

SideBoard

Conversations that matter for non executive directors

Fixing the skills shortage means rethinking education

Having access to the right kind of skills is an ongoing thorn in the side of Australian business. Three quarters of CEOs interviewed for PwC's Global CEO Survey, say it's their biggest barrier to growth. So how should business leaders and boards respond? Is more investment in STEM education the answer? Harvard University's Tony Wagner, a world expert in innovation and education, believes that the business and education sectors need to work together more closely.

Q. What's behind the growing shortage of skills?

There's a widening gap between the kinds of skills that businesses need today – and tomorrow – and what our education system is actually delivering. And that's because it's still geared towards preparing students for the 'knowledge economy'. But we no longer have a knowledge economy. Internet search engines have turned knowledge into a commodity. Knowledge no longer provides the competitive advantage it once did. Instead, the world is moving towards an innovation economy, where what matters is not what you know, but what you can do with what you know.

Q. What are the skills in greatest demand?

Tony has interviewed many executives about this and overwhelmingly they say what's most important is the "ability to think critically". Put simply, this means being able to ask good questions. Secondly, business leaders are looking for people who can communicate well; not only write clearly, but also engage in conversation and listen carefully. And because so much of today's work involves collaboration, companies want people that can also work effectively with others. Nowhere does Tony hear executives talking about test scores. Some global organisations are moving away from asking for a university transcript, because it says nothing about these kind of skills.

Q. How does education need to change?

In order to equip students for the innovation economy, the education system needs to shift its focus from academic content towards developing the right skills and motivations.

For example:

- Schools focus on individual reward and achievement, yet innovation is a team sport.
- Schools increasingly encourage specialist knowledge, yet innovation often happens at boundaries.
- Failure is feared in schools, but innovation demands failure through fast processes of trial and error.
- Schools foster a culture that rewards compliance, yet innovation demands taking risks and showing leadership. And it's not just schools – many organisations have exactly the same model as our schools; then wonder why they struggle to innovate.



The gap is widening between the skills that businesses need today and tomorrow and what is being delivered by our education system.



Today knowledge is a commodity - it's not what you know but what you can do with what you know.



STEM education is not enough.

STEAM with A standing for Arts needs to be the focus.

Q. Do we need more STEM or more STEAM?

While STEM education is clearly important, on its own it won't solve Australia's innovation or productivity challenge, particularly more of the same kind of STEM. For example, much of the maths that's taught in high schools is irrelevant in the world today. Rather than abstract equations, we would be better off teaching statistical literacy, financial literacy and computational abilities. Moreover, we should be teaching STEAM skills – the A standing for the arts. These are skills in things like design thinking and understanding the customer experience. They are the so-called 'soft skills', which companies and universities struggle with because they are difficult to measure. But increasingly, companies are placing these soft skills at the heart of their business.

Q. What's the role of business?

Whether it realises it or not, business has a big stake in the education system: there is strong connection between the quality of education and the growth of economies worldwide. It's critical therefore that business defines and articulates the skills needed in order to deliver growth. But business leaders also need to consider how they talk about this with the education sector – if it's just dollars and targets then they will lose their audience. What business and education must both understand is that the skills needed to thrive in an innovation economy are the same skills needed for active and informed citizenship; there is a convergence. Employers that talk about skills for innovation within the context of skills for citizenship will find common ground.

Q. How do businesses identify the next wave of innovators?

The conventional wisdom in business is to hire students with the best test scores. But it turns out that the students with the best scores are not always the best innovators, often because they refuse to take risks. Companies need to look beyond test scores to different kinds of evidence that shows how innovative a person may be. Many businesses these days are using structured interviews or skills exercises to assess the ability of a candidate to solve complex problems, think creatively and work effectively as part of a team.

Q. What can Boards do?


Boards have a key role to play in fostering an innovation culture from the top. This means;

- Asking the right questions of management that encourages ways of thinking that are different to those of the past.
- Include innovation culture as part of the agenda - allow time and space for reflective inquiry.
- Coaching the CEO to be asking the right questions of the board, rather than feeling the need to always provide quick answers.
- Board members have to find a way to get comfortable with the idea of iteration. Innovation doesn't always have to be about the 'new' innovation can take an existing idea and make it better. Iteration is under-rated in today's race to disrupt.
- Regularly question management about investment in R&D, which is absolutely critical to driving innovation forward.
- Diversity of skills and experience is essential for today's Board - innovation happens outside specialisation.
- Boards can drive new thinking around assessment. Skills, motivation and purpose matter to today's workforce.
- Finally, the Board should ensure there is an open dialogue with the education sector, to make sure that both sectors are working towards the common goal of developing the skills that matter to the business community.

For more information on issues relevant to Boards in Australia please contact our Chairman

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It's critical that business defines and articulates the skills needed to deliver growth.



Boards need to:

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- Question R&D investment
- Open dialogue with the education sector
- Get comfortable with idea of iteration.
- Drive new thinking around employee assessment.