

National magazine of the Career Development Association of Australia

# Australian Career Practitioner

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Digital disruption and how to help clients secure jobs in a rapidly changing economy

Engaging young people in preparation for a changing labour market

Empowering students to explore entrepreneurship in education

Creativity and innovation in tertiary education

**CDA**  
A  
CAREER DEVELOPMENT  
ASSOCIATION OF AUSTRALIA

## INITIATIVE & DRIVE

Initiative and entrepreneurship collide when an individual demonstrates their ability to turn ideas into action. It is one thing to have a good idea, but it is quite another to make it a reality. Drive becomes essential to entrepreneurial practices as the need to maintain the motivation passes the initial stages of project development, especially as the individual faces the ongoing challenges of the journey.

## OPTIMISM

Attitude is everything in career development and studies indicate that 'entrepreneurs are more optimistic than the average person.' This optimism can positively impact the capacity to develop creative solutions and build confidence.

## RESILIENCE

When breaking new ground and developing new ideas, it is expected that challenges will arise. Resilience to maintain the vision in the face of adversity, financial strain and emotional turmoil while remaining pragmatic about the realities of success, is key to entrepreneurial skills.

## COMMUNICATION

The ability to articulate ideas, negotiate outcomes, listen to the contribution of others and to persuade and influence stakeholders to invest, purchase and support the entrepreneurial activity is vital to its success.

## PROBLEM SOLVING

Entrepreneurs develop marketable solutions to problems that many of us don't even know exist: they are ultimately, problem solvers. However, along the journey of entrepreneurship, they also encounter challenges that not only require resilience to overcome, but also a capacity to think creatively and solve developmental issues as they arise.

## RISK TOLERANCE

Risk and entrepreneurship go hand in hand. Taking calculated risks and mitigating against projected risks are central skills in the entrepreneur's toolkit. However, Peter Drucker (perhaps the most well-known theorist on entrepreneurship) makes the key point that an entrepreneur should not be *focused* on risk, but on opportunity. A capacity to undertake risk is inevitably a part of the process, but should not be the defining point.

## VISION

Joseph Schumpeter's Innovation Theory holds that the entrepreneur needs to be a 'man of vision' where his passion is as much in his action as it is in the outcome. Peter Thiel agrees, stating that an entrepreneur's vision is his/her driving force and source of inspiration.

## INNOVATION

Joseph Schumpeter states that the ultimate purpose of entrepreneurial practice is the creation of new products and processes - a position that has been echoed by countless theorists over the last century. However, while tightly entwined with the concept of entrepreneurship, it must be remembered that innovation is a separate construct.

## LEADERSHIP

Leadership is an essential part of entrepreneurship on many levels. Industry leadership, through challenging the status quo with new products, services and processes, is a central theme. However empowering, inspiring and motivating others to achieve a common goal is just as important.

## LEARNING AND SELF-REFLECTION

Lifelong learning is central to career development in the 21st century, and entrepreneurial practices particularly require individuals to be at the forefront of (if not driving) their industry standards. Self-reflection is a key element to this commitment to learning as it allows individuals to define and manage their goals, their direction and their values on an ongoing basis.

# WHAT ARE ENTREPRENEURIAL SKILLS?

What constitutes 'entrepreneurial skills' is a much debated subject, but the most commonly expected skills and attributes include:

**'ENTREPRENEURSHIP IS NOT MAGIC, IT'S NOT MYSTERIOUS; AND IT HAS NOTHING TO DO WITH GENES. IT'S A DISCIPLINE AND, LIKE ANY DISCIPLINE, IT CAN BE LEARNED'**

- PETER DRUCKER

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# From the Editor



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Entrepreneurship is a marriage of social and economic concepts and is thus significant to the very fabric of our social identity. Despite it not being a new concept, there is renewed interest in this idea of entrepreneurship in the changing career landscape of the 21st century. As such, the very social construct of an *entrepreneur* has begun to change.

No longer is entrepreneurship a lofty endeavour or a preferred label to being 'unemployed.' Neither is it limited to those willing to go all-in and venture out into business, cast adrift from regular income and luxuries such as leave entitlements and ergonomic chairs.

We are now understanding the concept of entrepreneurialism

as a deconstruction, a sum of individual parts that can be applied to employment as much as it can to self-employment.

In the changing face of the labour market, innovation and creative thinking have never been more important in the development of career plans. We are seeing the rise of portfolio careers and a ballooning of the freelance market facilitated by technology driven websites that connect people efficiently and easily. More people are undertaking multiple jobs, developing their own businesses and working part time for other companies. Entrepreneurial skills are key to our survival in the current and coming climates.

This edition will look at what entrepreneurial skills are (see the infographic on page 2) and explore the nature and impact of digital disruption on our career planning techniques as career development professionals. The articles cover high school innovation, tertiary change, and post school creative planning. This edition also features some insightful responses to highly relevant questions from two of our keynote speakers and a new infographic recently published by [mccrindle.com.au](http://mccrindle.com.au).

I hope that you enjoy this edition!

Zoë Wundenberg

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## LEADING, BUILDING, GROWING THE CAREER DEVELOPMENT PROFESSION

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CAREER DEVELOPMENT ASSOCIATION OF AUSTRALIA

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## PRESIDENT'S MESSAGE



Andrew Rimington, CDAA National President  
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Dear colleagues,

Welcome to the Winter Edition of another jam-packed ACP that features articles on entrepreneurship and innovation in a changing career landscape. I eagerly anticipate the Association's conference, which is our premier event held in Melbourne on May 26-28. The conference will expand on this theme, exploring the Inspiration of Excellence through Evolution, Innovation and Transformation with a focus on STEM skill development. I trust you have registered to attend the conference and taken advantage of the pre-conference workshops. There is much to be enjoyed and challenged by, providing stimulating reflection of career development practice.

The future of career development and the demands of the ever changing labour force are experiencing the pressures of society. Now, more than ever, people are focused on responding to the challenges and reaping the rewards of success characterised by well-paid jobs, a good car, a nice home and all the other trappings that come with it. However, we are also seeing a growing number of Australians being left behind, with limited skills and understanding of issues impacting the economy, labour market and trends in employment.

At the time of writing this as we move into mid-April, there is some uncertainty as to whether we are heading for an early election in July or a scheduled date sometime in October. Whatever the timing, the question that will be posed to all conference keynote presenters and panel participants is 'what should the next Australian Government do?'

This question could be considered in several contexts.

Firstly, members will recall that an Australian Government review in 2012, through the then Department of Education, Employment and Workplace Relations (DEEWR), led to the development and release of a National Career Development Strategy in 2013. This process was informed by input from CDAA and other career development organisations, employer and industry peak bodies, education providers, as well as State and Territory Governments. The Strategy had a strong evidence base, which included extensive market research in which DEEWR spoke to parents, young people, employers, career advisers, unemployed people, teachers and industry to ask their views about career development resources and activities.

Secondly, one of the areas of focus was to ensure that Career Development support is integrated into government programs, assisting people at education and employment transition points. In this context, both the South Australian and Victorian Governments have recently done so by requiring that professionally qualified and registered members of a career development professional body are used in the delivery of transition services to workers

assisted under the automotive industry support arrangements. In the Australian Government context, the Department of Defence, in its recent tender for Transition Services for ADF Personnel, also stipulated the same requirement for providers and contractors.

Additionally, the CDAA has been involved with the Disability Employment Taskforce, which has been reviewing the disability employment framework. The CDAA has participated in meetings and delivered presentations to the Disability Employment Taskforce with one area of focus being the consideration of how career management and individualised services can be provided to clients through contracted disability employment providers.

The third area to consider is how the original Career Development Strategy outlined the Australian Government's role to, among other things, adopt a cross-sectoral and lifelong approach to career development at the national level. This is in addition to facilitating links between career development and broader government policies of participation, productivity and social inclusion. It is however in this context there are particular areas of concern.

The Australian Government has clearly stated that the responsibility for education and hospitals is with the State and Territory Governments. The debate has been caught up in discussion around Federalism, funding, taxation and the respective levels of accountability. Unfortunately, the view has been expressed that career development is therefore not an Australian Government responsibility, but rather that of State and Territory Governments.

There are several problems with this view, and the major misconception is that career development is a 'schools' issue. It is clearly not, and as we understand, it is a 'whole of life' issue. It impacts on youth in transition, disadvantaged cohorts accessing the labour market, as well as those in work who are experiencing the impact of technological change and are subject to the vagaries of a competitive economy.

There have been many reviews in recent years covering industry policy, industry skill needs and the need to improve workforce productivity. Career development systems and processes are fundamental to achieving economic outcomes to ensure Australia is competitive in a global market.

The issue of career development is above party politics and requires a broad, cross-sectoral approach. In fact it was former Education Minister Brendan Nelson who provided the funding that led to the creation of CICA. It was also former Education Minister Julie Bishop that funded the Career Advice Australia initiative- an initiative led by industry and one which this author was engaged in through employment in the Chamber network.

Australia cannot afford to be left behind the rest of the world. The evidence clearly indicates that school education outcomes are not improving, that language literacy and numeracy deficits remain a significant problem for young people and also existing workers. Commencements in apprenticeships and traineeships continue to decline and the training system is in chaos.

The next Australian Government must focus on these issues to ensure equity of access to professional career development services that are provided across the life course.

Best wishes

Andrew Rimington  
National President

## NATIONAL OFFICE REPORT



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As we welcome the cold weather, excitement heats up for the 2016 CDAA National Conference. The three day event, focused on Science, Technology, Engineering and Mathematics (STEM), will be jam-packed with world-class keynote speakers, workshop presenters and panellists. With future shortfalls expected in these skills areas, it is vital we evolve and innovate to meet Australia's impending needs, starting now with a nation-wide discussion, which will move us in the right direction.

