

A VISION FOR AUSTRALIA BEYOND EDUCATION: LIFELONG LEARNING FOR AUSTRALIA'S FUTURE

GAP 10th Annual Economic Summit

NSW Parliament House
Sydney, 19-20 September 2019



Australian Government



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CONTENTS

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INTRODUCTION

Global Access Partners' 10th Annual Economic Summit, held on 19-20 September 2019 at the Legislative Assembly Chamber of NSW Parliament House, stressed the importance of lifelong learning, given the impact of technology on employment, and the need to retrain people as skills requirements change.

'A Vision for Australia 2019 – Beyond Education: Lifelong Learning for Australia's Future' brought together 133 Australian and international thought leaders, including teachers and academics, business executives, national and state policy makers and social commentators. Attendees framed education as a lifelong pursuit and called for broad reforms to help Australians flourish in a volatile, complex and fast-changing economy.

Delegates were welcomed to Australia's first and oldest Parliament House by the Summit's hosting MP, [the Hon. Anthony Roberts](#), NSW Minister for Counter Terrorism and Corrections. They also heard speeches from [the Hon. Sarah Mitchell MLC](#), NSW Minister for Education and Early Childhood Learning, and [Benedikte Jensen](#), First Assistant Secretary, Labour Market Strategy Division at the Australian Department of Employment, Skills, Small and Family Business. Finnish education expert [Prof Pasi Sahlberg](#), Research Director at the Gonski Institute for Education, University of New South Wales (UNSW), was a keynote speaker at the Opening Dinner.

The Plenary Sessions were chaired and facilitated by [the Hon. Cr Philip Ruddock](#), Mayor of Hornsby Shire Council and President of the NSW Liberal Party, and [Tanya Stoianoff](#), Head of Government Affairs, DXC Technology Australia and New Zealand.

At the Opening Dinner, [Catherine Fritz-Kalish](#) launched the *'Bridges to the Future'* report¹ by the GAP Taskforce on Youth Transitions – a formal submission to the NSW Curriculum Review. Earlier that day, the report was presented to the federal Education Minister, [the Hon Dan Tehan MP](#), as a submission to the Senior Secondary Pathways Review.

The next day of the Summit saw two more launches: GAP's biannual Journal of Behavioural Economics and Social Systems (BESS), introduced by [Dr Peter Massingham](#), and a book co-authored by [Brad Howarth](#) and [Peter Fritz AM](#), *"Innovation is for Everyone"*. BESS will explore the theory underpinning the practice of GAP's *Second Track* process, while the innovation book is a culmination of several years of conversations with leading thinkers from the realms of politics, academia, business and government.

As part of the programme, delegates enjoyed demonstrations by the Department of Employment, Skills, Small and Family Business, Google, The University of Sydney, and *Every Building is a Classroom* – a *Pacific Connect* project in the Solomon Islands co-funded by the Australian Government

In the lead-up to the Summit, on 18-19 September, the [International Centre for Democratic Partnerships \(ICDP\)](#) and GAP co-hosted the [Pacific Connect Ideas Exchange](#), bringing together emerging leaders from Australia and six Pacific Island nations to share ideas, discuss progress on current projects and broaden personal and professional networks. A delegation of Pacific guests participated in the GAP Summit.

Select presentations, articles and blogposts by Summit speakers and delegates are available on Open Forum.²



EXECUTIVE SUMMARY

- *A Vision for Australia 2019* discussed the **importance of learning at every stage of life, from preschool and school to tertiary and vocational studies and reskilling at work and in later life.** It was the culmination of several streams of GAP activity on early childhood education, school-to-work pathways and other issues, and will set the direction for GAP's next year of work.
- Despite media fears about robots and automation taking people's jobs, **the primary impact of new technology in a developed nation will be the augmentation of existing jobs.** While people who lose their jobs will need to be reskilled, people being augmented by technology need to be upskilled to take advantage of it and increase economic capacity. This training will be as important as the technology itself to maximise its output.
- **Young people will need a wider range of foundational, cognitive and vocational skills to shift between jobs in a fast-moving and uncertain future.** Learning to learn, and retaining a 'liquid mindset' will become more important than mastering particular tasks, as these may quickly become outdated. Many tasks will be replaced by machines, but business, academia and government can work together to reskill and upskill workers to allow them to find new careers augmenting technology in creative ways.
- **Technology can empower lifelong learning, as well as necessitate it.** Online courses and internet content allow anyone with internet access to learn more at any time. Instant, universal and frictionless access to the sum of human knowledge is driving today's 'Industrial Renaissance' – rather than any particular use of artificial intelligence (AI) or machine learning. Lifelong education will help everyone contribute to it and share its benefits, rather than be impoverished by a small and ever more powerful technological elite.
- **A wider range of more evidence-based and inclusive teaching techniques and platforms will be required, and creativity should be nurtured from the earliest age.** However, the rise of technology should allow a more human-centric society to flourish. Personal skills of leadership, creativity and empathy will become all the more important, and the point of technology to serve humanity, rather than humanity being challenged to serve machines, should be remembered.
- **Australia is well-positioned to take advantage of incipient and ongoing technological change.** The energy and optimism of people in their personal lives should be harnessed through collective effort to build a better and brighter future for all Australians in an ever more competitive and fast-developing world.
- **Bridging current gaps in the education system, supporting a wide range of formal and informal learning opportunities, building a coalition of stakeholders, and encouraging a flexible, positive and creative mindset in people of all ages** will help ensure that everyone benefits from the social and technological revolution of the 21st century by having the skills and knowledge they need to thrive within it.



RECOMMENDATIONS

- **‘Olympic Mentality’ in Education**

Education is a vital factor in ensuring Australia’s future competitiveness in the global economy. While important improvements in inclusion have been made, Australia is falling behind its international peers in terms of educational excellence. The Summit called for educators at every level to embrace an ‘Olympic mentality’ to encourage the highest as well as broadest standards of performance.

- **Better System Integration**

The gaps between Australia’s educational ‘silos of excellence’ should be filled to allow people to move more easily between them. The system should be seen as a ‘jungle gym’, rather than a ‘ladder’, to allow people to pick and choose the courses they need, which will in turn reduce the differences in social esteem afforded universities, TAFEs³ and online courses.

- **Teachers as Agents of Change**

Educators must be open to change themselves, and embrace new methods of delivery tailored to their students’ needs, rather than cling to traditional, and perhaps outmoded and ineffective, approaches. The teaching profession itself should become more porous, fast-tracking entrants from other professions and allowing teachers to experience other jobs or careers.

- **Look Beyond the Curriculum**

More time for unstructured play and nutritious school meals could improve outcomes and engagement in primary school, while better careers education should be offered in high schools to help young people navigate a range of post-school pathways to vocational training

as well as university. Creativity, problem-solving and systems thinking should be encouraged at every age to develop the skills increasingly required and valued in the workforce.

- **Lifelong Education**

The notion that education ends upon graduation from school or university must be challenged. We must increase the interaction between primary and high schools, TAFE and universities to ensure the transition between each is smooth, rather than abrupt and steep. Schools and universities should continue to interact with students long after they are graduated, and people should be able to re-enter education whenever they need to improve their skills. Education should be seen as a lifelong pursuit, with better incentives and support for reskilling, micro-credentials and other learning opportunities beyond formal qualifications later in life.

- **Upskilling and Retraining**

Federal and state governments, educational institutions, industry and individuals must all play their part in a positive and concerted effort to upskill and reskill Australian workers and prepare young people for the future. Avenues and incentives for schools, vocational colleges, universities and other stakeholders to work together more effectively must be identified and implemented. Making degrees and other qualifications more interoperable would improve interoperability between the institutions that grant them.



- **Cooperation with Business**

Steps to help students graduate 'work-ready' will need to involve business as key partners both in the education system and on-the-job skill development through course design, apprenticeships and traineeships, with industry taking a long-term perspective. Businesses must take responsibility for retraining their workers, rather than discarding them and hiring others trained at public expense.

- **Individual Responsibility & Support**

Individuals must also take responsibility for their own lives, using the wide range of formal and informal means available to them to gain the skills required to earn their way. Additional support must also be given to the most disadvantaged in society, as evidence shows that improved early education and school support pays rich dividends for society in terms of higher production and lower welfare and crime.

- **Enabling Technology**

Ensuring digital inclusion for all members of society will empower lifelong learning for people without access to educational institutions. However, online learning should supplement, rather than replace, other forms of education which are better suited to teaching foundational skills. Community colleges across the country could also be revitalised to offer relevant courses to people of all ages who did not attend university. Local, volunteer groups should be supported in their training and education activities for younger, older and displaced members of society.

- **Strengthening 'Soft Skills'**

Career advice and education should have a focus on a transferable portfolio of 'soft skills' that promote employability such as emotional intelligence, interpersonal communication, teamwork, initiative and enterprise.

- **GAP Taskforce on Career Education**

A GAP taskforce on career advice in high schools could be established to work on ways to help young people make the most appropriate choices for their needs.

- **Supporting Employee Transitions**

An 'employee pathway platform', based on the Canadian model, could help workers displaced or imminently threatened by emerging technology canvas potential pathways, suggest relevant skills training and identify employment opportunities.

- **The Institute for Human Progress**

An Institute for Human Progress could be created to study and promote a wide range of people-centric approaches to learning and skills. It would encourage a growth-oriented mindset in individuals, boost cross-sectoral cooperation and promote holistic approaches to public policy making.



ACKNOWLEDGEMENTS

Host

The Hon. Anthony Roberts MP, Minister for Counter Terrorism and Corrections,
NSW Government

Sponsors

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PROCEEDINGS

DAY ONE - Thursday, 19 September 2019

OPENING DINNER

Beyond Education: Lifelong learning for Australia's future

Catherine Fritz-Kalish

Co-Founder & Managing Director, GAP
Director, ICDP

Catherine Fritz-Kalish welcomed dinner guests to GAP's 10th Economic Summit and acknowledged the traditional owners of the land. She then gave the floor to **Stephen Hayes MBE**, Executive Director at Gravity Consulting.



Mr Hayes said GAP's success stemmed from 22 years of hard work by Peter Fritz AM and the GAP team on behalf of the nation. GAP has influenced thinking on complex policy issues and created an alumni network of over 3,500 people through its taskforces, working groups and standing committees. The Annual Summit is the centrepiece of GAP's activities, and has been held ten times which in itself is an outstanding achievement. Mr Hayes proposed a toast to the GAP team, and **Peter Fritz AM** thanked Mr Hayes on behalf of all GAP participants.

Catherine Fritz-Kalish said she had contemplated ending the Economic Summit series after 2018, but general support for a tenth conference encouraged her to continue. For the 2019 Summit, she chose a topic close to her heart – education and lifelong learning. While education was also the theme of the 2014 Summit, the wider topic of lifelong learning allows participants to discuss learning at every stage of life, from early learning and school, tertiary and vocational studies to reskilling at work and in later life.

- **GAP's work on education**

Ms Fritz-Kalish outlined the work of the GAP Taskforce on Youth Transitions whose final report, *'Bridges to the Future'*, was presented to the Hon. Dan Tehan MP, Minister of Education, in Canberra earlier that day, and featured in *The Australian Financial Review*.⁴ The Taskforce was formed to offer expert advice to the NSW Curriculum Review and present broader reform proposals to the Australian Government on school-to-work pathways. Ms Fritz-Kalish said she was proud to release the report at the Summit and encouraged delegates to read it and help achieve its goals.

GAP has championed early childhood education, music education, lifelong learning, online courses and tertiary reform, and this year's Summit is the culmination of that work. GAP has prioritised early childhood learning in its efforts to help the most vulnerable people in society, for while most Australian children enjoy quality early learning experiences, five per cent do not. The 2016 GAP Taskforce on Early Learning Education⁵ offered government a number of recommendations to engage these vulnerable families and their children, with a special focus on Indigenous and minority groups.

Ms Fritz-Kalish said her charity work has exposed her to some of Australia's most disadvantaged Indigenous communities, including two settlements in northern NSW which struggle to involve their children in any form of schooling. Visiting these places, playing with the kids and speaking to the elders moved her in ways she could not have imagined, and deepened her commitment to help improve their lives. The future prospects of these young people and their communities will depend on the education they receive.

Technology will empower lifelong learning as it can help anyone learn almost anything, anywhere, at anytime. The Organisation for Economic Co-operation and Development (OECD) defines people aged 45 or more as 'old', no matter how young they feel, but middle-aged women with children are the heaviest users of online courses, often studying at night when their other tasks are done.

GAP's work has highlighted the value of building communities around multi-purpose education centres. Doveton College was once a run-down public school in a disadvantaged Melbourne suburb, but is now a thriving service hub offering legal counsel, day care and vocational studies for local families.

Whether people learn online, though experience or community engagement, the most important thing is to teach in the most effective ways to suit every individual's needs.

Ms Fritz-Kalish thanked the Summit Steering Committee and the GAP team for organising the event and ensuring it had the diversity of age, profession and outlook required for a fertile exchange of ideas. The Summit will decide GAP's direction for 2020, and delegates were encouraged to suggest projects to pursue. Three years ago, Andrea Boyd's call for an Australian space agency at the GAP Summit⁶ set in train its creation in South Australia, and similar projects could gain traction

from this year's event. Delegates were urged to speak freely under the Chatham House rule of non-attribution and maximise the Summit's networking and creative opportunities.

Ms Fritz-Kalish introduced the Summit's host, the Hon. Anthony Roberts, Minister for Counter Terrorism and Corrections in the NSW Government. She recalled GAP's involvement in NSW strata law reforms initiated by Minister Roberts in 2012, and noted that early childhood education can improve productivity and reduce juvenile crime and welfare dependency in later life.



WELCOME ADDRESS

The Hon. Anthony Roberts MP
Minister for Counter Terrorism & Corrections,
NSW Government

The Hon. Anthony Roberts MP praised GAP's impressive track record in state, national, and international affairs, and encouraged delegates to appreciate the spirit of democracy and openness of their setting. Parliament House has hosted the NSW Assembly for 160 years, and is accustomed to robust debate. Minister Roberts therefore urged participants to engage frankly with each other and the issues at hand.



