



# CEO Perspectives: The Future of Schooling in Australia

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FINAL REPORT



CEO Perspectives is a national conversation about the future of schooling. It was commissioned to provide insights into the views and thoughts of many of Australia's leading CEOs on the future of schools and education in Australia. All over the world societies are debating how education systems need to adapt to the changes occurring in our communities and economies. The disruption and rapid changes taking place in organisations and businesses of all types, largely driven by changes in technology, have numerous implications for all levels of education.

The Association of Independent Schools of New South Wales is an active participant and leader in this debate. We recognise the critical need to better understand the views of the current generation of leaders from Australia's major corporations and industries, and government and non-government organisations, to harness these perspectives and encourage a more informed and cutting-edge debate.

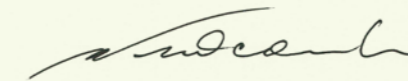
This project is not an academic inquiry; it is a qualitative research project as well as a conversation which aims to gather impressions, experiences and inputs from a variety of sources.

The purpose of this document is to provide the stimulus for your school or organisation to engage in this national conversation. Please share it widely and consider convening a group to discuss its contents and provocations. Above all, be engaged. There is no conversation more important.

Dr Geoff Newcombe AM

*Chief Executive*

Association of Independent Schools of NSW



Knowledge Society was delighted to work with AISNSW to broaden the conversation on the future of schooling in Australia. We can't read the future; we can only explore its contours and themes.

CEOs are well placed to engage in an inquiry about the challenges we are facing because that is their job: to discern the pathway for their organisations to adapt, develop and create the new. The CEOs involved are all grappling with these same questions in their organisations, and represent the media, the professional services, medicine, retail, science and technology.

The picture that emerges is of an exciting world of possibilities and opportunities for young Australians entering the workforce to solve challenging social problems, create new industries and markets for Australian entrepreneurship, build a more resilient society. They have made a case for reflection on how we can adapt our education system including more emphasis on human qualities and competencies, more real-world learning and authentic problem-solving and collaboration, and richer exposure to global issues.

We hope you will use this report to open the conversation widely in your school community or organisation. We are all navigating change and in this we are all learners – schools as much as companies, individuals as much as organisations. All of us are students of the future.

Elena Douglas

*Chief Executive Officer*

Knowledge Society







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See the CEO video interviews at [www.aisnsw.edu.au/ceoperspectives](http://www.aisnsw.edu.au/ceoperspectives)





## Introduction: the case for change



Our education system is designed for another age and is ripe for reinvention. Around Australia, education leaders and policymakers are rethinking how we teach students, what we teach them and how we assess their competence. These are key challenges. This report was not designed to address all of these challenges; however, it is important to note that they influence this conversation.

### Education is essential to individuals and society

The Kindergarten to Year 12 education model has always been the bedrock of our social, cultural and economic life. Good education has multiple positive impacts on society. Education is one of the principal ways that societies equip young people to take their place in the community, not just as workers and leaders, but as citizens and parents. It is the way we pass on knowledge to the next generation – there is no more important investment for our society. Of all the factors that drive economic growth, cognitive development is the strongest and it is important for our school curriculum to better support and to challenge students to develop their cognitive capacity.

### Challenges in Australian education

#### How do we ensure all students meet national numeracy and literacy standards?

In Australia, 42 per cent of 15-year-olds are not meeting minimum national standards in maths, and 36 per cent are not reaching the same benchmark in reading. The Fogarty Foundation, which works to improve the performance of socioeconomically disadvantaged schools, found that 70 per cent of Year 6 students from such schools did not have sufficient functional literacy to engage with high-school level material, and were two to five years behind the national average. Australia must provide a high quality, high equity education for all students.

#### How do we continue to support and upskill our teachers?

According to the Grattan Institute, ‘in Australia, a student with a teacher in the top 10 per cent of teachers in the country can achieve in half a year what a student with a bottom 10 per cent teacher achieves in a full year’. We must continue to find ways to support and upskill teachers with the practices that have been proven to make the biggest difference to student learning outcomes.

#### How do we give all students the opportunity to grow?

There is mounting evidence that we are not engaging and challenging many of our students. Across Australia, Grattan Institute research has identified up to 40 per cent of students are unproductive in any given year and evidence suggests on average one to two years behind their peers in literacy and numeracy. We need to find ways to support teachers to address widespread student disengagement in the classroom.

### Momentum for change is building

Momentum for change is building across the country, as it is all over the world. Some favour a radical remodelling of our current education system and others a more gradualist approach. The traditional drivers of educational reform have been changes to the nature of work, changes in social values, changes in technology and changes to the industrial and operational contexts of our schools. All of these traditional drivers of change are operative now along with an increasing pace of technological change. For these reasons, it is important that we bring a new consciousness to the design of our evolving education system rather than use an approach that solely buffets it from the forces of change.



## Summary of forces driving change



Understanding these forces of change is important. The following is a high-level summary of the sorts of dynamics that are emerging in the future of work and society that are relevant for schools and education systems and sectors. A reading list is provided at the back of this report.

The industrial era has ended and we are experiencing the most significant disruptions to occupations and industries in more than 200 years. It is predicted that more and more occupations will demand higher cognitive abilities such as logical reasoning and problem-solving skills. Pure technical ability will no longer be sufficient; creative and interpersonal skills will be required even in domains which were once predominantly technical.<sup>1</sup>

The three principal forces driving change are:

- **Automation:** advancements in robotics, computing and artificial intelligence have meant that machines are performing more and more tasks that were once performed by humans.
- **Globalisation:** increasingly, employers no longer need to rely on a local workforce. They can draw from an international pool of workers because of advances in technology, which means that foreign workers can remotely complete jobs for Australian employers. This also means the domestic workforce needs to be more globally oriented.
- **The 'gig' economy:** new technology platforms have enabled service providers to connect directly with employers. Working arrangements have become more flexible, with an increase in contract, part-time and temporary work structures.

### A new era in the world of work

To prosper in this new work context, young Australians will need to be equipped with skills, mindsets and capabilities to respond and adapt to shifting occupational landscapes, and to be able to work across several industries. They will need to be lifelong learners who are curious, adaptable, autonomous, driven, self-disciplined, confident and have competency across these skillsets:

- **Foundational skills:** literacy, language and numeracy.
- **Technical skills:** skills related to particular disciplines such as science, technology, engineering, mathematics and humanities.
- **Enterprise skills:** creativity, problem-solving abilities, critical thinking and digital literacy, financial literacy, project-management, the ability to work in a team, communication and global citizenship.
- **Career management skills:** it is predicted that young people will need to work up to 17 jobs across five industries to adequately support themselves.<sup>2</sup> A linear career trajectory will not be the norm.

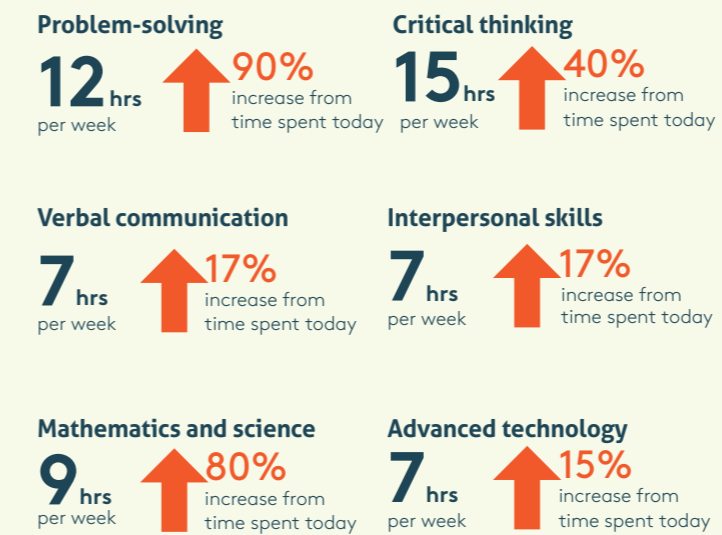
### Work and learning

According to research by the Foundation for Young Australians, learning on the job will become increasingly important. Young people will need to exercise enterprise and communication skills much more than they do today, and be much more independent and entrepreneurial than they are today, as shown below.<sup>3</sup>

Smart Learning



Smart Thinking



Smart Doing



### New directions in global education

Given the forces of change which are creating an increasingly volatile and complex world, the society and economy of tomorrow will rely on empathy, social intelligence and global perspectives. We will need a humanitarian education as well as an entrepreneurial one to empower young people to develop the solutions to business, social and environmental challenges. In a globalised world, all three are interrelated. In the words of the Organisation for Economic Co-operation and Development (OECD), 'Education needs to aim to do more than prepare young people for the world of work; it needs to equip students with the skills they need to become active, responsible and engaged citizens'.<sup>4</sup>

Themes from the OECD World of Learning

- The true:** the realm of human knowledge
- The just and well ordered:** the realm of political and civic life
- The sustainable:** the realm of natural and physical health
- The prosperous:** the realm of economic life
- The good:** the realm of ethics and judgement
- The beautiful:** the realm of creativity, aesthetics and design

<sup>1</sup> The Future of Jobs Employment, Skills and Workforce Strategy for the Fourth Industrial Revolution, World Economic Forum, 2016  
<sup>2</sup> New Work Smarts, Foundation for Young Australians, 2017

<sup>3</sup> New Work Smarts, Foundation for Young Australians, 2017  
<sup>4</sup> The Future of Education and Skills: Education 2030, OECD, 2018

## Key themes



The Association of Independent Schools of New South Wales spoke with 15 CEOs, managing directors and leaders to hear their observations on how economic and societal changes were playing out in their organisations, how they could foresee these changes impacting their organisations into the future, and what this might mean for our younger generations and for schools. The key themes that emerged from these interviews are outlined below.

### 1 Collaboration and teams

The expectations of every CEO, managing director and leader we interviewed wanted teams that were multidisciplinary, included diverse perspectives and were formed around solving particular problems. The forces of change in the world mean that increasingly employers are seeking multidisciplinary, high-functioning teams which are able to solve problems and discover, implement and execute solutions.

A lot of the discussion about collaboration overlapped with discussion of the skills that are required to work well in teams: understanding different points of view and different styles, being able to translate across different perspectives and disciplines. This puts a greater emphasis on interpersonal skills, which many interviewees referred to as 'soft skills'. Many mentioned the importance of EQ (emotional quotient) in addition to IQ (intelligence quotient) and being able listen to others' perspectives.