For those of you whom I have not spoken to, my name is Georgia Kelly-Bakker. I am the new Communications and Events Officer, taking over from Renae Sullivan. My background is in print and radio journalism, and I have recently completed a Graduate Diploma in Public Relations. In this role, I have hit the ground running, producing newsletters, media releases, updating social media and the website. My aim now is to focus our communications on increasing engagement with existing and prospective members, and increasing CDAA event attendance.

We have also introduced a new National Manager, Peter Mansfield. Peter has

held leadership positions in industry associations over the past 15 years. He is enjoying gaining insight into career development and playing a part in supporting this critical industry. He is already impressed by the passion of our members, with many volunteering their time in leadership and committee roles; this level of commitment would be the envy of many associations.

With a wealth of CDAA knowledge, former Project Officer, Michele Whall, returned to the association in January to assist with the staff transition at national office. She did a wonderful job of easing both myself and Peter into our new roles, continuing to be an asset to our small team. We have now farewelled Michele, but hope she continues to have a presence within the Association.

Our divisional committees have already hosted a successful collection of professional development events this year. The Western Australian committee attracted 74 attendees to their 2016 *Career Development Practitioner Network* event. Meanwhile, Queensland had more than 40 at their *Labour Market - Making sense of all that data* event. We thank all

of our committees; we could not provide these opportunities without your hard work. But their work has not ended, we still have a fantastic calendar of events for the remainder of 2016!

As you may be aware, we are in the process of electing new members to the National Executive Committee. The election process will conclude at the CDAA Annual General Meeting, which will be held during the National Conference. We farewell those members who are standing down from the NEC. Your work has contributed to the continued improvement of the association. Meanwhile, we welcome our new committee members and look forward to your energy and passion. Nomination results will be made available to all members in the AGM papers.

CDAA will again have a stand at this year's national conference, so please come past and meet your National Office team.

Best wishes,

Georgia Kelly-Bakker

CDAA Communications and Events Officer

on behalf of National Office staff

## CONNECT WITH CDAA ONLINE



LinkedIn provides an excellent platform for participation in current industry conversations, retaining currency in relevant publications and establishing professional networks.



### CDAA LinkedIn Group

<http://www.linkedin.com/groups/Career-Development-Association-Australia-Inc-2241956>

Scan the QR code on your phone or follow the web address above to join the CDAA community on LinkedIn.

# Non-traditional pathways to career development in a tough labour market

Nicholas Wyman, CEO, Institute of Workplace Skills and Innovation and Skilling Australia; Author, 'Job U: Find your path to a successful career in a tough job market'  @nicholas\_wyman

Australia is abundant in natural resources (iron ore, coal, diamonds, gold, oil), indeed, it is 'the lucky country.' However, while Australia has enjoyed a growing economy and relatively low unemployment for the past 20 years, a few years ago the GFC wiped out a quarter of a million jobs and caused youth unemployment to skyrocket to over 20% nationally.

The nation's leaders acknowledge that we must develop more than mineral and energy resources for our luck to continue. We must also develop our human capital.

Currently around 800,000 Australians are unemployed, many with university degrees, and that doesn't include the underemployed. At the same time, many jobs remain unfilled because there are not enough people with the practical, real-world skills that companies need. It's a phenomenon I call 'people without jobs, and jobs without people.'

While employment opportunities do exist, many university graduates lack the skills employers are looking for. The result is a middle skills gap that is hamstringing economic progress, particularly in the sciences and technology.

Here are three practical ways Australia can up-skill to meet the demands of a vibrant, innovative 21st century economy.

## 1. Raise the status of skilled education.

Many people still think that vocational and technical education leads to jobs that are menial and low-paying, with no opportunities for advancement. This couldn't be further from the truth. Today, there is a bevy of respectable, well-compensated, upwardly mobile

careers that don't require a university education. These jobs exist in progressive, fast-growth industries, such as healthcare, bio-tech and cyber security, agriculture, information technology and service industries, such as tourism and hospitality. Unfortunately, vocational study has a history of being seen as less respectable than attending university. This must change.

The skills needed to succeed have changed as rapidly as the technological advancements of the last few decades, and all signs point to this trend continuing. With a focus on real-world application and practice, vocational study builds strong transferable skills and encourages adaptability—a key asset in today's labour market.

## 2. Address youth unemployment and disengagement.

Youth unemployment today is 3-4 times the national unemployment rate. This is because there are too few high school student graduates with marketable skills. The erosion of vocational education has practically guaranteed this alarming situation. According to the National Centre for Vocational Educational Research, apprenticeships have decreased by 12.2% from 30 June 2014.

Other economically strong nations have a long-term commitment to vocational education. At the core of this commitment are apprenticeships and traineeships, which help drive low youth unemployment. Switzerland, for example, has around 3.7% unemployment of young people. Among northern and central European countries, between 40% and 70% of high-school students



Nicholas Wyman

opt for vocational education. After completing three years of combined classroom and on-the-job learning, they have a qualification that carries real weight in the labour market and a pathway to even higher levels of education and earnings.

## 3. Make sure people leave our educational institutions with real world workplace skills.

In the coming decades, the most attractive job candidates in just about every field will boast not only strong academics, but also practical, real world workplace skills. TAFE and many private training providers are great places for people to develop both. Graduates of apprenticeships and other vocational programs can command wages and salaries equal to (and sometimes better than) those of the average university graduate.

Innovative secondary schools work closely with local industry to provide career training, workplace-based learning and direct pathways to jobs. The P-TECH schools being piloted by the Federal Government in Geelong and Ballarat are good examples. At its core, the P-TECH model

is about collaboration between education, industry and community. Employers including IBM (one of the founding partners of the model in the US), Barwon Health, Bendigo Bank, GMHBA, Opteon and Tribal Campus are actively involved in the partnership. The employers, together with Federation College and Newcomb Secondary College offer an industry-supported pathway for young people to earn a qualification that works toward strengthening their employment prospects. Students in the pilot will be on a pathway to achieving a Senior Secondary Certificate, featuring technical and vocational education components. P-TECH students will then extend their studies beyond secondary school to achieve a STEM related diploma, advanced diploma or associate degree.

### **Dispelling the 'university is for everyone' myth**

There is a common misconception that traditional university is the only pathway to success. Yet successful careers are not handed out with university certificates; they are built through the acquisition of real work skills and getting what I call the 'right education, at the right time'.

My father was a university professor, and it was natural to assume that his son would earn a degree. In his eyes, university was the place for me. So too the majority of adults in my life regularly told me that university was the logical choice. But my happiest adolescent memories were not of books and classrooms; they were of cooking at my European grandmother's side, soaking up the smells of her kitchen.

My father realised that logic alone would not dissuade me. So he turned to a time-tested parental tool for getting children to change their mind: subterfuge. He arranged for me to work at the local pub, where he figured the uninspired, stodgy dishes would surely break my heart. I still remember the worn patch on the tile floor where the cook had stood for the past 20 years melting slices of cheese on dishes like chicken parmigiana. Would this be my lot in life?

A family friend convinced me to hang on to my dream, and helped me land a culinary apprenticeship at the

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There is a common misconception that traditional university is the only pathway to success.

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Regent (now the Sofitel) hotel kitchen in Melbourne - a kitchen where something as elemental as chicken stock was created with meticulous and loving care.

Then, as now, new apprentices were assigned the unglamorous chores, and I got my fair share as a rite of passage: chopping lettuce, peeling and chopping bag after bag of onions, garlic and potatoes, and cleaning up after the demanding head chefs. It was hard work, and the days were long. But I loved it because I was learning and applying new skills every day. And the experience affirmed that I had an unquenchable passion for what I was doing: cooking.

My apprenticeship was more fulfilling and rewarding than any lecture theatre experience could have been. Three years into it, I was a member of the Australian Youth Culinary Team, which competed and won gold in the 1988 Culinary Olympics in Frankfurt, Germany. I still remember the blood, sweat and tears that went into serving 115 portions of Desert Bloom, our award-winning rabbit dish—victory made all the sweeter because of our adaptability (the 30 kilograms of rabbit meat we'd brought from Australia had been held in German customs).

Fortunately, problem solving under pressure is one of the many 'soft skills' you learn as an apprentice. Combining our initiative, time-management and team-building skills, within 24 hours we had located a local source of rabbit meat, negotiated a supply of the central ingredient, prepared our dish and outscored twenty other nations.

As I refined my skills, more career opportunities presented themselves. In 1989, I was awarded a scholarship to study and work in some of the most

iconic eateries in Europe, including Gleneagles Hotel in Scotland and Claridge's Hotel in London, where I had the life-changing experience of cooking for Queen Elizabeth II, Prince Charles and Diana, the Princess of Wales, and other members of the Royal Family. These opportunities provided work experience that no traditional classroom could have imparted.

Yet my stint as a chef did not close the door to academic learning, as my parents had feared. After several years of striving to perfect the art of cookery, I was satisfied with my career but looking for more. So I went back to study and completed a Master of Business Administration at Swinburne University. At first I feared the years spent out of school would put me at a disadvantage, but in fact the self-confidence and problem-solving abilities I had developed through my apprenticeship gave me a unique perspective, and a point of difference in the classroom. I have since continued my executive education with Harvard Business School and the John F. Kennedy School of Government, and today I have the privilege of helping hundreds of young people do exactly as I did: develop respected and well-paid careers via journeys other than the traditional high school-to-university route.

### **Connecting young Australians to the skills employers actually need**

In Australia today, there is a broad range of educational opportunities and options: career- and technical-focused high schools, apprenticeships, TAFE programs, certifications and online learning platforms.

These non-traditional pathways offer practical tools and the inspiration to make work life more fulfilling and financially rewarding. No two people are the same, nor will they travel exactly the same path. We all have different learning styles, interests and talents. With skills-based career development, young Australians can pursue an individual passion while gaining the knowledge and experience to build a rewarding career.