He thanked GAP for its ongoing vision and energy in promoting positive change by bringing government, business, academia and non-government organisations (NGOs) together to find practical solutions for the common good. Such events help build a better NSW and nation by breaking down Australia's 'silos of excellence', and prepare all stakeholders to meet future challenges together.

Minister Roberts outlined the NSW Government's bold infrastructure plan and its commitment to protecting the most vulnerable members of society, agreeing that investment in education reduces future crime. Ninety cents of the last dollar available in public funds should be spent on education, with 10 cents saved for health, as high-quality education for all reduces the calls on the rest of public spending.

Catherine Fritz-Kalish thanked Minister Roberts and invited the Hon. Sara Mitchell MLC, NSW Minister for Education and Early Childhood Learning, to deliver the opening keynote speech.

KEYNOTE ADDRESS

The Hon. Sarah Mitchell MLC
Minister for Education and Early Childhood Learning, NSW Government

The Hon. Sarah Mitchell MLC underlined the importance of lifelong learning to her work. As a mother, a resident of rural NSW and a former minister of Aboriginal Affairs, she also underlined the value of early education in young people's lives and the long-term social and economic returns of preschool investment.

- **Lifelong education**

Education was simpler in the past, as mastering a single set of skills could equip a worker for decades of gainful employment. Our children's future will be

shaped by new technology which performs routine tasks without human oversight, and so education now faces unprecedented challenges in preparing them for more creative endeavours. Young people in classrooms today must be prepared to flourish in a workplace and society we cannot fully imagine.

Just as literacy and numeracy are the foundations of learning, understanding how we think and discover are the keys to ensuring lifelong access to knowledge for all. The ability to learn throughout our working lives will be vital for success in the 21st century, as today's school graduates will have to constantly reskill and may have ten to twenty different jobs in their careers.

Australia's education system must gear itself towards lifelong learning. Policy makers should identify and fill the gaps within and between different spheres of educational endeavour, as well as improving current services.

- **Bridging the gaps**

The word 'gap' derives from an old Norse word meaning chasm or empty space. Gaps are therefore the spaces between objects or silos, and education has no shortage of them. The school system is fractured between public, Catholic and independent schools, and subjects are split between science, technology, engineering, maths (STEM) and the arts – or the enlightenment and romanticism. Urban and rural education can be very different in resources and style, while gaps between different parts of an individual's journey can prove most damaging of all.

These personal gaps can leave children disengaged from school, and large swathes of the population have become disconnected from the education system. Rather than view education as a continuum which begins at birth, we have treated it as discrete blocks of time within specific institutions, such as primary and high school, university and vocational education.



“Mentoring in schools must be improved to help young people identify where they want to go next.”

“The teaching profession must become more porous, allowing teachers to leave and return more easily, or come into teaching from other careers.”

- The Hon. Sarah Mitchell MLC -

Each of these stages is separated from the others, and knowledge about people’s abilities and needs disappears into the gaps between them. A small number of young people fall through each gap in turn, and failure to make the jump to the next level can leave them disengaged from education overall.

Older people can also feel intimidated by current social, economic and technological transformations, as their education gave them analogue skills in an increasingly digital society. The finite nature of each educational stage also reduces people’s ability to return to improve their skills to match the pace of change around them.

The solution, in theory, is surprisingly simple. The notion that education ends upon graduation from school or university must be challenged, and instead be seen as a lifelong pursuit. We must increase the interaction between primary and high schools, TAFEs and universities to ensure the transition between each is smooth, rather than abrupt and steep. Schools and universities should continue to interact with students long after they are graduated, and people should be able to re-enter education whenever they need to improve their skills.

The next wave of education reform must bring these different parts together, a process which can be achieved in four ways:

- Firstly, the curriculum must not be designed to leave people behind, a point accepted by Prof Geoff Masters AO in the first curriculum review in NSW for 30 years.
- Secondly, post-school pathways to work or vocational education must be clarified, as the current system focuses on young people aiming for university, and those who want to learn a trade instead can be left unsure of how to go about it.
- Thirdly, mentoring in schools must be improved to help young people identify where they want to go next.
- Lastly, all types of education should be seen as equally valid. Our obsession with ranking and rating everything over the last 25 years has meant that many young people do not make the decisions which are best for them, but choose a school or programme based on its prestige or ranking.

Filling the cracks in the schooling system will help ensure that all citizens benefit from the social and technological revolution of the 21st century by having the skills and knowledge they need to thrive within it.

- **Opening the teaching profession**

There must also be more opportunities in the teaching profession to attract people with the right skills who have previously enjoyed careers in other



professions. Infrastructure and teacher funding in NSW are at record levels, and the NSW Government recently committed another \$6.4 billion up to 2027. Only the finest graduates will become teachers in NSW public schools, and the outlook for the profession has never been better.

Policy is stable, funding is generous, and Australia enjoys fundamentally sound political and bureaucratic machinery. Teaching should become one of the most sought-after professions in the 21st century, yet despite these opportunities for the future, there is an increasing nostalgia for the past, and educators often lament that their profession's prestige is declining.

Over and above micro-policy changes, one major change is required. The teaching profession must become more porous, allowing teachers to leave and return more easily, or come into teaching from other careers. This change may appear controversial, but such discussions are the point of these forums.

The teaching profession in NSW is ageing, and while other professions have become more porous, the nature of teaching has remained fixed. Too many trained teachers leave after a handful of years, never to return. It is not a bad thing for teachers to gain experience in other industries and professions, and apply their skills to new challenges, if they can then return to the classroom. Similarly, people who have excelled in other careers such as law, business, medicine or science have much to offer if they could enter teaching later in life.

Other professions almost expect people to leave and spread their wings after a few years. In an era when people increasingly have multiple careers over their working life, teachers should not be encouraged to stay in a single post or profession. This rigidity may explain why teaching struggles to attract the brightest talent, as young people with an

interest in teaching may be put off by the cultural expectations of a decades-long commitment to it.

Teachers who do spend their working lives within the profession should be celebrated, as it is a calling as well as a career, but there should also be a place for people with the right skills who want to teach for a shorter period, either earlier or later in their careers. This does not mean lowering entry standards, as NSW will maintain the highest standards in Australia, but ways to fast-track people from other careers can be found which do not require two additional years of training.

There has never been a better time to be in Australian education. This country is a leading knowledge economy, its schools and universities rank with the finest in the world, and its institutions are well equipped to embrace the concept of lifelong learning.

In closing, Minister Mitchell wished delegates success with their discussions in the Chamber the following day.

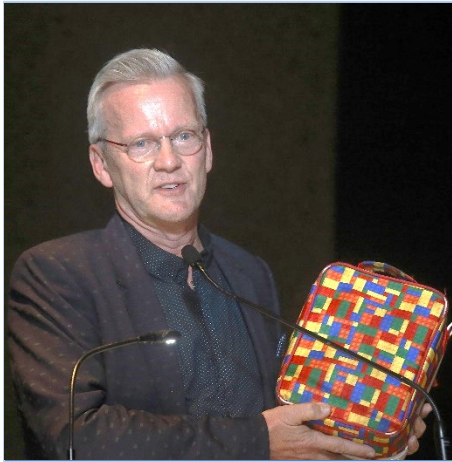
Catherine Fritz-Kalish thanked Minister Mitchell for her thought-provoking address and introduced Prof Pasi Sahlberg, Professor of Educational Policy and Deputy Director for Research at the UNSW Gonski Institute for Education.

“We must fix school inequity to have a top education system”

Prof Pasi Sahlberg

**Deputy Director, Gonski Institute for Education,
UNSW School of Education**

Prof Pasi Sahlberg offered his impressions of Australia's education system through the experience of his young children moving from Helsinki to a local primary school. Although he had received a warm



“The culture of school choice and competition in Australia stands in stark contrast to the Finnish system. The argument that quality and choice will improve overall quality has long been made, but international evidence tends to suggest the opposite.”

- Prof Pasi Sahlberg -

welcome in this country, he had been surprised by questions regarding which private school his children would attend. Australians assumed that a university professor would automatically send his children to an expensive private school, or that Finnish education was superior. He appealed for more credit for Australian teachers, as they are as skilled as their lauded Finnish counterparts but held in much lower regard.

Prof Sahlberg said his eldest son attends his local public primary school, as he did in Finland, and is happy there. However, the boy's experience in primary school is very different from Finland in three important respects. He now has a much longer school day than he did in Finland, spending six and a half hours or more at school every day instead of four. Secondly, despite this longer school day, he spends much less time playing freely outdoors. Finnish school children enjoy a 15-minute outdoor break after every 45-minute lesson – unless the temperature drops below -15°C. Finally, the school does not provide meals, and so everything he eats must be brought from home. By contrast, every Finnish school offers a healthy free meal to each student every day.

- **Educational inequality harms society**

Australia has some of the best schools in the world for some, but not all, of its children. While elite privately funded schools have world-class facilities and teachers, not all schools enjoy the same

resources. The culture of school choice and competition in Australia stands in stark contrast to the Finnish system, and makes it difficult to build a world-class system for all. The argument that quality and choice will improve overall quality has long been made, but international evidence tends to suggest the opposite. Prof Sahlberg said children's performance should depend on their own effort and ability, rather than their family's circumstances, and saw inequity as the central issue to be tackled in the Australian system.

The OECD argues that family background is more closely correlated to school success in Australia than in many comparable countries. The amount that pupils' families directly contribute to public primary and secondary schools is also larger in Australia than other OECD nations. In 2015, Australian public schools received an average of \$750 per child from their families, and this direct subsidy raises the question of whether even the public school system is free at the point of delivery.

In 2017, UNICEF⁷ called Australia's education system the second most unequal in the developed world – a worrying fact, given the link between educational performance and social segregation. Finally, and most troubling of all, OECD comparative studies show that a majority of disadvantaged students attend disadvantaged schools. When disadvantaged students attend schools where most pupils are not disadvantaged, they score 86 points higher in the OECD's Programme for International Student



Assessment (PISA) test after three years of schooling. Improving equity is therefore the most important issue in building a truly world-class education system for all.

- **More play and better food**

The Gonski Institute and other scholars work on ways to improve equity, although they accept that this is a highly complex problem without a clear starting point. One positive step forward could be offering school meals to all, rather than relying on parents to provide a packed lunch. Many children take a box full of crisps, sweets, biscuits and sugary fruit drinks, rather than fresh fruit and water. Packed lunches also tend to be more expensive as well as less nutritious than school-provided meals.

Government health experts estimate that only 60% of children aged 5 to 15 consume the recommended amount of fruit every day, and just 5% eat enough vegetables. Thirty per cent of school children are now overweight in many developed nations, and adult diets are scarcely better. A poor diet does not promote healthy learning or living, in or out of school. Healthy children tend to do better at school, and so Prof Sahlberg called for nutritious meals to be offered at school to help address the worrying decline in PISA and NAPLAN⁸ scores in Australian schools.

Offering every child in NSW and Australian schools a free, warm lunch and an hour of free play in the long school day would not only improve educational outcomes but produce healthier and happier children. School lunches should also be integrated into the curriculum to teach children about good nutrition, table manners, agricultural production and care for the environment.

Many countries, from Sweden, France and Estonia to India, pursue this approach with success. Finland has fed all its children in school since 1943 and has

reaped the educational and social benefits. Finnish PISA results are higher than Australia's for many reasons, but better school nutrition is certainly one of them.

Finland's Ministry of Education sets strict standards to ensure these lunches are properly organised at every school. The rules cover the space the children have, as well as the food they receive. Schools must offer a *'pleasant, quiet area which allows pupils to take their time and helps them to understand the role of eating, mealtimes and spending time with each other to promote their own wellbeing'*. Special attention is paid to the tables at which they sit, and the taste, temperature and presentation of food, to ensure it is palatable. Freshly baked bread is served as often as possible.

International research, including a well-known Californian study, show that schools which feed children healthy food produce more successful and healthier children. The Gonski Institute is willing to run a pilot in NSW which will show the power of healthy school meals and free outdoor play. New Zealand's prime minister recently announced a large-scale trial of providing food in 120 schools.

Prof Sahlberg urged NSW to extend the idea to offer an hour of free outdoor play in all its schools. While providing school food would cost additional public money, families would save if they did not have to provide expensive packed lunches every day.

Catherine Fritz-Kalish thanked the speakers, event sponsors and GAP team, before bringing the opening dinner to a close.



DAY TWO - Friday, 20 September 2019

Catherine Fritz-Kalish opened the Summit debate and paid respect to the original owners of the land. She welcomed delegates to GAP's 10th Economic Summit and thanked them for being part of GAP's 3,500-strong alumni. Around 650 people are working on GAP taskforces, committees and projects at any one time, and the Summit will set their direction for the following twelve months.

Ms Fritz-Kalish thanked the Department of Employment, Skills, Small and Family Business, DXC Technology, Google and Herbert Smith Freehills for sponsoring the event.

She then introduced Benedikte Jensen, the First Assistant Secretary of Labour Market Strategy at the Department of Employment, Skills, Small and Family Business in the Australian Government, to deliver the opening address.

OPENING ADDRESS

'How lifelong learning can help people adapt to workplace change'

Benedikte Jensen

**First Assistant Secretary, Labour Market Strategy
Department of Employment, Skills, Small
& Family Business, Australian Government**

Benedikte Jensen said that the Department valued its partnership with GAP and looked forward to new projects in the future. She also acknowledged and thanked her mother for inspiring her love of lifelong learning.

- **Federal initiatives**

The Australian Government's reforms of vocational education and training aim to promote lifelong learning in a variety of ways. The Council of Australian Governments (COAG) meeting in September 2019 saw the Prime Minister and Premiers of all States and Territories agree the need for a training sector that is responsive to the needs of private industry and the public sector, ensures employers have ready access to a highly skilled and adaptable workforce, is flexible in providing skills at all points in an individual's career, and recognises the importance of a viable and robust system of both public and private providers.

The Government spends \$3 billion a year on the vocational education and training (VET) system and recently announced an additional skills package worth \$525 million. The Joyce Review stressed the need to meet immediate skills shortages and ensure that training keeps pace with a changing economy, and so the new skills package will create a national approach to defining skills priorities and engage industry more closely in designing and delivering new provision. It will also establish a National Skills Commission to provide leadership on workforce needs and VET funding.

