



28th National Vocational Education and Training Research Conference

CONFERENCE GUIDE

PROGRAM AND ABSTRACT BOOKLET

PRESENTED BY



SUPPORTED BY



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

Thank you to the following organisations for contributing to the *28th National Vocational Education and Training Research Conference 'No Frills'*.

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WELCOME



On behalf of NCVER and our co-host TAFE SA, welcome to the 28th National Vocational Education and Training Research Conference 'No Frills'.

This is only the second time in 28 years this annual national conference has been hosted in NCVER's home base of Adelaide and we warmly welcome our delegates both to the conference and to our fine city.

The student journey: skilling for life is the theme for this year's event, where we will explore VET's role in lifelong learning now and into the future. We will also seek to understand how VET needs to transform in the future so it can confront the challenges of an increasingly complex and changing world.

Over the next two days, we are offering over 40 presentations covering topics as varied as life skills, supporting students, young people, skills and jobs, access and equity, apprentices and trainees, training and assessment, and employability skills.

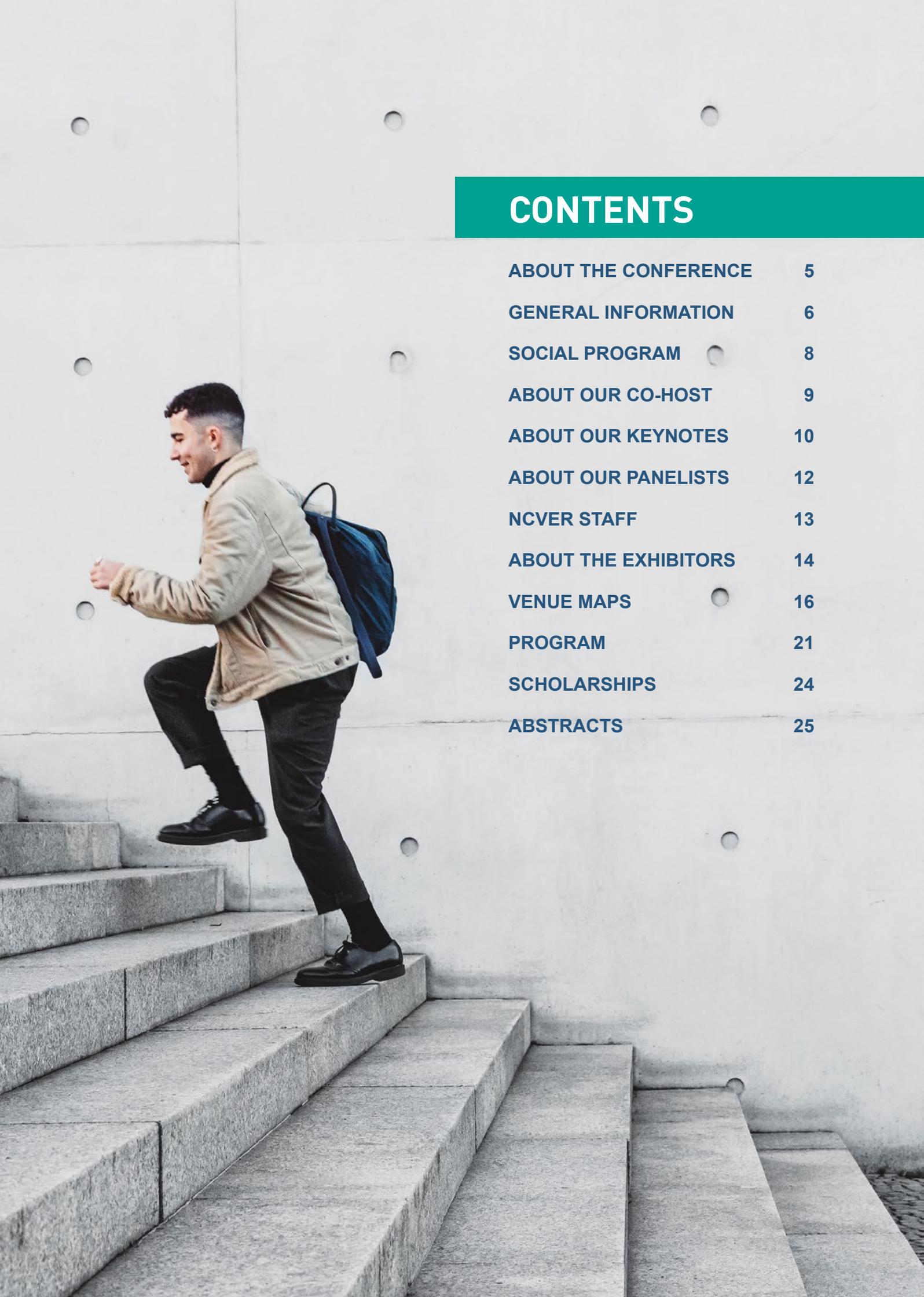
This conference is a key part of NCVER's commitment to engage the VET community in research and to build research capacity and capability across the sector.

Importantly, it is *your* conference. We encourage you to take the opportunity to connect and share knowledge with this outstanding group of VET researchers and professionals.

Finally, I would also like to take the opportunity to warmly thank our event sponsors for their valuable contribution.

We hope you enjoy your time in Adelaide.

Simon Walker
Managing Director
National Centre for Vocational Education Research



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ABOUT THE CONFERENCE

The 28th National Vocational Education and Training Research Conference 'No Frills' is being co-hosted with TAFE SA in Adelaide on 10-12 July 2019.

'No Frills' is a well-known annual national conference where researchers, practitioners, providers, government and industry representatives come together and share knowledge, ideas, insights and solutions surrounding Australia's VET sector.

The conference also provides valuable professional development opportunities through a program of hands-on, interactive pre-conference workshops incorporating activities on data and research analytics, and research practice.

The 2019 conference program will focus on **The student journey: skilling for life**.

As explored at past 'No Frills' conferences, the world of work is changing, driven by rapid technological evolution in an increasingly global society. It's almost certain that the skills we develop today won't be enough to operate or compete effectively in the workplaces of tomorrow.

Will it be enough for our future workers to earn a single qualification or learn only a few different skills? Where do employability skills fit into the mix?

While every student's journey is different, more and more research and discussion points to how workers must become lifelong learners to enable them to grow and evolve with their jobs. VET plays a critical role in making this happen.

For presenters

Presentations will be uploaded and saved under (surname, first name) on laptops in allocated rooms, under **NCVER 2019 'No Frills' Conference**. We ask that speakers check their presentation and audio-visual material before presenting. If you have any concerns, please speak with Stephen Tormet or June Ingham (NCVER staff members) at the registration desk during the break preceding your presentation or at the beginning of each day.

Stay connected

Follow us on twitter: @NCVER

Twitter: Delegates are encouraged to tweet during the conference using the hashtag: **#NoFrills2019**

Please note our PR & Social Media Officer (Helen Wildash) will be taking photos and tweeting during presentations.



#NoFrills2019

GENERAL INFORMATION

✓ Registration desk

The registration desk will be located on Level G – Street Level in the Atrium at TAFE SA Adelaide campus, 120 Currie Street, Adelaide.

Opening times each day are:

Wednesday 10 July – 10:30am

Thursday 11 July – 8:00am

Friday 12 July – 8:30am



Pre-conference workshops

Professional development workshops will run concurrently on Wednesday 10 July. The workshops start at 11:00am and will be hosted at TAFE SA Adelaide campus. Delegates who have pre-paid for the workshops will have their allocated workshop details on the back of their name badge.



Mobile conference app proudly sponsored by Cengage

This year we're bringing back the mobile conference app. Packed with features such as timetables, session reminders, maps, networking functions and more, the app will be your essential conference partner.

The app is available on iPhone and Android or via the web link. Enter the follow link while on your smartphone to download and install: <https://crowd.cc/s/2G780>

Or scan this QR code:



Drop-in data hub

Again this year, delegates interested in accessing data can speak to an NCVER data expert, one-on-one. This personalised service will provide delegates with data information from a basic introduction to VOCSTATS, to constructing tables for specific data, or exploring NCVER's range of data products and tools, we'll be happy to point you in the right direction.

We will also have a knowledgeable NCVER staff member on hand to help you navigate NCVER's free international research database, VOCEDplus, which contain over 80,000 Australian and international tertiary education research and statistical publications.

Time slots for these 'drop-in' sessions can be booked at the registration desk.



Delegate identification and security

All delegates will be given a name badge at registration. For security reasons, we ask that you wear your name badge at all times, which identifies you as a conference delegate. This name badge is also the official entrance pass to all conference sessions, morning and afternoon teas, lunches, the welcome reception and conference dinner including buses (if pre-paid).



NCVER team

The NCVER team is here to make your conference time rewarding and educational. If you have any questions, please go to the conference registration desk. See page 13 for pics of the NCVER team!



GENERAL INFORMATION



Internet access

Wi-Fi will be available during the conference with details provided at the registration desk and on the event app.



Mobile phones

As a matter of courtesy, please turn off or silence your mobile phone during all sessions.



Climate

Temperatures in Adelaide will be around 16°C, going down to 9°C at night.

We strongly recommend you bring warm (layered) clothing due to the short walk between venues. A cloak room will be available to store jackets/coats while sessions are running. (Please see maps - Room C.G03)



Dress

Delegates may choose to wear comfortable smart casual clothing during the conference and social events.



Student massages

Students from Evolve College will be on hand Friday to provide attendees with free relaxing shoulder massages.



Parking

Due to the proximity of the conference venue to the Adelaide CBD, no free parking is available at the TAFE SA Adelaide campus. Paid council street parking is available by meter and there is a council car park located below the campus, as well as many other multi-level car parks nearby, subject to availability. Further information can be found on the [Parkopedia](#) website. Car parking will be available at both the Tonsley and Regency Park sites for those wanting to drive to the Welcome Reception and/or Conference Dinner.



Taxi

Suburban taxis: 13 10 08 or book online through the conference app (Uber also available through the app).