# Empowering students to explore entrepreneurship in education

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Mary Tattersall

Contemplating career development skills and reading about future career trends has personally crystallised the concept of entrepreneurship as pivotal, not only as a behavioural skill or disposition in career development, but as a new career. The characteristics of being entrepreneurial encapsulate core skills in career development: risk taking, curiosity, ability to cope with, and embrace change (and being comfortable with uncertainty), being flexible, highly self-aware and self-confident. The development of such skills resonates with career self-management and will prepare our students for life.

Young people need to walk away from school with a résumé of skills that embraces this entrepreneurial focus, to enable them to compete in a global market. According to the Work Studies Years 9-10 unit mentioned in ACARA's publication, *The Shape of the Australian Curriculum*, entrepreneurial behaviour needs to be articulated within the school curriculum. Identifying personal entrepreneurial attributes as well as interpersonal and intercultural skills are highlighted as essential by ACARA. Critical and creative thinking skills are also mentioned which will facilitate innovation, the ability to identify problems, be resourceful and generate productive solutions. With a changing world of work and evolving skill expectations that require lifelong learning commitments, schools have a crucial role

in preparing the next generation of the Australian workforce for the changing career landscape on the horizon.

## How is the world of work changing and what does this mean for our students?

Digital disruption, globalisation and automation now and in the future mean that we need to consider how we will respond to a changing world of work in Australia. We know that future work patterns will be unique; resilience and persistence will be requisite skills to cope with such irregular and global work scenarios. Young people will need to be resilient: able to cope with change, and be armed with a skill set that encompasses communication, engagement, business acumen and confidence in developing and launching their own ideas. Digital disruption doesn't have to be feared. According to CEDA's report "Australia's Future Workforce," technology advancement will increase opportunities for people to access and work in a global market and we will see an increase in self-employed workers. As educators, it is our role to prepare our students for these changes and empower them to develop the skills that they need in order to optimistically adapt to the changing market.

Positive stories are starting to unfold in response to the changing needs of the career landscape, characterised by an emerging start up culture, where people are less afraid of failure, instead seeing it as a learning experience, while becoming increasingly comfortable with the idea that a degree does not necessarily have a specific job outcome. The Age (6 April, 2016), for example, recently reported on a holiday activity where children are actively learning business skills. The article detailed how Steve Glaveski has launched "Lemonade Stand" to enable young children to develop a business idea, launch it and test it out on a market. Furthermore, Guy Claxton has articulated a 'growth mindset' where failure is part of the cycle of learning and young people pursue learning to be better rather than perfect, with a focus on improvement

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Positive stories are starting to unfold in response to the changing needs of the career landscape...

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rather than marks. This mindset will foster resilience and this resilience will facilitate innovation as the process (i.e. 'learning to try') is valued as much as, if not more than, the outcome. The concept of a growth mindset where we, as educators, use this language empowers young people and continues to create positive stories of change not just in preparation for students beyond Year 12, but also through adapting education delivery throughout their schooling experience to celebrate process rather than focus on outcomes.

## How can educators create positive stories of change for students?

I am writing tentatively as these are relatively new ideas to be explored and to embed into our programs. My goals, as an educator, are to provide practical learning experiences which articulate and embed these characteristics for young people, to work with staff and expound the message to staff, parents and students. It is ultimately a win-win situation if we can articulate the skills of entrepreneurship in schools, teach these skills, assimilate them across the curriculum and nurture these behaviours in our students. We can achieve this within the classroom, in co-curriculum programs, through enriching pastoral programs which many schools now offer, and through partnerships with external tertiary and vocational institutions. Victoria University, for example, has launched a program for Years 10 and 11 students to participate in a Business/Social Enterprise competition. I believe all students would benefit from such

enterprising activities through truly learning collaboration and teamwork skills. Career Practitioners must work with other staff across all departments, and generate a sphere of influence to have all staff teaching skills for careers.

Projects where social justice programs engage with social enterprise to see how change can be made via economic catalysts is where real world learning lies and social enterprise can be replicated within a school environment. Many schools promote social justice, the leap to be made is to research and engage with social enterprise and understand that making a difference is possible through innovative and collaborative ideas and programs. Using social enterprise as a case study to explore how these projects are developed, and tapping into the plethora of programs that are in our communities demonstrates that we could allow our students to clearly experiment with entrepreneurial skills in a meaningful way.

The notion of 'a job for life,' even if one engages in long years of education and training is now aberrant. With digital disruption, industries will change in ways that we can only begin to fathom. Adaptability to prepare and cope with change coupled with a commitment to ongoing professional development will be key in navigating the changes that lie ahead in the labour market. It's not just about physical activity, though. I have already talked about the need for a change in mindset and now more than ever, it is evident that we need to prepare students psychologically for the changes that are already underway. Part of this psychological adaptation involves retaining optimism about the evolving market and becoming accepting of a sense of discomfort in not knowing what the future holds. The spirit of adventure embodied in entrepreneurship will mean that some individuals, with support, will keep trying and work through failure, listen to feedback, make improvements and learn. Choices may not always be perfect, they may not always be safe when one takes risks and steps into the unknown. The teaching of Positive Psychology principles certainly assists students and staff to navigate the chaos aspect of careers.

Taking risks, being curious and stepping outside one's comfort zone are skills which can be facilitated within the school's curriculum and indeed co-curriculum experiences. Students who persist with languages, who engage in exchange programs, as well as community and charity programs are more likely to develop a global awareness and embrace opportunities beyond their comfort zone. Developing

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Entrepreneurs need to have well-honed collaborative and teamwork skills and the classroom provides an ideal place for this to happen.

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empathy for others and a sensitivity to their lives and cultural experiences will be essential in the global careers of the future as we shift towards a focus on emotional quotient in desirable employability skill sets.

Entrepreneurs need to have well-honed collaborative and teamwork skills and the classroom provides an ideal place for this to happen. The concept of having a business unit built into a program where students generate ideas, go through learning about the business cycle and pitch their ideas to a panel is something we can consider in our curriculum. This teaches business acumen and introduces them to economics – vital skills for the 21st century entrepreneur. Students must understand that entrepreneurship is not just a skill for their own career development, but it can also be a profession in itself that is a realistic option.

#### **How will student career development support in schools evolve?**

Flexibility and change will be hallmarks of career development skills and lifelong learning. In pastoral programs and in classrooms we need to accentuate student's self-awareness; to know their strengths, and deficits and know that they can change (growth mindset). The use of careers inventories, aptitude tests and personality tests assist students in conversations regarding their strengths as well as providing students with an appreciation of others' differences. This is part of our careers program but also is integral to our pastoral program where mentors work with individual students on their academic goals and discuss strengths to assist students to develop strong self-awareness. Students could benefit from conducting an audit of their own entrepreneurial skills.

Students need to be self - managing, prepared to consider many options, to develop transferable skills, learn how to research information to facilitate effective decision making and set goals. This is applicable in school, comparing and contrasting tertiary courses,

being aspirational in choices and also understanding their own strengths and skills to make realistic choices. These research skills will be recursive when they change careers or upgrade skills so developing the basics in a supportive school environment builds a strong foundation for future life events. The growing value of entrepreneurship is reflected in global attitudes to innovative business design in the tertiary sector as well. In countries such as America, this concept of having 'start ups' and failures of start-ups on résumés is an acknowledged activity. It is positive to see that major universities on our own shores are embracing enterprise and innovation, such as Swinburne's new Innovation unit in their Business degree, Monash University's Business Strategy major in their Peninsula course, and RMIT's hallmark Entrepreneur degree just to mention a few, and of course Watson, the super computer at Deakin University which is pure innovation. The skills we encourage in our high school curriculum have new avenues of tertiary exploration to encourage entrepreneurship to be understood as a profession as well as a requisite skill set.

At a recent seminar by PWC on 'Creating Australia's Future Workforce,' the words of Tony Wagner resonate as the epitome of entrepreneurial skills: academics do matter, skills matter more and innovation matters most. We all need to engage with others in our faculties, in businesses and in our communities so that we can come up with big ideas and are given time to explore, engage and develop projects. I know I face challenges, but in saying that, I am excited by the prospect of making programs more dynamic and meaningful in schools for the students.

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# Career practitioners should advocate for maths in STEM education: without M, there is no S, T and E

Dr Peter McIlveen, School of Linguistics, Adult & Specialist Education, University of Southern Queensland & Dr Harsha Perera, School of Education, University of NSW e: peter.mcilveen@usq.edu.au p: +61 7 46312375

Career Development Practitioners (CDPs) should play a vitally important role in the Australian Government's 'innovation agenda' and the focus on careers in science, technology, engineering, and mathematics (STEM). CDPs' current contribution to the innovation agenda is, however, marginal and unheard. The insignificance of the contribution is not for want of interest nor trying, for it is the case that the CDPs make a very important contribution to the lives of students of all ages and education sectors. What is missing is a strategy for research and development for STEM careers, which is an irony given the R&D focus of the innovation agenda.

Here, we argue that CDPs can speak to that agenda, but only as an outcome of making a substantive contribution to solving crucial problems that cause diminished interest in STEM careers.

Much of the rhetoric of urgency in the innovation agenda echoes Australia's performance on benchmark tests of literacy and numeracy (OECD, 2016) as well as hyperbole that Australia is 'falling behind' its global competitors. However, the differences between the average of Australian students and the averages of some other industrial nations (e.g. Germany) may not be all that meaningful beyond statistical differences. Despite this, quite marked differences are present in comparison with nations that have a central role in the economy of Asia Pacific (e.g. Korea, Japan). The blame for Australian students' relatively weaker performance is sheeted home to teachers along with accusations that teachers are not sufficiently prepared to engage in the teaching of mathematics, which is the inherent language of science, technology and engineering. Indeed, without M, there is no S, T, and E.