The Australian Government is also founding a National Careers Institute and will appoint a National Careers Ambassador to work with industry, schools, and tertiary providers to better connect skills and training options. Two skills organisation pilots in aged care and digital skills will look at how to align training package development with the needs of industry more closely and in a more agile manner. These and other developments attest to the Government's commitment to the VET sector.



- **Reskilling car workers**

Recently published research on worker transitions from the auto industry to other jobs is also instructive. The closure of the Ford, Holden and Toyota car plants and their impact on the supply industry in 2016-17 was one of the biggest structural adjustments in Australia's manufacturing sector in living memory. In 2014, the Australian Government estimated that 27,500 jobs would be lost with the transition of car manufacturing, including 6,600 jobs from the car plants themselves and 20,900 from 215 suppliers.

However, only 14,000 jobs had actually been lost by May 2019, less than half the losses expected.

Research released before the GAP Summit details the employment outcomes of former car-workers three, six and 12 months after retrenchment. Eighty-five per cent remain in the jobs market, and 82% are employed in new jobs. Many of these manufacturing workers were older and had worked for the same employer most of their lives, and so these positive results attest to the success of the transition package.

Training support, covering everything from university degrees and VET to funding for licenses and tools, helped workers find a range of new avenues, a fact Ms Jensen illustrated with the story of "Barry", who moved from working in the auto supply chain to healthcare, a growing employment sector. He built on qualifications from his previous job to find a new position, showing that training and experience from one job can transfer to new sectors. However, workers need to build a portfolio of specialised, digital, soft and foundation skills to equip them for future changes in the economy.

As well as training support, career counselling and job-hunting tips, including assistance with resume writing, interview skills and digital literacy, were made available to auto workers.

Workers with technical and soft skills often undervalue these skills and struggle to relate them to prospective employers. Helping candidates identify and promote transferable skills was critical. Communication, resilience, teamwork, leadership and problem-solving skills are valued by employers alongside the ability to work to strict deadlines.

Some of the technical skills auto workers had were in high demand by prospective employers. These included skills in lean manufacturing, continuous improvement, quality control and attention to detail.

A number of workers mentioned how much they valued the individual career counselling services that encouraged them to consider different career paths and explore the transferability of their skills.

Some auto workers capitalised on their soft skills and moved into different industries, while others relied on their proven technical skills to find jobs in similar industries.

Early notification of workplace closure also gives workers time to adjust and reskill. Toyota, Holden and Ford announced their proposed closures in 2013-14, giving time for federal and state governments, manufacturing peak bodies and unions to collaborate with the companies on worker support. While the car companies transferred some staff to new roles and locations, supply chain firms were able to diversify, and only a quarter of them closed, compared to initial fears of a loss of three quarters.

- **Government assistance**

These lessons have shaped recent government programmes and industry best practice to support worker transitions. The *Stronger Transitions* package released by the Australian Government in July 2018, for example, offers pre- and post-retrenchment support for workers in five regions experiencing rapid change: Adelaide, Mandurah, North West

“A key role for government is to listen and respond to everyday Australians and apply the lessons learned from past and current experience through flexible policy and program responses.”

- Benedikte Jensen -



Tasmania, Melbourne North/West and North Queensland. Local Employment Facilitators reach out to companies experiencing significant retrenchments and explain the benefits of acting early, and co-funded support is offered to affected workers by transition specialists, with redundant workers receiving immediate access to government employment services and relocation assistance. The programme reflects the importance of early and close partnership with companies.

The *Career Transition Assistance* programme is available to all job seekers on income support, aged 45 or above. It was rolled out nationally in July 2018 as part of the Government's *More Choices for Longer Life* budget package. This programme addresses the barriers which mature aged workers face in returning to the workforce. It offers a personalised skill assessment as well as training advice, and incorporates feedback from former car workers. Finally, a new digital tool on the Government's *Job Outlook* website infers people's skills from previous jobs and helps them see how they could be applied in other jobs.

The auto industry experience shows that individuals, industry and government must all play their role to produce successful outcomes. Workers must be proactive in identifying current skills and be open to embarking on new training, while employers must offer early warning of retrenchment plans and aim to better understand the skills and potential in their

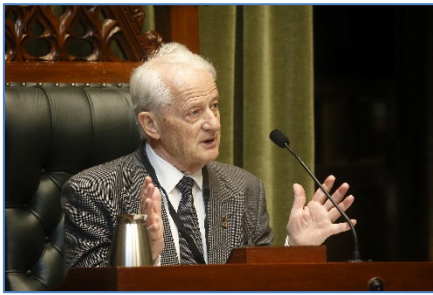
workforce, to identify options for redeployment or reskilling of workers.

Education and training providers have a role in developing and delivering accessible quality products that meet the requirements of adult learners and businesses, while government should set up adequate regulatory, safety and legislative environments for businesses and education and training providers. Government also has a role in providing information on the changing labour market and tools to support individuals, businesses and education providers to plan for the skills needed for the future. A key role for government is to listen and respond to everyday Australians and apply the lessons learned from past and current experience through flexible policy and program responses.

Ms Jensen urged all stakeholders to work together to put people at the centre of change and help build a prosperous society all citizens can enjoy and contribute to in the future.

Catherine Fritz-Kalish noted the Department of Employment's partnership with the GAP Standing Committee on Productive Ageing, and thanked Ms Jensen for her address.

She then introduced the Hon. Cr Philip Ruddock, Mayor of Hornsby Shire Council and President of the NSW Liberal Party. She thanked him for his years of contributions to GAP summits, before welcoming him to chair the first plenary session.



SESSION ONE

‘Australia’s future... How can education best deliver?’

The Hon Cr Philip Ruddock
Mayor, Hornsby Shire Council
President, NSW Liberal Party

The Hon. Cr Philip Ruddock said he held strong views on education and, as a lawyer, had to constantly be open to learning himself. Law practice has changed over time, just as other jobs have done, not least with the influx of women. Gender equity has progressed across the economy, and women now make up half the High Court.

The Gonski report underlined the importance of ensuring that every Australian benefits from education, and the government is putting considerable effort and resources into ensuring that education is available to all. While the situation is not perfect, significant improvements in inclusion have been made.

Cr Ruddock argued that as far as progress in excellence was concerned, Australia was falling behind its international peers and competitors. In the Olympics, Australians compete to be the best, and an “education Olympics” could encourage similar high standards of performance in this country.

He outlined debate procedure and the Chatham Rule of non-attribution, before introducing Professor Brian Schmidt AC as the first Session speaker.

“The future of higher education in a rapidly evolving skills market”

Prof Brian Schmidt AC
Vice Chancellor and President,
Australian National University
Winner of the 2011 Nobel Prize in Physics

Prof Brian Schmidt AC agreed that Australians live in a time of profound change and things which hold true today may not do so tomorrow. The oft-discussed future of work will see some people augmenting their skills with the power of AI and big data to boost their productivity, however, the people replaced by machines risk losing their livelihood.

Current education to produce ‘job ready’ candidates will not properly prepare young people for this unprecedented and uncertain future. Graduates need education which helps them make complex decisions and quickly adapt to gain the new skills they will need. The training system should therefore allow everyone to improve their skills throughout their careers and harness these innovations.

- **Rethinking the system**

While recent COAG discussions are useful, Australia should take a fresh look at higher education as a whole and realign it to meet future needs, rather than continually patch a broken system. Thinking beyond his own research-intensive university, Prof Schmidt argued that post-secondary education, from vocational training to post-degree research, should become a part of every Australian’s lifelong learning.

Forty-five per cent of female and 35% of male school leavers go to university today, up from just 15% in 1995. Thirty per cent of women and 40% of men attend vocational education, about the same as 25 years ago. More than 20% of students work entirely online, without ever attending the institution



“Australia must continue to invest in people’s foundational capacity to help them expand their horizons and abilities. The challenge lies in deciding how much foundational education young people require, as it is difficult to study later in life.”

- Prof Brian Schmidt AC -

that grants their degree. This figure has risen sharply over the last five years, a trend which is set to continue.

University students still reap a ‘graduate premium’, but its value is declining, due to higher graduate numbers. Despite this, 90% of graduates are in full-time employment three years after leaving university. The Grattan Institute recently analysed the pros and cons of people’s decision to attend university, and concluded it remains a reasonable choice for most people, given the current system.

The education required to help young people deal with change comes in two forms – foundational knowledge and skills and, secondly, vocational training specific to a job or activity. School years 1 to 8 used to be enough to give most Australians the foundational skills they needed for their life of work, and while schooling for most people now runs from kindergarten to Year 12, it may still not be enough. The challenge lies in deciding how much foundational education young people require, as it is difficult to study later in life. Whether or not neuroplasticity declines with age, it takes a lot of time and effort to rewire a brain and teach foundational skills to older people.

• Foundational skills

According to the World Economic Forum, the skills sought by the world’s most successful companies include analytical and critical thinking, learning how to learn, creativity, complex problem-solving, leadership through social influence, emotional intelligence, system analysis and innovation. Such skills are useful for everyone, be they a plumber or astrophysicist, as a plumber must understand the increasingly complex systems in modern buildings, just as an astrophysicist must understand the stars.

Australians still believe that vocational skills are the province of TAFE, but universities also teach practical skills in subjects such as medicine, the law, education and accounting. Many combined degrees have a substantial vocational element but are not labelled as such. This split between foundational and vocational skills is problematic, as Australia needs practical people with strong reasoning skills to solve problems in a strategic manner in every occupation.

The future will require people to master complex skills and tasks to be competitive, requiring in turn an increasingly broad set of foundational education to underpin them. The shelf life of skills will decline, and so people will have to be able to learn – and learn quickly – throughout their working lives. Society must ensure that technology augments people’s skills, rather than replacing them altogether. This will make them more productive, rather than leaving them unemployed.



- **A stronger ecosystem**

Prof Schmidt called for a stronger educational ecosystem – rather than simply stronger individual parts – in which everyone, of all abilities, can see a sensible path forward to meaningful employment. The system needs to be designed around these pathways, rather than the other way around. Vocational education should give people the skills they need in concert with business, rather than merely reflecting business needs.

Australia must also continue to invest in people's foundational capacity to help them expand their horizons and abilities. Vocational education must include a wider age range than just high school leavers, and welcome those with university backgrounds. Universities can also provide vocational education in fields such as cyber-technology, and all these activities should be integrated properly into the public policy framework.

Universities and other educational institutions will be disrupted, but they will also evolve to survive. Universities generate cutting edge-research which soon transfers to the commercial and technology spheres, for example, and will not be replaced by the digital platforms which undercut their costs for undergraduate study. ANU and other elite institutions will continue to train the 'educational Olympians' of the future, as the need for a relatively small, high-value cohort of high achievers will expand rather than evaporate.

Cr Ruddock thanked Prof Schmidt and introduced Dr Melis Senova, the founder of Huddle, to explain how people can consciously evolve their own mindset through human-centred design and systems thinking.

“How to be the person who consciously evolves their mindset”

Dr Melis Senova
Founder, Huddle

Dr Melis Senova related her experience on GAP projects, including her suggestion that a proposed innovation summit should expand to include 'spaces of innovation', which in turn led to the speech by Andrea Boyd which advocated the Australian space agency.

She then explored people's development of their own identity through employment after they left formal education. People tend to identify with their job – saying “I am a doctor” rather than “I practise medicine” – but the meshing of identity and profession may not survive in a world where people move more easily between very different jobs and some professions go extinct.

- **The evolution of technology**

While there are gaps in people's educational journeys, there is a wider chasm between the speed of human and technological evolution. Humans have evolved slowly over millions of years, while technology has accelerated in recent times at an exponential rate. Technology will continue to change infinitely faster than the people who use it. The book *Metaskills* by Marty Neumeier breaks down human development into four main stages: from the invention of language in the distant past and writing at the dawn of civilisation to the scientific revolution of the 17th and 18th centuries and, finally, self-alteration today.

Humans can now edit their own 'source code' DNA through genetic engineering, gene splicing and gene therapy. We are ending a four-billion-year era of natural evolution in life, and beginning a new era of human creation. As the impact of climate change demonstrates, we are now in the Anthropocene, the



“A new and more creative world is trying to be born, offering a higher social purpose and a deeper sense of personal fulfilment. Its realisation will demand a different set of abilities from those prioritised in schools, and the GAP Institute for Human Progress may be the catalyst required for change to happen.”
- Dr Melis Senova -

age in which human activity shapes the world. We must therefore consider how our foundational education – or ‘meta-cognitive skills’ – will direct these 21st century technologies to benefit humanity, rather than enslave it.

- **Mass production and metaskills**

‘Metaskills’ are transferable across different times and situations, shaping our sense of ‘how to be’ as much as ‘what to do’. They are guiding principles, rather than specific steps, but all the more important for that. Whatever its downsides, the Industrial Revolution brought many positive changes to human society and made the factory the standard operating model of the 20th century. The education system soon followed this mass production approach to assemble graduates to meet society’s demands.

The education system has become extremely good at this task. Streamlined institutions focus on increasing through-put, maximising their number of students and minimising their staff, while using standardised, reliable metrics of testing and assessment. Their graduates therefore excel in measurable realms of intelligence, but may be less accomplished in harder-to-measure areas such as creativity, intuition, emotional maturity and resilience – the very ‘metaskills’ they will need in the future. Sir Ken Robinson observed that complaining that graduates lack creativity today is akin to condemning a bus for not being able to float.

Technologists predict that artificial intelligence will surpass human capacity in the near future, but despite that prospect, humans will remain a species which constantly strives to extend its mental and physical reach beyond current limitations through the act of learning. However, several enablers must be present for the act of learning to occur, and a mastery of metaskills may prove more important than STEM.

Such metaskills are essential building blocks for people to build their own identity and mindset, and include self-awareness and the ability to observe oneself, particularly in the most trying circumstances. Self-reflection is also vital, as it allows people to learn objective truths from their own subjective experience. Self-directed growth requires belief in one’s ability to improve one’s own capacity, while the ability to feel one’s own emotions, show empathy for others, commune with nature and unleash imagination are also essential. The ability to think holistically, rather than in silos, will also help us handle ambiguity and uncertainty in times to come.