13Cabs: 13 22 27



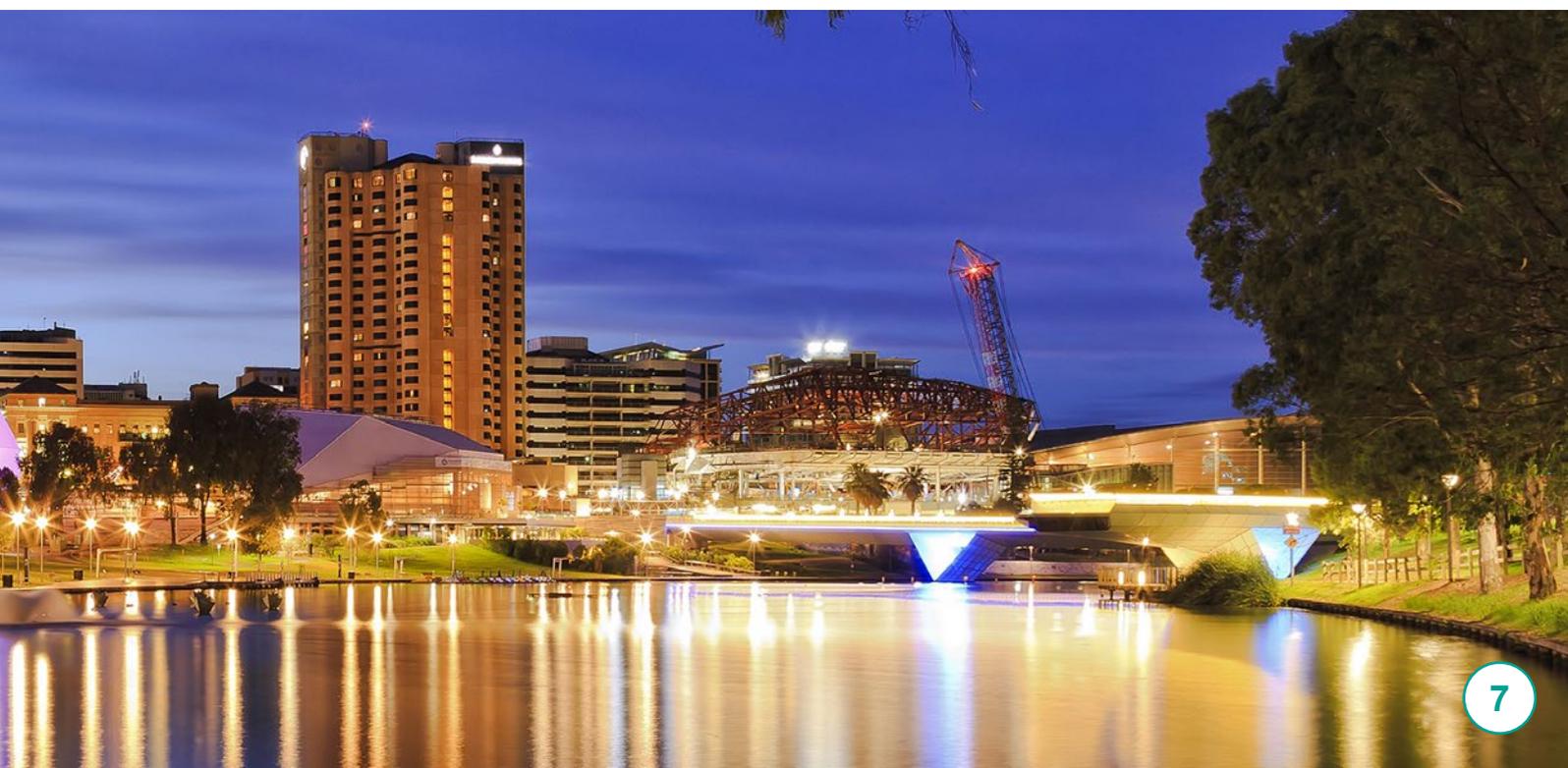
Conference evaluation

We would appreciate your feedback. A survey evaluation will be emailed to you after the conference.



Post-conference

Following the conference, papers will be available from VOCEDplus <[voced.edu](#)>, the tertiary education research database produced by NCVET. An email notification will be sent to conference delegates once all papers are uploaded.



SOCIAL PROGRAM

Welcome reception

Delegates are invited to attend the Welcome Reception on Wednesday 10 July between 5:15-6:45pm at TAFE SA Tonsley campus, 1284 South Road, Clovelly Park. This provides a great opportunity for you to meet and network with other delegates. Drinks, canapes and light entertainment will be provided.

The impressive TAFE SA building, part of the Tonsley Innovation District which brings together leading-edge research and education institutions, has been designed to be a learning tool in itself. All of the building's services – electrical, plumbing, communication, air-conditioning, gas, waste systems – are exposed, so students get an insight into how the building works. Within this structure, the Tonsley campus is host to a suite of specialist facilities.

Attendance at the Welcome Reception is included in your conference registration fee. If you indicated you would not be attending during the registration process and now wish to attend, you must inform the conference organisers as soon as possible.

The welcome reception is proudly sponsored by the National Wine Centre of Australia

Conference dinner

The dinner will be held in the Graduates Restaurant at TAFE SA Regency campus, 137 Days Road, Regency Park on Thursday 12 July at 6.30pm. Delegates will be treated to a delicious three-course dinner prepared by students under the supervision of their teacher. The dinner provides the perfect opportunity to network with colleagues in a relaxed and informal setting.

We are thrilled to have Glenn Cooper AM, Chairman and Ambassador for Coopers Brewery as our guest speaker. After starting his working life as an automotive electrician, Glenn joined the well-known family brewery in 1990 as Sales and Marketing Director, where he oversaw the launch of numerous popular Coopers products. An entertaining speaker, Glenn is currently Chairman of Australian Made Australian Grown, and former Chairman of the Adelaide Fringe and the Adelaide Convention and Tourism Authority.

The conference dinner is available to delegates who booked and paid for the dinner with their conference registration. The **green** dot on your name tag denotes your registration for the dinner.

The dinner has free seating although some tables will be reserved for our co-host, sponsors and special guests.

Dress is smart casual.



ABOUT OUR CO-HOST



TAFE SA is South Australia's largest vocational education and training (VET) provider and one of the largest in Australia. It is also a registered higher education provider. With more than 70,000 student enrolments each year, and delivering training at over 300 locations right across South Australia, TAFE SA has courses covering more than 80 areas of industry and activity, with flexible delivery options that suit the needs of its students.

TAFE SA continues to demonstrate its significant contribution to building a skilled, sustainable workforce for the state of South Australia. The organisation is responsive to the needs of employers, working with industry groups to deliver relevant, high quality training that aligns with contemporary career opportunities.



ABOUT OUR KEYNOTES



Senator the Hon Michaelia Cash

Senator Cash is a Cabinet Minister in the Morrison Government. Senator Cash was elected to the Senate as a Liberal Senator for Western Australia in 2007. She commenced her term on 1 July 2008. She was re-elected as a Senator for Western Australia in 2013 and 2016.

On 29 May 2019 Senator Cash was appointed the Minister for Employment, Skills, Small and Family Business in the Morrison Cabinet. Since entering public life Senator Cash has held a number of Ministerial appointments. Senator Cash was appointed to the Cabinet as the Minister for Employment; the Minister for Women and the Minister Assisting the Prime Minister for the Public Service on 21 September 2015. On 20 December 2017 Senator Cash was appointed the Minister for Jobs and Innovation.

On 28 August 2018 Senator Cash was appointed the Minister for Small and Family Business, Skills and Vocational Education in the Morrison Cabinet. From 18 September 2013 to 21 September 2015 Senator Cash was the Assistant Minister for Immigration and Border Protection and the Minister Assisting the Prime Minister for the Status of Women. In September 2012 she was appointed Deputy Manager of Opposition Business in the Senate. In September 2010 she was appointed to the dual roles of the Shadow Parliamentary Secretary for Immigration and Shadow Parliamentary Secretary for the Status of Women.

Prior to entering Parliament, Senator Cash was a senior lawyer at law firm Freehills (now Herbert Smith Freehills) practicing employment and industrial law. Senator Cash holds an Honours Degree in Law from the University of London and a Bachelor of Arts (Social Science) from Curtin University in Perth, graduating with a triple major in public relations, politics and journalism. In addition, she holds a Graduate Diploma in Legal Practice from the University of Western Australia.



The Hon David Pisoni MP

David Pisoni was elected to the South Australian Parliament as the Member for Unley in 2006.

Appointed as a Minister in the Marshall Government in March 2018 he currently has responsibilities for the Innovation and Skills portfolio. Prior to being sworn in as Minister, David was the Shadow Minister for Planning, Transport and Infrastructure and Education.

David was born and educated in South Australia, attended Salisbury High School and completed a Furnishing trades apprenticeship at TAFE.

David became the Managing Director of his own manufacturing and retail company in Adelaide and Sydney and over 22 years was responsible for training 20 apprentices.

Spanning more than 30 years, David has played an active role in his local community of Unley and has been a passionate advocate for many organisations, charities and businesses.

ABOUT OUR KEYNOTES



Dr Fiona Kerr

Dr Fiona Kerr is a prominent thought leader who consults globally in the fields of cognitive neuroscience, complex systems dynamics, human connectivity and the impacts of technologisation. She is the founder of The NeuroTech Institute, an independent, multi-disciplinary body working at the intersection of neuroscience, emerging technology and ethical practice.

Her qualifications include cognitive neuroscience, complex systems engineering, psychology and anthropology, with more than thirty five years of industry experience. Fiona advises organisations ranging from Defence and Cirque du Soleil to Finland's AI steering committee. She is an adjunct at Adelaide University, a Research Fellow at SAHMRI and an international speaker.



Ms Gabrielle Kelly

Ms Gabrielle Kelly is recognised as a global leader in the implementation of a life-course approach to human development and building wellbeing at scale, within an evidence-based framework. She is invited to speak globally about the practical application of wellbeing at scale and the ever-expanding body of research knowledge. She has been appointed by the UAE World Government Summit to the Global Wellbeing Cross-Cutting Council on Sustainable

Development Goals (SDGs), a group of interdisciplinary decision makers from governments, international organisations, academia, and the private sector to advance the creative implementation of the 17 SDGs at national and global levels through wellbeing policy, measurement, science, practice, and initiatives.

The interdisciplinary commitment of the Wellbeing and Resilience Centre is a product of Ms Kelly's broad global engagement as a thought leader, film-maker and digital media executive as well as the vision she brought to the Centre. She led the innovative Adelaide Thinkers in Residence Program (2009-14) driving significant and sustained political and social change in advanced manufacturing, early childhood education, city design, ageing and wellbeing. The integration of global best practice within a collaboration of influential public and private sector local leaders, to achieve rapid implementation of new policy ideas, was the hallmark of the program under her leadership.

Ms Kelly is the Founding Director of the Wellbeing and Resilience Centre at SAHMRI and is on the board of the Australian National Development Index organisation.