Another element in this broader discussion was the need for schools to rethink how much of the emphasis was on individual achievement when the rest of life – and especially work – will be much more about the performance of the team.

### 2 Engagement as local and global citizens

Most of the CEOs wanted schools to help young people develop into good citizens, not just good workers. They saw this in two ways. First, young people involved in community endeavour during their schooling were more likely to develop some of the resilience, understanding and interpersonal skills which would benefit their future careers. Second, that there are many societal challenges their generation will need to solve, so it was essential to cultivate a broader sense of local and global citizenship in all young Australians.

### 3 Enterprise skills

There were several elements to this broader discussion including the fact that Australia's economic growth will increasingly depend upon entrepreneurship, and creating new products and markets. Many CEOs, managing directors and leaders spoke about the demands of this more dynamic, entrepreneurial environment and the importance of employees with well-developed enterprise skills, which would enable their businesses to meet these challenges. Enterprise capabilities discussed included resilience, the ability to deal with failure, curiosity and intrinsic motivation, creativity, problem-solving and global understanding.

### 4 Domain knowledge, rigour and interdisciplinary learning

Across the CEO group interviewed, there was a strong commitment to the importance of disciplinary rigour. While strong fundamentals and disciplinary knowledge were still regarded as essential, CEOs are relying on schools to deliver young people who excel at working in interdisciplinary teams and problem-solving. Strong domain expertise was important to contribute to a multidisciplinary team. The group valued rigour, deep knowledge, the ability to understand complexity and the pursuit of excellence and mastery. However, many emphasised the importance of schools ensuring that students experience interdisciplinary problem-solving as well – where problems could only be solved using knowledge from multiple disciplines. Some CEOs named disciplinary silos as a problem given that in the real-world problems occur in complex contexts.

### 5 Curiosity and inquiry

Almost every CEO interviewed emphasised the importance of curiosity and the intrinsic motivation to learn and understand new things as a lifelong virtue. It was clear from this group of CEOs that working in their organisations, this attribute would be valued and be essential to achieve. While few CEOs gave advice on how to engender intrinsic curiosity, which is the driver of lifelong learning, it is one of the key qualities they look for in their employees and they want schools to help foster curiosity and create lifelong learners.

### 6 Global perspectives

Several of the CEOs, managing directors and leaders emphasised that our young people need to focus their attention and learning on understanding the world outside Australia. Whether they were promoting the opportunities for Australian exports and increased activity in international markets, particularly in Asia, or thinking about the global challenges the world faces, CEOs want to see young people emerging from school with a strong understanding of global conditions, opportunities and challenges and having a good knowledge and deep cultural understanding of the countries and societies in our region.

### 7 Job readiness, real-world and authentic learning

Many interviewees wanted young people to have more real-world learning experience throughout the school journey, more authentic learning experiences and a greater emphasis on framing learning in its real-world context. This would enable them to be more job-ready at the end of their schooling.

### 8 New models of schools/ learning ecosystems

Many interviewees envisaged significant disruption to our current model of schooling. The future world they spoke of saw learning driven more by students' interests, capacities, and the problems they would like to explore and solve instead of age group. The personalisation of learning was a theme that several of the CEOs referred to. They believed dynamic technology would produce real-time data on students' learning and development and enable them to achieve mastery over time rather than being limited to the achievement of a whole class.

CEOs also envisaged more porous boundaries and greater flexibility and interaction between primary, secondary and other learning institutions, including TAFEs and universities, schools, industry and community. A more dynamic, less siloed schooling sector would provide students with the benefit of richer, more real-world and authentic learning opportunities and give them far greater exposure to the world outside of school making them job ready faster. Finally, some of the CEOs saw a real opportunity for teachers to have more exposure to industry through teacher internships and other programs.

### 9 Competencies

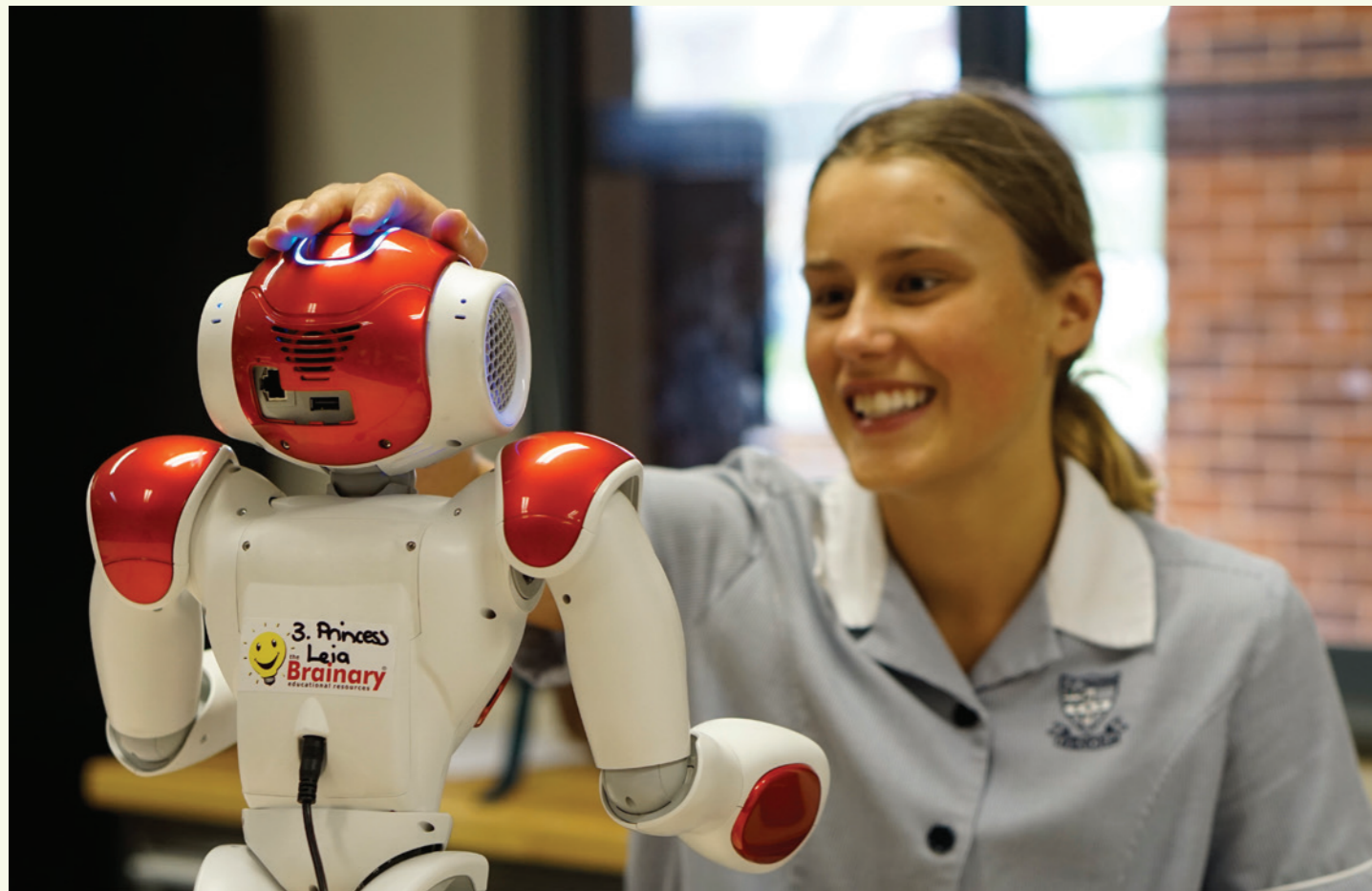
Several CEOs spoke about the importance of connected educational experiences for young people. They were enthusiastic about the teaching of knowledge in context and put an emphasis on competencies that brought together knowledge, skills and capabilities together in a real-world context. The CEOs interested in the development of usable competencies valued this type of learning. The competencies that were most highly valued were enterprise skills and interpersonal skills including being able to think much more about the performance of the team than one's individual performance.

Although the Australian Curriculum already makes room for this approach, several of the interviewees wanted more emphasis on the development of those competencies. The current focus on external assessment measures that privilege memory and rote learning at the expense of competency development was identified as a significant problem for educators to attend to.

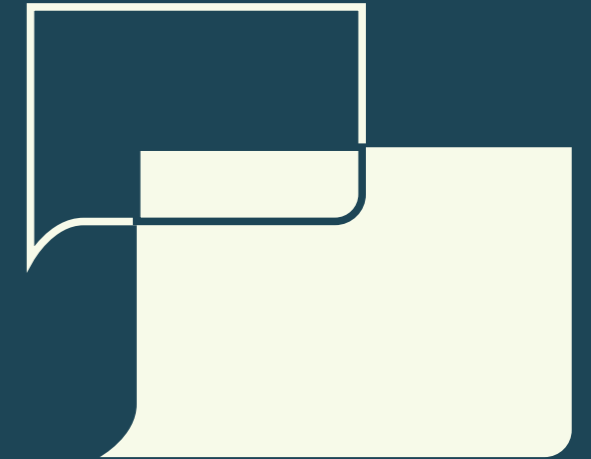
Some interviewees referenced alternative models and more creative processes in school to set young people up for the transition to work and life including the creation of portfolios, which better documented their capacities and skills, as opposed to merely presenting their academic transcripts, and more opportunities for internships and on-the-job traineeships.

## 10 Post-school opportunities

Some interviewees engaged with the issue of the pathways young people are making into work and careers. In addition to there being a strong interest in schools ensuring greater industry and real-life career exposure, several interviewees were interested in seeing more consideration of alternative pathways for young people. They felt that leaving school with the highest Australian Tertiary Admission Rank (ATAR) possible may come at the expense of more engaged and intrinsic learning during the final years of schooling.