- **An institute for human progress**

Such elements are still underserved in the current education system, and Dr Senova proposed the creation of an ‘Institute for Human Progress’ to aid understanding of the key aspects of our humanity. It would examine what it means to be human in the 21st century and help ensure that all Australians have the fundamental capabilities required to transition



between careers, technologies and social paradigms. We need to shift our understanding of how to live to be able to change from one state to another.

Australian policy makers are pushing STEM subjects in the hope this will generate economic growth and employment in the future. However, the world also needs creative people with the metaskills which only humans possess, and the current education system is not up to the task. A new and more creative world is trying to be born, offering a higher social purpose and a deeper sense of personal fulfilment. The realisation of this world will demand a different set of abilities from those prioritised in schools, and the GAP Institute for Human Progress may be the catalyst required for change to happen.

DISCUSSION

Cr Ruddock backed Dr Senova's call for an 'Institute for Human Progress' and opened the floor to discussion under the Chatham House rule of non-attribution.

- **Careers education**

The first contributor welcomed the release of the GAP report '*Bridges to the Future*' and its recommendations on high school careers education. Only two Australian states offer formal careers education in their school syllabus, and teachers are often saddled with the role of careers advisor because it fits their teaching schedule, rather than any particular knowledge or expertise. This neglect does our students a disservice, and more effort should be put into helping young people explore their options more effectively. The speaker therefore backed the idea of a **GAP taskforce on improving careers advice in high schools**.

- **Self-reflection**

The following speaker underlined the importance of self-reflection, and noted the habit of one successful Australian entrepreneur in sitting down every week to write about the most important thing he learned that week and share it online with his friends and colleagues. Lifelong learning includes a responsibility to share what we know with others, and the marginal cost of distributing knowledge in the digital age is zero. Today's free distribution of knowledge should allow everyone in the world to share in human progress, unlike in previous times.

The act of reflection is one of the few mechanisms humans have, to make new pathways of thought in their brains. The brain remains plastic into adulthood, and can reorganise itself if given the right stimulation. People stay the same because they actively try not to change, but the potential for transformation is enormous.

School and university teaching should encourage students to develop their broader metaskills from the start, including the need for self-awareness and reflection. The University of Sydney, for example, engages students in discussions about their aspirations and current strengths and opportunities for growth. The University offers students the chance to work on a suite of specific skills it believes will be important for their future, including the ability to work across cultures and disciplines. These broader skills can also be incorporated into the curriculum in schools and Higher School Certificate (HSC), as well as the tertiary sector.

Other speakers backed the proposed **Institute for Human Progress**, with an innovation consultant seeing the barriers of human ego and confirmation bias as more important to the formation of new firms than finance or technology. Better understanding of these human factors would improve student engagement, and people's willingness and ability to transition in the workforce.

- **The nature of education**

Every era has its own debates on the nature of education, and 'new' ideas are often age-old concepts framed in novel terms. The term 'critical thinking' was defined by John Dewey in 1910 as a goal, rather than a subject or technique in itself. He used it to link a child's natural curiosity, fertile imagination and love of experimentation to a modern scientific attitude.

Most of the metaskills defined by international bodies and thought vital for the future are not modern at all. Indeed, they have enjoyed a much greater emphasis in education and society at other times in the past. The real question is understanding how young people acquire knowledge, and leveraging their motivation to do so.

- **Cultural norms and intergenerational engagement**

The next speaker asked about the role of national aspirations and cultural characteristics in shaping educational outcomes. People from 100 countries study at ANU, and while cultural expectations play a role, they also change over time. Australian students see those from Singapore as remarkably dedicated, and marvel at their study on weekends, but while these students may excel at reproducing facts, they may fall short in creativity. Singaporeans share a drive and commitment in university which some Australian students lack, with Australian students taking their ability to attend for granted and looking to minimise their workload while receiving a degree.

The next speaker remembered learning many of his life skills from his parents and felt the younger generation missed out by spending more time on their phones with each other than talking with their parents and extended family. This disconnect between the generations is hampering young people at work as well as at home, as younger workers tend

to socialise only with their younger peers and do not engage with and learn from their more experienced colleagues.

- **Fostering student engagement.**

Some young people appear to attend university or study courses to please their parents. Parents advocate practical courses which should lead to a job, sometimes overriding a student's desire to explore their own interests. This may lead to a lack of engagement by young people in their education, or a focus on specific skills which technology may soon render obsolete. Young people may have several different jobs over their working life, and parents as well as institutions must encourage the studying of metaskills.

Institutions which churn out graduates on a production line tend to have relatively poor student engagement, with many students using online resources instead of attending lectures and only attending for tutorials. These students miss the traditional college social life and extracurricular activities which make university a memorable time.

Educators can improve student engagement by making the classroom a place where students want to be and teach material which cannot be found on Wikipedia. Institutions such as ANU and the University of Sydney, which shape their teaching to encourage student engagement, reap the benefits with higher course enrolments and retention. Dual degrees which satisfy both parental utility and student passions are also a distinctive part of Australian higher education.

UNSW also strives to engage its students through social interaction as well as inspiring lectures; however, it acknowledges that its provision of digital resources means that students living around the university visit campus less often than their predecessors, as well as affording course access to the 20% who live more distantly.



Most students also have part-time jobs to help pay for living expenses, and the digital availability of material means they are more willing to miss lectures to work. These students may seem less engaged in student life, but many are actually doing a double degree while holding down employment. They also engage with each other through their phones and social media, just as their peers do, and so may have just as much social interaction as their predecessors, albeit in digital form. Students at many campuses may not have the same college experience as those at elite institutions, but they are still part of small communities within the whole institution.

The founder of a hub which runs programmes on social entrepreneurship said her organisation helps students work in teams in industry on real projects with a social impact, supervised by an expert in their field. These students develop many of the skills outlined in the session, including problem-solving, creativity, teamwork, resilience and the ability to pivot as they are operating in the real world. Students are also encouraged to reflect on their own experience to learn from it in personal terms and emerge more work-ready with experiences they can talk about in job interviews.

UNSW has invested significantly in this programme, but the systemic problems discussed in the Summit session, including students working part-time jobs which leave them less time for such activities, remain. Students struggle to grapple with uncertainty in the workplace because they are used to clear course outlines which state the tasks they must complete – a number of essays, for example, of a specific and limited length.

There are many good ideas for change, but the challenge lies in scaling them up to cater for every student, as these richer experiences cost more to deliver – a funding role which industry should take up. While the growth of online learning has created

more opportunities for study, it remains less suited to nurturing foundational or metaskills.

- **The role of industry**

The following speaker said that he had spent the previous nine months researching the future of skills training, and while a handful of large organisations, such as Service NSW and Sydney Water, are taking a proactive approach, most businesses do little to develop and extend the skills of their employees. Management may acknowledge that different skills will be required in five to ten years, but is unwilling to invest in employees. Companies expect universities or government to train the workers they will need, and will simply sack their current workers and hire new ones when the time comes.

Australian firms have reduced the training and development role of human resources, and now see it as a mere hiring function. Unless industry realises that this refusal to invest in its own workforce today will cost it far more tomorrow, it will not remain competitive. Employers complain that they must spend a year training graduates to be useful in today's workplace. However, they make little effort to talk to universities or government agencies about what they need.

AI and process automation may indeed save people from having to perform like robots, and free them to do higher-value, more creative work; however, if they are not trained now to be more creative, they will not be up to the task.

Another delegate agreed that Australia is already experiencing a skills crisis in technology and digital transformation as well as metaskills. Australian firms remain complacent about the issue, and a recent EY report on the future of work found that 60% of firms do not have a plan to upskill their workforce, just as 60% of workers do not think their job will be affected by digital technology. Summit delegates

were asked for ways to combat this lack of urgency, as Australia's comfortable lifestyle will not survive a fall in relative productivity.

- **New learning techniques**

People's hard-wired expectations of education after 12 formative years in the classroom can limit their responsiveness to alternative methods of teaching. Schools and universities should teach students in a wider range of ways, including how to learn by themselves and from their everyday experiences as well as more formal instruction.

A Melbourne consultancy Huddle, for example, helps organisations realign their mindsets from a fixed way of thinking to embrace new opportunities. It encourages creative solutions to complex problems by offering its clients six ways to think differently, including the concept of a 'liquid mindset'. Clients are invited to acknowledge how they usually think about problems, and 'try on' a completely different approach. While this may feel awkward at first, simply acknowledging other options can reduce internal barriers to their adoption.

Having an 'open mind' means staying receptive to hearing different perspectives, without any compulsion to always change one's own. An 'open mind' helps people appreciate other people's points of view, while a 'liquid mind' helps people change their own. Once people are shown alternatives to established ways of thinking, they not only find more fertile ground for change, but have language to describe it. This, in turn, helps them cultivate a 'whole mind' in terms of thinking holistically and systemically about the problems they must overcome.

The founder of a successful open learning company with 1.5 million users in Southeast Asia considered that all delegates agreed on the need for lifelong learning and skills development, but noted the lack of

discussion of how they should be taught. He argued that students' approaches to learning are determined more by the education system they are brought up in than national or cultural norms.

Decision-making in software engineering is based on hard data and rigorous analysis, with rapid innovation and testing to find the best techniques, yet teaching practice is not approached in the same way. Companies offering more modern approaches face strong resistance from the educational establishment, as academics and teachers do not want to change the approaches they have used, however ineffectively, for 10 or 20 years.

Doctors, engineers or technologists would not insist that practices used in the past cannot be improved today, and teachers, as fellow professionals, should change their mindset. Education itself does not iterate or innovate, and one of the biggest barriers to teaching foundational skills and new approaches is their outdated method of delivery.

- **An ecosystem not silos**

While delegates agreed that an ecosystem of provision should be developed to replace the isolated institutions today, they also acknowledged that incentives for schools, vocational colleges and universities to work more effectively together must be identified and implemented.

Making degrees and other qualifications more interoperable would improve interoperability between the institutions which grant them. The stigma suffered by some parts of the system would reduce, if people could move more freely between them to build the portfolio of skills they require.

- **Hearing young voices**

The Foundation for Young Australians (FYA) has researched 'the new work order' for the last five



years, and continues to explore the intersection between school, universities, parents and students. Delegates argued that student voices should be heard in the debate as well as adults talking on their behalf, and it was noted the formal, jargon-heavy language used in the Chamber might deter young people from contributing. High school students from all backgrounds can be confused about the best way forward. These students need more informed help to make sense of their options. There must be a social and cultural transition to help people navigate changes in technology, as technology itself shapes society and culture.



- **Journal of Behavioural Economics and Social Systems (BESS)**

Dr Peter Massingham launched the Journal of Behavioural Economics and Social Systems (BESS) on behalf of Global Access Partners and the Journal's editorial board. This exciting venture will explore complex or 'wicked' problems too large and uncertain for any individual to solve.

The *Second Track* process allows groups of thought leaders from government, business, academia and NGOs to offer the breadth of perspective required for a holistic appraisal and work together to implement their own recommendations, as well as influence public and private policy. The Journal's inaugural issue celebrates this process and its success.

Steps will be taken to understand and quantify the *Second Track* process in future issues, creating an evidence base to encourage its wider adoption.

Dr Massingham encouraged delegates to submit articles for the next edition on group problem-solving and the issues facing Australia.

Cr Ruddock thanked contributors and invited Benedikte Jensen to close the session.

Ms Jensen observed that many speakers saw deficiencies in the way young people are advised about career choices and the skills they will need in the future. She hoped the Australian Government's development of a National Careers Institute and the appointment of a National Careers Ambassador would address some of these issues. She also urged delegates and other stakeholders to engage with the Government on shaping the future of education, training and skills.

Ms Jensen remembered attending a G20 conference on the future of work in 2018 where the Secretary of Finland's Department of Education stressed the importance of soft skills, such as problem-solving and creativity, and wished they were called '**essential skills**' instead. She also recalled her experience in Berlin when she was shown the way Siemens teach their apprentices how to learn, as well as particular vocational skills, as they cannot be sure what skills these young people will need in the future, only that they will need to know how to learn them. The apprentices formed teams and were given a problem to solve with the robots, machines and technology at the disposal, an exercise which developed teamwork and rewarded imagination, as well as technical competence.

Cr Ruddock thanked the keynote speakers and brought the session to a close.



SESSION TWO

‘The future of work and lifelong learning’

Catherine Fritz-Kalish welcomed Tanya Stoianoff, the Head of Government Affairs at DXC Technology Australia and New Zealand, to chair the second session on the future of work and lifelong learning.

Tanya Stoianoff

Head of Government Affairs
DXC Technology Australia and New Zealand

Ms Stoianoff said she had attended the launch of DXC’s third digital transformation in Adelaide the previous day and explained how they enhanced collaboration between industry, government, universities and TAFEs to share ideas, solve problems, reskill workers and pursue digital change.

DXC wants to employ work-ready graduates and offers three to six-month internships at its head office to offer ICT students practical experience.

She then introduced Greg Miller, Co-founder and Executive Director of Faethm, to discuss re-framing of the future of work.

“Reframing ‘the future of work’ in order to navigate ‘the evolution of work’”

Greg Miller

Executive Director, Faethm

Greg Miller said he had attended the last five GAP summits and related those events to his own fast-developing business. Faethm now trades with firms in 23 countries around the world, including Rio Tinto, MasterCard and Swiss National Rail. It is also one of the few Australian companies – the second in Asia and the 16th in the world – to become part of the World Economic Forum’s Centre for the Fourth Industrial Revolution which reskills and upskills workforces around the world.

- **Analysing the Australian workforce**

Faethm built an AI engine it trained on two billion workforce records that can now identify the roles in any workforce at risk from automation and which therefore need to be re-skilled. It also highlights roles which can be augmented by technology, and whose workers need to be upskilled, as well as new jobs which will be required in the future.

This platform has analysed Australia’s workforce as a whole and found that, despite media fears about robots and automation taking people’s jobs, the primary impact of new technology in a developed nation will be the augmentation of existing jobs. However, those individuals being augmented by technology need to be upskilled to take advantage of it and increase economic capacity. This training is as important as the technology itself, to maximise its output.

Every industry will have its own story. While retail and healthcare are the largest employers in the country, financial and insurance services have been among those most disrupted by new technology. A third of the jobs in this sector are at risk of



“Phrases like ‘the future of work’ do the issue a disservice, as it suggests that current leaders can leave it to their successors to worry about. It should be viewed as a process of ongoing, incremental evolution in which every individual can play a part.”

