



Skills
Australia

Workforce Futures:

Towards an Australian Workforce Development Strategy

Skills Australia would like to hear your views on *Workforce Futures* and welcomes your written submission by **6 November 2009**.

To assist with the analysis of submissions received, we request that feedback is provided using this template. Your co-operation is appreciated.

Submissions received may be published by Skills Australia or quoted. Please indicate in the space provided below if you would like your submission to remain confidential.

Please email submissions to secretariat@skillsaustralia.gov.au

Submission information

Organisation The Association of Consulting Engineers Australia (ACEA)

Contact Caroline Ostrowski

Phone 02 9922 4711

Email caroline@acea.com.au

Do you agree to the publication of your submission?

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Workforce Futures:

Background Paper One

What does the future hold? Meeting Australia's skill needs

The *Workforce Futures Overview* paper raised a number of questions relating to Skills Australia's proposed approach to developing an Australian Workforce Development Strategy. In this section, we seek your feedback on questions relevant to meeting Australia's skill needs. *Background Paper One* at www.skillsaustralia.gov.au/Publications_and_Resources highlights a number of issues for discussion which are relevant to your response.

Please provide feedback to these questions in the boxes below. A space has been provided at the end of the section to provide feedback on other issues you wish to raise.

Future skill needs and projections

Q1. Are Skills Australia's interpretations of our future skill needs reasonable? Is there other evidence or analyses that should be considered?

Professional, scientific and technical services are highlighted as one of the industries that grow the fastest and most consistently in all three scenarios. Furthermore "in the five years to February 2009, Architectural, Engineering and Technical Services experienced the largest employment gain or 57 900 new jobs". (Employment Outlook for Professional, Scientific and Technical Services, DEEWR, 2009). The evidence offered within the Workforce Futures papers (the Papers) is consistent with the ACEA's position that there is a current and ongoing shortage of engineering and related skills in Australia due to their being a high unmet demand for these skills over an extensive period of time.

A risk-based approach

Q2. What is your response to our proposal that governments should adopt a risk-based approach to skills planning? What do you see as the respective roles of industry, governments, education and training organisations and individuals in planning?

The ACEA views that a risk based approach to skills planning is in the nation's best interest. A targeted response addressing the skills highlighted as 'high risk' in the Papers will undoubtedly produce results that will add value to the Australian community and economy. One aspect for consideration when attempting to improve the capacity of the 20 or so 'high risk' skills is that

related skills may fall victim to shortage as a result.

Like many consulting professionals, engineers do not work in isolation. In the transport sector for example, some 84 jobs are created and supported by one professional engineer's design and project management role. (*National Engineering Alliance (NET) market failure in undergraduate engineering 2009*). A secondary policy response will be needed to address likely shortages in occupations which support some of these 'high risk' occupations.

A secondary policy response would therefore need to be in place to address these skills.

It is widely accepted by engineering stakeholders that Australia's education sector routinely struggles to produce sufficient engineering graduates to meet industry demand. A formal partnership between industry, Government and education providers, so that efforts are coordinated and mutually agreed upon, would work to engage all stakeholders in solving the shortage problem. The ACEA is of the view that a National Engineering Taskforce should be established to address the shortage of engineering skills.

The ACEA is also of the view that whilst efforts to increase the skills capacity in areas that are considered highest risk, information and collecting and collating data on the future needs of all industries/sectors is important.

Investment to support workforce demands

Q3. How can we best use current investments to support our emerging workforce demands? What types of interventions may this require from governments, education and training organisations, industry and others?

On the premise that Australian governments adopt a risk-based approach to skills planning, existing investments should become more targeted to support the skills development of the skills that have been evaluated as highest risk. The paper suggests that a possible solution for using existing investment to support emerging workforce demands is an increased national effort on foundation skills, especially on literacy and numeracy. This doesn't appear to correlate with a targeted risk based approach – foundation skills are broad and varied, and whilst efforts should be made to increase foundation skills, a targeted plan should seek to be more specific. For example, in an attempt to increase engineering skills, a targeted response would include streamlining migration processes, particular science and mathematics education programs for primary and secondary schools, an engineering elective introduced for secondary schools etc.

The ACEA is of the view that there is currently very little funding available specifically targeted at increasing engineering and related skills. There is however a plethora of funding invested in increasing other skills which could be extended to other industries such as the consulting engineering industry. Current federal Government funding like the grants currently being offered to promote careers in agriculture would be useful for the consulting engineering industry.

Other existing funding which could be extended to the consulting industry is the funding provided to employers of apprentices who often receive access to both state and federal funding in

recognition that Australian employers of apprentices are providing training and life-long skills. The ACEA's member firms provide graduates with life-long skills in the same capacity and not do have access to funding like employers of apprentices do. Graduate employed in the consulting engineering industry are unable to work independently and require significant guidance, further training and mentoring for up to the first five years of their professional careers from their employer.

Another area of funding that could be assessed for improvement is the Productivity Places Program (PPP). There are only three qualifications available under the productivity places program which relate to the consulting engineering industry (Certificate III in Engineering – Technical, Certificate IV in Engineering, Diploma of Engineering – Technical) and whilst these skills are required, the ACEA's research suggests that the engineering discipline most affected by the skills shortages is geotechnics. This is very closely followed by civil and structural engineering professionals and environmental engineers are also in short supply. (ACEA 2009 Skills Survey) It appears that there is a mismatch between funding allocated and areas of critical shortage.

Proposed actions

Q4. Do you have any comments about any of the specific actions suggested in Section 4.3 of Background Paper One?