Mr Glenn Cooper AM

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An entertaining speaker, Glenn is currently Chairman of Australian Made Australian Grown, and former Chairman of the Adelaide Fringe and the Adelaide Convention and Tourism Authority.

ABOUT OUR PANELLISTS



Anthony Kittel

Anthony Kittel is the Chief Executive Officer and owner of REDARC Electronics. REDARC is a Lonsdale SA based, advanced manufacturer employing 205 staff and also has an office at the Williamstown NSW Aerospace Centre employing 10 staff. Anthony graduated as a qualified Mechanical Engineer at the South Australian Institute of Technology (now UniSA), and completed his MBA at the University of Adelaide. In 2013, Anthony graduated from the three year Owners Presidents Management (OPM) program at Harvard Business School. In April 2018, Anthony was conferred the Degree of Doctor of the University honoris causa, Flinders University. Anthony is the National Vice President & SA Branch Councillor of Australian Industry Group, a member of the Flinders University Engineering School Industry Advisory Board and a member of the Adelaide University Business School Industry Advisory Board. He is also the immediate past Chairperson of the South Australian Training and Skills Commission.



Tom Cleghorn

My career in organisational development started with an interest in leadership which was sparked when witness to a remote area emergency response. I continued to learn about leadership through my own (short) career in professional sport and began to broaden my focus to explore capability and business improvement. I have been very fortunate to have had some amazing experiences working across multiple industries and continents over the last 12 years with a focus on building and delivering on objectives related to capability development.



Shannon Baldock

Prior to joining TAFE SA Shannon ran a successful electrical contracting business working in high risk environments. Since joining TAFE SA Shannon has spearheaded the adoption of VR in the air conditioning and refrigeration work group. His passion for innovative training and assessment practices is rapidly spreading throughout TAFE SA.



Rachelle Boyle (2017 Vocational Student of the Year Award at the Australian Training Awards)

At 18 years old, Rachelle Boyle had no idea what she wanted to do with her life. She turned to TAFE SA's range of courses and decided on a Certificate III in Events. Falling in love with the content and the supportive teaching environment, Rachelle continued to complete her Diploma and Advanced Diploma in Events. Rachelle now works as an Event Planning Coordinator at the Adelaide Convention Centre, after graduating with her Advanced Diploma of Events. Before that, Rachelle studied while working at All Occasions Group, a specialist in local, national and international events. She is now studying a Bachelor of Media and Communications at Flinders University whilst continuing to work full-time.



Steve Davis (Facilitator)

Steve Davis has spent 20 years as a marketing communication consultant and has recently launched his new consultancy, Talked About Marketing. As a workshop presenter and speaker, he has delivered keynotes and conference sessions on social media marketing for tourism, food and wine, law, and building industry sectors. His first career was radio and journalism and those 18 years included a two-year stint as a current affairs presenter (in English) for Hungary's national broadcaster. In 2013 he began a podcast, The Adelaide Show, which was a national finalist at the Australian Podcast Awards. He also hosts the NCVET podcast, Vocational Voices, and a national comedy podcast, School Of Hard Knock Knocks.

NCVER STAFF



Toni Cavallaro
National Collections
Manager



Emerick Chew
Research Officer



Kate Dowling
Data Analyst



Daryl Fischer
Research Officer



Cameron Forrest
Acting Senior
Research Officer



Kelly Frazer
Knowledge
Management
Manager



Olivia Gu
Data Analyst



June Ingham
Team Leader,
Communications
& Events



Genevieve Knight
National Research
Manager



Deanne Loan
Digital Publishing
& Communications
Manager



Phil Loveder
Stakeholder
Engagement
Manager



Lisel O'Dwyer
Team Leader,
National Research



Kristen Osborne
Research Officer



Rose-Anne Polvere
Research Librarian



Ronnie Semo
Senior Research
Officer



John Stanwick
Senior Research
Officer



Stephen Tormet
Events &
Administration
Assistant



Simon Walker
Managing Director



Ian White
Data Analyst



Helen Wildash
PR & Social Media
Officer

ABOUT THE EXHIBITORS



ADCET

The Australian Disability Clearinghouse on Education and Training (ADCET) website provides information, advice and resources to disability practitioners, academics, teachers and students on inclusive practices within the post-secondary education sector. <adcet.edu.au>

aXcelerate

aXcelerate is a revolutionary student management system, run entirely from the cloud. The system intuitively handles all aspects of running an Australian training organisation and ensures that users are compliant with government standards such as AVETMISS and USI.

aXcelerate also integrates with popular education and financial applications like Moodle, Wordpress, and Xero, to provide a flexible and customisable software solution for training organisations and RTOs.

aXcelerate is built around smart system linkages between prospects, clients, learners, trainers, courses, accreditations and finances to keep your business running intelligently. Save countless hours of administration and trainer time by using our Online Assessments platform.

People in Agriculture

Practical employment platform promoting careers in Agriculture and creating great workplaces. <peopleinag.com.au>

Australia's Agriculture industry adds \$54 billion annually to the country's GDP and provides over 300,000 jobs. Continuing to attract great people is key to ensuring a bright future for Australian Agriculture.

Whether you're assisting young people with career options or keen to no know more about Agriculture, the People in Agriculture platform provides everything you need in one place.

ABOUT THE EXHIBITORS



Skilled Careers – Government of South Australia

Skilled Careers is a state government initiative promoting the wide range of careers available through an apprenticeship or traineeship, to ensure the state is fully equipped to meet the skills needs of growth industries. We are working with industry, training providers, group training organisations and community organisations to identify current and future needs, and we're delivering tailored projects to support commencements in apprentices, trainees and like qualifications.



The Learning Resources Group

The Learning Resources Group is a one-stop shop for everything you need in relation to learning resources. With a growing catalogue of training materials and LLN resources and software, TLRG is at the forefront of technology and RTO compliance. Visit our website today to find out how TLRG can help your organisation train and assess smarter <tlrg.com.au>



TAFE SA

TAFE SA is South Australia's largest vocational education and training (VET) provider and one of the largest in Australia. It is also a registered higher education provider. With more than 70,000 student enrolments each year, and delivering training at over 300 locations right across South Australia, TAFE SA has courses covering more than 80 areas of industry and activity, with flexible delivery options that suit the needs of its students.



VOCEDplus

Ask a VOCEDplus Librarian. Come and meet the team behind VOCEDplus and find out what VOCEDplus has to offer, including a database of 80 000+ Australian and international tertiary education research publications and value added products such as the VET Knowledge Bank, the Pod Network, the VET glossary, 'Focus on' special topic pages and the new VET Practitioner Resource. If you have any information needs, ask about the expert research and reference services on offer.

VENUE MAPS: CONFERENCE HUB

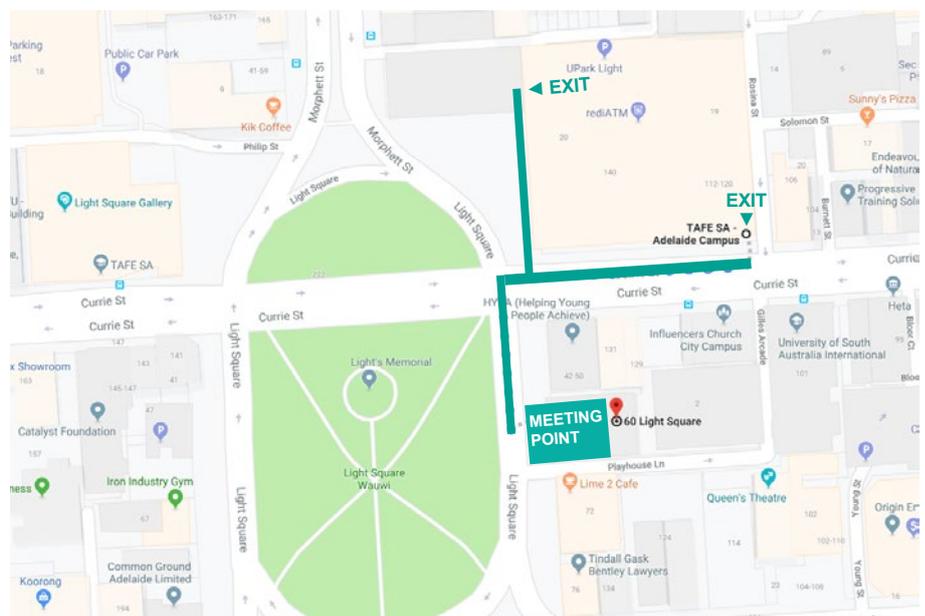
TAFE SA Adelaide campus, Ground floor Atrium, 120 Currie Street, Adelaide