- Greg Miller -

automation, and another third will have their work augmented by technology and need to be upskilled. The industry will save up to \$16 billion by automating its processes, and so is pursuing change as quickly and comprehensively as possible. Female workers are particularly vulnerable to retrenchment, a blow to the strides made towards gender diversity and inclusion in the workforce.

New ‘job corridors’ are being created across the economy, where the attributes in a threatened job can be useful in professions with shortages. While 45% of accountancy jobs are threatened by automation, for example, accountants can be retrained in six months to become cyber-specialists.

- **Australian under-investment**

Australia is spending \$29 million on its AI strategy over four years, compared to £200 million in Great Britain, €1.5 billion in France and €500 million in Germany in 2019 alone.

Canada is often compared to Australia, but it is far ahead in terms of technology readiness. It was the first country to produce an AI strategy and is spending \$125 million over five years in this space. Canada is also the only country in the world with a government-funded **‘employment pathway platform’** to help workers displaced or imminently threatened by emerging technology identify their best alternatives, find appropriate skills training and

secure new jobs. Every country, including Australia, needs a similar service, and creating such a platform would be a useful project to emerge from the GAP Summit, not least because the Canadians are willing to offer advice from their experience.

Mr Miller spoke about his recent ten-day trip to Europe where he observed a distinct difference in the attitudes of European and Australian industry towards this issue. He met representatives of companies with a total of two million workers, and found they are seeking a social license to automate by ensuring that workers are retrained as automation is introduced, rather than simply discarded. They are setting targets for the number and diversity of workers who will transition to new jobs, in stark contrast to Australian firms who simply fire the workers they have and hire new ones trained by others.

Mr Miller urged Summit delegates and other thought leaders to frame these issues in a positive manner. He asked them to raise awareness about change, guide industry and government on best practice, and increase impetus for immediate action. Phrases like ‘the future of work’ do the issue a disservice, as it suggests that current leaders can leave it to their successors to worry about. Furthermore, the future is unknown and unbounded, and can be a daunting prospect. Mr Miller suggested to view it as a process of ongoing, incremental evolution in which every individual can play a part.



“Creativity and initiative, analytical thinking and innovation, active learning and technology design and programming are among the most sought-after attributes in WEF surveys of the most successful firms. These skills are highly transferable and can be fostered by removing the barriers between the ‘silos of excellence’ identified by the Summit.” - Tabitha Bertron -

The term ‘Fourth Industrial Revolution’ also has negative and violent connotations of upheaval producing more losers than winners. Mr Miller saw it instead as an ‘Industrial Renaissance’, in which creativity and imagination could come to the fore. Technological change will not herald the end of work but will see a transition to new types of human activity.

The NSW Government is taking a lead by examining the roles of all its 400,000 employees and identifying both skills gaps and new opportunities. It is willing to shift staff between departments to ensure they have new roles to play in delivering the best services to the state’s inhabitants. Mr Miller urged attendees to promote such positive examples and encourage more of them across the country.

Tanya Stoianoff thanked Mr Miller and introduced Tabitha Bertron, the Head of Performance at Google Customer Solutions, as the next speaker.



“Fostering a culture of lifelong learning”

Tabitha Bertron
Head of Performance
Google Customer Solutions

Tabitha Bertron said over 3.2 billion people – almost half the world’s population – are now online, and the pace of technological change is increasingly outstripping our ability to keep pace. PCs came to market in the 1970s, and the majority of Australians obtained Internet access in the 1990s. Eighty-four per cent of Australians now use the Internet through their mobile phone, and it has changed the way people live, learn and shop, and even how they find a partner.

Google handled over 25 million Australian searches on ‘how to...’ over the last 12 months. Some of the most common searches were ‘how to study effectively’, ‘how to learn to learn’, and ‘how to motivate yourself to study’. Australia must ‘double down’ on its learning culture to remain an innovative nation, and help people learn new skills throughout their careers. It should value education just as it champions sport, as Australia’s ability to grow and prosper is directly related to its ability to learn new skills.

Ms Bertron argued that work on three elements is required to foster a culture of lifelong learning in this country – education, experience and expertise.



- **Education**

Learning begins with education, but the system which people navigate is now a 'jungle gym', rather than a 'ladder'. We must shift our mindsets to see every day as an opportunity to learn, rather than pigeonhole learning to our time at school or when changing careers.

Ms Bertron traced her career progression from marketing to helping clients' transition to digital advertising at Google. She said she had learned in many different ways along the way, including TAFE, university and online courses, and this 'jungle gym' mentality had allowed her to enjoy multiple careers in marketing, products and sales in the USA and Australia.

The task can appear overwhelming, but people must improve and fill gaps in their skills to stay competitive and relevant in the jobs market. Lifelong learning is encouraged at Google from its interns to its CEO. Every employee must invest 15 to 20 hours in learning new skills, as the company must continue to innovate and keep pace with developments.

- **Experience**

Most Australians assume their education ends when they finish school, TAFE or university; however, this mindset can see them fall behind. Experience is also a great teacher. It helps shape our perspective, fuels innovation, and fosters critical thinking. It also helps us identify and understand the problems and issues which need to be solved. Consciously learning from our experience is vital.

Automation could replace 40% of current jobs by 2035, from data entry office jobs to warehouse packing and product delivery. However, it is never too late to learn. Ms Bertron told the story of a retired mechanic and business owner who came back to work to learn the digital technology his son had incorporated into the family firm.

Graduates 20 years ago were more confident they had the skills they needed to succeed than university leavers today. Indeed, only a quarter of recent graduates feel they have the necessary knowledge. Lifelong learning must be encouraged on and off the job to help people stay ahead of the relentless pace of change.

- **Expertise**

The nature and content of expertise will change in years to come. Creativity and initiative, analytical thinking and innovation, active learning and technology design and programming are among the most sought-after attributes in World Economic Forum surveys of the most successful firms. These skills are highly transferable across different firms, careers and industries, and they can be fostered by removing the barriers between the 'silos of excellence' identified by earlier speakers.

Summit delegates should take responsibility for driving positive change across the nation as well as calling for action from others. Every success story started with one small action, and Ms Bertron hoped GAP alumni could accelerate and strengthen these changes to encourage lifelong learning and improve education, experience and expertise for all.

If successful, this effort will give current and future generations the capabilities they need to overcome economic downturns and fill gaps in skills as well as any other nation on the planet. Ms Bertron asked delegates to consider what their role should be, and what small steps they could take to start this revolution.

DISCUSSION

Tanya Stoianoff thanked the speakers and opened the floor to questions and debate.

- **Early years education**

The skills required for lifelong learning should be taught from the earliest age, but attention must also be paid to the shockingly low level of some children's experiences at home. A primary school teacher in Victoria has seen children who did not know how to open a book, an experience shared with a kindergarten teacher in the western suburbs of Sydney who said that two thirds of the children coming into her class had never even seen a book before.

While Australia as a whole is doing well, a significant cohort of children are still missing out on the most basic foundations of learning. The good news is that solutions are known, and are outlined in **the 2016 GAP Taskforce report on early childhood education**. Putting time and money into young people who would otherwise miss out will help increase the average performance of Australia in the most cost-effective manner. The bad news is that many parts of the system are not doing what needs to be done due to inertia and complacency.

Children from Indigenous backgrounds are missing out the most, but while the 'Closing the Gap' targets have still not been met, they are doing relatively better in education, with more children staying to Year 12, going on to university and founding their own companies. A difference can be made in the west of Sydney and Melbourne and north Adelaide in a similar fashion, but this will require a better regarded and more highly trained and paid early childhood workforce.

We know that children are not going to be cared for by robots for reasons of real, rather than metaphorical, evolution. Children need responsive people who are interested in them, and who cultivate their attributes and innate curiosity, creativity and empathy, rather than merely physical skills. Early childhood should be the crucible of the vital 'soft skills' sought after in later life, but it can also be the time when people learn to be concerned by other people's distress, and they tend to retain that attitude for life.

It would be wonderful if most Australian children enjoyed high-quality early childhood care, but the facts do not bear out the supposition. The early childhood workforce, 97% of which are women, is one of the poorest paid in the economy. Thankfully, there are numerous historical and international examples of how the sector responds to investment, and how children benefit in turn. Australia needs another 9,000 early childhood teachers, with four-year degrees, to meet the growth in need over the next five years. Upskilling this workforce would do much to shepherd the future of our capacity for innovation and flexibility.

- **Learning from data**

The mass collection of data allows the modelling and prediction of people's behaviour, which in turn can transform health and other services as well as the retail industry. Current data can also paint a clear picture of future economic and technological developments and reduce the need for guesswork in planning a response. Australia is already well-placed to anticipate change and respond appropriately. *With you, with me*, an organisation created by a former SAS soldier after he failed to find work as a security guard, now helps veterans find civilian jobs in cyber-security, automation robotics and data, given the demand in those sectors. It assesses applicants, organises training and helps to place them with firms.



- **A process of change**

There have always been jobs and professions which required lifelong learning, and the introduction of new technology and legislation is not unique to today. If we have adapted to change in the past, then we already know what works. If we know what the future has in store and can test our current capabilities and fill the gaps in our skills, then our companies can prepare themselves for the future. Our competitors began to change earlier, and are spending more, and Australia must now catch up.

A recession may be the trigger which spurs Australia out of its complacency, as it was in the UK, or the succession of younger people raised in the digital age into senior roles may galvanise industry.

- **Learning attention spans**

One delegate admitted that mobile phones and social media have reduced his attention span, and worried that people's constant use of Google, YouTube, Facebook and Twitter are eroding their abilities to study and learn. However, he was reassured that while platforms like YouTube offer a way for people to 'snack' on content for half an hour at a time, they will not change the way that people learn significant new skills. This media should be integrated into education, to make it more interesting and conversational, rather than replace it altogether.

- **A collective response**

A consultant said that many firms already struggle to find talent to hire, although this might be symptomatic of their failure to upskill their own employees. People displaced from work are less likely to know the best path to an alternative career, and the speaker called for better tools to help them understand their way back to work.

She also called for a collective response to the challenge from society as a whole, rather than finger-pointing at government, academia or industry and calls for others to take the initiative. She urged the creation of a multi-sectoral coalition to form and work together to this end. As our jobs change or disappear and we live longer beyond traditional retirement age, individuals will have to find new meaning and purpose for their lives.

Governments can use new technology to tackle problems of social exclusion and inequality, industry must invest to generate the skills it needs, and academia should continue to push forward knowledge. Summit delegates have the positions, experience and commitment to play a pivotal role in pushing these stakeholders forward.

- **Navigating the bureaucracy**

The next speaker noted that all people learn throughout their lives, and the most adaptable succeed. He relayed the story of a young boy in India who looked at the moon every night to think beyond his own village, and grew up to be a successful entrepreneur.

Governments often have good ideas they struggle to implement, and the role of public servants is to understand their agenda from their point of view, anticipate their intentions, seek input from stakeholders, and offer advice. It is not their place to promote their personal beliefs, or express them in public, but to put the ideas of elected office holders into action.

Another delegate, a former civil servant, underlined the very clear and important distinction between public servants and elected officials. Government is mainly about maintaining the status quo and keeping things in good working order, rather than radical change. However, parties in power enact policy to reshape the future, either by making something

better, or stopping something worse. Senior public servants play a vital role in this conversation by remaining well-briefed and engaging in strategic discussions, such as those at this Summit.

- **Boosting real wages**

The Reserve Bank of Australia (RBA) has worked on a range of ways to increase wages, as Australia, in common with other developed nations, has suffered stagnant real wage growth. However, major global technology firms such as Google, Amazon and Facebook have built on their first mover advantage and now have the resources to extract profits from almost every activity around the world.

Australia has focused on building human capital, but technological advance may render that increasingly irrelevant in a future dominated by major technology firms. Many people took coding degrees and entered businesses to develop software, as they were told that would guarantee them a future, but global systems are increasingly being adopted by firms, rendering in-house solutions irrelevant.

- **Exporting agricultural technology**

When Faethm examined the impact of automation on Southeast Asian agriculture, it found that it had little impact to date. Australia, by contrast, leads the world in automating its farms and minimising human employment. Australia has an opportunity to export this technology to other nations, as the costs of technology will continue to fall until they undercut even the cheapest labour. Australia should not stand aside to let China or the USA take these markets, and the trigger for greater interest from Australian firms may be the profits to be made by exporting these technologies and services abroad.

Faethm has also worked with KPMG to examine agriculture in Australia, and found that the industry is desperate for people with the right data and AI skills

for today. The financial opportunity which moves industry to act should therefore combine with the data on skills gaps to drive the education system to provide the necessary training. Human capital and interaction will always be important, whatever the shape of technology to come.

- **Accessing the sum of human knowledge**

The common belief that 'machines are taking over' misrepresents the true situation. The technological revolution is a by-product of the more fundamental point that the 'colossus of human knowledge' is now accessible to everyone. This is as big a change as transitioning from an agrarian to an industrial economy. Global regulators are struggling with the concept of blockchain and their inability to regulate it, for example, but this epitomises the old-fashioned mindset which sees this knowledge as a propitiatory machine, rather than freely available intellectual capital.

- **Community colleges**

One delegate had been impressed by the love of learning exhibited at his child's high school graduation ceremony and, although the prospect of lifelong learning might appal those school leavers at the moment, he felt the future was in good hands. He remembered that community colleges played a vital role in lifelong learning in Britain in the mid-20th century and were similarly influential in Australia. They offered opportunities for working people who could not afford to attend university to better themselves but have suffered in recent years through the arrival of the Internet and cuts in government funding.

Revitalising Australia's remaining community colleges would help the cause of lifelong learning, in addition to the excellent work they do with migrants learning English and older people pursuing a range of interests.



- Green shoots of recovery

Summit delegates offered a range of programmes which offer the prospect of positive change.

The Spark Festival is a celebration of innovation and entrepreneurship in NSW which is poised to roll out across the nation. Despite only having a single employee, it handled 13,000 registrations for 165 events across the state last year. Almost half the registrants were women, and 16 of the events were in regional NSW.