## Edited CEO Transcripts



On the following pages are edited transcripts of video and phone interviews conducted with the participants listed below. See the CEO video interviews at [www.aisnsw.edu.au/ceoperspectives](http://www.aisnsw.edu.au/ceoperspectives)

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| <p><b>1 Ken Boal</b><br/><i>Vice President</i><br/><i>Cisco, Australia and New Zealand</i></p> <p><b>2 Dr Zena Burgess</b><br/><i>Chief Executive Officer</i><br/><i>Royal Australian College of General Practitioners</i></p> <p><b>3 Sara Caplan</b><br/><i>Managing Partner, PwC Australia</i><br/><i>Chief Executive Officer, Skills for Australia, PwC Australia</i></p> <p><b>4 Steve Cox</b><br/><i>Managing Director</i><br/><i>Dymocks</i></p> <p><b>5 Dr Michelle Deaker</b><br/><i>Managing Partner</i><br/><i>OneVentures</i></p> <p><b>6 Patricia Forsythe</b><br/><i>Executive Director</i><br/><i>Sydney Business Chamber</i></p> <p><b>7 Tim Fung</b><br/><i>Chief Executive Officer</i><br/><i>Airtasker</i></p> <p><b>8 Michelle Guthrie</b><br/><i>Managing Director</i><br/><i>Australian Broadcasting Corporation</i></p> | <p><b>9 Louise Mason</b><br/><i>Group Executive &amp; Chief Executive Officer</i><br/><i>Commercial Property</i><br/><i>Stockland</i></p> <p><b>10 Jan Owen AM</b><br/><i>Chief Executive Officer</i><br/><i>Foundation for Young Australians</i></p> <p><b>11 Kellie Parker</b><br/><i>Managing Director</i><br/><i>Planning, Integration and Assets</i><br/><i>Rio Tinto Iron Ore</i></p> <p><b>12 James Pearson</b><br/><i>Chief Executive Officer</i><br/><i>Australian Chamber of Commerce and Industry</i></p> <p><b>13 Luke Sayers</b><br/><i>Chief Executive Officer</i><br/><i>PwC Australia</i></p> <p><b>14 Professor Michelle Simmons</b><br/><i>Australian of the Year 2018</i><br/><i>Scientia Professor of Physics, University of New South Wales</i><br/><i>Director, Centre for Quantum Computation and Communication Technology</i></p> <p><b>15 Adrian Turner</b><br/><i>Chief Executive Officer</i><br/><i>Data61, CSIRO</i></p> |
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## Ken Boal

Vice President  
Cisco Australia and New Zealand

### What skills and capabilities do you look for?

At Cisco, the skills and capabilities that we're looking for can be quite broad. We find we often develop the skills and capabilities for some of the specific technology requirements that we have but that does need to be laid on a strong foundation, so STEM is absolutely critical to that, but it's not purely STEM. With the earlier-in careers that we're bringing in we look for previously so-called 21st-century skills or enterprise skills. This is a big part of our recruitment phase that we look for: problem-solving, collaboration, creativity, a lot around teamwork and collaboration skills; just working together.

We're really looking for folk who are curious, they're willing to learn, we've got a very fast-changing industry – technology – and it's changing many other industries as well. So that curiosity, that willingness to learn, to roll up your sleeves and develop a real passion, passion for what we do, the impact that we can have to make a better society, is absolutely fundamental to what we do. A lot around how work is done in teams – so self-awareness of how individuals are playing their role in the team, empathy for others' point of view is really important. We look for adaptability in our teams and our staff. There's just the changing nature of work, the highs and the lows and then also our top performers are quite resilient because when you're in a competitive industry it's not always going to be success, so you need to cope with the ups and downs of the enterprise world. And then at the same time we look for leadership qualities at every level, even in our early-in careers. Leadership potential, the ability to step up and be strategic, to understand the bigger picture, but also then to be able to be action-oriented, to have an execution focus. So not just to be 'talk the talk', but to be able to 'walk the walk' with the actions and the plans that need to be put in place.

### How satisfied are you with the capabilities of the young people applying for jobs at Cisco?

I think the top end of the young people that we see, the high performers, are terrific. They are better than ever. I'd say the average, though, is either the same, if not struggling to really understand what employers are looking for. It might be [they have] very strong disciplinary skills or foundational knowledge, but not the strengths and the capacity around the enterprise skills, the soft skills per se. That's something

that is harder for us to assess in an interview, but that's an area that we would like to see lifted on an ongoing basis.

Specifically, I think resilience is one that our young people need more work on. Frankly, I think everybody needs more work on resilience. The ability to cope with failure, with challenges and with the speed of enterprise, the speed of our lives now and what's going on.

### What role can schools play in creating a learning mindset?

Knowledge is not static; knowledge is dynamic and the creation [and] the curation of that knowledge and then the learning culture within the firm to embrace that and to democratise that knowledge is really important. So both the commitment to a learning culture and commitment to furthering the knowledge base are very important for technology firms and I think it should be for every employer. I think schools are creating that mindset – helping to create the curiosity and the passion for learning on the whole.

### How does having domain expertise enhance collaboration and teamwork?

We're a technology employer, a technology company, so we have an absolute bias and a real focus all around STEM fields, the STEM disciplines, but it's not purely STEM. We're strong advocates for a skills mix and we look for skills mix at the individual, at the team and at the organisational dimension. So here it's about combining and having a strong foundation. Maybe a major in the STEM areas, but with absolute capabilities around humanities, arts and social sciences. And that's when magic really happens – when those three dimensions, and especially at the individual dimension, you have strong STEM and humanities capabilities bundled together; that's what it really takes to be a high performer in the modern enterprise. The days of individual work doing it in a dark room are long gone, or that is absolutely the exception not the norm. And so teamwork and how technology is applied to society, to the enterprise, to government service delivery, that requires a whole host of skills. And once again at those three dimensions. So that's a really interesting skills-mix discussion that we're really advocating for.

*“Self-awareness of how individuals are playing their role in the team, empathy for others' point of view is really important. We look for adaptability in our teams and our staff.”*

### For you as an employer, what do you see as the strengths and weaknesses of the ATAR system?

Well the ATAR system is what we have today and it's not always a great guide necessarily. We're not after the smartest guy or girl in the room. We look for this breadth of skills and the ATAR doesn't really help us inform that. So that's why additional assessment and other actions are necessary as we on-board early-in careers and young people.

So what would be better? I think that's the million-dollar question. I think this is where a broader scorecard, a more balanced scorecard, would be really helpful. Balancing obviously the foundational knowledge, the critical knowledge, the subjects and the disciplines that we need, that we're looking for, but as well as really touching on these enterprise and 21st-century skills. We'd like to see that eventuate over the next few years. It would be something that I think would be very helpful for employers and also for universities because a lot of students coming out of secondary school are going into the wrong programs and then it's a year or two in before they realise it and have to back out of it. A more balanced scorecard approach would be the way to go.

### Which different employment pathways are you seeing from schools to your organisation?

Pathways into organisations like Cisco are quite interesting. Mostly we employ through university graduate programs but not exclusively. We've seen tremendous success in taking students out of the vocational education training sector – TAFEs here in Australia. We have a really strong relationship with TAFE. We've actually got an industry learning program with TAFEs around the nation. It's very strong and that's also a good pathway into degree-based programs.

### What do you think the school of the future might look like?

I think schools themselves will break down – they won't be as rigid in the four walls of the classroom and in the school itself. There'll be a lot more collaboration with other forms of education, whether it's vocational education, higher education but also industry and probably and potentially also government. There'll be access to all manner of really wonderful resources, both virtual and physical, at the fingertips. I would hope that it's about individual work and a lot more about teamwork. Technology plays a role there but there'll also be times where it's disconnected. It's not about technology, it's about good old face-to-face engagement and real human-centred connectedness that we also need in our daily lives.

### What are the social changes that will define Australia in the future and what role can schools play in preparing students for that?

There's the demographic change, the generational change and of course we've got cultural diversity here in Australia. They're wonderful opportunities but they are also challenges.

I think we've also got this economic diversity and with the onset [of] the changes to work, the threats and the opportunity around the jobs of the future and automation, that's also got the potential to create more social change. It's important that we take the entire population of Australians with us on the journey.

Understanding the awareness, the empathy, support for the demographic changes, the generational, the cultural changes but also the changes to our economy and the nature of jobs and the nature of work. This is where education provides a lot more than just the foundational literacy and numeracy skills. Citizenship, globalisation, self-awareness, our role in the world, ethics – all these things are fundamental to an education today.





## Dr Zena Burgess

Chief Executive Officer  
Royal Australian College of General Practitioners



## Sara Caplan

Managing Partner, PwC Australia  
Chief Executive Officer, Skills for Australia PwC Australia

### What types of skills and character attributes do doctors need to have today?

Doctors today need to have medical knowledge, patient management skills, the ability to reason and assimilate lots of new information, the ability to build relationships, they need to be comfortable going into new and familiar situations and dealing with the unknown, they need to be literate, numerate and able to interpret and critically analyse data.

Trainee doctors spend three years working in community settings, gaining real-world, day-to-day experience. During that time, they are developing flexibility and resilience, confronting unfamiliar situations and getting more exposure to the real world of work. Part of that is understanding that not all jobs are interesting all the time, some things that you have to do during your working day are mundane.

### Looking into the future, what types of skills and attributes do you think doctors will need to have?

In medicine, as with all sectors now, it's about learning to learn. So, yes, technical skills are important, but it is soft skills and technical skills that make all the difference. Technical skills are baseline skills, but they will also need critical judgement, patient management skills, knowing the right data to focus on, problem-solving skills and decision-making skills, how to interact with customers, how to interact with peers and work as a team.

*“Technical skills are important, but it's soft skills and technical skills that make all the difference.”*

### What do you see as the strengths and weaknesses of the ATAR system?

Medicine has a high ATAR because it is highly sought after. It is a high-stakes and high-status industry. However, doctors are healers – people who want to study medicine need to be interested in being a healer, not just being the smartest students. More and more, universities are using interviews as a way of deciding who is suitable and who is not. There is no perfect solution – we need a selection process that is fair and equitable.

### If you were to set up your version of the ideal school, what would that look like?

Not everyone would want to come to my school. It would have a strong focus on philosophy, reasoning, history and social justice. It would have a liberal arts curriculum, with lots of experiential learning such as living with Indigenous cultures and volunteering. I would want to immerse students in all kinds of environments so they would learn about building a respectful community, respect for others and respect for the environment.

### How important in the workplace is the capacity to learn and master new skills?

The capacity to learn and master new skills is probably one of the most important attributes that people need going forward. If you think about how fast jobs are changing and how much influence digital for example is having on the workplace, jobs are going to change faster and faster and people are going to need to keep upskilling and reskilling throughout their lives. They're going to need to continually be learning new ways of doing things, new skills, new approaches to solving problems; so that capacity to learn. If we start developing that in school we'll really see people through to a successful future.

### What do you think school might be like 10 years from now?

It's a really interesting question to think about what primary or high school might be like in the future. And I definitely think that the foundation of all education is that baseline learning for each subject. As a mathematician myself I know how important it is to know the fundamentals because you can't build on those. But I think that we'll see more things like project-based learning and schools working much more closely with employers and industry so that pupils get a chance to think about real-world problems.