Successive federal and state governments, on both sides of politics, have attempted to redress the numeracy (and literacy) of graduate teachers because of public disquiet and evidence that Australian students are not performing as well as students in comparator nations (OECD, 2016). Yet, teachers and teacher educators continue to resist government interference in their profession, as they should. The reality is that schools and teachers in this country are a political football, partly because the teaching profession is not autonomous of government. Consider that the author and custodian of the *Australian Professional Standards for Teachers*:

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The blame for Australians students' relatively weaker performance is sheeted home to teachers...

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the Australian Institute for Teaching and School Leadership (AITSL, 2016b), is 'funded by the Australian Government and the Minister for Education and Training is the sole member of the company' (AITSL, 2016a). That is, a single government official, no less than the Minister, owns the company.

It is, nonetheless, reassuring that AITSL has stipulated one professional standard devoted to numeracy, 'know and understand literacy and numeracy teaching strategies and their application in teaching areas.' And, that is as good as it gets. Fortunately, accreditation standards for teacher education degrees require

that pre-service teachers' numeracy levels are within the top 30% of the population (AITSL, 2015) and AITSL has led the introduction of compulsory tests of literacy and numeracy for pre-service teachers. Ostensibly, it would seem that things are going in the right direction.

Where teachers and teacher educators fail on their own merits, however, is in an apparent reluctance and resistance in some quarters to accept this regime of assessment of pre-service teachers' numeracy. Australian teachers and teacher educators are the first to opine in the media that there are insufficient public funds (i.e. taxpayers funds) invested in teacher education and teachers' professional development. There may be some truth in their assertions that Australian teachers receive less public investment than their international counterparts (Dabrowski, 2016). Ironically, it seems that their complaints of lack of public funding and demands for more only serves to bolster government control of the profession - 'he who pays the piper calls the tune.'

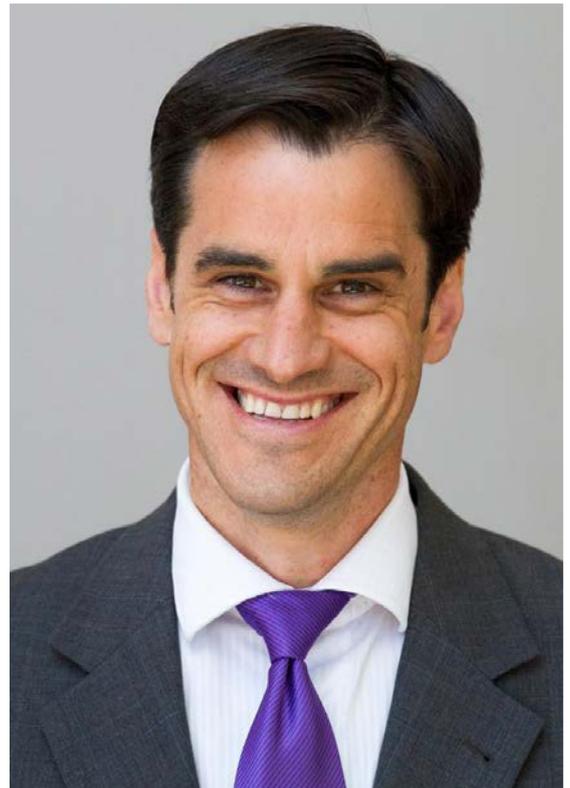
Beyond the politics and power plays of funding, implementation of professional standards, and testing pre-service teachers' numeracy, we want to know the causes of their reluctance to engage with mathematics. It is heartening that leading scholars in the field of teacher education (e.g. Dinham, 2016) are turning their attention to teachers' themselves and their attitude toward mathematics. Is it possible that a cause can be found in the psychological makeup of teachers' themselves? We think so.

Social cognitive career theory (SCCT; Lent & Brown, 2013) applies well to teachers' career satisfaction (Duffy & Lent, 2009). Self-efficacy is central

**Continued on Page 15**

# MARK MCCRINDLE

Mark is an award-winning social researcher, best-selling author, TEDx speaker and influential thought leader, and is regularly commissioned to deliver strategy and advice to the boards and executive committees of some of Australia's leading organisations. Mark's understanding of key social trends and his engaging communication style place him in high demand.



MARKET RESEARCHER AND FOUNDER - MCCRINDLE RESEARCH  [WWW.MCCRINDLE.COM.AU](http://WWW.MCCRINDLE.COM.AU)

## How do you envisage the labour market changing over the next 10 years?

There is a basic reality around job functions in developed economies with a relatively high cost of labour: everything that can be automated, will be automated, and every role that can be offshored to lower cost-base countries will be offshored. However, technology and business innovation will create new and diverse roles in areas that technology can't compete. Roles that require creative input, people-focus, leadership skills or high-level communication talent can be future-proofed as they are not effectively replaceable by technology.

## How are our social trends changing and why?

We're in the midst of one of the most transformative decades ever. When this decade began there were no iPads, social media was just emerging, smartphones and apps were just becoming mainstream. Now, Australia's population is 10% larger, a new generation (Generation Alpha) has begun, and the mobility

of where we live and the urbanisation of how we live has grown significantly- all in less than a decade. So economically, technologically, sociologically, generationally and attitudinally, there have been lots of changes. It's rare that you get the confluence of such megatrends that we're seeing at the moment.

## How do you envisage our national landscape in 20 years?

With population growth comes increasing diversity, a rich lifestyle, greater entertainment options but also rising house prices, the wait for public services, and of course traffic congestion. Our households will also look different - by 2020, for the first time in our history, the couple only household will be more common than the couple with kids household. The solo person household will move from 23% to 27% by 2020 and will be fast closing in on traditional couple and couple with kids households. By 2040, Australia will be home to 35 million people, and Sydney and Melbourne will each have populations of 7 million people.

# UNI DEGREES



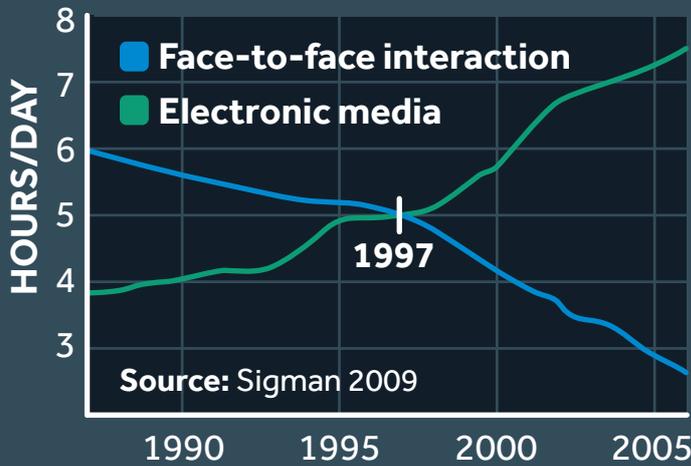
**X** 1 in 4    **Y** 1 in 3    **Z** 1 in 2\*

# MOBILITY

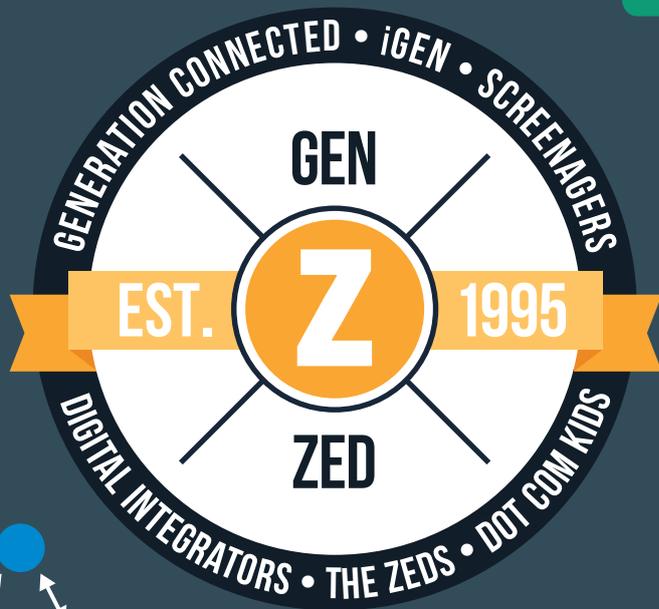


**5** CAREERS    **15** HOMES    **17** JOBS

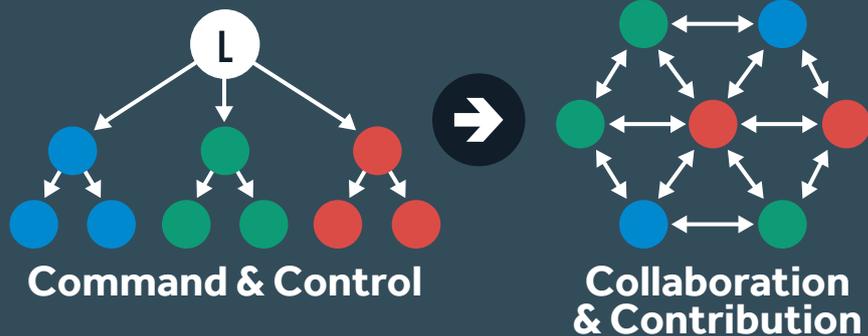
# SCREENAGERS



IN A LIFETIME\*



# LEADERSHIP STYLES



**GLOBAL**  
**2,000,000,000**  
**2 BILLION GEN Zs**

# REDEFINED LIFESTAGES



# WORKFORCE OF 2025

*Kids In Parents Pockets Eroding Retirement Saving*



Google

Google.com domain registered



Portable MP3 players

USB flash drives



Nokia 3310



Wikipedia

skype™

myspace



Facebook opens to the public

YouTube



1997

1998

1999

2000

2001

2002

2003

2004

2005

# EFFECTIVE ENGAGEMENT

Verbal  
Sit & listen  
Teacher  
Job security  
Commanding  
Lum centred  
Book exams  
Books & paper