Australia's largest ever school entrepreneurship programme is now underway, with 66,000 students from 10 to 16 studying entrepreneurship for a term every year. This may produce products for the commercial market today, as well as new business founders tomorrow, as students gain more creative attitudes and problem-solving skills.

FYA is working with aged care in South West Victoria to help 2,500 people transition from retail to personal care. Creating a portfolio of skills in caring, nutrition and mental health can offer people in declining sectors scope to create a new career in wellbeing. Not every new job will be related to AI, and human-centred skills will become ever more important. The banking industry in Britain and Europe is also retraining former bank workers to enter home support, youth help and health care.

Infexchange is an organisation which services 35,000 NGOs across Australia and uses technology to promote inclusion and social justice, not least through its user-friendly 'Ask Izzy' app for homeless people.

- An active role for older people

While humans may soon extend their lifespans even further through genetic tinkering, people still need to find real purpose in the additional longevity they have achieved through better standards of living and medical care. Australia's growing cohort of older people is often seen as a social or financial burden, rather than an achievement, but older Australians remain interested in learning and enterprise, although they do not want to learn or work in the ways that younger people do. They see retirement as a new life stage when they can do things in a different way to their 'mid-life grind', and their experience should be used to help co-design new lifestyles and learning styles for older people the future. Indeed, younger people might start to yearn for similar lives, when they see how good they can be.

Public policy makers know that Australia's ageing population is the major demographic challenge of our time. While the GAP Summit concentrated on school and workforce training, lifelong learning is also important for mature workers and the retired who are the fastest growing cohort in the nation.

The government wants to see older Australians learning longer, as well as working, volunteering and contributing longer than before, in proportion to people's longer lives. If people continue learning and stay engaged well into their later life, they are also more likely to live longer, happier and healthier lives.

The Waverton Hub in the northern suburbs of Sydney offers an example of what can be achieved by people in their own interest. It was set up seven years ago by a dozen volunteer Australians who wanted to come together and learn and now hundreds of older people are involved in what has become a thriving community resource. Like many successful solutions, it is local and self-sustaining, bringing people together and tackling the loneliness which is a growing problem in society.

- **Cultivating a “yes, and...” mindset**

Summit delegates were encouraged to embrace a ‘yes, and...’ mindset which was open to a range of ideas and solutions, rather than a ‘no, but...’ attitude which argued against all points of view but one. Older people need to communicate with younger people through their phones and emojis, just as younger people should talk more with their elders, for example, and people can learn from watching content online as well as in traditional classrooms.

Modern media has eroded attention spans in some circumstances, but people will also sit down and binge-watch an entire season of a show. People are simply more selective regarding how they spend their time and what they pay attention to, given the greater range of choices available.

We must all develop greater plasticity of mind and attitude to learn new skills as required, rather than think that learning one particular new skill will suffice. Developing greater empathy for others should also help us understand ourselves. ‘Systems entrepreneurs’ can be found in business, government and civil society, and encouraging them to act and cooperate offers a way forward.

Another speaker thanked delegates for touching on a number of topics close to his heart, and stressed the need for schools to teach thinking and planning skills and improve customer service. People need meaningful employment to have meaningful lives, and technology should help people achieve this.

- **The importance of optimism**

One delegate said he had spent the last two years asking people what made them optimistic and found they were much happier with their personal lives than their perceived state of the nation. He had not found ordinary Australians to be complacent about their lives, their skills or

their future, but argued that Australia’s culture is so saturated with pessimism and cynicism that a false perception is made.

Ninety-eight per cent of the stories on ABC News are negative, and other newspapers, news organisations and magazines are also saturated with bad news. The Fourth Industrial Revolution is not seen as an opportunity in this country, as it is in Asia and the Middle East, for example, but merely as a threat to jobs. People working in large corporations tend to be more pessimistic due to constant and significant job losses, but overall the population is more robust and forward-thinking than usually assumed.

The Bill and Melinda Gates Foundation and other organisations which have analysed Australian attitudes have also found that individual Australians are extremely optimistic about their own lives and prospects, but pessimistic about the country and the wider world due to their relentless bombardment with bad news.

The speaker therefore urged Summit delegates to ask their friends, families and peers what they were doing to encourage optimism in their lives. He encouraged them to share stories of hope, as GAP has done for 20 years, as people yearn for positive news in real life just as they do in entertainment. Rather than call others complacent, we should share and encourage optimism in everyone’s life to encourage positive action.

Young people have been criticised for being risk-averse, just as parents have been blamed for wanting practical, rather than imaginative, courses for their children. However, another speaker thought parents wanted their children to be safe, rather than successful, and sought qualifications for them to get and keep a job.



Children at a younger age do things with all their heart, and this power of play should be remembered in adulthood. Unprecedented challenges cannot be faced by simply repeating the same old solutions. Young people have energy and enthusiasm, and it is older people who need to get out of their way and let them make the world a brighter and more amazing place.

Tanya Stoianoff thanked all the contributors and brought the second session to a close.



LUNCH SESSION

Catherine Fritz-Kalish welcomed Peter Dunne, Partner at Herbert Smith Freehills, to introduce the Lunch session's keynote speaker.

Peter Dunne praised the GAP Summit as the best yet and introduced Craig Robertson, the Chief Executive Officer of TAFE Directors Australia.

“Helping all Australians thrive in the challenging world of changing demand for skills”

Craig Robertson
Chief Executive Officer,
AFE Directors Australia

Craig Robertson discussed ways to help all Australians thrive in a challenging world with fast-changing demand for skills. He stressed the commitment of all tertiary education to help all citizens, including Indigenous people, share in the wealth of Australia. As chair of the World Federation of Colleges and Polytechnics, a loose coalition of technical and vocational leaders around the world, he has the opportunity to travel and observe how countries with different economic circumstances are adapting to change.

The call for an Olympic mentality towards university education, raised earlier in the day, reminded him of the world skills competition for training and vocational education. Over 5,000 young people from around the world came together in Kazan in Russia in July 2019 to compete. Australia finished in 8th place, an improvement of two places on Abu Dhabi in 2018. China finished first, and will host the next event in Shanghai in two years' time. Countries increasingly work to global skills standards.

In July 1992, then Federal Minister of Education Kim Beazley met John Fahey, the NSW Premier, to ask if vocational training and education could transfer from State to Commonwealth responsibility. Australia was in recession, youth unemployment was high and workers were at risk of losing their jobs to industrial restructuring. Under the banner of 'working nation', all States and Territories except NSW had agreed to transition responsibility for vocational training and education to Canberra. Reportedly, the Prime Minister's office had not told Minister Beazley that all

“The times call for a new settlement which returns aspirations to VET courses, balances choice with equality, and increases investment in the disadvantaged. As well as enhancing the life prospects of every individual, lifelong learning for all can help bring growth back to Australia.”

- Craig Robertson -



other states had agreed to turn up, and the two men only agreed shared responsibility and the creation of a new National Training Authority to bring a more unified approach to vocational education.

The States and Commonwealth cooperated closely between 1992 to 2005, but despite its success, the Authority was abolished in 2005 and responsibility for coordination was transferred to the federal bureaucracy. Australia may be returning to the economic conditions of 1992 and again needs a new settlement based on a grand vision for vocational education and training as part of a coherent suite of post-school options for all Australians.

Data from the Treasury's national accounts and other sources shows that GDP grew by just 0.5% in the June quarter, with annual growth of around 1.5%, well below RBA targets. Per capita GDP is lower, while household disposable income is down more than 1% over the past year. Household incomes per capita are no higher in real terms than they were in 2010. The RBA has stressed the need to reduce unemployment to maximise output from labour and push wages higher; however, unemployment is rising beyond Melbourne, Sydney and Canberra.

The RBA Governor is also challenging the government to use fiscal levers to boost wages, but that will demand improved productivity through better capital and labour efficiency. However,

Australia's productivity growth of 0.4% is the worst since the 1990s' recession.

Participation in VET has plummeted, rather than increased, and its reputation has been seriously damaged by fraud perpetrated by unscrupulous providers exploiting student loans. However, half the new jobs over the next five years will need VET qualifications. Ongoing automation and digitisation will change how we work, and what we need to learn to do.

The banking system, for example, is investing in technology, despite its recent upheavals, causing large staff layoffs. These changes are inevitable, as they reduce costs, improve efficiency and boost profits, but we must ensure workers have the skills they need to find new employment. Keating and Beazley faced similar challenges in 1992, and the time is right again for change. The vocational education sector is 'on its knees' at the very time the economy needs boosting. The sector must revitalise its services and products to help workers face the challenges ahead.

The Commonwealth is open to change, and has launched a review of VET which Summit delegates can contribute to. Ministers are meeting to decide the priorities for vocational studies, and Mr Robertson urged the consideration of three main propositions.



Tertiary education has shifted towards universities in recent decades, and a better balance should now be sought. It is understandable that young people want to go to university, because tertiary education offers a broad range of skills and paths into careers. Young people want careers with meaning and opportunity, and are not buying what VET has to offer at the moment. This is the heart of the problem to be solved for TAFE and other institutions.

VET has competency-based training, with qualifications based on tasks involved in occupations. This approach was adopted in the late 1980s, and was ideal for the time. It helped people with experience but without qualifications have those skills formally recognised, allowing them to find employment more easily. However, this method has produced a utilitarian fixation which trains for today's jobs, but fails to give people the foundation skills they will need for new jobs in the future.

'Regulated occupations' will remain an exception. They were once seen as 'skilled crafts', with practitioners acquiring the required know-how over a period of time, but today we want qualified electricians wiring our house, just as we want qualified surgeons operating on our bodies. Qualifications and competency-based training will remain a vital part of VET in this regard, but even these jobs are being affected by automation and digitisation, and VET cannot keep training only for the past.

Mr Robertson called for 'normative aspirations' to return to VET. VET and TAFEs should be used in a positive and aspiration way to offer opportunities for all and improve their life chances, rather than simply train them for jobs which are available today but are often poorly paid.

Secondly, Australia needs to square choice with equality of opportunity. Education reformer Jean Blackburn AO, born a hundred years ago in 1919, is often remembered for dismantling technical schools

after her 1985 review of Victoria's post-compulsory schooling system. However, her greatest contribution was her focus on pupils' lack of success in school due to social and economic circumstances. Her work on the Schools Commission in the 1970s challenged the accepted wisdom of the time that success was a product of genetic talent. Her pioneering work led to the disadvantaged schools programme to tackle pockets of disadvantage in particular schools, an ongoing problem as mentioned by Prof Pasi Sahlberg at the Summit's opening dinner.

Ms Blackburn's work clashed with the parental choice movement, part of the neo-liberal spirit of the age, which saw consumer power as the best way to improve quality. These two perspectives played out under the Whitlam and Fraser schools commissions, and this dilemma is becoming apposite again. The VET sector has suffered from a surfeit of choice and market theories, causing the new Productivity Commissioner to call the VET sector 'a mess'.

Choice underpins our liberal democracy and free market economy, but reconciling choice with opportunity for all remains a challenge for public policy. Ideas from Summit delegates could help ease this tension in education policy.

Finally, Mr Robertson called for all stakeholders to offer opportunities for Australians at risk of being left behind. People with capital, or access to capital, are best placed to take up opportunities, and forums can easily focus on making things better for social elites. These people have the family and learning capital to make their way in life. The measure of a society is how it caters for the non-elite, and deliberate investment is required to reactivate education policy and enliven learning for all, not just the most successful.

Education policy should focus on the individual, rather than markets, and the time is right to increase opportunities for everyone.

In 1980, Singapore's Prime Minister Lee Kuan Yew told Bob Hawke that Australia risked becoming the 'poor white trash' of Asia if it did not reform its economy. While that has not come to pass, the warning still stands 30 years later, as our neighbours invest heavily in their workforce.

Individuals love to return to success, and work hard to avoid failure. If young people enjoy meaningful, purposeful and successful education at school, then they are more likely to embrace lifelong learning, as they have benefited from it in the past. We therefore need to work harder for those at risk of failure in school, to encourage them to continue learning for the rest of their lives.

The times call for a new settlement which returns aspirations to VET courses, balances choice with equality, and increases investment in the disadvantaged. As well as enhancing the life prospects of every individual, lifelong learning for all can help bring growth back to Australia.

SUMMARY OF OUTCOMES

Peter Dunne

Partner

Herbert Smith Freehills

Peter Dunne thanked Mr Robertson, summarised the main themes of the Summit, and challenged delegates to take them forward. He said Prof Pasi Sahlberg, Prof Brian Schmidt AC and Dr Melis Senova had offered practical ways to retain excellence while extending opportunity, and honoured the Hon. Cr Philip Ruddock's call for an 'Olympic level of skill'. He recalled the question raised by Tanya Stoianoff which everyone must face

in navigating changes in technology, and thanked Tabitha Bertron and Greg Miller for inspiring delegates with their optimism and focus on Australia's strengths as well as weaknesses.



Mr Dunne suggested four ways to take the discussion forward into practical action. GAP has already proposed a taskforce to address the lack of clear advice for school leavers, but all Summit delegates can play their part. The *Second Track* process offers a way forward on education, just as it helped create Australia's space agency. Herbert Smith Freehills set up its own 'Project Manhattan' to discuss the problem of society outsourcing its problems to government, and Mr Dunne agreed that the GAP model of both originating and implementing ideas was a powerful way to achieve change.

Early childhood education should only be the start of lifelong education, but older workers and citizens should be engaged in the search for solutions, rather than have them imposed. Finally, Mr Dunne backed the idea for an Institute for Human Progress and urged Summit delegates to decide the role they wanted to play and contact GAP to offer their support.



Live AID was a huge success before mobile phones and the Internet, with concerts in New York and London to raise funds for Ethiopian famine relief. Just as Bob Geldorf urged people to stand up and donate to save people's lives, Mr Dunne called for delegates to contribute to the cause of education.

Catherine Fritz-Kalish invited **Brad Howarth** to launch a new book, *Innovation is for Everyone*, written with Peter Fritz AM on innovation in Australia, and underlined the need to keep the conversation going.



Brad Howarth said he was inspired by the passion shown by Summit delegates in the Chamber – and the climate protestors outside it – and underlined that innovation was the force creating the new world around them.