Just about all of the work that we do in PwC is project based. So, one of the most important sets of skills that we need from people is that ability to understand what it is like to work in a project team to solve a problem collectively – to understand what the different roles might be, whether somebody is really good at doing analysis and research, somebody else is really good at crafting a solution whatever it is; understanding that you can be one part of a team – you don't have to do everything and you don't always have to be the leader. It's about collaboration, understanding each other's strengths and weaknesses, and working together to get the best solution. So being able to adapt that and use that in a school-based environment would be incredibly useful for the pupils in terms of their future and for us as employers.

*“One of the most important sets of skills that we need from people is that ability to understand what it's like to work in a project team to solve a problem collectively.”*

### How can schools help students navigate employment pathways?

In the future I would like to see schools being able to give really objective advice to pupils about the future, about where they can go. I know that's incredibly difficult because things are changing fast, but I would love to see schools talking to pupils about the whole range of opportunities that are out there. It might be going to university, it might be going into work; it might be starting a business. I think at the moment there is a tendency to focus on the university route and that's understandable for a lot of families, it's an aspiration, but I'm not sure that it's going to be the right way for everybody going forward in the new economy. So the higher apprenticeship program at PwC really was born out of us wanting to make sure we were recruiting from the most diverse talent pool. We recognised that we didn't really have a formal route for people who might want to join, who for whatever reason didn't want to go to university or haven't been to university or couldn't go. So, we developed a higher apprenticeship program to enable people to come in through that route. You can come straight from school into the workplace. You can carry on doing learning through a diploma or advanced diploma and you're learning on the job. So you're working in teams as part of a project team, just like anybody else does at PwC, but you can start it earlier. You can progress to that pathway and then go on to the next level in the organisation.

I think in the future more and more people are going to be looking at what skills they have now and what skills are they going to need for the next iteration of their job. I think that's where identifying that gap is going to be really important and understanding how to fill those gaps. And I think that's why things like shorter courses and micro-credentials are going to come in. From a school perspective, it's an interesting question and it's perhaps about how do you modularise parts of the curriculum? How do you look at building blocks so that somebody doesn't necessarily have to do a full subject but could make up a cocktail of subjects that they need to be able to do a particular role or take them down a careerpath. It won't necessarily always be at school or university about full qualifications.



## Steve Cox

Managing Director  
Dymocks

### What is the most important thing schools can do to prepare students for the working world of the future?

From an educational perspective, I think there is even a bigger need for schools to create lifelong learners, people who will seek out information, look for a broader knowledge base because it is all too easy in today's society to be very narrowly defined. For example, if you go into a Dymock's store and you see all the books, you may well get tempted to buy a book you would never have thought, which will open you up to a new perspective, a new idea, a new direction and a new journey. Whereas if you log onto Amazon or you log on to the Dymock's website, you'll get shown the books that we think you like because of the books you bought in the past and because of what other people have bought. So it becomes very narrowed down to your purchasing behaviour and purchasing behaviour of similar like-minded individuals as opposed to a broader perspective in life and being challenged to think differently and being challenged to go beyond your normal areas.

### What has the transition to digital meant for your business in terms of the skills and attributes you require from employees?

The business that I run, a large part of our growth in recent years has really been through data analytics, data analysis and statistical analysis of marketing outcomes results, so a lot of number crunching to enable us to market to the individual on a much more effective basis.

The kinds of people that we have need to think about that data but also the technology specialists and businesses that we have to engage with to better access data and to make sure that that data can be used effectively within the business and then communicated across different channels.

Education should equip people with the questions that they need to ask and the ability to comprehend the answers and to find those things out because things change over time. For example, the way we market today is vastly different to the way we marketed five years ago. Five years ago was still very much focused on TV and on newspapers and things like that. Today it's all digital,

pretty much all of the money we spend now is in the digital space. Yes, we've brought in some people who have got those skills but people here have to adapt, they have to go out and seek out that information, learn about it on the job, and they have to be able to show that they can take that stuff on. If they don't, they will lose their relevancy. It moves so quickly.

### What types of skills and attributes do you look for?

Fundamentally, we're looking for the right mindset and a very positive, engaged, enthusiastic individual. That's really important. I think then especially the education system has a role to play there as well in helping people deal with mental health, helping people stay physically active, helping people to understand the importance of nutrition. There's no doubt that a positive mental mindset makes a big difference in the work environment and it's a very important part of what keeps people employed, what maximises productivity in the workforce. We look for that. More and more tertiary education is an expectation, a higher-level education. And evidence of what people have done to continue to learn is also really important because we are looking for lifelong learning. We're looking for people who can work with other people cross-functionally. More and more businesses are running agile methodology. The old paradigm of 'I'm your line manager and you report to me and we deliver work in a vertical silo' is going and businesses are working cross-functionally, bringing in specialist teams as required. Teams are working on problems without that direct line of accountability. Organisations are flattening out in many ways. The ability to work cross-functionally across teams with others is a very important skill set.

Also project management, because more and more of what we do and deliver becomes short sprints, project based. More and more the thing that sets aside businesses that do well and the business that don't is not necessarily the ideas, it's the ability to execute – performing businesses execute well. They consider and they execute and that's not to say they don't make mistakes, in fact in many ways they make more mistakes than ever because we break down problems into smaller pieces. We try, we test, we learn, we try, we test, we learn so you go through a continual iteration of execution, review, realignment of

*"I think there is even a bigger need for schools to create lifelong learners, people who will seek out information, look for a broader knowledge base because it is all too easy in today's society to be very narrowly defined."*

where we're heading. So the whole process of test and learn, test and learn, test and learn – it's a different way of doing business than the old days where you might sit down and spec out a huge project and you start at the beginning go all the way through to the end.

### How important is having an understanding of global contexts in your business?

Education has an important part to play in helping the individual to think differently and to understand other cultures and other views and other perspectives and not to get into this very isolationist mindset, which perhaps is

playing out on the global stage. The world is becoming in many ways bigger, more divided and segregated.

What I would like to see students coming out with at the end of their high schooling years is that understanding of the cultural views – the things that have driven societies, their belief systems, so that when you meet and you do business with somebody who is Chinese, you may not be able to speak Mandarin, but you understand some of the cultural nuances of how you communicate and what they are hoping to achieve and what you are hoping to achieve.







## Dr Michelle Deaker

Managing Partner  
OneVentures

### As an investor and an employer, which attributes do you look for in young people?

When we're looking to bring people into companies, we're looking for people with really strong critical thinking skills and problem-solving skills. They need to be adaptable learners. We also look at their past history and see what they've actually done before. So we're looking for past behaviours as a way to actually see whether they're going to have good future behaviour. And some of that good future behaviour are things like their willingness to want to perform, to be outcome driven in the way they work and to drive towards results as well in the way they work. They need to be good communicators. They need to be able to work in a team and they obviously need to understand their area of expertise. We're always looking for top talent.

Certainly we are looking for students to come out of school with strong STEM skills. They also need good project management skills. We want them to be curious, who want to be entrepreneurial. There's a whole wave of skills that we would like students to have because the next wave of jobs is going to come in areas of the new economy, the connected economy.

### From your perspective as an investor in new technologies, how do you think learning will change in the future?

I see learning completely changing over the years to come, and I think that's basically because currently we see learning based on your age, the year that you're in. Whether you've mastered something or not doesn't matter. You sort of step off and move onto the next thing. I think we're going to see learning becoming much more personalised based on the experience for the individual student. It will be student-centric in the way the programs are designed and we'll start to measure with data everything that students do. So, we'll start being able to track and measure their learning and mastery and we'll know when they've become competent in a certain area of education or not and if they've become competent they'll be able to move on to another area. So, we're going to see very rapid and big changes.

I think some of the other things we're going to see because of the shortage of teachers in some of these higher skilled areas is the use of technology to deliver a flipped classroom, where students will go away and they'll hear the lesson by the best educator in the state, in the country, in the world, in a particular subject, and then they'll come back into the classroom and the teacher will facilitate the learning environment with that student or particular students. So, we're going to see big changes and shifts in education with blended learning offline and online. We're also going to see a move into project-based learning a lot more and where students are engaging in activities, learning to collaborate together and solve problems.

### What role do you think technology can play in measuring learning and measuring mastery?

I think when people learn we want them to come out understanding core competencies and having mastered a topic. And that means that they've got to a certain level of skill where you could say that they're very competent in that area, so they've mastered that area. Today, the way we test that is we give students a course and then we give them a test and if they get seven out of 10 we think they've done okay, but in fact there might be a big gap in their knowledge and they haven't really mastered the subject. So, it's understanding what the core competencies of a particular subject are, and has the student really got a good understanding of those core competencies?

### What changes would you like to see in the school learning environment?

I think what we're going to see in the younger years is moving away from a lot of rote learning and moving more into activity-based learning. So there will be a lot more projects, a lot more cross-curriculum activities. I think we've done a lot of learning in education where we've said this is history, this is maths, this is English, this is science and actually all of them interconnect. I think we're going to see schools moving to do a lot more cross-disciplinary learning and that will flow through eventually into high school.

*"We're looking for people with really strong critical thinking skills and problem-solving skills. They need to be adaptable learners."*

You still need to have that disciplinary rigour behind a particular subject area; I think sometimes you can bring a subject to life if students are understanding the application. And I think sometimes we miss that a bit and kids will say that school is boring because they're not seeing or interfacing with their learning in such a way that's active and engaging.

It's harder but a lot of innovation actually comes out of cross-disciplinary thinking and so we'd like to encourage high schools to also start adopting some of those things where you're solving a problem in the world and then you're bringing in all of the different aspects of history, art, related to that problem, culture potentially. So having an understanding of society as a whole, the science that's behind that problem, solving things with maths – so more of an interdisciplinary approach in education. I think you'll

also want to have a classroom environment that can be easily modified to the teaching of a particular lesson. So one minute there might be a project going on, the next minute they might be doing a formal classroom, the next minute they might be doing group work. So you're going to see classroom design change as well.







## Patricia Forsythe

*Executive Director  
Sydney Business Chamber*

### What do your industry contacts say about school leavers and the types of skills they are bringing into the workforce?

One of the concerns from a lot of parts industry is that not enough young people are seeing opportunities with vocational training and apprentices. They're not seeing a skilled workforce at that level as being something to which they aspire. So, the vocational training at school is not pointing them in that direction and perhaps they have a lack of understanding of [other] opportunities. Everybody is taught through the language of university when very clearly not everybody should be at a university, and it ultimately would devalue universities if everybody was.