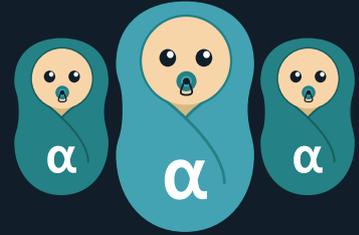


Visual  
Try & see  
Facilitator  
Flexibility  
Collaborating  
Learner centric  
Open book world  
Glass & devices



# TOP NAMES

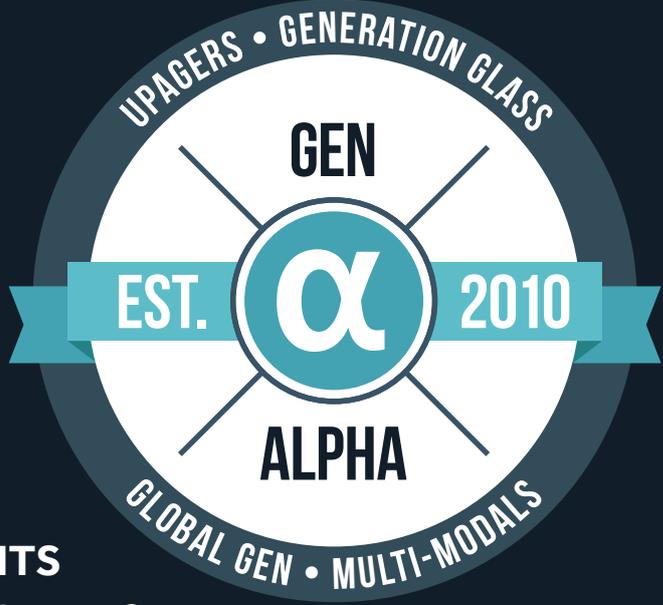
Oliver	1	Olivia
William	2	Charlotte
Jack	3	Mia
Noah	4	Ava
Jackson	5	Amelia



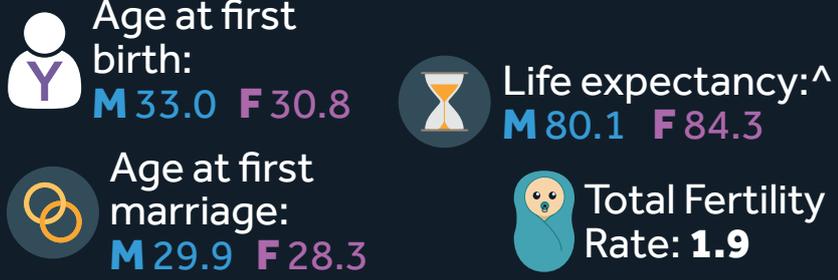
**2,500,000** Gen Alphas born globally each week

## TOP 6 POPULATIONS...

...if social media sites were countries



### GEN Y PARENTS

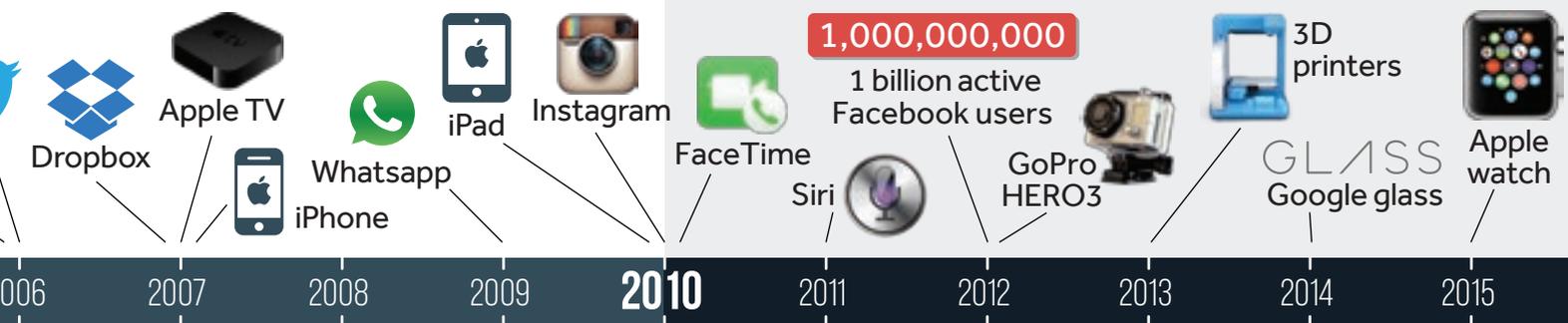


## ADULTHOOD



**MEME OF THE YEAR**  
**WORD OF THE YEAR**

Photo-bombing	Planking	Gangnam Style	The Fox	Icebucket Challenge	Blue & Black/ White & Gold
App	Cloud	Hashtag	Selfie	YOLO	Bae





## ASSOCIATE PROFESSOR JOANNE EARL

Joanne Earl is an Associate Professor in the Flinders Business School at Flinders University. She is a Registered Psychologist and a member of the Australian Psychological Society. She is passionate about making retirement a positive experience for all Australians and she regularly appears in the press and on radio talking about her research.

### ASSOCIATE PROFESSOR, FLINDERS BUSINESS SCHOOL, FLINDERS UNIVERSITY

#### **What are the greatest challenges that we face in the coming years?**

There are challenges but also great opportunities. Our research promotes a wholistic model of planning, promoting the accumulation of resources across different domains: wealth, health, social, cognitive, emotional and motivational. Some people will find this challenging. Career professionals have a lot to contribute by supporting individuals and organisations before and during retirement. Whilst financial advisers and accountants have the financial aspects of retirement covered it's not that simple. We need more people to provide retirement counselling that understand the whole person. One of the most critical things a person will do is decide how they will spend their time in retirement, how and when they transition. Big decisions about when to leave work, whether to work part-time or engage in new areas all require support. I think CDAA members are in an ideal position to assist.

#### **How does the changing world of work affect our mature workers?**

Globally, there is a push for self-sufficiency so there will be increasing emphasis on people working for longer. However, we know from ABS data that many people will leave the workforce prematurely as a result of poor physical and psychological health. Keeping

well and choosing the timing and circumstances of our own workplace exit will help to promote better retirement adjustment. Keeping healthy should be emphasised just as much as accumulating wealth. I believe we will also see more people transitioning in and out of work as their circumstances and needs change.

#### **How do we plan for retirement in such a changeable market?**

Retirement is a process and not an event so planning during retirement is just as important as planning pre-retirement. Rarely in life are our plans 'set and forget' and retirement is no different. We know from our research that planning pre and post retirement promotes better retirement adjustment. Given the government's push for self-sufficiency, and delays in when we can access our pensions, people will need to plan to maintain lifestyle. We also know from our research that planning promotes a greater sense of mastery – of feeling that you are in control of your situation – and this also leads to better retirement adjustment. Although we can't plan for everything having a plan provides us with a 'snapshot' of where we are so we can adjust if and when necessary.

to the SCCT and research shows that teachers' self-efficacy is crucial to their teaching performance, engagement and retention in the profession, as well as their students' learning outcomes (Zee & Koomen, 2016). Research also demonstrates an association between pre-service teachers' self-efficacy and anxiety about mathematics (Hoffman, 2010).

Avoidance is an all too common defence against something that produces anxiety. Parents with 'math anxiety' (Maloney & Beilock, 2012) transmit their fears onto their children who consequently learn less mathematics (Maloney, Ramirez, Gunderson, Levine, & Beilock, 2015). Could it be the case that teachers with lower self-efficacy for mathematics unwittingly avoid mathematics in their lessons as a way to manage their own anxieties? Could it be the case that teachers' anxiety and avoidance may be transmitted onto their students (Maloney & Beilock, 2012)? A single teacher could change the career trajectory of a child.

We propose that there is a pressing need to conduct research into the career development of teachers and their self-efficacy for mathematics not only for their sakes but also for the futures of their students. The SCCT is an ideal framework for such research because of its empirical track record and the centrality of self-efficacy to its tenets and hypotheses. Research that demonstrates how teachers' self-efficacy for mathematics influences the career development of their students could be used to inform teacher education degrees, professional learning programs, and professional standards. After all, it is the students who ultimately lose if a teacher who unconsciously diminishes their students' self-efficacy for mathematics curtails their awareness, aspiration, and achievements toward a STEM career.

As educators, counsellors, and leaders, CDPs are in an influential position to add a different perspective to current public debate about teachers' professional standards. CDPs have the professional legitimacy to dispassionately advocate for R&D that enhances teachers' self-efficacy for mathematics because of the

two-fold focus on teachers' career development and their students' career development. Such advocacy would be a useful contribution to the innovation agenda because it would go toward alleviating the cause of the problem.

CDPs also have a critical role in leading educational interventions and programs designed to increase interest and broaden participation in STEM careers. For instance, the Australian Government's *Restoring the focus on STEM in schools* initiative proposes to pilot the US-based 'Pathways in Technology Early College

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High School' (P-TECH) model. The P-TECH model is an education-industry collaboration that provides students with an industry-supported pathway towards attainment of a STEM-related diploma, advanced diploma, or associate degree. The model foregrounds dynamic collaboration between education and industry sectors, hands-on work-experience, and industry-based mentoring for participants. A second aspect of the government's initiative is the provision of STEM enrichment summer schools for high achieving students. Both these initiatives seek to enhance STEM-related self-efficacy, expectations and interests, which are related to STEM career participation. CDPs may be involved in (a) identifying students most likely to benefit from these initiatives, (b) pinpointing and negotiating potential industry partners, and (c) jointly developing, alongside teachers and industry-based personnel, appropriate career

development resources that aim to sustain interest and participation in STEM careers.

Along with these novel initiatives, traditional activities, such as university fairs, work experience programs, and field days, remain in the remit of CDPs. Taken together, these traditional activities and new initiatives position CDPs at the forefront of an innovation agenda that seeks to produce STEM-interested-and-literate citizens by exposing them to more authentic STEM learning experiences. CDPs can lead the way.