Catherine Fritz-Kalish encouraged delegates to join GAP's future taskforces and offered a vote of thanks to the Summit Steering committee, the GAP team and the Summit's speakers, delegates and sponsors. She praised her father for pioneering the use of multidisciplinary teams to solve 'wicked' social problems, before bringing the Summit to a close.





APPENDICES

2019 GAP SUMMIT

BEYOND EDUCATION: LIFELONG LEARNING FOR AUSTRALIA'S FUTURE
A Vision for Australia
 Global Access Partners 10th Annual Economic Summit

PROGRAMME

Day One – Thursday, 19 September 2019

Strangers Function Room
Parliament House of New South Wales
6 Macquarie St, Sydney

6:15pm	Registration, Pre-Dinner Drinks and Demonstrations
7:00pm Opening Dinner	<i>'Beyond education: Lifelong learning for Australia's future'</i>
Introduction	Catherine Fritz-Kalish Co-Founder and Managing Director, Global Access Partners (GAP) Director, International Centre for Democratic Partnerships (ICDP)
Welcome	The Honourable Anthony Roberts MP Minister for Counter Terrorism and Corrections NSW Government
Keynote Addresses	The Honourable Sarah Mitchell MLC Minister for Education and Early Childhood Learning NSW Government <i>"We must fix school inequity to have a top education system"</i> Prof Pasi Sahlberg Professor of Educational Policy Deputy Director, Gonski Institute for Education, UNSW School of Education
Closing Remarks	Catherine Fritz-Kalish
9:00pm	Close


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2019 GAP SUMMIT

BEYOND EDUCATION: LIFELONG LEARNING FOR AUSTRALIA'S FUTURE

A Vision for Australia

Global Access Partners 10th Annual Economic Summit

PROGRAMME

Day Two – Friday, 20 September 2019

Legislative Assembly Chamber
Parliament House of New South Wales

8:15am

Registration

9:00am

Welcome and Introduction

Catherine Fritz-Kalish

Co-Founder and Managing Director, GAP
Director, ICDP

9:05am

Opening Address

"How lifelong learning can help people adapt to workplace change"

Benedikte Jensen

First Assistant Secretary, Labour Market Strategy
Department of Employment, Skills, Small and Family Business
Australian Government

9:25am

Session One

"Australia's future... How can education best deliver?"

Session Chair

The Honourable Cr Philip Ruddock

Mayor, Hornsby Shire Council
President, NSW Liberal Party

"The future of higher education in a rapidly evolving skills market"

Prof Brian Schmidt AC

Vice Chancellor and President, Australian National University
Winner of the 2011 Nobel Prize in Physics



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2019 GAP SUMMIT

BEYOND EDUCATION: LIFELONG LEARNING FOR AUSTRALIA'S FUTURE

A Vision for Australia

Global Access Partners 10th Annual Economic Summit

PROGRAMME

Day Two – Friday, 20 September 2019

Legislative Assembly Chamber
Parliament House of New South Wales

"How to be the person who consciously evolves their mindset"
Dr Mells Senova
Founder, Huddle

10:15am

Discussion

11:00am

Morning Tea

11:30am

Session Two

"The future of work and lifelong learning"
Session Chair

Tanya Stolanoff

Head of Government Affairs

DXC Technology Australia and New Zealand

"Reframing 'the future of work' in order to navigate 'the evolution of work'"

Greg Miller

Executive Director, Faethm

"Fostering a culture of lifelong learning"

Tabitha Bertron

Head of Performance, Google Customer Solutions

12:05pm

Discussion



Australian Government



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2019 GAP SUMMIT

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Day Two – Friday, 20 September 2019

Strangers Function Room
Parliament House of New South Wales

12:55pm

Break

1:00pm

Lunch

Introduction

Peter Dunne

Partner, Herbert Smith Freehills

*"Helping all Australians thrive in the challenging world of
changing demand for skills"*

Craig Robertson

Chief Executive Officer
TAFE Directors Australia

2:15pm

Summary of Outcomes

Peter Dunne

2:25pm

Vote of Thanks

Catherine Fritz-Kalish

2:30pm

Close



Australian Government



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SPEAKER PROFILES

Tabitha Bertron

Head of Performance
Google Customer Solutions

Tabitha joined Google in January 2019 to lead the Australian and New Zealand mid-market business with a focus on helping customers grow and compete on the global stage. Prior to joining Google, Tabitha worked for LinkedIn for seven years based in both New York and Silicon Valley leading the North American pre-sales business, go-to-market product teams and enterprise sales teams. During this time, she held product and sales leadership positions focused on all size customers from small business to large enterprises. Simultaneously, Tabitha was one of the founding members of Unlock, an eight-week apprenticeship program geared towards people switching careers to sales. Graduates included athletes, financial analysts, retail store managers and returning to work mothers. Before LinkedIn, Tabitha gained experience in product and marketing working for American Express and Vodafone based in Sydney.

Peter Dunne

Partner
Herbert Smith Freehills

Peter is one of Australia's leading private equity lawyers, specialising in M&A and private capital raisings. Peter's private equity practice has extensive experience in debt financing, private equity fund raisings, management and leveraged buy outs, and trade sale and IPO exits. His understanding of private equity, in conjunction with public markets expertise and M&A credentials, provides significant competitive advantage to clients. Peter has worked with a number of private equity houses on the disposal of portfolio investments and has been involved in leveraged acquisition market, advising both private equity houses and leveraged financiers on the financing aspects of many landmark transactions. Peter assisted the Federal Government on its reforms to the federal tax system to facilitate start-up capital raisings and employee share schemes. He was recognised as a 'Leading Lawyer' in Australasian Legal Business Magazine's Private Equity practice area guide and ranked as one of Australia's 20 'Leading Experts' in private equity law on ExpertGuides.com. Peter has a Bachelor of Economics and Bachelor of Laws (Honours) from Monash University, and a Graduate Diploma of Applied Finance from the Securities Institute of Australia. He is admitted to practise in New South Wales and Victoria, as well as England and Wales.

Catherine Fritz-Kalish

Co-Founder & Managing Director, GAP
Director, ICDP

Catherine Fritz-Kalish is Co-Founder and Managing Director of Global Access Partners (GAP) and Director of the International Centre for Democratic Partnerships (ICDP). Over the last 20 years, GAP has grown to become a proactive and influential network which initiates high-level discussions at the cutting edge of the most pressing commercial, social and global issues. Through forums, global congresses, annual summits and government advisory boards, GAP facilitates real and lasting change for its stakeholders, partners and delegates by sharing knowledge and creating input for government policy. Over the past few years, GAP has established a number of national consultative committees and taskforces which are working to shape the face of the Australian business and policy environment. Catherine's broader business experience includes coordination of a number of international initiatives as part of the annual programme for the small and medium-sized enterprise unit of the OECD headquarters in Paris; marketing and brand management within all seven divisions of the George Weston Foods Group; and just prior to establishing GAP, working within the TCG Group of companies in the area of start-up incubator establishment. Catherine holds a Bachelor of Science degree from the University of New South Wales and a Masters of Business in International Marketing from the University of Technology, Sydney. Catherine has three children and is passionate about helping those less fortunate. She is Chair of the Board of social justice charity *Stand Up*; co-founded *Thread Together* which provides brand new clothing to disadvantaged communities across Australia; and is part of a significant giving circle which engages whole families in the act of giving to those in need.

Benedikte Jensen

First Assistant Secretary
Labour Market Strategy
Department of Employment, Skills, Small
& Family Business, Australian Government

Benedikte Jensen is First Assistant Secretary, Labour Market Strategy Division at the Department of Employment, Skills, Small and Family Business. Benedikte's division is responsible for employment policy to support disadvantaged job seekers into work, international engagement, support for retrenched workers, and labour market research and analysis. Benedikte has held senior roles in both the Australian and New Zealand public services. She was Division Head in the Commonwealth Department of Environment responsible for communications; internal audit, strategic policy, budget coordination and international engagement. Earlier she was First Assistant Secretary responsible for Climate Change Adaptation and Science and Public Affairs in the former Department of Climate Change and Energy Efficiency. Benedikte entered the Australian public service in 2010, initially as an Assistant Secretary in the Strategic Policy and Delivery Division of the Department of the Prime Minister and Cabinet. In New Zealand, she held senior roles as Deputy Secretary of the NZ Department of Labour, a Division Head in the NZ Treasury (including running the Tax Policy Division and leading welfare reform), and advised the Prime Minister Helen Clark on Financial and Economic Matters during the Global Financial Crisis. Her non-public service roles have included Research Director of the Public Policy Think Tank 'The NZ Institute', senior analyst in the Federal Reserve Bank of San Francisco, and Economic Consultant.

**Greg Miller**

Executive Director
Faethm

Greg Miller is the Co-Founder and Executive Director of Faethm responsible for global growth and partner ecosystem. His 25-year career in the IT industry has spanned Silicon Valley start-ups and Australasia multinationals. Previously Greg worked at SAP where he held the roles of Chief Operating Officer and VP and GM Global Partner Operations, ANZ. Prior to that, Greg held senior roles at Unisys, PeopleSoft, Siebel Systems and Oracle. He is a passionate believer that results are driven by highly engaged people and that the highest level of engagement is achieved when you connect those individuals with the communities in which they live and work. As such, Greg has a strong interest in Corporate Social Responsibility, having led both PeopleSoft and SAP's CSR programs. He remains a National Ambassador and advocate for The Australia Indigenous Education Foundation and The Smith Family. Greg chairs the *Young ICT Explorers'* youth STEM program and is founder of The STEM Network, a community of industry leaders joined in a public-private partnership whose purpose is to ensure young Australians have an interest in STEM careers and are equipped with the necessary STEM skills and knowledge they need to succeed.

The Hon. Sarah Mitchell MLC

Minister for Education & Early Childhood Learning, NSW Government

Since entering parliament in 2011, Sarah has served on numerous committees and as Parliamentary Secretary for Regional and Rural Health and Western NSW. In 2017, Sarah was appointed Minister for Early Childhood Education, Minister for Aboriginal Affairs and Assistant Minister for Education. In 2019, Sarah was appointed as Minister for Education and Early Childhood Learning. Sarah was born and raised in Gunnedah and has spent most of her life living in North-West New South Wales. She continues to live in Gunnedah with her husband Anthony and their daughters Annabelle and Matilda. Sarah has a Bachelor of Arts majoring in politics, international relations and sociology from the University of New South Wales. Prior to entering Parliament, Sarah worked for former Deputy Prime Minister John Anderson in Gunnedah and for the Federal Member for Parkes, Mark Coulton, in Moree. Sarah is a graduate of Gunnedah High School and is passionate about education, particularly in regional and remote parts of NSW. As Minister, she is committed to ensuring every child – no matter where they are from – has access to a top-quality education. Sarah is an active supporter of local community organisations and has been involved with a number of local charities including the Gunnedah Family and Children's Services and Gunnedah Paediatric and Maternity Support (PRAMS). Sarah's eldest daughter has just started kindergarten at a local government school, so she is personally invested in NSW's education system as a parent. Her regional background and her community mindedness have given her a thorough understanding and appreciation for the issues affecting communities right across NSW, and in particular a connection with the regional and rural people she represents.

The Hon. Anthony Roberts MP
Minister for Counter Terrorism &
Corrections, NSW Government

The Hon. Anthony Roberts MP was appointed Minister Counter Terrorism and Corrections following the 2019 NSW election. In his ministerial capacity, Mr Roberts is responsible for the Department of Corrective Services NSW (CSNSW)m, which manages offenders in prisons, on parole and performing court-ordered community service. A primary aim of CSNSW is to keep the community safe by reducing reoffending through offender programs, education and jobs training. CSNSW also works with other States, Territories and Federal bodes on countering terrorism and violent extremism through initiatives including security and intelligence, and inmate disengagement programs. Since first being elected as the Member for Lane Cove in 2003, Mr Roberts has served as the Minister of numerous portfolios, including Planning, Housing, Fair Trade, Industry, Resources, Energy, Regional Development and Skills. Mr Roberts has also served as Special Minister of State and Leader of the House. Shadow portfolios in which he has served include Emergency Services, Juvenile Justice, Citizenship, Volunteering and the Arts. Elected to Lane Cove Council in 1995, Anthony served two terms as a Councillor, including two years as Mayor. Between 1996 and 2003, Anthony served as an adviser to then Prime Minister, the Hon. John Howard OM AC. In 1994, Mr Roberts volunteered for military service, enlisting in the Australian Army Reserve and serving for nine years, retiring with the rank of Captain. Educated at Saint Ignatius' College in Riverview, Mr Roberts attended the University of Technology, Sydney, where he studied Business and served as President of the UTS Union. In 2010, he graduated with a Masters of Arts in Strategic Communications from Charles Sturt University.

Craig Robertson
Chief Executive Officer
TAFE Directors, Australia

Craig Robertson commenced as CEO of TAFE Directors Australia in April 2017. The organisation promotes nationally and internationally the critical role that TAFEs play in tertiary education in Australia. In this role he is also the Chair of the World Federation of Colleges and Polytechnics which is a global network of associations and institutions committed to high quality professional and technical education and training. Prior to joining TDA, Craig worked in the Victorian Government in 2015 and 2016, and for over 30 years in the Commonwealth Government.



The Hon. Cr Philip Ruddock
Mayor, Hornsby Shire Council
President, NSW Liberal Party

Philip Maxwell Ruddock is Mayor of Hornsby Shire and President of the NSW Liberal Party. Mr Ruddock was a Liberal Member of the House of Representatives from 1973 to 2016. First elected in a 1973 by-election, by the time of his retirement he was the last parliamentary survivor of the Whitlam and Fraser Governments. He was both the Father of the House and the Father of the Parliament from 1998 until his retirement. He is the second longest serving parliamentarian in the history of the Australian Parliament. Mr Ruddock served continuously in federal ministry and cabinet during the Howard Government, as Minister for Immigration and Multicultural Affairs from 1996 to 2003, and then Attorney-General from 2003 to 2007. He also served as Minister for Indigenous Affairs and Minister Assisting the Prime Minister for Reconciliation. In February 2016, Mr Ruddock announced his retirement from politics and was appointed Australia's Special Envoy for Human Rights. He has wide committee experience, having served on the Joint Standing Committee on Foreign Affairs, Defence and Trade; the Joint Standing Committee on Intelligence and Security; Coalition Foreign Policy and Defence Committee; and Coalition Legal and Immigration Committee. Mr Ruddock served as Chair of the Human Rights subcommittee of the Joint Standing Committee of Foreign Affairs Defence and Trade, and the Joint Standing Committee on Human Rights. He was also a Member of the Joint Committee on Corporations and Financial Services. With degrees in Arts and Law from Sydney University, Mr Ruddock practised law prior to entering parliament.