### How could schools better prepare students for their working lives?

Part of the problem is the density of the curriculum. We layer things on and we rarely take things out, so I think we will see a simplification of the curriculum to some extent, but I think what we will start to see is a greater focus around problem-solving skills and a capacity to work within broader groups. So there is not much point being just the top maths and science students if you can't more broadly work within teams around you. And so I think what we will start to see is how we are developing rounded students.

Employers do look for students with a rounded skill set and problem-solving. Technology and information technology and some of the basic parts of the STEM area are a given, and everybody will need those, but I think we're going to see an emergence of how we learn and the fundamental skills, and how to find the knowledge, our research capacity. It makes it harder to do examinations but I think that's what employers are looking for.

### What other kinds of skills and capacities and character traits do you think will be crucial to working over the next five to 10 years?

We are being disrupted. The knowledge you took in at the beginning of school or what you've acquired at university may not be enduring, but how do you go about building on those skills and your problem-solving capacity will be important.

I do work a lot with people in the policy space. The written word is really important and that fundamental skill of being able to write formal business English is as important today as it was 50 years ago even if a computer can help you fix your spelling. I might be old-school on this one but the communication skills that are inherent in how you write, how you speak, and how you articulate a case are absolutely fundamental, whether you are the technology expert or something else. Communication skills are enduring.

*"Part of that problem is the density of the curriculum. We layer things on and we rarely take things out."*







## Tim Fung

Chief Executive Officer  
Airtasker

### What are the skills and character traits that you look for when hiring?

There are two main aspects that we're looking for when we're hiring people at Airtasker; and of course we're hiring across a multitude of different kinds of skills. So engineering, product management, design, finance and people ops as well. So you've got a huge number of different types of roles. And what we're looking for are two main things. The first is technical skills. So have you demonstrated that whether you're in finance, whether you're in people ops, whether you're in marketing or product management, you've got the technical capability to be able to achieve what we need to set out for you. And we're very, very diligent about setting out exactly what we need for each hire that we make.

The second aspect that we're looking for is alignment with values. So one thing about our company values is they're very dear to our heart and we really rally around our values. I think that finding people who connect with those values and who want to live by those values and our mission, that's really important.

### How important are digital skills at Airtasker?

Even the word digital is probably not used at Airtasker because it's such an assumption that people are able to work on their technical craft and really what we're seeing is that the technology we're using, whether it's some software or building large databases from scratch, there's a technical capability that's required across every skill at Airtasker. So even our finance team needs to know how the accounting platform integrates with the software, for example, and we take that to another level where we're actually building and engineering a lot of software technology in-house. So it's not just an understanding of how to be the user of that technology but also the creator of that technology.

### How important is having a sense of curiosity?

I definitely do think it's important to have a curiosity about how things work because in a startup things are moving quickly and what you might have been doing last week could be completely different to what you're doing this week. So you're not going to learn a system and just be using that singular system for the next X number of years. It's more kind of like, 'Things are broken. We need to go fix them. What's it going to take to fix them?' So it is important to have that curiosity.

### How important is the ability to learn and master new skills at Airtasker?

It's absolutely critical that people continue to learn so we invest a lot into our learning and development. That's everything from learning your technical craft, whether it's reading a lot of books that we fund, whether it's going on training programs, whether it's going to a conference like the Apple worldwide development conference in San Francisco. It ranges through that and we take it even further into things like people management. So things like learning how to give good feedback is really critical and we provide training too.

### How should schools be responding to the increasing role of technology in society?

One of the most important things is that you know how to learn new things. And we just spoke about things like curiosity and the ability to skill yourself up. And I think that's really critical in the technology space because things are moving so quickly that if someone's going to teach you how to actually do something, five years later that's going to likely be either irrelevant or require some serious polishing to get it back into the shape it needs to be useful in an organisation. So I think the most important thing is to learn how to learn more.

*"You've got to get people to want to put themselves up there, want to take a risk, make a bet, learn something and then whether they win or they lose that bet, to be able to keep going."*

### What would you want all students to have when they walked out of the gates at the end of their schooling?

Learning how to find out where they're going to get more information and more and more knowledge and how to access that knowledge would be really important. The second thing that's quite important is to give people confidence. Being in a workforce requires you to put yourself out there, to be able to take a risk and actually follow up on that risk to turn it into something big – and whether it's in a corporation or in a startup at the complete other end of that risk spectrum – you're always going to need to put yourself out there.

So giving people the confidence and the ability to learn are probably the two most important things.

You've got to get people to want to put themselves out there, want to take a risk, make a bet, learn something and then whether they win or they lose that bet, they are able to keep going.







## Michelle Guthrie

Managing Director  
Australian Broadcasting Corporation

### What do schools need to keep in mind when preparing young people for a globalised workforce?

The thing for me is to make sure that we are preparing our children for a very uncertain future – an optimistic future but a future where it is in all likelihood you’re not going to have a career for life. I look at my own experience and the fact that I graduated from law school and I ended up running the ABC seems to be a big stretch.

The key thing is understanding the kinds of capabilities we’re really teaching and most of that is around the skills of the future and on the kinds of skills that are less about particular knowledge points of view, but more around things like curiosity, adaptability, that sense of being able to pivot and be able to take in new information and make decisions to be able to problem-solve, to be able to collaborate.

For most questions that come up in the workforce there is no right answer. It is more around, ‘What are our options? What do we think if we went in this direction?’ It’s really important to not have that sense of – ‘Oh, I know the answer, I’ve seen this before’. It is about interrogating and looking at different points of view and having a team collaboration that looks at things in a different way and [has] people that can disagree.

### Which skills and capabilities are important when working in a multidisciplinary team?

One of the things that I found when I was working at Google was that it was very clear that having a science, technology, engineering, maths background was incredibly important, but also understanding how, almost from an anthropological perspective or from an arts and humanities perspective, how do people use these tools and how are they useful in people’s daily lives.

The key thing for me was having an openness to asking a lot of questions, ‘How does this technology work? What are the likely consequences of different paths around that technology?’ And that doesn’t mean I need to know how to program, but it does mean that understanding

key technologies (in my case initially around pay TV, so understanding conditional access and how that actually works with satellites that distribute the signal and how that then connects to a customer management system) was really important.

### What have you learnt about leading teams and the way that teams work best together?

The thing that surprised me the most was realising that a lot of that is based on actually getting the most out of your people. The key thing is really empowering everybody within that organisation to get the best out of them and making sure that there is real alignment around the strategy; there’s real alignment about what we’re trying to get done. Also having that sense of what are we here for? That real sense of purpose and how do we make sure that we are single-minded about that purpose.

The thing that I’m concerned about is that the way in which you’re successful within the organisation is getting the most out of your teams and actually working together to solve a problem. I’m not so sure that’s the way our school system works, which is actually about being the best and beating everyone else. And that kind of mentality is not going to help you succeed in a modern workplace.

### How would you change our current education system?

Having a better knowledge of different points of view – having a real sense that just because you and your fellow students, who might come from a certain sort of socioeconomic background or come from the same life experience think that, it doesn’t mean you’re right. And I think the one thing that I really learnt in operating in Asia, having very different markets from Korea, Japan, India, China, is that everyone has a different perspective and having that better sense of individual difference. I think in schools a lot of that is kind of beaten out of us. How do you actually disagree, but try to get to a better place on an overall basis? I worry about not having enough different perspectives within a school environment.

*“You want to make sure that you understand all of the global influences and the global potential of the world, but also at the same time be incredibly connected to your community.”*

### From what you saw at Google about lifelong learning, how can you imagine education changing in the future?

When we would discuss what has changed in the last 100 years or 50 years about the way in which education works – actually not that much, which is remarkable when you think about how much has changed in the world. And it may be that you now submit your essays by laptop, but what’s really changed in that world? And, actually, for a lot of our students, a lot hasn’t changed.

There is now this sense of most of the information that is being imparted you can get by searching Google. So, you need to understand how to find facts and how to test facts and to be able to then say, ‘What does that mean? How do I take data and analyse it, and how do I actually use that to have insights?’ I think that’s the critical piece that needs to change.

### How can schools help young people to become better global citizens?

It is around that sense of, ‘How do I contribute not just to my workplace, but how do I contribute to the community,

how do I contribute to my family, how do I operate as a citizen of Australia?’ And I think that again, trying to bring in that multifaceted approach where you know you can be creative you can actually be a member of the community, you can be very focused on work and family. And how do you do that in a way that is authentic to you? I think the more that we are opened up to global influences, the more you can potentially see that sense of connection to community going away. And I worry about how that how that’s going to play out for us.

The way I look at it is you want to make sure that you understand all of the global influences and the global potential of the world, but also at the same time be incredibly connected to your community because otherwise you really do have that sense of not belonging anywhere.

When you take into account the opportunities and also the threats coming globally, I think the other piece is understanding that sense of, ‘Failure is okay’. I worry in Australia that failure is not okay. I’m not so sure that we train our children that failure is okay, and that we have a sense within a corporate environment that failure is okay, that mistakes are made and it is better to be fast than to be right, necessarily. And again being able to pivot very quickly to be able to say, ‘Well that didn’t work’.







## Louise Mason

*Group Executive & Chief Executive Officer  
Commercial Property  
Stockland*

### What types of skills, character traits and capabilities do you look for in your employees?

Stockland values, encourages and rewards employees with strong social and relationship-building skills who can work as part of our teams to deliver the company's vision at both a macro and micro level. Our values permeate throughout the company, from our board and executive team right through to our retail centre, community and retirement village managers and staff, and everyone in between.

We are looking for people with critical thinking skills as much as those with technical skills – for people who can ask questions, be curious and think for themselves. The question for educators to contemplate is, 'How can we drive an education system to create curious thinkers?' I reflect on my own experience studying at Macquarie University where I learnt the importance of putting your ideas out there when you have something relevant to say – even if you aren't the most experienced or confident person in the room.

We need people from all backgrounds, and as employers, we need to widen their net when it comes to capturing talent. It's just as important to draw from the psychology school as engineering school. Technical skills are needed in parts of the business, but people skills are necessary in others – and as you rise up the ranks, people skills are often the most important. We also genuinely get better outcomes when we have diverse teams.

### What are some of the employment pathways for young people?

Initiatives like the Macquarie University PACE [Professional and Community Engagement] program are a great way of linking student learning with industry as a study requirement, growing the learning opportunities for students and forging valuable relationships between students and future employers.