- Room C.G01 Data hub
- Room C.G03 Cloakroom



Meeting point for all bus transfers

60 Light Square, Adelaide



CONCURRENT SESSIONS

TAFE SA Adelaide campus, First floor

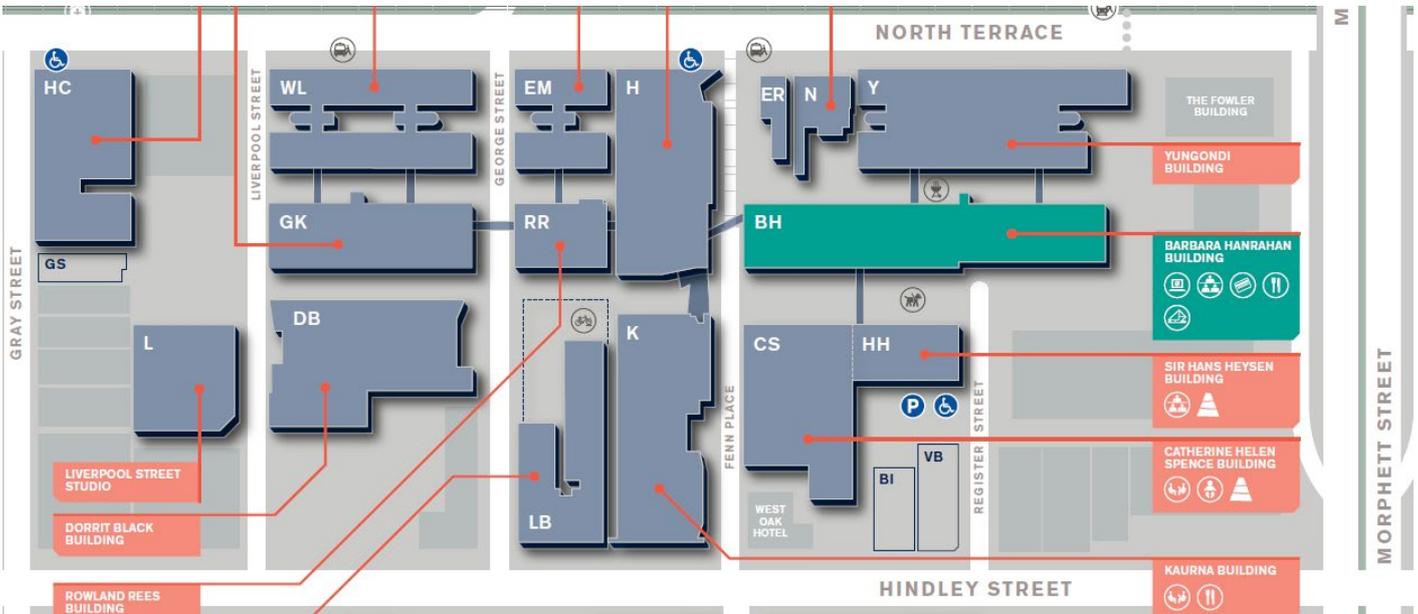
Rooms A.118, A.101, A.102, A.104



PLENARY SESSIONS

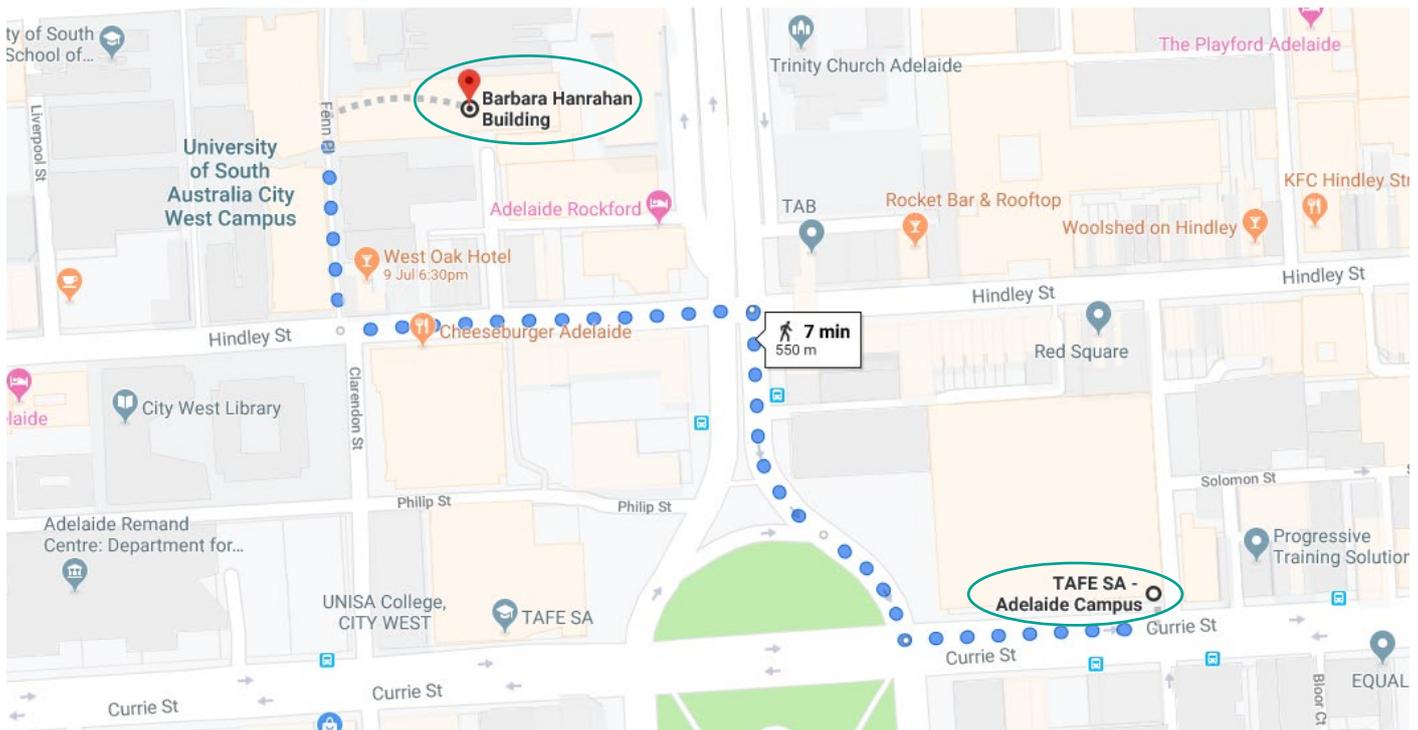
UniSA City West, Barbara Hanrahan Building

Room BH2-09



Route from TAFE SA to Barbara Hanrahan Building

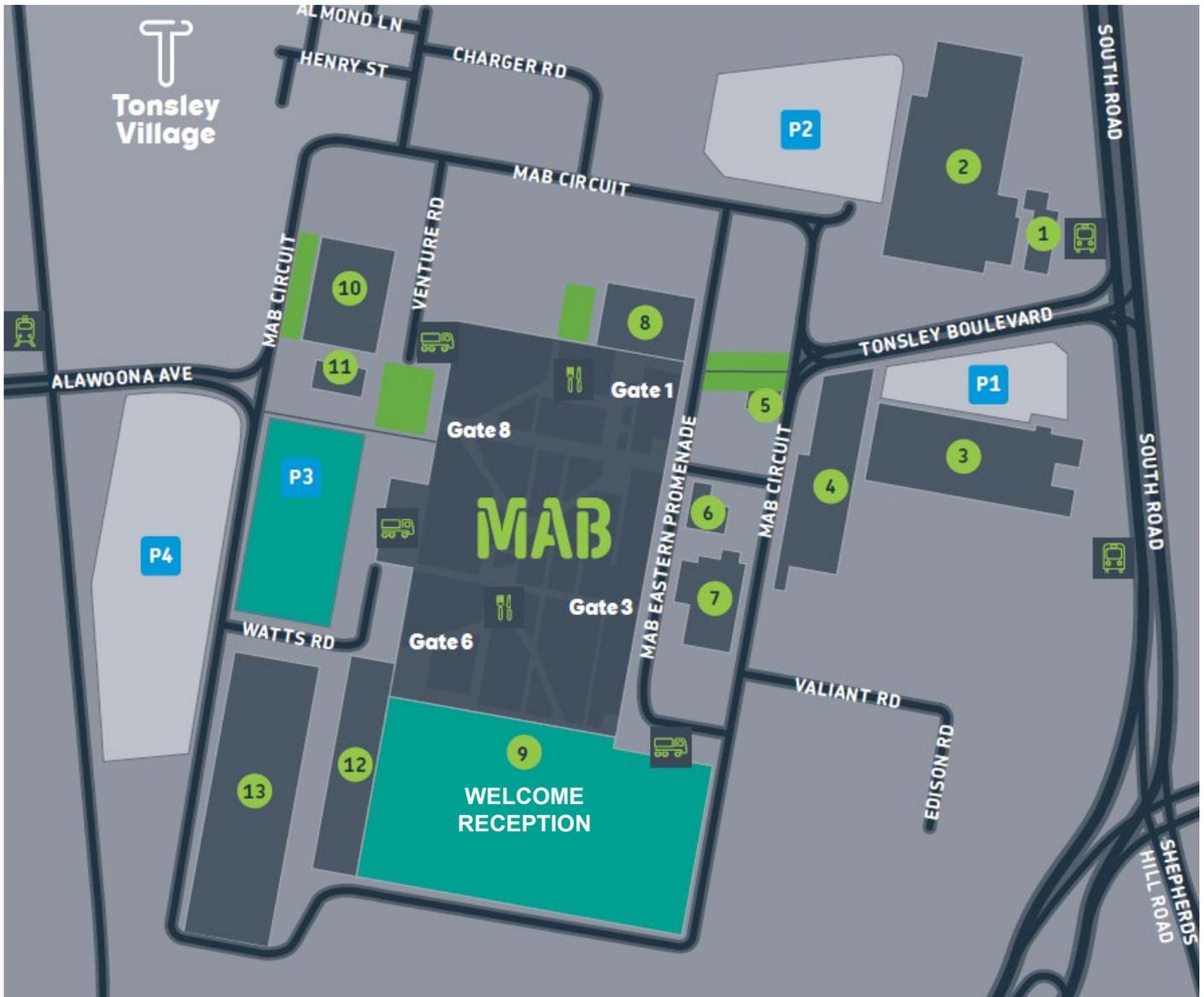
Around 600 metres (approx 7 min walk)



WELCOME RECEPTION

TAFE SA Tonsley campus, Tonsley Innovation District

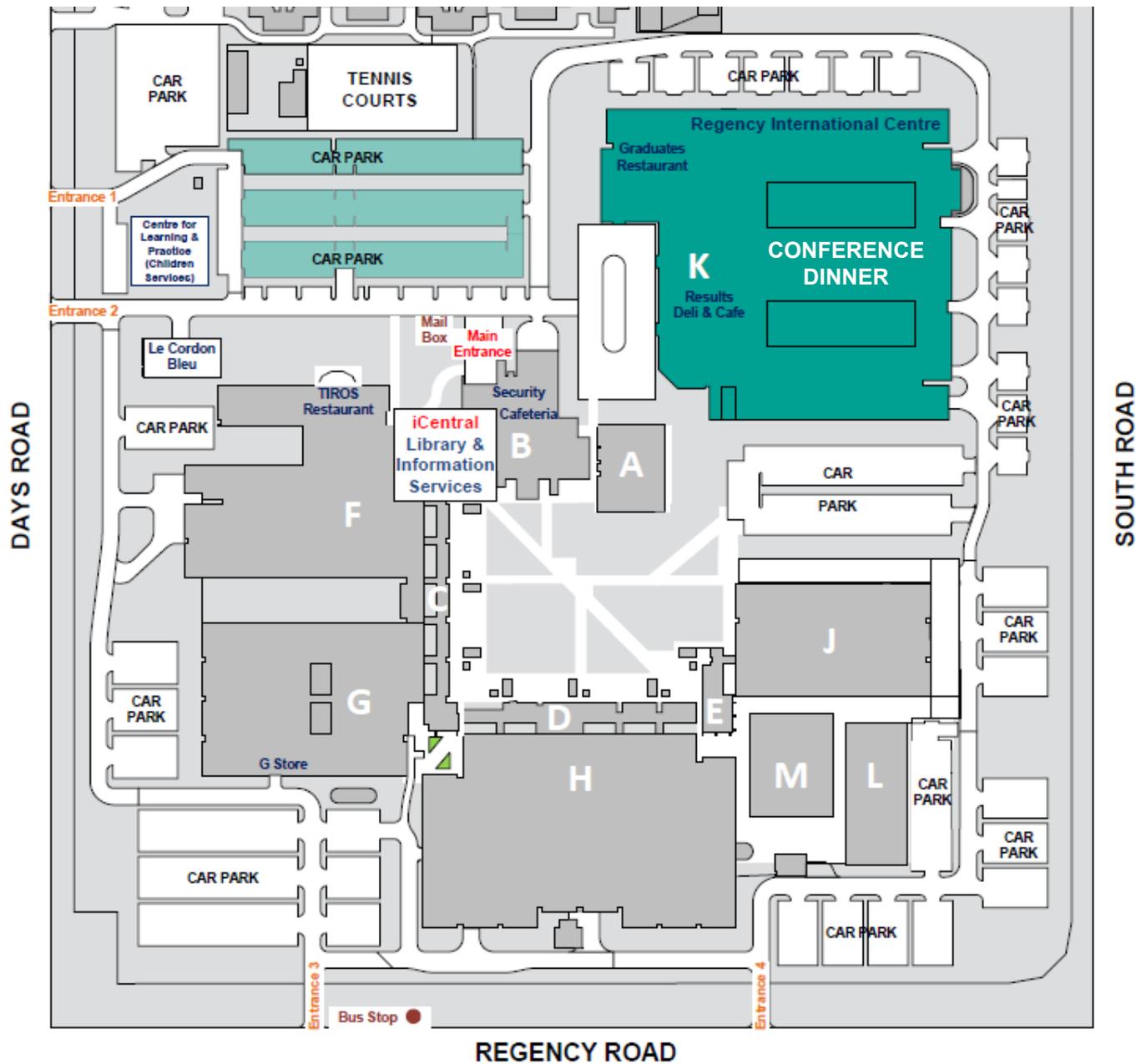
Please use carpark P3, Welcome reception is in Building 9