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# Digital disruption and how to help clients secure jobs in a rapidly changing economy

Sue Ellson, *Independent LinkedIn Specialist, Careers Adviser, Trainer, Writer, Author, Speaker, Digital Marketing Business Consultant* **e:** [sueellson@sueellson.com](mailto:sueellson@sueellson.com) **in** <https://au.linkedin.com/in/sueellson>



Sue Ellson

The rate of change in every industry appears to be accelerating every day. We are hearing about the effects of digital disruption in virtually every occupation. As CDAA members, we are encouraged to complete professional development on a regular basis. Each week, to maintain my level of professional competency for the work that I do, I attend between one and four live events, I review between 10 and 30 written articles in my niche, I attend webinars, watch videos and more – and that is just to keep up to date – I source even more information when I am writing!

As the nature of work changes, so too are the terms that are used to represent our changing lifestyle. We are hearing about the 'gig' economy where workers don't have jobs any more, they just go from gig to gig (artists, writers and musicians are well versed in this lifestyle). We are also hearing about the 'attention' economy where workers who have a personal brand secure work and those who don't miss out.

Workers who plateau in their career and do not continue to upgrade their skills, particularly their level of digital literacy, are finding that they are automatically excluded from job opportunities. I have worked with many clients who have incredible stories perfectly recorded in their heads or documented in well organised paper records at home. Their skills, knowledge and networks are often

completely hidden from the employment marketplace.

I also attend a lot of events related to entrepreneurs and startups. Artificial intelligence (AI) is changing business in significant ways. Privacy is in theory 'by design.' You can choose to opt-in (like eye tracking when you visit websites from your laptop) with the perceived benefit being a more personalised experience. However, in reality, a huge amount of your online and offline activity is being collected and tracked. Your mobile phone is essentially a mobile tracking device. If you are signed in to Gmail, Google is tracking all of your search queries and online activity.

In the past, data and information were collected on a demographic basis. Now your behaviour is being monitored as a result of the data that has been collected and that information is used for all sorts of predictive decision making. This can include workforce management: no more shonky rosters based on supervisor favourites. Now, you will only be rostered on if the demand has been predicted.

This ever increasing use of technology is scaring some of my clients to such an extent that they are often reacting to this invasion of privacy and security by reducing their online presence. Unfortunately, this creates a bigger problem because the future employer cannot verify their bona fides or worse still, even find them in a search either within an applicant tracking system where they have submitted their résumé or via LinkedIn or Google.

## So where does this leave us as career development professionals?

We need to help clients understand that most people who live in Australia can no longer control every aspect of their privacy.

I have been reliably informed that if the police have video footage of an incident and I was at the scene, they can identify my presence by matching the video footage of the incident to my driver

licence photograph.

Multiple crimes have been solved by tracking the movements of a mobile phone even if the person did not have 'share my location' application enabled. Our personal records are kept with a broad range of organisations and our electronic transactions using a credit/debit card match us to all sorts of behaviour.

Consequently, in the year 2016, we all need to accept that our personal privacy simply cannot be controlled.

What we can control is our identity and how we relate to and respond to the world around us.

We need to help our clients understand the ways that they can move forward and we have to be able to show them how we have done the same (quick reminder, as a minimum, you must have an amazing LinkedIn Profile completed for your purpose!). We can help them understand what can protect them from the biggest risks and what can help them move closer to their purpose.

## Client digital protection strategies

1) Unless essential (for government or banking records), do not use a real date of birth (I usually recommend the 1st of January of the year the person was born – it is easy to remember).

2) Help the client create a LinkedIn Profile matched to their purpose so that they can be found in a Google Search for their name.

3) Encourage the client to create a comprehensive 'Usernames and Passwords List' so that they can have different passwords for their various accounts. Invite them to print this list and put it with their important documents (Will, passport etc) so that their accounts can be closed after their death or their contacts can be notified of funeral arrangements (gruesome I know but there are now 'digital executor' jobs for closing digital profiles). This list

should not include passwords to bank accounts.

4) Make sure that they do not publish any sensitive information online at all. They may be able to publish information in an anonymous format or use percentages instead of dollar amounts.

5) Remind them to only publish information that they are happy to see in court. This includes details they add in recommendations – never ever lie or exaggerate the truth.

### Innovative digital strategies

1) Encourage individuals to register a domain name in their own name ie sueellson.com – this is a low cost investment and if they buy it today but only publish content on it five years from now, it will automatically be a five year old website. Buying it now prevents someone else buying it before they do. I have even purchased the domain names for my children. I recommend crazydomains.com.au but do NOT buy all of the other options they offer (additional names, email, hosting, promotion, security etc).

2) Create a Google Plus Profile at <http://plus.google.com> and in the Links section, add in their LinkedIn Profile URL and links to any other online profiles that they have (if you are a Professional Member of the CDAA, you can add a link to your own profile on the CDAA website) – this will make sure that these results will appear in Google before some other famous celebrity with the same name.

3) Recommend that they become a member of their Professional or Industry

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What we can control is our identity and how we relate to and respond to the world around us.

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Association and promote this in all of their content – résumé, LinkedIn, website, Google Plus profile etc. This associates the profession or industry with the person and supports the member body.

4) Show them how they can build their network both online and offline. Employability is based on skills, demand and access to referral networks – so the sooner a client understands that building a network and maintaining it is vital for their personal income generating capacity, the more likely they are to secure work. At worst, it will give them direct access to the latest developments in their industry or profession.

5) As always, encourage them with new ways to access the changing world of work. Entrepreneurs survive through strategic alliances, collaborations and a commitment to achieving their goals. They are willing to fail, take risks and recover from setbacks. American entrepreneurs are well known for wearing failure as a badge of honour, believing that unless they have failed multiple times, they are unlikely to be a success in the long run!

### Preparing for the unknown

My brother started his career in the Navy and he was told, if you can't tie knots, tie lots. I like this metaphor! We really do not know what the future holds, so rather than work out what knots we have to learn to tie right now, we could simply tie a lot of knots.

In practice, this means that we need to constantly be aware of the choices available to our clients: what quantitative and qualitative market information is available; what skills we need to acquire; what techniques are working or no longer working; what niches are being created; and how we can cope with the constant changes occurring in society.

We need to offer a non-judgmental space where our clients can safely navigate a path to their purpose. Whilst we may or may not be aware of all of the ins and outs of the client's profession or industry, we can empower them with skills that can be applied across multiple occupations, enterprises or locations.

It is also vital for us to ask our clients questions about their experiences in the market so we can help them respond to the significant changes and challenges. We need to be courageous, resilient and willing to learn, today and every day.

Disruption in 2016 is often called 'digital' but disruption has been occurring for centuries – things come and go all the time – what has changed more recently is the pace. Are you ready for the ride of your life?

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## BOOK REVIEW: How to get a job in the 21st Century

Reviewed by: Jason Brown, PCDA, La Trobe University

**Author:** Rebecca Fraser

**Publisher:** Vivid Publishing

**ISBN:** 978-1-925341-28-7

Amazon.com currently stocks over 15,000 titles on job hunting. I admire anyone who decides to write a book to compete in this market – ironically more competitive than getting a job. However, the author of 'How to get a job in the 21st Century,' is well qualified to contribute to this body of knowledge. Rebecca Fraser is a highly experienced careers practitioner well known to CDAA members as the current Victorian President. Fraser has a distinguished career receiving recognition from outside the profession via the Telstra Business Awards and within the profession as winner of the CDAA 2014 Sue Seawright Memorial Award.

The book walks the reader through the job search process, where comparisons are made between the traditional

and hidden job markets. Tips on using networks and looking for jobs online and through local newspapers generate ideas for the job seeker to broaden her or his approach.

The section on the application process explains how employers have expanded the use of e-recruitment tools to screen suitable candidates, but stops short of selection processes like video interviewing, psychometric testing, and assessment centres. The chapter that specifically looks at e-recruitment explains how particular elements like tables or images within a résumé can result in the parser tools missing important information.

Moving on to résumés, Fraser describes the standard sections to include in a résumé and the formatting rules to be followed. A few tips are thrown in to

illustrate a few different options based on the readers' circumstances. Cover letters are also allocated a few pages to explain the purpose of the cover letter and how to structure one.

The remainder of the book is a collection of résumé and cover letter exemplars and an encore chapter on interviews.

The octavo-sized book is a very easy read at just over 100 pages. It's a book that you can pick up and use as a reference when you are stuck on getting a section of your résumé or a paragraph of your cover letter humming. Whilst the book is aimed at a general audience, I think it is most suited to job seekers who have a clear idea of their career direction and have the writing skills to craft a well targeted résumé.

# Engaging young people in preparation for a changing labour market

Bev Hoffman, Executive Officer, North East Local Learning & Employment Network  
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Bev Hoffman

Imagine telling a young person you know that the current labour market has been through a “structural change” and now has an “emphasis on greater efficiency and productivity”! Huh??! What about describing how “policies [are] aiming to increase school retention rates to produce a more qualified workforce, including [the] parental perception that education credentials ... lead to a higher income and a full-time job”. Whaaaaat??? ‘I just want to get a job ... and ... I want it now!’

Aside from managing the level of required patience to move successfully from school into the workplace, parents and teachers are also called on to support young people in understanding exactly what the current and emerging labour markets need from this next generation of employees. What advice do we have for this 14 and nine month aged young person who can now head off into the workplace because, legally, they are able to work? As Eric Bittner from Café Derailleur recently suggested,

*‘Dear Eager Young Person,*

*Firstly, thanks for your enthusiasm and for stepping away from Snapchat to drop in your résumé in-person. I know how hard it can be for some Millennials to take their eyes away from their smartphone for 15 minutes. Bringing your résumé in personally is a good move. I’m busy running a café and probably wouldn’t have had time to read your Facebook message or email.’*

Ah communication, and how the subtleties of exchanging details, establishing a personal connection, not to mention eye contact, can make all the difference in this venture. In spite of this emphasis on ‘efficiency and productivity,’ we still have to be able to connect in a very human way to our fellow workers, and we do this with language. Spoken, written and body language. A thorough reading of Eric’s practical wisdom will give any eager young person the heads up on preparing for the workplace. Understanding the best approach, clothing, skills and attitude, what can be expected and how he expects you to supply all the practical things like a Tax File Number, bank account and superannuation details, make the transition to the first job just a little smoother.