Stockland has been recognised as a top 30 Graduate Employer for 2018 by The Australian Financial Review and included among the top 100 Australian employers of graduates for a second consecutive year. We support our graduates to learn on the job and throughout their careers with us. Having access to a range of opportunities early on in your career including working with an allocated sponsor and exposure to our executive committee and senior managers is so important to shaping your career journey.

### What can schools do to equip students with the skills, knowledge and attributes that are relevant to your industry?

From a skills perspective, we support the recent emergence of more growth-based outcomes and measurements. Just as our workplaces are increasingly focused on outcomes rather than process, so should the performance of our students be focused on their capacity building and the realisation and fostering of students' growth potential.

Encouraging problem-solving and a growth mindset will equip students to deal with the challenges of the workplaces of the future. An element of flexibility also needs to apply to the school curriculum. While competencies in numeracy and literacy remain vital, the curriculum needs to be able to adapt and expand to include other emerging areas of educational need such as digital and financial literacy.

The importance of developing strong time management and organisational skills should not be overlooked given the changing nature of our work and the evolution of more traditional single-specialist roles into roles requiring more multidisciplinary skills and abilities.

### What can schools do to better equip students to be good citizens and to build cohesive communities in the future?

We are very focused on teaching kids STEM skills, which is important, but we also need to teach students the importance of diverse and inclusive leadership and supporting this with resilience. This is absolutely critical to ensuring community cohesiveness and organisations governed by strong, values-based executives who are cognisant of the social dimension of their work.

We need to be fostering innovation, tolerance and inclusivity in our leaders of the future along with resilience and flexibility in order to maintain Australia's high liveability standards as our population grows and evolves in its composition. This is one of the most important lessons I've experienced in my career and is something I feel strongly that our school leaders should be contemplating. Working with a diverse team can be challenging – it does add time when you are thinking through different points of view, but the outcome will

*"The question for educators to contemplate is, 'How can we drive an education system to create curious thinkers?'"*

always be more robust. This is how we need to be teaching our children to think, learn and grow and we need to ensure our education system, with its enviable track record of success, continues to support the best outcomes for students.







## Jan Owen AM

Chief Executive Officer  
Foundation for Young Australians

### In the new work order, is there still a place for core disciplinary knowledge as opposed to skills?

There are a couple of things about knowledge that I think are really important. Number one, we have got the most highly qualified generation of any generation. So 60 per cent of young people at age 25 have got higher further education, which is a university level of education. So we are a highly qualified country. The question that we have to ask is, 'Do we have the right knowledge, and do we have the right skills to face into the future?' And what's become patently obvious is that there is a mismatch at the moment – so what is being required in terms of both knowledge and skills and we're coming up short. We've got skills gaps but we've also got knowledge capability gaps. So although we are obviously highly educated and we have a highly educated generation, we need to join up these two things of knowledge and skills. And of course we are going to be, continue to be, a knowledge economy. One of the things we know is that there are areas that we can be the best at in Australia. And I think that we should be pointing and be giving as much information to students and parents around that.

We know that technology is going to continue to grow. We know that in an ageing population, anything around the caring services, is going to explode in a country like this.

What we have now is an education system – and this is right through high school and still at higher further education – that basically focuses on just content and we teach content and we teach it in silos. So over here we learn history, over here we learn science, and over here we learn maths. None of this way of learning at the moment is really focused on, 'How can you join knowledge and capabilities, skills and build competency?' And if competency is anything, it is the marriage of knowledge and skills and capabilities. That's how you become a competent person.

So I like to think about competencies and I like to think about knowledge, skills and capabilities as building our competencies. They can't be separated anymore. You can't do knowledge over here and then build capability over here. This is the challenge for the 21st century learning system. And it's not only an intellectual challenge, it is a challenge because that's how young people want to

learn. They have put their hand up and said, 'We want to learn in an immersive real-world context – where we are bringing knowledge, skills and capability together to build our competency'. And if we don't do that it will be on us because we've already got 46 per cent of students disengaged in school. And they're the ones that turn up and just kind of blank out and every single educator knows those students. They may not be swinging from the ceilings or be in absenteeism but they're just not really present.

To have 46 per cent should be a huge red flag to us that we are not delivering knowledge, skills, capabilities and therefore building competencies in a way that we need to now, and for future generations. And I think those human skills are the ones we all talk a lot about. Robots are not going to be able to do that. Robots can't really empathise even though they might sound like they are empathising when they speak in such a nice voice to you and you think Siri's your friend. But genuine empathy, the ability to empathise, the ability to understand what a problem is before you can solve it rather than just spitting out an algorithm that tells you how to solve it. These are uniquely human features and so a part of the human condition is for us to really focus on learning those much better and to focus on bringing them to the workplace. And obviously schools and families are a great place to learn those things.

I think so much of this comes back to, 'How do we help students really know themselves?' You know, self-awareness. I think there's an incredible movement around positive psychology and mindfulness, which all basically speak to self-awareness. 'Are you a person who is self-aware? Can you monitor and can you regulate your feeling and your responses and your reactions and then can you bring that to the workplace? Can you bring that to teamwork, to collaboration, to negotiation?' So these two things must go hand in hand. We must help people with the tools for awareness and we must give them places to practise and hone and really put these skills into the real world, and into things they are doing.

### How do you see schools working in a complex ecosystem of education?

The role of secondary school and high school is absolutely critical now and also educators. So yes there is a system called school but educators – and I'm purposeful about educators, because I think the teacher role is one role in

*"What we've got right now is we have an education system ... that basically focuses on just content and we teach content and we teach it in silos."*

being an educator – an educator today in the 21st century must be a curator, they must be a convenor, they must be a facilitator, they must be a broker and one part of their role is going to be teaching. But let's not forget that as much knowledge as a young person could want is at their fingertips. So this is about, 'How do you transfer, how do you understand and how do you connect learning and skills and capabilities?' So the educator is probably the most important role, particularly at a time of transition like this. This role is paramount. So we need highly trained, highly educated professionals working with students.

We also need to understand that this is now a complex ecosystem of education. Very deep and very complex, and rich, it's fantastic. As well as the 250,000 teachers that we have in Australia, we probably have as many again allied professionals from all kinds of contexts. Whether they're from industry or whether they're from other disciplines such as health or whether they're not-for-profits who come and work with schools. This is a deep allied profession. We don't treat it like that, we don't think about it like that and we certainly haven't joined it up like that. But teachers are doing it. I think we need much more structure around how we are supporting the learning profession as an allied deep complex profession.

The other thing that schools must do is start to break down these boundaries between primary school and also between further education, whether it's vocational or university. So these boundaries must become much, much, much more porous. Students do not see these things in boundaries, they see the stop-start but it doesn't serve them. When we talk about the fact that we're going to spend 30 per cent of our time learning on the job that means that whole idea of a life of learning is real, but number one is we are going to be in and out of learning our whole lives; we're going to be in and out of educational institutions or providers, we're going to be engaging through our whole lives. So starting in high school, understanding this is not a hard stop at the end of high school and it's not even a hard stop at the end of further education, it is incredibly important that we embed that.

### The Foundation for Young Australians researched accelerators to employment for young people. What were they?

So number one, the fastest accelerator to getting a job – in fact it could speed up your access to a job by 17 months – was being able to demonstrate skill sets: problem-solving, critical thinking, innovation, creativity, cultural intelligence

– so the whole idea about working in diverse teams and in diverse environments is now being privileged in the new kind of work order.

And then also digital skills – so seven out of 10 jobs are going to require a high degree of digital skills and capabilities. If you had that skill set when you left school and if you could demonstrate that skill set and you built a portfolio of experiences and learning and practical elements of that, you could accelerate.

Those skill sets are absolutely teachable. They're not learnt intuitively and they are also all teachable within the current curriculum. We have a national curriculum that these skills can be taught through – they are, they can be embedded in maths and in history and embedded in project-based learning. These are the skills that you do learn in project-based learning and in immersive real-world learning. So we just need to privilege them.

The second accelerator to employment was access between the ages of 15 and 25 years to 5,000 hours of paid work, internships, work experience. So 5,000 hours, about 10 hours a week over 10 years or grouped into three-month packages across that time. If you have 5,000 hours of real experience, really deep experience in the workplace, that would accelerate employment by 12 months.

We also found that access to multiple pathways, so again career management skills was an accelerator. Career advice is clearly done and dusted, that is a 20th century idea to go to a careers advisor and they say, 'Here's your one hour in the whole of your high school experience to talk about what career you would like'. Clearly that's not going to work when we expect a 15-year-old today to have up to 17 jobs in five different industries. Instead, career management and career navigation become skills of the future. So if, again, students had good access to good information that plays a huge role.

And then the other area that we found, which was not a surprise, but it now firmly links mental health to education. If at age 18 years – at the end of your entire schooling as your walking out the gate, if you had an optimistic outlook and a sense of resilience – so your mental wellbeing was strong – you had a much greater access to the kind of thinking that supports you getting a job. That would accelerate.





## Kellie Parker

*Managing Director  
Planning, Integration and Assets  
Rio Tinto Iron Ore*

### How is technology influencing the skills and capabilities you need on your team?

Part of my job is that we have our automation strategy and technology stream and in that we have 95 autonomous trucks, so trucks driving around pits all unmanned. We have one-fifth of our drill fleet autonomous that is managed from that remote operation centre and we'll be shortly managing the biggest robots in the world, which are our autonomous trains. So we have more robots in our operations than anywhere else and we have the biggest fleet of robots in the world. So it's super exciting.

As a mining business, you have core skills that you gain from a mining engineer, geologist to traditional professional skills. But we're seeing that those skills need to be combined with some of the new skills of data science, artificial intelligence and how they come together. And the reason is that you want to make good decisions and some of these new technologies can help you and enhance your decision-making. But to understand how that comes about, the geologist who makes decisions about what's in the ground needs to understand how artificial intelligence decision tools work. They have to combine those skills together. So we're definitely seeing engineers and geologists starting to combine this work and therefore their work is changing. Traditionally geologists are out in the field and they still do go out to the field but you see a lot more actually working with the data and the volumes of data to make different decisions about what we could mine and what that product could look like.

### What does this mean for schools?

Working collaboratively in a classroom, that's where you learn. So if you are used to rote learning or only learning by yourself once you come to a workplace that needs to collaborate it's really difficult. It is really important that we collaborate across all of our areas in our business. So, we have one-third of people that come straight out of secondary education straight into the workforce. One-third have got some TAFE or apprentice qualification and one-third are professionals. Across that we all collaborate because we've all got something to contribute.

