



For universities to produce employable graduates, they need to work collaboratively with industry partners in educating their students. Shutterstock

How universities can make graduates employable with connections to industry

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This article is part of a series exploring ideas for reforming higher education in Australia. We asked academics to analyse overseas models, innovative ways forward in a digital world, and ideas we may not have considered.

Minister for Education and Training, Simon Birmingham, wants to “boost the employment prospects of graduates” and offer “better value for taxpayers”. There are challenges to doing so.

Accelerating digital change is a major challenge. The McKinsey Global Institute estimates half of current work activities could be automated using existing technology. The OECD says jobs will increase, but workers will need different skills.

Universities can update and change their curriculum. But if Australian business is not keeping up with technology, graduates will be prepared for jobs of the future not jobs on offer. Sadly, this is becoming a reality. Productivity Commission data shows Australian business productivity and technology adoption is slowing.

There is a training gap

Many current business leaders graduated knowing one discipline well with some skills to use their knowledge. They typically worked for a business that gave on-the-job training. Over time, they took a further qualification to broaden their skills for management roles. The MBA, for example, has developed for that purpose.

Today, it's different. Small and medium sized businesses (SMEs) have neither the time nor budget to train graduates. They face cost and price competition and want to hire experienced workers.

Australian Bureau of Statistics (ABS) 2016 data showed 99.5% of business employers are SMEs with under 200 employees.

At the other end, big businesses hire fewer fresh graduates. For example, where large numbers of accounting or law graduates used to build on their skills and gain experience through preparing accounts or contracts, most of this is now automated and employers want graduates to have that experience already.

What does this mean for universities?

Discipline knowledge, such as engineering or media is important. But graduates also need experience collaborating in multi-disciplinary, cross-cultural teams to solve complex problems, using significant amounts of information and data. Communication and technology skills are essential.



Collaboration skills, as well as specific discipline knowledge, are important for making graduates employable. Shutterstock

Graduates need a clear idea of their career purpose. They need mental and practical tools for fast-changing careers in the gig economy, where full-time, long-term employment is rare. They need tools and practice to create and run the small businesses that drive Australian economic growth.

Read more: The problem isn't unskilled graduates, it's a lack of full-time job opportunities

To achieve this, universities need to use their deep knowledge of research to reinvent both the curriculum and the way they deliver it.

International labour market data and analysis of the hundreds of millions of jobs and skills advertised globally is now available. It gives clear indications of trends in skills and job requirements. Add to this the knowledge gained from universities' collaboration with employers and research partners, and they have an unrivalled understanding of where technology in each discipline is moving.

Bond's law programs use the expertise of the legal profession, such as drafting contracts, mediating disputes or representing clients to embed lawyering skills and practise from the first semester.

Swinburne's Engineering Practice and Australian Graduate School of Entrepreneurship Degrees use design thinking to co-create the curriculum with industry experts.

Curtin's inter-professional health programs integrate World Health Organisation recommendations to train its students and industry together to create the collaborative health workforce to meet local community-based health needs.



Health effectively integrates professional experience in the curriculum by integrating problem-based learning in hospitals with patient cases. Shutterstock

Challenges

One challenge is how we scale, bridge the experience gap, and help SMEs to use graduates to build business productivity and competitiveness.

First, we need to increase authentic professional experiences embedded in the curriculum, and replicate and simulate workplace challenges. Health has always done this well by integrating problem-based learning in hospitals with patient cases into the curriculum.

Read more: Demand for people skills is growing faster than demand for STEM skills

Now in most courses, first year experiences build through to capstone projects. Work integrated learning and internships are increasing.

But every student will not get a work placement, and sometimes placements do little to prepare students for work. Employers need to invest time and training to make it worthwhile for both the student and the employer.

Instead, universities have to simulate workplaces at the university together with industry partners. Universities can then work with SMEs on tailor-made projects that also help the SME.

Universities cannot build advanced manufacturing facilities for students to train in from day one. So companies like Siemens and Samsung support universities with the latest technologies.

Are we there yet?

Definitely not. But universities often lead business in graduate preparation by embedding work experience into the curriculum.

The key is to ensure continued collaboration between employers and universities and to pay attention to the changing needs of businesses. Employers can then take advantage of graduates who have the skills and capabilities to drive their productivity and future success.