So once a young person has wrapped their head around all this information, which can be all new information by the way, we need to remember that there is a first time for everything and most of the adolescent experience is ‘my first time’ centred. We’ve been there, we’ve done that but when it’s an original moment it’s hard to anticipate and plan because you don’t know what’s going to happen, let alone how you might respond to what just happened. Workplaces are strange and uncomfortable environments when your

friends aren’t there to laugh with you and reassure you that you’re an ok person. And the work might be totally fascinating, it may even be familiar because there was ‘that Work Experience week in that other workplace,’ but everything in the here and now is different.

## So how does a young person build a work ethic and identity?

Ani Wierenga’s ‘Young People Making a Life’ gives a bit of a clue. Her 12-year longitudinal research project with 32 young people, residents of a small hamlet village in Tasmania resulted in an insightful model for determining how young people see themselves as workers, community members and participants in the making of their lives. Using narratives gathered from interviews with young people 12 years of age into their twenties she’s been able to distinguish four ‘types’ of cultural orientation. The interview data showed there were ‘clear’ and ‘unclear’ stories of identity being told over the decade long conversations. When discussing work options, the young person’s focus was determined to be ‘local’ or ‘global’. The combinations of these four ideal-types produced four distinctive categories of life-making – Figure 1 below:

Sources of Ideas		Focus		
More diverse	Global	Exploring	Wandering	
More homogenous	Local	Settling	Retreating	
		Clear	Unclear	Stories of Identity
		High	Low	Trust of Social Sources
		Specific	Vague	Stories about what I’m doing

**Figure 1:** The combinations of four ideal-types and four distinctive categories of life-making

The four types have distinct characteristics when it comes to identity and employment choices.

• **Exploring:** global references, telling clear (if multiple) stories of 'past, present, future, and me'

• **Settling:** revolves around a local world, telling clear stories about identity

• **Retreating:** relates only to own location but with fragmented stories

• **Wandering:** there is an intention to go into the bigger world but explained with unclear stories

Therefore, suggesting a 'gap year' job to a young person with a 'retreating' narrative may result in a lot of time spent searching local papers for positions and wondering what job they could do and not a lot of action or connection to appropriate learning opportunities. A young person in a 'wandering' stage of life who didn't take a gap year may well end up frustrated by the lack of relevant employment that stretches their potential.

Understanding the young person's identity, focus on work opportunities, their level of trust and access to a variety of ideas and activities is key to finding just the right employee in a competitive and changing employment market. It's not enough to anticipate a young person will know themselves this well, insight from trusted family can help, previous experiences in workplaces or sporting groups may add information but as adolescence draws to a close and young adulthood looms on the horizon, the knowledge gained can slip away as the anxiety of the 'new' takes hold. The employer's capacity to 'see' and describe these patterns can add an important perspective to the developing work habits.

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... the very consciousness that you are an essential part of this online world where your job is to consume rather than create products has ramifications to those identity and work choices.

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As Eric so succinctly explains it,

*'I employ for will, not skill. If you're the right person for my café, I'll invest in your training. So while you're scaring me with your knife skills, I'm wondering:*

*Do you help out in the kitchen at home? Do you do the dishes every night without mum and dad asking (that's initiative and autonomy) and quickly (that's work rate) and properly (that's attention to detail)?*

*Do you cook regularly? (that's passion for food). Iron your clothes, shower once a day and brush your teeth (that's presentation and personal hygiene)?*

*Do you do your homework without being asked and set your alarm to get yourself off to school each day (that's motivation)?'*

Millennials have the dubious honour of having spent their entire lives as consumers, from supermarket aisles to ebay to www.boohoo.com, the idea of accessing any and all objects that satisfy real and imagined need is as natural as breathing. Ray Morgan polls show,

*'In the 12 months prior to September 2014, 38% of Australians 14+ (or 7,387,000 people) bought one or more products over the internet in an average four week period...'*

And, the very consciousness that you are an essential part of this online world where your job is to consume rather than create products has ramifications to those identity and work choices. Set a course for having the 'most toys when you die' to win, and the key to achievement is the job you get to make that an attainable goal. Without the big bucks, there can be no expensive car, no designer appliance bedecked kitchen, no furnished luxury apartment, no electronic home theatre haven or, and this one is especially hard to swallow, no partner for life and procreation.

Previous generations could see a university education as a guarantee of a higher salary and life-long employment. They heard narratives about the aunt, cousin, father or even grandfather who had followed that trajectory to its successful conclusion. Can we honestly say that is still true? When 'modern' wealth creation that meets our aspiration for a 'better life', springs from 'start-up' technologies, professional sport (if you're a man) or being an important CEO of a big mining company (oh yeah, it helps if you can inherit your father's wealth and company) how can a young person hear and know the intimacies of these success stories, let alone relate them to their everyday lives?

How do we engage young people in preparing for a changing labour market?

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... this is possibly the most important part of our preparation speech to the young people we know: set your goal then start at the bottom of the mountain you want to climb.

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By reminding them that the core skills that will support them their whole working life are based within their own lives. Know who you are – strengths and weaknesses alike, relate and communicate with all people you come into contact with, discuss your choices and if someone close to you laughs at your ideas, get a second opinion. Be creators of objects not consumers. And, and this is possibly the most important part of our preparation speech to the young people we know: set your goal then start at the bottom of the mountain you want to climb.

*'Phew, the dishwasher's finished, so pull that rack out and let's start again. And again. And again. For five hours.*

*'When do I go on the floor and serve customers?' When you learn to do the dishes quickly and quietly.'*

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# Grow Careers: a case study in innovative career development in schools

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The Grow Careers website (<http://www.growcareers.com.au>) is a theoretically derived career intervention that attends to the career development needs of students, parents/guardians, past students and staff in Australian schools. The career theories that underpin the Grow Careers website are Cognitive Information Processing career theory (CIP: Sampson, Reardon, Peterson, & Lenz, 2004) and life-span, Life-space career theory (Super, 1953, 1980, 1990). CIP is concerned with the knowledge base and information processing skills required to solve career problems and make good career decisions throughout life. CIP theorists have turned their attention to applying what is known about individuals as career problem solvers and decision makers to the design and delivery of career interventions and services (Ruff, 2010), including

## The Grow Careers website is a self-help intervention that is suitable for high readiness students

the design of needs-based websites for counselling and career services (Sampson, Carr, Panke, Arki, et al., 2003). Life-span, life-space theory deals with the processes of adapting to the work role and working conditions throughout the life course, life structure, the social context of career development and implementing self-concept in work and other life roles (Hartung, 2013; Super, Savickas & Super, 1996).

### Structure of the Grow Careers Website

Sampson et al. (2003) distinguish

between resource-based websites and needs-based websites. Resource-based websites are organized on the basis of content (e.g., career assessment tools, occupational information, tertiary education courses, etc.) and may include lists of resources and external links. Users see and can access all the resources and links that are listed, regardless of whether they target their needs. Needs-based websites on the other hand, present users only with information, resources and external links that match their career development needs. Some websites may combine resource-based and needs-based design principles. Resource-based websites are less time consuming than needs-based websites to develop. However, to the extent that there is a large list of resources and external links, they run the risk of being overwhelming for users. Further, resource-based websites assume that users can readily identify the appropriate resources to meet their needs. In a school community this may not be the case, particularly for middle years students in the Growth stage or early Exploration stage of career development who may not be aware of all of the information and resources they need to make informed learning and career choices. Needs-based websites are less likely to be overwhelming as the full range of information, resources and links are spread across all user groups in accordance with their career development needs. Initial development of needs-based websites, however, may be more complex. The Grow Careers website is primarily a needs-based website, although the links to web pages of course providers and resources for career exploration suggest that some pages combine a needs-based and resource-based approach.

Recognising that individuals differ in their readiness for career problem



Dr Catherine Hughes

solving and decision making, CIP endorses a differentiated service delivery model where students are allocated to self-help, brief-staff assisted or individual case-managed levels of career service delivery on the basis of readiness screening. Individual case-managed career service delivery is for those who are low in readiness. The brief staff-assisted level of career service delivery involves a practitioner supporting students or clients in a group setting such as a workshop or career education class. This level of career service is most suitable for those with a moderate readiness. The self-help level of service provides minimal or no career practitioner input. Students and clients independently use career resources, but are able to seek the support of a career practitioner if needed. The Grow Careers website is a self-help intervention that is suitable for high readiness students allocated to the self-help career service delivery level.

Although self-help services are considered appropriate for high readiness students or clients, a needs-based self-help resource such as the Grow Careers website may produce positive career development outcomes for students and clients with moderate or even low readiness.

This is particularly the case when use of the website forms part of a suite of career interventions and when the students and clients can access career practitioner support if needed. For example, Doe, Das and Chen (2014) trialled an e-newsletter delivered to students enrolled in programs delivered by the School of Business at an Australian university. The e-newsletter content was relevant to the courses students were studying, their stage within the course, and their stage within the recruitment cycle. Many of the students also accessed other services and resources provided by the university's Careers and Employment Service. Self-reported confidence in understanding job search strategies and recruitment processes was significantly higher at post-test.

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These processes require individuals to engage in exploratory activities...