What is really important in schools is that you learn how to collaborate and how you problem solve together and how

you bring your voice forward and how you listen to others and how you then think through that because no one person has the answer. And quite often you don't need to be precisely right. You need to be right in a direction going forward. And you don't have to have the exact answer. So multiple different opinions and hypotheses can be tested. So really important on a collaboration is being curious, asking questions, 'Why? Why does it happen that way? Does it always happen that way?' And I think the other thing that's really important for kids to learn is when you're testing those hypotheses, 'How do you work out what's fact and what's fake?'

### How important are rigour and domain knowledge when working collaboratively?

We're a mining company, therefore we need mining engineers, we need geologists, so we need absolute rigour, but it is how those combinations come together. We can't run our business solely on those disciplines. We need a much wider group of people to help make the best decisions to operate the business.

### If you were designing a high school of the future, what would it look like?

I would have much more industry and employer engagement with teachers. I think teachers are so influential and their professional development is around how they teach, which is really important, I'm not saying you shouldn't do that, but they don't always get the opportunity to know what's going on in industry, and to educate themselves so they can then be relevant to the students they're teaching.

*"What's really important in schools is that you learn how to collaborate and how you problem-solve together and how you bring your voice forward and how you listen to others and how you think that through because no one person has the answer."*







## James Pearson

*Chief Executive Officer  
Australian Chamber of Commerce and Industry*



## Luke Sayers

*Chief Executive Officer  
PwC Australia*

### How do we build better bridges between schools and industry?

Schools and business have got to do more together. No question about that and it doesn't have to be at the big end of town. All schools are located in communities. What about reaching out to the local businesses that are near the school that are in a position to get involved to maybe provide work experience – that's an obvious one – and that's something my wife and I used to do in our small family business. We used to get kids from the local high school to come and do some work. Little things like that matter.

The experience allows them to get to know what a workplace looks like, and what it feels like, what it means to turn up at 9:00am and go home at 5:00pm. What it means to be given instruction, what it means to respond, what it means to work alongside colleagues and learn not just from someone who is formally teaching you at the front of a classroom, but who's teaching you as you work literally side by side with them on a project, a design or manufacturing something. You know, those are kind of almost intangibles. I've seen these kids after two or three weeks become different people and their eyes have been opened up to the possibilities.

### What would you like to see improved with the current school system?

When you look at what it takes to succeed in the services you've obviously got to have literacy and numeracy skills, and you need them not just to a basic standard, you need them to a high level but you also need to have good interpersonal skills, you need to be able to communicate well and the staples – turning up on time, doing a good job, applying yourself. What people call the work ethic – never underestimate how important that is.

These are quite practical skills that you're talking about and they're very important because what employers look for is not so much technical skills – I mean, yes, they are important and sometimes more important in some very technically focused areas than others – but technical skills can be taught. Most of all they're looking for attitude and they're looking for an ability to think and of course a work ethic that demonstrates you're going to stick at a problem and find new ways or alternative ways of solving it.

We need schools to be teaching kids, helping kids to learn how to stick to a problem but not in a dogged sense of, 'Well, I'll just keep trying and trying and trying and then eventually I might have to give up' but persist and try new ways of solving it. I think that's where true genius can be found and what excites me is that when we're pondering about what jobs will exist in five, 10 or 15 years, if we teach kids to think like that they'll actually be inventing their own jobs.

*“Schools and business have got to do more together.”*

### What kinds of skills and capabilities do you look for in employees at PwC?

Our organisation has approximately 8,000 people. The diversity of backgrounds and experiences within that 8,000 people is significant. We have people trained in law, finance, commerce, education, doctors, nurses, paediatricians, speech therapists, entrepreneurs, technologies, etc. Our business today and the skills that we will continue to employ are of a technical nature, but more and more we're also looking for other skills that we believe our people need to possess to be relevant for the future. We're looking for people who are agile in mindset – people who are resilient and able to make mistakes, fail, learn and grow. We are looking for people who are strong communicators. We're looking for people who have head but also heart and are technically great, but also great at relationships.

We have a set of values here which are the aspirational culture and the aspirational heartbeat of what we want at PwC. The attributes that we're looking for are underpinned by those values. So we want people who are self-starters and self-motivated and are willing to try different things. We want people who embrace difference and truly believe in collaboration and working together. We want people who have high integrity and are honest. We want people who are entrepreneurial and pushing the boundaries, and looking for different ways to help the country and help our clients. So we're looking for those sorts of assets on top of great technical depth.

### What does agility mean in your workplace?

Ten years ago our frame of agility was a person in Melbourne who was able to go to Sydney and that person was geographically agile – wow, have we moved on since then. Today, we're talking about agility of mindset, agility of experience and adaptability. And so practically that might mean that you might be a subject-matter expert in formulating strategy and policy, but we need that person to also have the adaptability to leverage those skills. So how do you take strategy and policy skills and use them to work with a board to set up how they assess an organisation. It's hard. But it's reliant on confidence, it's reliant on a learning mindset and a listening mindset rather than a telling mindset. It's reliant on resilience because you're not going to get it right the first time. You're going to learn and scrape your knees on the way through. So how do we instil this constant learning mindset? I do think that starts back probably at primary school, and definitely high school.

*“We're looking for people who have head but also heart and are technically great, but also great at relationships.”*





## Professor Michelle Simmons

*Australian of the Year 2018  
Scientia Professor of Physics, University of New South Wales  
Director, Centre for Quantum Computation and  
Communication Technology*

### What types of skills and capabilities do young people need for the future?

The thing that I've learnt from my own experience (and this is really just from the perspective of my field) I think it's that really deep knowledge and deep discipline expertise that people fundamentally need. It's great for young students to have experience of the world outside of learning to give them a kind of broad view of the world and how things are changing quickly, but fundamentally when it comes to engaging with these new industries, it's that really deep knowledge and discipline-specific knowledge that we're going to rely on.

I'm a physicist and in our area we do a lot of computing, so I'm very conscious that in the world of big data, where there's lots of information out there, that suddenly those areas of maths, statistics, physics, learning how to code and being able to problem solve become very critical going forwards – and to do well in these areas it is important that you come from studying a subject at its deepest level and taking on the subject to its full extent.

Part of my nervousness just generally is about the fact that now there is a lot of information out there – you can learn a lot online and there's easier access to education. We are in danger of creating people that have a limited knowledge about a lot of things and we might start losing that very deep knowledge in some of the areas that I think you need to have when you're actually creating and building new technologies.

These fundamental technical skills – maths, physics, problem-solving, coding, statistics and computer science – are all critical. I'm very conscious of that – certainly in my field – in the experiments that we run, we do modelling on computers in the first place to design the devices we make. We then operate very technical equipment that is run by computers. There's a lot of coding to run the equipment that actually creates the devices. Then there's the actual building of the device before we measure it. During this process there's the analysing of the data that comes from it and again there are huge amounts of coding involved in extracting the data and analysing the data and then again modelling the results at the end. So we're very happy with people with excellent maths, computing and physics skills as well as the problem-solving aspect. At the core of all of that is enthusiasm, resilience, a positive attitude and the willingness to learn. That really comes from within.

### What are the character traits and attitudes of people who are having the most impact in your field?

It is people who are used to solving problems but have that kind of grit and determination. I've said this many times but the things that are really the most rewarding are the ones that take a long time, require effort. Whenever you create new technology you have to understand many different aspects of it at a deep level and you have to be able to take it from a concept all the way through to the actual practical building and then the modelling of it. And that process of creating something and it either working or not working, or working in a way that you didn't expect, and then going through that many times is really fundamental to understanding and learning it at the best level.

### What is the importance of domain knowledge when working in a multidisciplinary team?

In the team we have people from all over the world. It's a very diverse team culturally and we've got a good mix of males and females. But for the team to work well, it's important that people have self-motivation and a positive attitude but also being able to communicate well and recognise that everyone has a role and everyone's got different weaknesses and strengths.

So the actual team and the kind of experience you get from working in a team is fantastic. It certainly trains you for the outside world but fundamentally I guess at the core of all of that is your role in the team comes from your ability and what you can give to the team. The more skills that you have, that you learn, that you can translate to others, the more value you add to the team. So recognising that, having that deep discipline expertise is pivotal but also picking up other skills along the way – whether it's being able to give a public lecture, or to design something on a computer or touch type or speak clearly – all of these skills are fundamentally useful to a team environment. If you're building and creating things, that team environment is essential for taking something from an idea all the way through to reality.

*“Having the grit and determination to see a project through and then the resilience of how to deal with the unexpected ...”*







## Adrian Turner

Chief Executive Officer  
Data61, CSIRO

### What do you think schools and education systems need to be thinking about?

Where we're at right now is, it's an exciting time but it's a disruptive time. We are seeing the convergence of material sciences, biology and information communication technology coming together in what some calling the Fourth Industrial Revolution. And on par with the Industrial Revolution where we saw 95 per cent of the world move from agriculture-based industry to industrial production. So that required a whole new set of skills and we're seeing that our students need to develop a whole new set of skills.

If you think about the attributes of the economy, if you think about attributes of firms that succeeded in the last era, they are very different than what will succeed in this era. Where we've got a rapidly changing economic and business context, a different set of skills [are required]. So, it's resiliency to change, it's the ability to question things -- curiosity is paramount -- flexibility and a recognition that people will need to learn and re-learn throughout their career.

### Which skills and character traits do you look for as an employer?

First of all I look for EQ (emotional quotient), I think that because the context – the business context and market context – is changing so quickly; the ability for an individual to go and change the world by themselves is a lot harder than in the past, it requires teaming. And so, communication skills and the ability to work with others is fundamentally important, as is the ability to problem solve. Another area I look for is conflict resolution and the ability to deal with conflict in a constructive way because often times the best ideas come through debate and when there's truly something new and a true breakthrough it looks ridiculous or people have trouble putting a frame around that and so they're the sorts of things that I look for. Related to that is also curiosity, so I look for the tinkerer, I look for people that aren't satisfied with what they read and hear, they have to go and explore and get hands-on and break things down and show initiative in doing that. So, curiosity is a fundamental capability that we look for as well.

It's the ability to know what question to ask and then on the heels of that it's the ability to work in a multidisciplinary fashion, because it's usually at the intersection of these disciplines that magic happens. There's a lot of not just IQ but EQ involved in that to be able to bring teams together so that the whole is greater than the sum of the parts.