CONFERENCE DINNER

Graduates Restaurant, TAFE SA Regency Park campus

Please enter from Days Road, use entrance 2, Graduates Restaurant is in building K



CONFERENCE PROGRAM

Wednesday 10 July 2019

PRE-CONFERENCE PROGRAM

10:30	Registration & exhibition open (TAFE SA Adelaide campus, Ground floor Atrium, 120 Currie Street, SA 5000)
11:00	Pre-conference professional development workshops
11:00	Workshop 1 and 2
12:30	Light snack break
13:00	Workshop 3 and 4
14:30	Light snack break
15:00	Workshop 5 and 6
16:30	Bus departs for Welcome reception (TAFE SA Tonsley campus)
17:15	Arrive at Welcome reception proudly sponsored by the National Wine Centre of Australia
18:45	Bus departs for TAFE SA Adelaide campus

PRE-CONFERENCE PD WORKSHOPS

11:00	1 Australian VET returns on investment <i>Genevieve Knight, Lisel O'Dwyer & Phil Loveder, NCVER</i> ROOM A.102	2 Exploring data from the Longitudinal Surveys of Australian Youth (LSAY) <i>Ronnie Semo & Olivia Gu, NCVER</i> ROOM B.B02
13:00	3 DIGITAL SKILLS (three presentations) Digital skills in the workplace <i>Anne Alkema, Industry Training Federation, New Zealand</i> Digital literacy is important <i>Anitza Geneve, TAFE Queensland</i> Skilling students in new and emerging learning environments <i>Kathryn McGilvray, eLearning Educational Solutions Pty Ltd</i> ROOM A.102	4 Understanding and using our data products and tools: region, industry and more! <i>Toni Cavallaro & Daryl Fischer, NCVER</i> ROOM B.B03
15:00	5 ADVANCING VET PEDAGOGY (three presentations) The influences online VET teachers report constrain their practice and prevent student-centred pedagogy <i>Deniese Cox, Griffith University</i> VET Disability Awareness eTraining - enhancing the student journey <i>Jen Cousins, TAFE SA & Darlene McLennan, National Disability Coordination Officer (NDCO) Program</i> Lifelong learning: a tale of one trainer's journey <i>Alan Maguire, On Target Work Skills</i> ROOM A.102	6 VOCEDplus: resource discovery to support practitioners <i>Rose-Anne Polvere and Kelly Frazer, NCVER</i> ROOM B.B04

POSTER PRESENTATIONS (SHOWING EVERYDAY)

Upgrade and update
Chris Ho, Chisholm Institute

Exploring best practices to develop creativity in VET
Md Aftabuzzaman, Melbourne Polytechnic

Life at 24: then & now
Olivia Gu, Ronnie Semo & Kate Dowling, NCVER

Collaborative teaching model to amalgamate vocational education skills into tertiary programs
Shweta Singh, University of Queensland

CONFERENCE PROGRAM - DAY 1

08:00	Registration & exhibition open (TAFE SA Adelaide campus, Ground floor Atrium, 120 Currie Street, SA 5000)
08:40	Walk to University of South Australia (City West, Barbara Hanrahan Building, Room BH2-09)
09:00	Welcome to Country: Proud Kaurna man Tamaru
09:05	Ministerial address: Senator The Hon Michaelia Cash, Federal Minister for Employment, Skills, Small and Family Business
09:20	Ministerial address: The Hon David Pisoni MP, South Australian Government Minister for Innovation and Skills
09:30	NCVER welcome address: Mr Simon Walker, Managing Director, NCVER
09:35	Co-host welcome address: Mr David Coltman, Chief Executive, TAFE SA
09:45	Keynote address: Dr Fiona Kerr, Neural and Systems Complexity Specialist, University of Adelaide THE DANCE WITH TECHNOLOGY: HOW DO WE ENSURE WE LEAD?
10:30	Morning tea proudly sponsored by the Independent Tertiary Education Conference 2019 (ITECA)
11:15	Concurrent sessions start (1–6)

CONCURRENT SESSIONS - DAY 1

THEMES:	LIFE SKILLS ROOM A.118	SUPPORTING STUDENTS ROOM A.101	YOUNG PEOPLE ROOM A.102	WORKFORCE/EMPLOYMENT ROOM A.104
1	11:15 Life skills for a digital future <i>Morteza Hajizadeh & Kevin O'Leary, Australian Industry Standards</i>	Help! I'm starting tertiary study — now what? <i>Allyson Dutschke, University of Adelaide & TAFE SA</i>	Insights from 20 years of the Longitudinal Surveys of Australian Youth <i>Cameron Forrest, NCVER</i>	Supporting workforces during industry transition <i>Brett Hall, Jobs Queensland</i>
2	12:00 The 4 th Industrial Revolution and VET: the relevance of entrepreneurship education in Australia <i>Wendy Perry, Workforce Blueprint</i>	Evaluating the effectiveness of support interventions for adult dyslexic learners in multiple tertiary learning environments <i>Michael Styles, Primary Industry Training Organisation</i>	Preparing HSC VET students for work placement — go2workplacement an online work placement preparation program <i>Brendan Gembitsky, NSW Department of Education</i>	Unaccredited training: why employers use it and does it meet their skill needs? <i>Ian White, NCVER</i>
	12:45 Lunch			
3	13:30 Provision of foundation skills by community education providers in regional Australia — what does it look like and does it help get people into VET? <i>Lisel O'Dwyer, NCVER & Evelyn Goodwin, Community Colleges Australia</i>	The student journey — building resilience as a key life skill <i>Amanda Torr, Te Runanganui o Te Atiawa & Hinemoa Priest, WelTec</i>	School-to-work transitions of youth in Australia: a sequence analysis approach using the Longitudinal Surveys of Australian Youth (LSAY) <i>Emerick Chew, NCVER</i>	Shaping the skills of our future workforce <i>Sharon Robertson, IBSA</i>
4	14:15 Employability skills: have we had it wrong? <i>Kate Perkins, Australian Council for Educational Research (ACER)</i>	Investing in our future: how can educators identify and minimise students' detrimental individual differences while strengthening their positive characteristics? <i>Cameron Williams, Black Dog Institute (University of New South Wales)</i> NCVER EARLY CAREER RESEARCHER SCHOLARSHIP	Recognition of structured workplace learning for senior secondary students undertaking VET <i>Daryl Sutton, Victorian Curriculum and Assessment Authority</i>	An industry training organisation perspective of strategic planning for future workplace learning and assessment innovation in New Zealand <i>Reena Patel, The Skills Organisation, New Zealand</i>
	15:00 Let's celebrate! VOCEDplus 30 th Birthday special afternoon tea proudly sponsored by AVETRA			
5	15:45 Just what skills are required for life <i>Serryn O'Regan, Evolve College</i>	GRAD SHOW — preparing graduates for life in the creative industries <i>Monica Davidson, Creative Plus Business Group Pty Ltd</i>	Case studies of good practice in parent engagement in career education <i>Lauren Renshaw, Australian Research Alliance for Children and Youth (ARACY)</i>	A longitudinal study of students' experiences and outcomes: attracting and retaining individuals to the aged care and hospitality sectors <i>Melinda Brown, SkillsIQ</i>
6	16:30 Embedding learner capabilities and using the I am Capable online validation tool to create the most employable graduates in NZ <i>Andy Kilsby & Amber Paterson, Otago Polytechnic</i>	The different journeys taken by international VET students <i>Steve Nerlich, Australian Government Department of Education and Training</i>	School-based apprenticeships providing a gateway to further education and employment <i>Karen Coulston & Karen White, Toowoomba Catholic Schools</i>	Preparing our workforce for the future: putting the 'New Work Mindset' into action <i>Alex Snow, Foundation for Young Australians (FYA) & Belinda Kim, South West TAFE</i>
	17:15 Concurrent sessions conclude			
	18:10 Bus departs for Conference dinner (TAFE SA Regency campus)			
	18:30 Conference dinner (Graduates Restaurant, Regency International Centre) Dinner speaker: Glenn Cooper AM, Chairman Coopers Brewery			
	22:30 Conference dinner concludes			
	22:35 Bus departs for TAFE SA Adelaide campus			

* Speakers and presentations are subject to change

CONFERENCE PROGRAM - DAY 2

- 08:30 Registration & exhibition open (TAFE SA Adelaide campus, Ground floor Atrium, 120 Currie Street, SA 5000)
- 09:00 Concurrent sessions start (7–10)

