skills.**

This can be based on existing government analyses – ACS' own work and the work of others including the Australian Technology Council. On the government side, the National Skills Commission can drive the development of a comprehensive analysis of required skills. There is a pressing need to identify the skill shortfalls that are likely to be of greatest importance to the sustained growth of the Australian economy.

This can be used to inform the priority skills list. These lists have existed for many years, and many of the listed key skills shortages haven't changed much. This is partly because government has failed to regularly update these lists to align with the industry demand. As a consequence some of the lists include skill sets for which there is rapidly declining demand in the Australian economy.

We should first assess the level of people required, over time, with the relevant required skills. This should be combined with an assessment of the capacity of the Australian education system and industry to produce people with these skills. Subsequently, initiatives, schemes and incentives can be developed to encourage enrolment in relevant course and/or skills migration pathways in relevant profession.

2. **The government, in close collaboration with industry, needs to track the contribution to skilled labour supply which has been, and may in future be, provided by immigration.**

Immigration will inevitably form part of the solution to skills shortages, but we have few indicators of how well that has been targeted and the outcomes from the immigration pipeline. The government and industry need better metrics on these indicators in order to drive better outcomes and to ensure migration schemes are effective in addressing the skills shortage and making contributions to the targeted professions.

3. **Our education pipeline needs significant work.**



Between 2021 and 2026, Australia will need more than 50,000 new technology-skilled workers every year¹. As of 2019, there were less than 7,000 domestic students completing IT courses nationally, well short of requirements².

The government needs to make every effort to increase that number, including:

- financial incentives for tertiary students studying technology relevant courses
- encouraging adoption of Digital Technologies education from Foundation through Year 12, through school funding incentives, school assistance programs and mandated curricula
- providing IT teacher education and assistance programs
- any other measures that can drive more students into technology careers.

4. Retraining and reskilling programs need to be a government priority.

ACS believes that these programs can be an important stop-gap in the nation's skills shortages. Business and industry-led programs built around government funding or tax incentives can upskill existing workers requiring skills update in new technologies. Incentives for mature-age education and training should also be a significant government focus, with HECS-style funding and government-assisted education funding reducing friction for getting older workers reskilled in new technology.

We believe it is important that these programs drive the right skills, as identified in public goal number 1, and not be used for 'basic' training programs.

5. Business and other organisations should be encouraged to reskill their own workforces.

'Fire and replace' employment practices will not serve Australia in the long-run. Business and government should be encouraged to retain and train existing workers where new skills are needed. We would encourage all businesses to adopt long-view workforce development programs that will ensure that the nation is producing technically skilled workers both through the education systems and through on-the-job training. Government can provide incentives for such programs, as well as assistance in setting them up.

¹ See ACS Australia's Digital Pulse 2021.

<https://www.acs.org.au/insightsandpublications/reports-publications/digital-pulse-2021.html>

² Per the Department of Education uCube: <http://highereducationstatistics.education.gov.au/>