What I've also observed is the people in our environment who perform the best are good at multiple things. There's also a creative and artistic side – a lot of the people that perform really well in data science and computer science could be artists, musicians. One of our senior team members is an actor who participates in plays. He's in our business development organisation and learns improvisation skills that he can bring to a business context as well. And the machine learning, which is all about maths and statistics – the best machine learners are actually philosophers because they can think in a systems way and think about the implications of the mathematics that they're doing. So, how do you acquire that? Well, it comes back to the network, it comes back to also reading and being curious, this value of mastery, to want to continue to learn and continue and consume knowledge around new areas and the unexpected connections between these disciplines really create magic.

### Where are the weak spots in our current education system?

I'll share an anecdote: we have an annual conference and we get 1,200 people. I said I'd like the kids on stage, telling the audience full of industry leaders and political leaders what they want from us. They told us that the things they really wanted to study they had to do in clubs because the curriculum was really constrained; there wasn't room. And when we pushed them we learned that it was also a function of some of the teachers not being comfortable with some of the subject matter but also the way they're measured meant that it was difficult for them to deviate from the standard curriculum and the modes of teaching. The second thing they said was they picked their subjects not because of what they were interested in necessarily but based on what would maximise the ATAR result. So, they're smart, they were gaming the system.

*“I think it's an enormous opportunity and I do think it's going to change, the system is going to change because the world is going to demand the system to change. And the question is whether the existing institutions will evolve themselves, or whether it's going to take new institutions and new models to force them to change.”*

### What would the education system of the future look like?

If we were to start again today and redesign our education system, it would look completely different. What we'd be doing is psychographic testing and we'd be having a conversation with the individual and we'd be saying, 'What interests you most, how do you think, how do you problem solve?' We'd be equipping them with a baseline set of skills around resilience, financial literacy, communications skills, we'd probably have an artificial intelligence, an AI-based career concierge that sits on their shoulder throughout their entire career that also has a point of view of where industry is headed and what new skills are going to be required in particular jobs.

I think it's an enormous opportunity and I do think it's going to change – the system is going to change because the world is going to demand the system to change. And the question is whether the existing institutions will evolve themselves, or whether it's going to take new institutions and new models to force them to change. Then you take a step back and say, 'Well, actually Cisco certifies 20,000 people a year in the area of cybersecurity', so you've got

this convergence of vocational training, industry, and what I think is going to happen is we're going to move to micro-credentialling where credentials are recognised in a more standardised way and carried across institutions. So, if I do a course because I'm employed by Cisco, and that will count towards a course I do at TAFE and then I dip into university, well there will be some consistency and common frameworks for those credentials that I carry with me through my life. And if we think about the implications of micro-credentialling it's going to atomise the curriculum in institutions, and if you think about then the ability to choose individual sub-components within courses, basically 'I build my own coursework or curriculum'. That's profound! And, then it's going to place the emphasis on the teacher and the individual more so than the institution. So, I think we're in for a real shift and the good news is there will be more transparency around the value and quality of the teaching and the curriculum. And the importance is there's going to be more transparency for me as an individual into the quality of the curriculum and the relevance of the curriculum to where I want to end, because there will be feedback loops, there will be rating systems, employers will rate it, and so that's a good thing because I think it's going to lift the quality and force the lifting of the quality overall.





## Implications for schools and our education system



The participants highlighted a range of important issues from their perspectives as employers, CEOs, managing directors and leaders within Australian businesses and civil society organisations. These thoughts have implications for schools and our education system, as highlighted in the summary below.

### 1 Learning to work in teams

The strength of this theme from the CEO perspective should prompt schools to ask what more they can do to emphasise how individual learning contributes to team outcomes. Obviously, the years of schooling require extensive individual effort for genuine learning to occur across required subjects. Not all learning can take place in a group setting and even in on-the-job work teams research shows that most breakthroughs come from the combination of phases of hard individual effort, combined with team and collaborative effort. Getting the balance right for different ages and stages in students' learning experience is a question for the judgement of teachers and leaders in schools. Education authorities need to look at the curriculum through the lens of how well syllabus and curriculum support materials encourage a combination of individual effort and team learning.

### 2 Enterprise skills

Many schools and teachers place an emphasis on the development of enterprise skills, using the existing curriculum, which is to be applauded. More work could be done in this regard, however, and CEOs would like schools to incorporate more opportunities for their students to develop the full range of enterprise skills. Enterprise skills identified in the Australian Curriculum include: creativity, problem-solving abilities, critical thinking and digital literacy skills, financial literacy, project-management skills, the ability to work in a team, digital literacy, communication skills and global citizenship. The current review of the New South Wales curriculum will need to consider how an even greater focus is given to these skills.

### 3 Disciplinary rigour and interdisciplinary learning

The CEOs lauded disciplinary rigour, hard subjects and interdisciplinary learning. On the whole, they seemed cognisant that employers and industries are more reliant than ever on subjects that prepare young people for science, technology, engineering and mathematics professions. The rider to this was that in the future most of these professionals will need to bring their rigorous disciplinary knowledge to a table with professionals from other disciplines. This will require the skills of collaboration and translation between different disciplines and perspectives. This feedback encourages schools to look at engaging in both discipline-specific problem-solving as well as more complex-embedded problems that require multiple disciplines to collaborate to best prepare students for their future working lives. The CEOs take the same perspective as the OECD and other educators that our education system is capable of strengthening interdisciplinary learning and competency development without sacrificing rigour.

### 4 Curiosity and inquiry

Schools are in a strong position to continue to build on the good work they are doing to focus on curiosity and intrinsic motivation. Many teachers do this and will continue to do so. It is important that all young people are supported to develop their intrinsic curiosity across all aspects of their learning/schooling. This will enable them to thrive in the future by choosing problems they wish to solve, galvanising resources and technology, being self-motivated to work on solutions and collaborating across disciplines and national boundaries.

### 5 Local and global citizens

In such a global age, schools need to consider how they are creating opportunities for young people to think beyond their school horizons and develop global competence. The OECD has identified global competence and learning, which supports participation in interconnected, complex and diverse societies, is no longer a luxury but a pressing necessity. The OECD has created a framework to guide the embedding of this competence throughout the curriculum to support schools and educators in this endeavour. Schools can prioritise providing opportunities to learn about global developments; teaching students how they can develop a fact-based and critical worldview of today; equipping students with the means to analyse a broad range of cultural practices and meanings and have experiences with different cultures.

### 6 Real-world and authentic learning

The formation of the next generation has never occurred solely inside the school gate. CEOs want to make the boundaries between the world of schooling and the real world more porous, more often. This may involve rethinking the design of the physical spaces in which students learn including adding more time outside the school. Although some real-life learning has been integrated into the school curriculum, there is opportunity and desire for much more of this. The more time young people spend engaging directly with real business, social and environmental challenges, and being exposed to global perspectives, the richer will be their education and preparation for the future.

### 7 New models of schools and learning

Schools are going to continue to grapple with the right technology to support the work they do. Certainly the radically personalised and dynamic online learning environments being used in leading-edge higher education environments will one day make their way into K-12 schooling. In a technology-rich landscape, schools will need to consider which technologies are going to be most effective in supporting the learning and future needs of their students. Education authorities can assist schools by reviewing the technology landscape and assist schools with guidance on which technology makes a difference to learning outcomes, based on evidence.

### 8 Prioritising competencies

The Australian Curriculum has identified a set of general competencies and encourages the development of these throughout schooling with levels of competency identified by year group. These general capabilities cover all of those identified collectively by the CEOs: literacy, numeracy, information and communication technology capability, critical and creative thinking, personal and social capability, ethical understanding, intercultural understanding. These have been augmented and described as Learning Across the Curriculum in the New South Wales syllabuses. The challenge is for schools to find ways to embed them authentically in the learning of knowledge, skills and priorities to develop competencies and for education systems and statutory bodies to find ways to prioritise them.

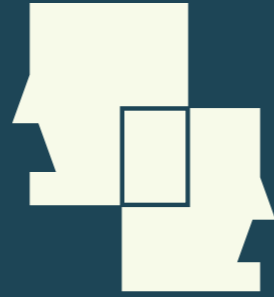
### 9 Post-school opportunities

Now that 60 per cent of Australian students enter university through pathways other than the ATAR, its role in the lives of many students is changing. The ATAR was designed to be an equitable means of assessing and comparing the academic performance of school leavers in a particular year across the country so that universities could easily select suitable candidates for scholarships and courses. Many students pursue alternative pathways to employment including through TAFE and graduate programs that provide on-the-job-training and this is only expected to grow. As schools and school communities actively engage in reflection on what the final year experience should be for the different segments of the school population, new opportunities and pathways may emerge.

Future career paths will be much less structured and people will have several careers over the course of their lifetime. It is important that young people learn to think about pathways while they are at school so they are prepared to become better stewards of their talents. As the CEOs pointed out, overemphasis on and even gaming of ATAR leaves students less well-rounded than they might otherwise be and underprepared for university or their working lives.



## Questions for reflection in your school community



These questions are prompts to help you to discuss the future of schooling, from the context of your school, with your school community.

- Q1** In which areas and ways are you teaching the skills and creating opportunities for collaboration? What opportunities could you create to broaden and deepen these practices?
- Q2** What is the current understanding of enterprise skills in your school community? To what degree are they explicitly taught across your curriculum?
- Q3** How might you create further opportunities for interdisciplinary learning while maintaining disciplinary rigour?
- Q4** How do you engage students in inquiry about subjects, problems that interest them and nurture their curiosity? How do you know this effective?
- Q5** How often do you create real-world learning situations for your students where they can change something outside the school gates? How could you expand these opportunities?
- Q6** What opportunities do your students have to engage with local and global issues so that they can develop their global competencies and cultural literacies?
- Q7** How connected is the learning in your school to the real world? How might you build stronger relationships with community, business, industry and other learning institutions?
- Q8** How is your school currently keeping informed about the developments in education technology? Which processes does your school have that enable you to capitalise on technology while maintaining the focus on learning?
- Q9** How might you give greater prominence to the explicit teaching of the range of interpersonal skills and human qualities required for life and work?
- Q10** How well are the range of post-school opportunities for young people understood and spoken about in your school community? How might you create more opportunities for students to have broader conversations and engagement with communities, businesses, industry and other learning institutions?

## CEO Perspectives: The Future of Schooling in Australia

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Written and produced by Michael Bignill, Meelee Soorkia and Elena Douglas.

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