CONCURRENT SESSIONS - DAY 2

THEMES:	APPRENTICES & TRAINEES ROOM A.118	TRAINING & ASSESSMENT ROOM A.101	ACCESS & EQUITY ROOM A.102	SKILLS & JOBS ROOM A.104
7 09:00	doorways2construction — a pathway success? <i>Marie Paterson & Eric Parnis, Construction Industry Training Board (CITB)</i>	Training - a stepping stone towards workplace competency, but not the full journey <i>Michael Hartman, Skills Impact</i>	Student choice and lifelong learning: who you gonna call? <i>Don Zoellner, Charles Darwin University</i>	Are skill sets booming? Use and utility of skill sets <i>John Stanwick, NCVET</i>
8 09:45	Apprentices' perceptions of their supported acquisition of literacy and numeracy skills <i>Liam Frost-Camilleri, Federation University Australia</i>	Looking inside — new tools for training package transparency <i>Michael Wyndham, Australian Government Department of Employment, Skills, Small and Family Business</i>	Preparing students for gender equity in the workplace of tomorrow <i>Donna Bridges, Charles Sturt University</i>	Rethinking the link between study and jobs <i>Elizabeth Knight & Emma-Jane McCarroll, Education Services Australia</i>
10:30	Morning tea proudly sponsored by the Independent Tertiary Education Conference 2019 (ITECA)			
9 11:00	Employers' perspectives of the benefits and barriers to women in trades and what needs to change <i>Mark Williams, Building & Construction Industry Training Organisation (BCITO)</i> NCVER RESEARCHER SCHOLARSHIP	The RPL candidate — a neglected stakeholder <i>Deb Carr, Think About Learning & Dr Helen Smith, RMIT Consultant & CDU University Fellow</i> VDC PRACTITIONER SCHOLARSHIP	Factoring in equality of opportunity: a case study of Western Sydney VET <i>Don Perlgut & Evelyn Goodwin, Community Colleges Australia Fellow</i>	Skilling up: intervention strategies for career development <i>Andrea Rivett, Wise Employment t/a Interskills</i>
10 11:45	Harnessing social and cultural capital for life skills — women who 'can talk the tools' and 'walk the work'! <i>Elizabeth Wulff, Charles Sturt University</i>	The significance of higher vocational education in Australia <i>Shaun Rawolle, Deakin University</i>	Occupational outcomes' influence on students' choices of higher vocational education in Australia <i>Stephen Parker, University of Glasgow & Elizabeth Knight, Monash University</i>	The future workforce requires a change of mindset <i>Andrew Hardiman, Department of Education Victoria</i>
12:30	Lunch			
13:00	Walk to University of South Australia (City West, Barbara Hanrahan Building, Room BH2-09)			
13:15	PANEL DISCUSSION Lifelong learning: VET's role now and into the future Anthony Kittel , Chief Executive Officer, REDARC Electronics Tom Cleghorn , Manager Workforce Development, Resthaven Shannon Baldock , Electrical Lecturer, TAFE SA Rachelle Boyle , Event Planning Coordinator, Adelaide Convention Centre Facilitated by broadcast journalist Steve Davis			
14:00	Keynote address: Ms Gabrielle Kelly , Founding Director of SAHMRI Wellbeing and Resilience Centre WHY PSYCHOLOGICAL WELLBEING AND RESILIENCE IS CRITICAL FOR MODERN VOCATIONAL EDUCATION SYSTEMS AND WHAT TO DO ABOUT IT QUICKLY			
14:45	Conference wrap-up, closing remarks and 2020 co-host announcement			
15:00	Conference close			

* Speakers and presentations are subject to change



SCHOLARSHIPS

Scholarships were offered again this year, for the third year running. This initiative, which is part of NCVER's commitment to build capacity and capability in VET research, is designed to facilitate attendance and widen participation from across the VET sector.

Congratulations to the following 'No Frills' 2019 scholarship recipients:

VDC Practitioner Scholarship

Ms Deb Carr, Think About Learning

Presentation, Friday 11:00

The RPL candidate — a neglected stakeholder

NCVER Early Career Researcher Scholarship

Mr Cameron Williams, Black Dog Institute (University of New South Wales)

Presentation, Thursday 14:15

Investing in our future: how can educators identify and minimise students' detrimental individual differences while strengthening their positive characteristics?

NCVER Researcher Scholarship

Mr Mark Williams, Building & Construction Industry Organisation, New Zealand

Presentation, Friday 11:00

Employers' perspectives and barriers to women in trades and what needs to change

Listed in alphabetical order of presenter surname.

Exploring best practices to develop creativity in VET

POSTER

Md Aftabuzzaman, Melbourne Polytechnic

The last few decades have witnessed dramatic changes in the nature of work due to a number of reasons. A significant portion of the jobs in the new economies of the developed world will not be in the traditional forms of employment. The typical employers of the 21st century have very different expectations of their workforce and the modern workplace will require greater self-motivation, self-reliance and an enhanced ability to work independently without supervision. Therefore, creativity can be seen as one of the important 21st century skills.

The present study explores the definition of creativity and investigates the best practices which can be accommodated in Vocational Education and Training (VET) to nurture creativity.

The word 'creativity' is constantly being encountered in everyday life, however, an agreed definition of creativity is difficult to attain. A definition of creativity varies according to the differing conceptions and contexts of creativity. Creativity is a complex and multi-dimensional phenomenon and is comparable to intelligence in a number of ways.

VET skills development is often seen as being limited to meeting the demands of technical and industry-based occupations. However, the development of creativity in VET sector has not been well understood in the context of the knowledge-based economy of the 21st century and not been applied in the Australian perspective.

The most comprehensive evidence on how to nurture creativity in young people is probably available in the UK through the establishment of the Creative Partnerships Program. As per this program, the learning environments that are effective in stimulating creativity: (i) value and celebrate creativity; (ii) develop creative pedagogies; (iii) provide opportunities to experience a stimulating environment; (iv) manage time effectively to explore, reflect, discuss and review.

Further research is warranted to develop and nurture 'creative classrooms' in Australian VET sector.

Digital skills in the workplace

WORKSHOP 3

Anne Alkema, Industry Training Federation NZ

The 2014 Adult Skills Survey shows 55 percent of adult New Zealanders have low skills in problem-solving in technology rich environments. This means they can undertake basic tasks that require a few steps on a computer, use familiar applications such as emails and web browsers, and solve problems where the goal is obvious. Given the increasing use of technology in workplaces this means around half the working age population do not have the skills required to cope with its introduction and the changes it will bring.

In 2017 the Skills Highway team at the Industry Training Federation noticed an increasing demand from employers to improve the digital skills of workers in lower-skilled jobs. This was brought about by the introduction of technology for reporting and communication, and on production lines. This led us to undertake a piece of research and resource development in 2018. Working in partnership with a literacy and numeracy provider, we explored what digital literacy means for workers in these jobs, what digital skills look like in the workplace, and developed measurement tools to assess the digital skills of workers.

Digital skills mean the skills required to access (turn on); to learn (think critically and problem solve); and to use (apply in context). As might be expected, the research is unanimous in concluding that these skills are essential for today's workforces, for future employability, and more generally in adult's home and community lives. In other words, skilling for life.

This presentation will describe the research methods, the findings from the research and the resource development projects. It will also invite discussion on the digital skills maturity framework developed as part of the research and the tool developed for employers to identify the digital skills required in their workplace and the capability of their workforce in relation to these.

Preparing students for gender equity in the workplace of tomorrow

ACCESS & EQUITY

Donna Bridges, Charles Sturt University

Industry is increasingly challenged to align more closely with social norms and expectations around diversity, inclusion and equality. Change is required to increase the numbers of women into work previously considered masculine. This also includes policy change and strategies to foster gender equity. In sectors such as the military, policing, engineering and STEM, reform has been slow but significant, however, there is a lag in the manual trades (carpentry, electrical, plumbing, welding, and automotive) in numbers of women

ABSTRACTS

entering the industry and in cultural reform. Vocational Education and Training (VET) has a unique role in preparing students for a world of work where gender equity is an expectation of government, employers, clients and co-workers. Therefore, the barriers women face in the manual trades, in both education and work, need to be identified and understood at a VET level. Masculine work cultures are known to devalue feminine attributes and harbour belief systems, values and practices linked to social exclusion, discrimination and harassment of women.

This paper reports the findings of a project that has conducted extensive industry consultations, interview research and focus groups aiming to access knowledge about how women achieve resilience, success and longevity in manual trade industries. This presentation focuses on preliminary findings about the gendered experience of VET. Our findings indicate that whilst the culture of manual trades VET classrooms is masculine, gender integration can change the nature of classrooms in ways that benefit all. We consider how this favourable transformation contributes to VET preparing students with 'soft skills' and 'skills for life'. Often difficult to define, these skills include acceptance and understanding of diversity, inclusion and equality; and an openness to gender equity strategies. Such skills support workers to operate and compete effectively in the workplaces of tomorrow.

A longitudinal study of students' experiences and outcomes: attracting and retaining individuals to the aged care and hospitality sectors

WORKFORCE/EMPLOYMENT

Melinda Brown, SkillsIQ

The Aged Care and Hospitality sectors are forecast to experience some of the highest levels of employment growth in Australia, with an additional 69,200 Aged and Disability Care workers and 79,100 Food/Beverage workers required by 2023. Attracting and retaining skilled workers however are significant challenges for the sectors. Understanding drivers of training selection and workplace satisfaction has therefore never been more important for these sectors to address shortages.

This research embarks on these issues through a longitudinal survey and explores a student's journey from the point of deciding to study VET qualifications, to completing (or not) the course, and workforce outcomes. A multi-modal national survey was employed, with online and CATI completion options. Wave 1 (conducted in 2018) covered two cohorts: current students and recent graduates of Aged Care qualifications (n=344) and Commercial Cookery qualifications (n=206). Samples were recruited with the support of training providers across Australia.

Wave 1 findings reveal that almost all students commence their course to enable them to meet employment objectives, including to change careers. 55% of Aged Care respondents and 82% of Commercial Cookery respondents were working in the industry of their course, and almost all felt the training helped them secure their job. Job satisfaction rates were high and nearly all saw themselves working in the same industry in one year's time. Only a minority (1 in 10) had decided to leave the industry with the main reason cited for leaving being that they felt the work was not stimulating.

Wave 2 and Wave 3 will track the same cohorts one and two years after completing their course, and determine whether they continue working in their sectors, or have moved on. Insights are being used to support the development of long-term workforce development and life-long learning strategies at both a Government and industry-level.