The ACEA is of the view that Skills Australia's three part approach to conceptualising workforce development through: demand driven planning for the future; improving the value from the skills investments being made in the existing and future workforce and better Government policy cohesion is sound.

The points made in Background Paper One relating to "Improving the national approach to planning and preparing for our skill needs" are inline with the ACEA's view that a national and collaborative approach to skills planning is needed. Governments, industry and education stakeholders working together, rather than in silos, will undoubtedly bring about better outcomes.

The ACEA strongly support the four possible policy responses in this section of the Paper:

Common planning principles will enable stakeholders to work together more effectively.

The proposal for *a regular national 'snapshot' of demand for skills* will primarily enable the education sector to respond to national education needs. The ACEA views that supply data should feature heavily in the 'snapshot'. If robust enough the data could help industry more effectively plan for the future.

Different planning for different purposes will mean that targeted responses will have more opportunity for success. This rightly recognises that different planning is required for different sectors.

The ACEA is particularly supportive of the proposed *new planning methodology* to address how governments can identify 'risk' occupations where it is important to take action. The ACEA views that shortages that cause major bottlenecks, have markets that do not work well and require a long time to develop are the appropriate measures for identifying 'risk occupations'.

Impact and ways to improve Skills Australia's proposed approach

Q5. How might our suggestions impact on your organisation/industry? Can you see advantages or disadvantages to our proposals? What could we do about it? What else should we be considering to make our future planning even better?

The ACEA sees advantages to deploying a risk-based approach to increase the skills that are crucial to our member firms growth and success. We see that over time, the increase in engineering and related skills will have a positive impact on the consulting industry and on Australia more broadly, as an increase in the number of engineers will allow nation building projects to be completed more efficiently.

For a number of years, the ACEA's firms have said that they have had to delay projects, in some

cases even not bid for them at all, simply due to there not being enough skilled personnel available to complete the work. Now with emerging growth sectors such as those relating to auditing for the National Greenhouse and Energy Reporting Scheme (NGERS), energy efficiency assessment and retrofits, renewable energy, climate change adaptation work, water security measures etc the ACEA's firms are reporting that shortages are presenting in these areas also.

Future planning needs to be cognisant of the emerging issues which are driving these skills needs. In addition, planning should target the 'highest risk' occupations alongside a secondary policy response to address the related skills that may fall victim to shortage as a result of an increase in the number of 'high risk' skills being developed.

To make future planning better, an open dialogue with industry is important. Not only will better communication between government and industry help with industry being able to make the most of any government assistance, governments will also be better able to engage with the work that industry is doing. The education sector is also an important stakeholder in the process and should be part of this dialogue to ensure any plan to address the future workforce needs of the nation is holistic. One way to address this is to allow better access for industry to the Council of Australian Governments (COAG) work.

Other comments

Q6. Do you have any other comments in relation to meeting Australia's skill needs or issues raised in *Background Paper One*?

The ACEA views that a proactive approach to a productive and well utilised work force would see a significant investment made regarding the introduction of core skills into all TAFE and university curricula.

The ACEA supports the Graduate Employability Skills Model which is centred on eight employability skills identified in 2001 by the Australian Chamber of Commerce and Industry (ACCI) and the Business Council of Australia (BCA) who undertook research to clarify the generic and employability skills required by industry. This project culminated in a report titled *Employability Skills for the Future* (DEST 2002) These skills are identified as: Communication, teamwork, problem solving, self management, planning and organising, technology, life-long learning, and initiative and enterprise. The ACEA views that this is one important initiative that should be pursued to address skills utilisation. Without graduate employability skills, graduates can seldom demonstrate their technical competence and contribute effectively to the workforce, hence affecting productivity.

In an attempt to increase new graduate participation in the workplace, universities should be encouraged to map the implementation of these skills into their curriculum. This process can be encouraged with Government funding, with applications available for either a complete and university-wide curriculum mapping exercise or faculty-specific integration of graduate employability skills.

It is important for the Department of Education, Employment and Workplace Relations to

encourage processes that integrate the employability skills within curricula, as this will ensure the skills have meaning and relevance. There should be a clear and consistent message that technical competence alone will not amount to 'employability'. The message must be conveyed that employability skills acquisition and technical competence are both required to succeed in the modern Australian business environment.

Once universities have identified how they plan to integrate the eight employability skills into their curriculum, the business community should be given the opportunity to comment on the relevance and suitability of how universities propose to teach and integrate employability skills.

Universities cannot effectively implement these skills without the aid of the business sector. The ACEA and our member firms are keen to offer such suggestions and continue work with the tertiary sector to ensure engineering students understand the skills required to obtain employment once they have graduated.

The ACEA views that incorporating graduate employability skills into higher education curricula is just one way in which Australia can address increased productivity of the incoming workforce in a proactive way.

The ACEA suggests that a truly holistic and realistic workforce capability plan for the nation must consider targeted migration as part of the strategy.

Skilled migration not only allows Australian employers to alleviate skills shortages promptly, but also allows information sharing and access to global skills.

The ACEA supports recent announcements made by the Minister for Immigration and Citizenship stating that an accreditation system for employers will be introduced by the Department. The accreditation system will allow employers with good track records, a history of compliance, that bring in skilled employees on market rates to apply for accredited employer status and have applications fast-tracked.

The ACEA supports streamlining migration processing for the consulting engineering industry, recognising that it is important that our member firms have efficient access to highly skilled global professionals that both assist with addressing skills shortages in Australia quickly and also bring international expertise to our shores.

The ACEA are looking forward to working with Skills Australia on increasing the number and the capacity of consulting engineering and related skills.



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