Prof Pasi Sahlberg
Professor of Educational Policy
Deputy Director - Research
Gonski Institute for Education
UNSW School Education

Pasi Sahlberg is a Professor of Education Policy and Research Director at the Gonski Institute for Education of the University of New South Wales. His working experience includes Director General at the Ministry of Education and Culture in Finland, Senior Education Specialist at the World Bank in Washington, Lead Education Specialist of the European Training Foundation in Torino, and Visiting Professor at Harvard University in Cambridge, MA. He has analysed education systems, researched school reforms, and advises Governments about education around the world. His latest book is *Let the Children Play: How more play will save our schools and help children thrive* with William Doyle (2019). He lives with his family in Sydney.

Prof Brian Schmidt AC

Vice Chancellor & President

Australian National University

Winner of the 2011 Nobel Prize in Physics

Professor Brian P. Schmidt was appointed Vice-Chancellor of The Australian National University (ANU) in January 2016. He is the University's 12th Vice-Chancellor. The Vice-Chancellor is the President and Chief Executive Officer of ANU. The Vice-Chancellor guides strategy and day-to-day leadership for the University and is also a member of the Council. Winner of the 2011 Nobel Prize in Physics, Professor Schmidt was an astrophysicist at the ANU Mount Stromlo Observatory and Research School of Astronomy and Astrophysics, before becoming Vice-Chancellor. Professor Schmidt received undergraduate degrees in Astronomy and Physics from the University of Arizona in 1989, and completed his Astronomy Master's degree (1992) and PhD (1993) from Harvard University. Under his leadership, in 1998, the High-Z Supernova Search team made the startling discovery that the expansion rate of the Universe is accelerating. Fellow of the Australian Academy of Science, The United States Academy of Science, and the Royal Society, Professor Schmidt was made a Companion of the Order of Australia in 2013.

Dr Melis Senova

Founder

Huddle

Dr Melis Senova is a recognised industry leader, a published neuroscientist, entrepreneur, author and executive mentor. She is passionate about humanity and helping people uncover their strongest foundations, so they can lead and create from this place. With a PhD in Human Factors (human-centred design), she is particularly interested in what it means to be human in this time of rapid shift. Her approach to enabling leaders through human-centric transformation is a unique combination of design, neuroscience and systems thinking. Melis is a pioneer in human-centred design, a founder of an award-winning strategic design firm, a highly regarded and enterprising thought leader, mentor and advisor to CEOs and executive leaders and, more recently, heads of state. Dr Senova is also the founder of Huddle, her consulting firm, and Huddle Academy, a school focused on building creative problem-solving capabilities for individuals and organisations. Dr Senova sits on various boards advising the Australian Government on topics relating to innovation, creativity, culture, and economic growth. Her recent book, *This Human*, was incorporated by Stanford school to form part of their 2018 curriculum.



Tanya Stoianoff

Head of Government Affairs

DXC Technology Australia & New Zealand

With almost 20 years of government relations and public affairs experience, largely gained in the online, telecommunications and financial services sectors, Tanya is the ANZ Head of Government Affairs at DXC Technology – the world's largest independent end-to-end ICT service provider culminating from the merger of CSC and Hewlett Packard Enterprise (HPE) Services. Prior to her time at HPE, Tanya was General Manager for External Relations at Veda with responsibility for government and stakeholder relations and regulatory affairs. Veda (since taken over by Equifax) was APAC's largest credit reporting bureau and data analytics company at the time. Tanya was the first Asia Pacific Director of Government Relations for PayPal - she established the function in Singapore and helped cultivate regulatory environments in various countries to open up new markets for online payments in Asia – that was after two years as Director of Government Relations at eBay Australia & New Zealand. Before that, she was Executive Director of the Mobile Carriers Forum where she played a leadership role in building community stakeholder relations, and shaping the regulatory environment enabling the rollout of 3G technology in Australia. Tanya's non-corporate experience includes managing government engagement campaigns for the Juvenile Diabetes Research Foundation where over a two-year period she was instrumental in securing \$35 million in Federal Government funds for clinical trials and \$43 million for carers of children with Type 1 diabetes. Her most recent activity in this community is her appointment as Director on the Danii Foundation Board. Tanya holds a Masters in Legal Studies (UTS), Masters in Public Policy (UNSW) and a Bachelor of Agricultural Economics (University of Sydney).

SPONSOR PROFILES



Australian Government
**Department of Employment,
Skills, Small and Family Business**

The Department of Employment, Skills, Small and Family Business is responsible for national policies and programs that support economic growth by assisting job seekers to find work, encouraging small and family businesses to grow, and maximising opportunity through access to quality skills and training.

The Department is responsible for the development and implementation of programs to improve the efficiency of the labour market and encourage employment participation. This includes managing *jobactive*, a program that connects job seekers with employers and is delivered by a network of providers in over 1,700 locations across Australia.

The Department supports the Australian Government's plan to encourage 250,000 more small and family businesses to start up over the next five years. The focus is on fostering an environment to grow confidence, increase investment and boost economic growth and employment. The Department:

- provides advice and financial support to people starting a small business through the New Enterprise Incentive Scheme (NEIS), Entrepreneurship Facilitators, Exploring Being My Own Boss Workshops and the SelfStart online hub
- supports the wellbeing of small business owners through mental health initiatives such as Everymind's 'Ahead for Business' program
- promotes digital engagement for small business through the Australian Small Business Advisory Services Digital Solutions Program and Small Business Digital Champions Project.

The Department supports the national training system to help individuals develop the skills they need for employment and to meet the needs of the Australian workforce. A key focus is improving the quality and regulation of the sector. We work collaboratively with states and territories, industry and other key stakeholders to develop and implement policy including:

- delivering measures in the Skills Package, Delivering Skills for Today and Tomorrow, announced in the 2019–20 Budget, including the National Skills Commission, National Careers Ambassador, Skills Organisations and Industry Training Hubs
- responding to recommendations in the Strengthening Skills: Expert Review of Australia's Vocational Education and Training System report
- managing the VET Student Loans Program, ensuring the quality and regulation of the sector through the Australian Industry and Skills Committee and the Australian Skills Quality Authority
- supporting participation in Australian Apprenticeships by managing the Australian Apprenticeship Support Network and apprenticeship incentives.

www.employment.gov.au

**DXC.technology**

DXC Technology is the world's leading independent, end-to-end next generation IT services company, uniquely positioned to help our clients harness the power of innovation to thrive on change.

Our mission is to lead digital transformation for our clients and deliver new beneficial outcomes for their organisation. We have the resources, global reach and scale to help clients apply the power of technology and confidently guide them toward the future.

DXC Technology's independence, global talent, expertise, and extensive partner network combine to provide greater benefit to you. Our strength comes from:

- Our **technology independence and extensive partner network**, including key strategic partnerships such as Amazon Web Services, AT&T, Dell EMC, HCL, Hitachi, HPE, HP, IBM, Lenovo, Micro Focus, Microsoft, Oracle, PwC, SAP, ServiceNow, and VMWare. Our industry-leading partner relationships work together to deliver the right solution and the right team to address complex, critical client business challenges
- A **differentiated operating model** – encompassing the building, selling and delivery of technology solutions – that enable seamless interaction with you.
- A **clear and confident vision**, forged over 60 years of delivering results for thousands of clients across all industries.

www.dxc.technology



Global Access Partners (GAP) is an independent not-for-profit institute for active policy that initiates strategic debate on the most pressing social, economic and structural issues facing Australia and the world today. It acts as a catalyst for policy implementation and new economic opportunities.

GAP promotes collaborative, multidisciplinary approaches to solving complex issues through the '*Second Track*' process. In contrast to other think tanks, it focuses on **practical outcomes** and the '*how*' and '*who*' of project delivery.

Our biggest asset is our **network** of over **4,000 Australian and international members**. More than **650 people** are engaged on various GAP projects at any one time. Over 120 partners have supported GAP's activities since its inception. These include federal and state governments, major corporates, peak industry and community bodies, universities and research institutes.

GAP runs national and international conferences, multidisciplinary taskforces and executive roundtables, coordinates community and stakeholder research projects and feasibility studies, and oversees pilot projects to trial new business ideas.

GAP's blogging site, Open Forum, is a well-established platform with an extensive community network, uniquely positioned to attract and engage target audience and informed contributions.

Established in 1997, GAP is a member of TCG Group – a diverse and growing network of Australian-owned companies founded over forty-six years ago.

www.globalaccesspartners.org



**HERBERT
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FREEHILLS**

Herbert Smith Freehills are delighted to have the opportunity to take part in this year's Global Access Partners (GAP) Annual Economic Summit on Lifelong Learning.

We are proud to participate and support GAP's vision to bring together a diverse group of individuals to provoke thoughtful discussion on topical social issues facing Australians and the wider regional community.

These discussions will impact both our clients and members of the broader HSF community. Investing in programs which shape the development of government policy provides us with the unique opportunity to be involved in the gestation of these new ideas and helps us be aware of both new commercial opportunities and risks.

As a global law firm, we are consistently recognised as a leading team in capital markets, mergers and acquisitions, dispute resolution and other key areas of commercial legal services. We are focused on ensuring commercial outcomes for our clients and delivering a premium service and exceptional client experience.

www.herbertsmithfreehills.com



Open Forum is an independent, interactive online community focused on the issues which matter to Australia's public policy debate.

Open Forum was initiated by Global Access Partners in July 2007.

Our bloggers and readers include people of all ages, from all over Australia and from all political spheres. Open Forum's network features senior business executives, government policy makers, academics, thought leaders and community advocates, as well as interested private citizens.

Open Forum is staunchly non-partisan. We believe this independence is fundamental to the success of any policy development forum. Our user-generated content allows us to explore areas which are relevant to the regulatory process, track citizen sentiment around particular issues, and use these as the basis for briefing notes and recommendations to government agencies.

Speeches, related blogs, articles and updates on the outcomes from the 2019 Summit will be highlighted on Open Forum, www.openforum.com.au/forums/education-2/

Please contact us if you would like to write a blog.

Email: editor@openforum.com.au

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www.openforum.com.au



DELEGATES

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Founder, VERGE, Papua New Guinea

Mr James Aiken

Executive Manager, Community Investment
Corporate Responsibility, Group Corporate Affairs
Commonwealth Bank of Australia

Togialelei Dr Safua Akeli Amaama

Associate Professor
Director, Centre for Samoan Studies

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Assistant Project Manager
Global Access Partners (GAP)

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Ms Preeti Bajaj

Chief Executive Officer, Clipsal Solar

Mr Stephen Bartos

Director, Pegasus Economics

Mr Alan Bennett

Independent Consultant

Mr Alexander Benze von Fritz

Consultant, Information Integrity Solutions

Ms Wiebke Benze von Fritz

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Corporate Advisor, Consultant, Lawyer

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Head of -Performance
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Vice-Chair, Internet Australia

Mr Benjamin Blackshaw

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COO & Director of Research, GAP

Ms Tina Briggs

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Founder & Chief Executive Officer
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Policy Manager, Workforce Skills
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Mr Michael Collins

Partner, Strategic Development Group

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NSW Minister for Education and
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Academic Director, Early Start
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Distinguished Professor of Accounting
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Ms Samara Hand

Indigenous Education Leader
Aurora Education Foundation

Ms Jodie Harrison

Shadow Minister for Early Education
NSW Parliament

Ms Melinda Hatton

First Assistant Secretary, Delivery and Employer
Engagement Division, Department of
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Researcher and Author

Ms Catherine Hu

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Computer Supported Learning and
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The University of Sydney

The Hon. Anthony Roberts MP

Minister for Counter Terrorism and Corrections
NSW Government

Mr Craig Robertson

Chief Executive Officer
TAFE Directors Australia

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Founder & Director
Social Impact Hub

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Strategic Engagement Manager
Wolters Kluwer Asia Pacific

The Hon. Cr Philip Ruddock

Mayor Hornsby Shire Council
President of the NSW Liberal Party

Dr Mike Rungie

Director
Global Centre for Modern Ageing

Ms Karen Russell

Early Childhood Education and Care (ECEC)
Access Strategy Manager



Dr Belinda Russon

Chief Executive Officer, Tranby National
Indigenous Adult Education & Training

Prof Pasi Sahlberg

Professor of Educational Policy
Deputy Director - Research
Gonski Institute for Education
UNSW School of Education

Mr Gary Samowitz

Former Chief Executive Officer
Stand Up

Prof Brian Schmidt AC

Vice Chancellor and President, ANU
Winner of the 2011 Nobel Prize in Physics

Dr Melis Senova

Founder, Huddle

Dr Tony Sherbon

Health Advisory Partner, EY

Ms Terri Solsky

Sydney Jewish Museum

Ms Miri Sonnabend

Director, Moriah College

Ms Helen Sousness

Chief Executive Officer, RMIT Online

Ms Erica Sparke

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Roberts, NSW Minister for Counter Terrorism
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Professor of Security & Risk
Edith Cowan University

Ms Svetlana Stankovic

Deputy Opinions Editor
The Guardian Australia

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Member for Gosford, NSW Parliament

Ms Louise Thurgood-Phillips

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Nutrano and Clearview Nominees

Mr Michael Trovato

Managing Director
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Mr Warwick Watkins

Managing Director, WW & Associates

Dr Ian Watt AC

Chair, ICDP

Ms Roulla Yiacoumi

Editor, *Information Age*
Australian Computer Society

Prof Ian Young AO

Director, ICDP
Chief Executive, Conviro Pty Ltd

Mr Christopher Zinn

Chief Executive Officer
Private Health Insurance
Intermediaries Association

REFERENCES

2019 GAP Summit Speeches, Blogs and Articles

- Open Forum Lifelong Learning Forum
<https://www.openforum.com.au/forums/education-2/>
- Welcome to the GAP summit – by Catherine Fritz-Kalish,
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