The RPL candidate — a neglected stakeholder

TRAINING & ASSESSMENT

Deb Carr, Think About Learning & Dr Helen Smith, RMIT Consultant & CDU University Fellow

VDC PRACTITIONER SCHOLARSHIP RECIPIENT

Recognition of Prior Learning (RPL) candidates often experience difficulties in navigating RPL processes. Ongoing transformation of contemporary workplaces requiring higher level credentials and demand for increasingly complex skills could exacerbate social-economic inequality for those who do not possess formal recognition of their workplace competencies. RPL transpires as a mechanism that provides credentialing within the VET sector. In this manner RPL may help to maintain social-economic inclusion diminishing the risk of people being left behind. However, recent data indicates that RPL granted is less than desired, has declined from 4.4% in 2014 to 3.4% in 2017 and is continuing to decline. Additionally, as a proportion of total VET students, traditionally under-represented and disadvantaged groups use RPL less.

This research project seeks to identify and explore difficulties commonly faced by RPL candidates whilst also identifying effective mitigating strategies. As an exploratory case-study, it follows the learning journeys of six RPL candidates. Data will be collected via four interviews. Profile interviews identify learning biographies, reasons for RPL, expectations and mindset. Subsequent interviews seek to track variable mindsets, investigate difficulties experienced and strategies used to address such difficulties, and opinions about RPL.

Questions about strategies are themed towards mindset and meta-learning (being aware of and taking control of one's own learning) techniques. Data will be analysed for common themes of challenges and strategies used, common movements in mindset, comparison of starting and ending mindset and recognition of RPL as a meta-learning experience in itself. Two candidates will be mentored utilising autonomy supportive principles related to the self-determination theory. Mentoring stories will be recorded in narrative inquiry methodology and analysed for themes of what worked and what did not towards diminishing difficulties.

Understanding and using our data products and tools: region, industry and more!

WORKSHOP 4

Toni Cavallaro & Daryl Fischer, NCVER

NCVER's host of innovative data products and tools help users get the most out of their data.

In this workshop we will demonstrate a number of these products including data from the Atlas of total VET tool that allows users to view data by specific data region.

We will also take you on a tour of our VET students by industry data visualisation product and show examples of our infographics and other tools. You'll learn how to access and analyse data using these tools and get a sneak preview of some future data products!

School-to-work transitions of youth in Australia: a sequence analysis approach using the Longitudinal Surveys of Australian Youth (LSAY)

YOUNG PEOPLE

Emerick Chew, NCVER

This study aims to better understand the complex and changing nature of pathways taken by young Australians in their journey from school to work using sequence analysis methods. Conventional methods of examining pathways and transitions generally follow a linear approach which only provides a 'snap shot' of the position of individuals at a given point in time. This tends to over-simplify the multi-dimensional nature of transition pathways. Sequence analysis methods incorporate the complex and dynamic nature of transition trajectories, allowing a broader understanding of young people's pathways. Moreover, it allows for better utilisation of longitudinal data that enables identification of dominant pathways or structures. Identifying a typology of transitions from school to work will provide important insight into how young people's background and characteristics can potentially influence the chance of experiencing a particular type of transition.

The primary source of data for the analysis is the 2006 cohort of the Longitudinal Surveys of Australian Youth (LSAY): a nationally representative survey that tracks 15-year-old students as they move from school to further education or other destinations until they are 25 years of age. Based on the survey data, it is possible to identify monthly education and labour market activities of respondents for each year in the survey between 2007 and 2016. Given the high volatility in the youth labour market, monthly activity data provide a finer level of analysis.

The study aims to identify the different types of pathways that young people follow in their journey from school to work to obtain a better understanding of the nature of these transitions. Using this information, it further explores the socio-economic and demographic characteristics of young people in different pathways and their implications for labour market, education and social policy.

School-based apprenticeships providing a gateway to further education and employment

YOUNG PEOPLE

Karen Coulston & Karen White, Toowoomba Catholic Schools

School Based Apprenticeships providing a gateway to further education and employment.

A presentation showcasing the systemic approach adopted by Toowoomba Catholic Schools Office (TCSO) to support students in 13 secondary schools and colleges to gain and maintain school-based apprenticeships and traineeships (SBAs) as an integral part of their senior studies.

The model adopted by TCSO since 1999 is a centralised program based in Toowoomba Queensland (the SBA Program). The SBA Program is managed by a staff of 2 who provide expert knowledge in relation to the Queensland model of school-based apprenticeships to the school SBA Coordinators and facilitates and monitors the students' training contract from commencement through to completion or transition to part-time or full-time status.

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Around 300 students in Years 10, 11 and 12 each year from these schools – which lie within a radius of some 500 kilometres – are supported to balance their school, training and paid employment commitments to successfully participate in an SBA.

The schools also benefit from the industry engagement that the SBA Program representatives undertake to build strong working relationships with employers, supervising registered training organisations and Australian Apprenticeship Support Networks to promote the benefits of SBAs.

A PowerPoint presentation will be used to outline the role of the SBA Program representatives in promoting the benefits of SBAs to students, parents and employers and the support provided to facilitate formal training contract arrangements and monitor student progress.

The presentation will also include graphical representations of student participation across a wide range of nationally recognised qualifications undertaken in Queensland and some cross-border arrangements over the last decade and photographs of students and employers involved in SBAs.

VET Disability Awareness eTraining - enhancing the student journey

WORKSHOP 5

Jen Cousins, TAFE SA & Darlene McLennan, National Disability Coordination Officer (NDCO) Program

In a fast paced technologically driven world where learners are expected to be tech savvy, switched on for eLearning with a preference for self-paced education there may be an assumption that all learners come with the same needs and requirements.

Recent research and consultations conducted in 2017-2018 by the Australian Industry and Skills Committee (AISC) as part of the Inclusion of People with Disability in VET Cross Sector Project, indicates that students with disability continue to have low participation rates in VET coupled with poor experiences and educational outcomes.

While VET Practitioners have training in meeting individual needs, there is minimal education about how to effectively respond to the needs of and empower students with disability to achieve positive education outcomes.

Given that skilled VET practitioners play a significant role in ensuring that students have a positive learning journey, practitioners need opportunities to build capacity about how to effectively engage and empower learners with disability, ensuring they are well informed, supported, and successfully provided with adjustments in VET settings. This is especially pertinent given the expected increased participation of people with disability in tertiary education, particularly the VET Sector, as a result of the National Disability Insurance Scheme (NDIS) implementation.

This presentation showcases the new/free VET Disability Awareness eTraining, outlining the intent and requirements of the Disability Standards for Education, the obligations & responsibilities, strategies to address them, approaches to inherent requirements and reasonable adjustments, as well as developing accessible delivery and assessment tools.

The session will provide participants with key considerations and practices, how to access the resource, and how it can be used to build capabilities in teams and enhance VET practice, and ultimately the learning journey for students with disability.

The influences online VET teachers report constrain their practice and prevent student-centred pedagogy

WORKSHOP 5

Deniese Cox, Griffith University

Online education continues to grow at a rapid pace as a diverse range of VET students embrace the flexibility and accessibility of learning online. However, students report a sense of isolation when learning online and online education has a reputation for decreased successful completion rates. Teachers are central to the success of online education and their implementation of student-centred practices is essential to combat the challenges of learning online.

Yet teaching online is not easy and it is fundamentally different to classroom teaching. It requires more than learning how to use technology, it requires different pedagogy. Unfortunately, many teachers are unprepared for the challenges of teaching online and for the different pedagogical knowledge required, and this results in teachers feeling constrained in the online teaching context. Studies have found that when teachers feel constrained by their teaching context their practice contracts. This contraction results in teacher-centred practice as reflected in static, arms-length learning materials for independent study while essential student-centred teaching interventions, student engagement, and collaborative practices get left behind.

This PhD research has collected survey, observation, and interview data within a sample of fully online VET teachers. The participant teachers have identified several teaching context constraints that cause them to implement practices that are profoundly more teacher-centred than they believe is required for quality online VET education and to effectively maximise student learning.

The research findings that will be presented here provide guidance to organisations about what constraints need to be alleviated so online VET students can benefit from the implementation of student-centred practices by their teachers. The findings also have implications for how organisations understand the role of online VET teachers.

GRAD SHOW — preparing graduates for life in the creative industries

SUPPORTING STUDENTS

Monica Davidson, Creative Plus Business Group Pty Ltd

There are currently thousands of students studying in creatives arts courses at TAFE and VET institutions, but what happens when study ends for these innovative artists? The creative arts have rarely been placed for predictable employment, but new technologies and the 'gig economy' mean that creative professionals are even less likely now to be traditional employees. They are much more likely to enter a world of the new normal, working in unrelated part-time or casual employment while pursuing their creative practice professionally. They will wear multiple hats, juggling employment with freelancing and accidental entrepreneurship to get by, often without any fundamental education in small business or freelancing to support them.

This lack of ability to embrace the new economy is ironic given the rapid growth of the creative industries in the last five years. The digital revolution and demand for innovation across all areas of industry mean that the Australian creative industries sector is growing 40% faster than the Australian economy as a whole. Creatives are the engine room of this astonishing growth, but often unprepared for the realities of working after graduation.

To capitalise on this growth, and the changes to traditional employment, recent graduates need a degree of entrepreneurship and self-employment skills to help them work towards success. Without guidance and education within their qualification, they can struggle to find their place in this creative boom.

In her presentation GRAD SHOW, creative industries specialist Monica Davidson will outline her research about the first year of working life in the creative industries after study in the arts and share some practical ideas about how educators and policy makers can better prepare graduates for a life of freelancing, employment and entrepreneurship in the gig economy of creative industry.

Help! I'm starting tertiary study — now what?

SUPPORTING STUDENTS

Allyson Dutschke, University of Adelaide & TAFE SA

Students enrolling in vocational education frequently come from backgrounds that have not been well served by formal education. This can make commencing study a challenge, with greater independent learning expectations and quite different delivery methods than many may have experienced in school. Frequently we hear of what the institution is doing, but who is talking directly to the students about their needs when embarking on a new course of study? What do they need to be successful, when do they need it, and who might be in the best position to provide this support?

Entering into a 3-year study, following Vocational Education students over the course of their Early Childhood studies, this PhD research project focuses on the impact of the training organisation in providing appropriate support to meet student need and encouraging them to persist and achieve through their current course. It is anticipated that as their beliefs in their own self-efficacy develop and their self-confidence increases, these students will not only be successful in their Certificate III studies, but will continue onto the Diploma of Early Childhood, employment in the early childhood field, and even studying the Bachelor of Early Childhood.

Every journey begins with the first step, and for many of these students, the first step can be very large and frightening. So how have they been supported to begin their study? This presentation shares some initial findings of the student's views of strategies which have been put in place to support these 'baby steps', to encourage these new students to be able to step out independently into the world which is vocational education. Has their transition been supported, and what could be more effective?