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### **Content of the Grow Careers website**

The content of the Grow Careers website is intended to meet the career development needs of each of the intended user groups. Sampson et al. (2003, p. 7) define needs as "... the gap between what individuals know and what is necessary for them to know to solve a problem". Sampson et al. (2003) describe three levels for planning needs-based website content. Level 1 involves identifying the user groups. As mentioned previously, the Grow Careers website has defined the school community to consist of students, parents/guardians, past students and members of school staff. Level 2 involves identifying the needs of each of these user groups and Level 3 involves identifying resources and external links that satisfy the needs of each user group.

As a website for the whole school community, life-span, life-space career theory is applied cross-sectionally in the context of Australian schools. For the purposes of the Grow Careers website, the needs of each of the user groups were identified with reference

to the vocational development tasks associated with the relevant stages of career development. A brief description of the vocational development tasks (Super, 1990; Hartung, 2013) associated with each career stage follows.

### **Vocational Development Tasks**

#### *Growth Stage:*

The vocational development tasks for children and for adults revisiting the *Growth Stage* at times of transition include developing a future orientation, decision-making capacities, competent work habits and attitudes and a conviction to achieve.

#### *Exploration Stage:*

The vocational development tasks of the *Exploration Stage* for adolescents, emerging adults and older adults experiencing career transition include crystallising a clear and stable vocational self-concept, specifying related vocational and educational options and implementing an initial occupation. These processes require individuals to engage in exploratory activities to develop knowledge of self, knowledge of options, knowledge of the contemporary world of work, career decision-making skills and processes for implementing career and course choices.

#### *Establishment Stage:*

The vocational development tasks of the *Establishment Stage* of career development for young-middle aged adults and adults revisiting the *Establishment Stage* include implementing vocational self-concept by obtaining and settling into an occupational role (stabilizing), consolidating through sustained productive work activity and effectiveness, and advancement for some workers. Other workers may take on more diverse work roles such as being part of committees or project teams. For some the work role may be peripheral and other life roles may be central. In this time of change and uncertainty, many individuals are likely to recycle through the *Establishment Stage*.

#### *Management Stage:*

The vocational development tasks of the *Management Stage* include consideration of renewal (e.g. mid-career change) or alternatively staying in a current role. Staying in a current role requires holding on to that role by meeting new challenges and negotiating changing technologies. Some workers update by renewing their skills to enhance work

performance. Others may innovate and discover new challenges. Savickas (2002) summarized these vocational development tasks as doing tasks (i.e., holding on), doing tasks differently (i.e., updating) and doing different tasks (i.e., innovating). In today's uncertain changing world of work, not all workers deal with the *Management Stage* vocational development tasks. Indeed, Savickas (2002) questioned the usefulness of this career stage in the contemporary world of work. He stated that the *Management Stage* may be relevant in bureaucratic organisations. Many schools and school sectors are bureaucratic organisations and long-term employees may deal with one or more of the vocational development tasks of this career stage.

#### *Disengagement Stage:*

This stage is concerned with transitioning to retirement and eventually implementing self-concept in life roles other than work. The vocational development tasks of this career stage include decelerating, i.e. reducing workloads, for example by working part-time, retirement planning and retirement living. Rather than separate from the work role, many workers may recycle through exploration and establishment and engage in alternative work.

Table 1 (on page 22) describes how the Grow Careers website presently addresses the career development needs/vocational development tasks of each of the intended user groups. The nature of the information, advice and external links is listed by user group and career stage. Although parents and guardians have their own adult career development needs, an assumption has been made that parents/guardians would mainly visit the Grow Careers website to support the career development of their children. Accordingly, adult career development needs of parents and guardians have not been covered.

On the website each of the career development needs are captured in the menu items for the relevant user group. For students in the middle years and secondary years, the menu items are expressed in terms of the typical career questions that students ask when they approach a Career Practitioner.

**Table 1**

Relationship Between Grow Careers Website and Vocational Development Tasks

User Group	Career Stage and Application on Grow Careers Website				
	Growth	Exploration	Establishment	Management	Disengagement
Middle Years	Information and links: <ul style="list-style-type: none"> <li>• Importance of planning</li> <li>• Decisions students make that influence future options.</li> <li>• Putting effort into school subjects.</li> <li>• Support people for making decisions about subjects and careers.</li> </ul>	Information and links: <ul style="list-style-type: none"> <li>• Advantages of co-curricular and extra-curricular activities.</li> <li>• School subject advice.</li> <li>• Identifying career options that match interests and subjective perspectives.</li> <li>• Resources for career exploration.</li> <li>• Getting a part-time job.</li> </ul>	N/A	N/A	N/A
Secondary Years		Information and links: <ul style="list-style-type: none"> <li>• Advantages of co-curricular and extra-curricular activities.</li> <li>• School subject advice.</li> <li>• Support people for making decisions about subjects and careers.</li> <li>• Career options and interests.</li> <li>• Resources for career and course exploration.</li> <li>• Post-school options and exploratory resources.</li> <li>• Getting a job.</li> <li>• Career decision-making model.</li> <li>• Applying for courses.</li> </ul>	N/A	N/A	N/A
Parents/Guardians	<ul style="list-style-type: none"> <li>• How parents can promote teen career development.</li> <li>• Links to resources and information.</li> </ul>		N/A	N/A	N/A
Past Students		Dealing with or recycling through Exploration: <ul style="list-style-type: none"> <li>• Career decision-making model.</li> <li>• Resources to clarify self and options knowledge.</li> <li>• Resources for exploring career and course options.</li> </ul>	Dealing with or recycling through Establishment: <ul style="list-style-type: none"> <li>• Job search skills, job application documentation, personal brand.</li> <li>• Job interview skills.</li> </ul>	Dealing with or recycling through Management: <ul style="list-style-type: none"> <li>• Sources of course information and MOOCs.</li> </ul>	
School Staff		Recycling through exploration: <ul style="list-style-type: none"> <li>• Career decision-making model.</li> <li>• Resources and information on changing career direction.</li> <li>• Resources for exploring career and course options.</li> </ul>	Dealing with or recycling through Establishment: <ul style="list-style-type: none"> <li>• Job application documentation, personal brand.</li> <li>• Jobs vacancy websites.</li> </ul>	Dealing with or recycling through Management: <ul style="list-style-type: none"> <li>• Sources of course information and MOOCs.</li> </ul>	‘Seniorpreneurship’ Australian Business website.

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# Creativity and innovation in tertiary education

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Australia faces some tough policy decisions to reshape its economy and prepare for an uncertain future, with predictions that up to five million jobs are likely to be automated by 2030. These changes will not arrive overnight but they are underway and over the next 20 years we are likely to see significant changes in industries that are currently considered safe.

We know that jobs in manufacturing, agriculture and mining have changed in recent years, but sectors that have been relatively immune to technological disruption until more recently are also coming under pressure. Higher education is one of the sectors that is responding to technology and automation.

In higher education, not much changed since students first gathered in Oxford and Bologna in the 11th century until recently. Students needed to be in a lecture hall to hear the professor or around a table to debate with fellow students. However, technology, innovation and automation has been eliminating those constraints and bringing sweeping change to higher education.

Like many industries, tertiary education is adapting and the system we have now strongly encourages innovation and promotes diversity in the ways that universities deliver for their students. This shift is commonly referred to as online education and with it comes opportunity for institutions and students.

To truly understand the nature of the shift in higher education, it is worth taking a moment to understand all that is captured under the banner of online learning. Wikipedia, a user-generated online encyclopedia, contains wonderfully detailed explanations. YouTube offers instruction on how to boil an egg as well as lectures on astrology. Massive Online Open Courses (MOOCs) have brought courses from the most prestigious universities to the laptops of the world.

Course materials and video lectures are published on the internet and

students interact with each other and submit assignments by e-mail, Skype and Facebook. Students can learn largely online, skipping lectures and reporting only for the final exam, unless the teaching is inspiring and engaging enough to encourage the trek to campus.

As this mobility of higher education students has increased, so has the range of learning experiences that students are offered. The positive effects on University practices have included a greater focus on high teaching quality and on providing an engaging and rewarding student experience no matter the mode of delivery. A positive effect of this innovation is that access to higher education has been increased to people who previously would have had difficulty in accessing campus-based learning.

In Swinburne's case, it allowed the development of a whole new model for educational delivery – Swinburne Online. Enrolment growth in online education is being driven by the non-traditional student population who are typically working professionals. Swinburne Online has a unique online 'campus' delivering high quality degrees with specialised pedagogies designed to take advantage of new technologies in online learning, backed by an active support structure that personalises the digital learning journey in a unique and meaningful way.

Swinburne Online students are predominantly working professionals with almost one quarter from regional, rural and remote areas.

Beyond evolving our own model, higher education has a part to play by giving people more than just professional and vocational skills. It must foster the thinking skills for the future that will be in demand.

We have always needed people who can focus their attention on a problem and arrive at creative solutions, and who are not bound by orthodox thinking. We will continue to need them in an increasingly automated world.

Creativity and innovation are not just clichés of the modern age. It is the kind of thinking that learns from history, but is not bound by it. This is the essence of the kind of thinking that drives innovation: proactively looking ahead and positioning ourselves for when the future arrives, not waiting for it to arrive and being caught flat-footed.

Not everyone will necessarily embrace change with the same enthusiasm, and this variation in readiness for the change is understandable. This can be seen as a good thing – we require some sceptics, a few cautious adapters and others who will enthusiastically take greater risks and test new directions. Universities must develop graduates who are attentive to emerging trends and opportunities, and are capable of leading and managing change.

Technology and automation require all organisations to respond in their own context. However, there are some common organisational actions that these imperatives demand:

- Commitment of time and resources to leadership training at all levels of the organisation
- A culture that encourages coaching and mentorship of others to optimise talent
- Leadership support spaces that allow collaborative problem solving

We must understand that technology is an essential part of our future and that change will endure. These challenges are not confined to Australia, but face every developed economy. It is how we adapt to this technological change that will determine our future economic prosperity.

Australia is a resilient nation. Its people are resourceful and imaginative and by embracing technological advances, including automation, there are few problems that cannot be met and overcome.

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