ABSTRACTS

Insights from 20 years of the Longitudinal Surveys of Australian Youth

YOUNG PEOPLE

Cameron Forrest, NCVET

The Longitudinal Surveys of Australian Youth are a series of studies that track young people as they move from school into further study, work, and other destinations. Beginning in 1995, six separate cohorts have been surveyed over the past two decades, each comprising nationally representative samples of over 10,000 students. In an upcoming publication, we showcase research highlights from the past 20 years, covering such broad areas as student achievement and aspirations, the influence of social background, vocational and further education, and satisfaction with various aspects of life.

In this presentation, we will summarise these research findings to demonstrate the value of longitudinal data for making educated decisions about youth policies. The insights provided by these data allow us to identify how school to work transitions have changed since the program's inception, as well as portraying the broader context in which policy can assist young people in making successful transitions.

Apprentices' perceptions of their supported acquisition of literacy and numeracy skills

APPRENTICES & TRAINEES

Liam Frost-Camilleri, Federation University Australia

The rapid evolution of technology has seen increased literacy and numeracy demands for apprentices. This research explored how these demands are navigated from an engineering apprentice perspective. Using a mixed methods approach, 56 engineering apprentices completed questionnaires and from an analysis, nine participants were selected for individual, semi-structured interviews. The questionnaires provided participants with an opportunity to quantify their perceived ability levels in reading, writing and numeracy and to reflect on the learning strategies and supports they used. Findings showed that many students struggled to explain with clarity how they acquired literacy and numeracy skills. The participants primarily focused on the navigation of coursework, including disciplinary jargon, and reported similar learning strategies. Many participants saw the Literacy and Numeracy Support (LNS) teacher as helpful for students other than themselves, with clear distinctions made between the roles of the trainer and the support teacher. Participants expressed some agitation with the self-paced nature of the classroom and a mismatch between the information provided at training and their workplace. Many participants demonstrated a belief that their reading, writing and numeracy ability levels are relatively fixed. This research suggests that developing a greater awareness among apprentices about how they learn could be beneficial in supporting their acquisition of transferable and lifelong literacy and numeracy skills. This research also supports the notion that a re-focus on the pedagogical approach in LNS courses could assist in developing required employability skills in a changing technological workplace. Reconsideration of the importance and approaches to support the development of learning strategies merits consideration at a local level within the wider continued dialogue around best funding and implementation of Language, Literacy and Numeracy (LLN) support models.

Preparing HSC VET students for work placement — go2workplacement an online work placement preparation program

YOUNG PEOPLE

Brendan Gembitsky, NSW Department of Education

Work Placement is a requirement for a range of HSC VET courses in NSW. Preparation of students for work placement ensures they can make the most of the work placement opportunity. This presentation will focus on Go2workplacement an online program which assists students enrolled in HSC VET courses to get the most out of their work placement by identifying the skills and competencies they want to focus on during their time in the workplace.

The presentation will provide a background to the NSW Work Placement Coordination Program and discuss the elements of online learning which comprise Go2workplacement. The presentation will also explore how go2workplacement can assist host employers to better plan the placement for students..

Digital literacy is important

WORKSHOP 3

Anitza Geneve, TAFE Queensland

There is no shortage of opinion that Digital Literacy, Digital Capability and Digital Skills are vital for both Australian and international workers, now and in the future. From government strategies through to industry reports the rhetoric is the same 'Australia needs a workforce that has a digital capability'.

This presentation provides an insight into a work in progress within the VET sector which builds on the findings of a 2018 Fulbright Professional Scholarship in Vocational Education & Training (VET) between TAFE Queensland and Massachusetts Institute of Technology (MIT) in the United States. The project explores how the digital literacy and employability skills of Vocational Education and Training (VET) sector learners can be supported. A key aspect is to better understand 'what digital skills are required for workforce participation'.

Informed by global approaches towards Digital Literacy the presentation describes a framework (Australian Core Digital Capability) where digital capability can range from the digital citizen, digital learner through to digital specialist worker. These capabilities do not necessarily follow a life span perspective. Older Australians in the workforce may well need to go back to learning new digital skills. Youth cannot be judged to automatically be considered digital natives. In fact, an individual may find that they may need to master digital skills in one area but may well have a high capability in another.

The presentation hopes to foster greater conversation with stakeholders by exploring a series of questions including: 'what are digital skills?'. Are they hard or soft skills? How do 21st Century/employability skills such as problem-solving fit in? What value do international frameworks offer, e.g. DigComp (who UNESCO have identified as a key digital literacy framework). And what role do Australian Training Packages play in fostering digital skills? Stakeholders will need to work collaboratively to find answers.

Life at 24: then & now

POSTER

Olivia Gu, Ronnie Semo & Kate Dowling, NCVET

The Longitudinal Surveys of Australian Youth (LSAY) studies nationally representative groups of young Australians over 10 years, from the age of 15 through to 25, as they move from school to further study, work and into adulthood. Detailed information is collected about their education and employment pathways alongside other useful measures including attitudes, aspirations, living arrangements and wellbeing.

The LSAY study commenced in 1995 with the 'Y95' cohort and since then, an additional five cohorts of young people have joined the survey program, the most recent commencing in 2015 (Y15). With more than 20 years of longitudinal data across six distinct cohorts, the LSAY study allows us to explore the student journey across multiple generations.

The LSAY 2009 (Y09) cohort is comprised of young people born in 1993-4 and belongs to the generation known as Gen Y. This generation has been surrounded by information and communication technologies since early childhood and lived through the rise of the internet. With this rise of new technologies, Gen Y are experiencing changes in the way people look for work and attract and retain employees.

In 2018, our Gen Y respondents were 24-years-old, with many completing or continuing their post-school studies, entering the workforce or establishing their careers. This poster compares the latest data from the Y09 cohort with those that went before them 10 years earlier, to understand how things have changed over time for young Australians making the transition into adulthood.

Life skills for a digital future

LIFE SKILLS

Morteza Hajizadeh & Kevin O'Leary, Australian Industry Standards

The unprecedented speed of technological advances and innovations, mainly prompted by digital transformation, is unremittingly transforming the current and future job outlook, hence changing skills needs. In this constantly changing landscape, current students feel the constraints of acquiring the right skills to brace for the brave new world of a digital future and futureproof their careers. This presentation seeks to delineate what constitutes life skills. A theoretical overview of life skills will be presented as a preamble to our findings.

The crux of this presentation is based on an extensive consultation process with employers across different industries and education providers in Australia. The consultation process was conducted through national Industry Skills Forums which Australian Industry Standards

(AIS) held in Australian capital cities, attracting more than 1100 people from both businesses and education providers. The themes of the forums included: new thinking about future careers, and future skilling our people in the age of digital transformation. Further information was collected through a national industry skills needs survey completed by industry employers.

A gap analysis is performed on the identified skills and those on National Register on Vocational Education and Training in Australia. The results will provide an indication of the correspondence and/or discrepancy between the required current and future skills and what is currently offered to students. The identified skills are also analysed through Google Trends to reveal the occurrence rate of these skills on Google Search Engine in Australia in the past ten years. These findings will further offer insights as to what skills educators should concentrate on to equip students with the skills of a digital future.

Supporting workforces during industry transition

WORKFORCE / EMPLOYMENT

Brett Hall, Jobs Queensland

Industry transition is a continual event in an industry's lifecycle not only impacts the industry and enterprise in question, but individuals, communities and regions. Depending on its speed, magnitude and severity, industry transition can have a variety of economic and social impacts on enterprises and their workforce in regions and communities.

Industry transition is often-times considered a negative event, but it can be experienced positively by enterprises and individuals in situations where an industry grows rapidly or where there is industry renewal.

The Supporting workforces during industry transition: Key elements for success project sought to better understand the impacts of and strategies needed to support the workforce in industries undergoing transition. The project involved a literature review and case studies of eight industries in transition: mining; car manufacturing, gas; commercial fishing; oil refining; agriculture; renewable energy; and print media.

As industries transition, there may be significant opportunities for individuals, enterprises and communities, such as reskilling or upskilling opportunities for individuals; productivity efficiencies for enterprises; and economic growth for regions.

These opportunities need to be balanced with recognition that change brought about through transitions can, at times, be difficult for the individuals and communities involved. Appropriate support structures are key.

This presentation will outline the key elements for success which provide guidance on how to best respond to future industry transitions and promote positive long-term outcomes for those affected.

The future workforce requires a change of mindset

SKILLS & JOBS

Andrew Hardiman, Department of Education Victoria

We must provide career education and VET courses to respond to the changing workforce in the new, dynamic world of work, the traditional, linear pathways to work are less common. So as a young person how do you equip yourself with the right skills to be successful in such an uncertain future?

In a New Work Order report by the Foundation for Young Australians (FYA) evidence and research suggests that we're facing the biggest disruption to the world of work since the industrial revolution. These changes mean 60 per cent of Australian students (71 per cent of those in VET) are currently studying or training for occupations. Despite all these changes, our mindset about work and the resulting advice we provide to young people remains largely the same.

Yet in this new work order where young people are predicted to have 17 jobs over five careers, it's clear that this traditional, linear career advice is no longer relevant or helpful. The analysis shows that there are seven job clusters in the Australian economy where the required technical and enterprise skills are closely related and more portable than previously thought. These job clusters include Generators, Artisans, Carers, Informers, Technologists, Designers and Coordinators.

What FYA have found through this analysis is that when a young person trains or works one job they acquire skills and capabilities that will help them get 13 other jobs. In other words, skills are more portable than we once thought. We need to shift the way we approach our working lives to think in terms of skills instead of jobs. To ensure this can happen our existing systems including careers education, VET courses and career information need to focus on building a portfolio of skills and capabilities over a person's lifetime.

Instead of focusing on a 'dream job' it may be more useful for young people to consider the 'dream cluster' based on their skills and interests and where they are likely to have the most longevity.

Training — a stepping stone towards workplace competency, but not the full journey

TRAINING & ASSESSMENT

Michael Hartman, Skills Impact

Training is an enabler of competency, but only supervised workplace practice delivers real competency. The VET system often does not support suitable workplace practice and often fails to meet expectations of learners, employers, industry and government.

Industry consultations across sectors employing a million workers demonstrate concern that the VET system struggles to produce proficient, work-ready people and does not support lifelong learning.

Industries challenge the concept that assessment of a person after completing training produces a competent outcome. Only work practice and the feedback that real work provides produces competency over time. Apprenticeships, with their built-in work experience, are seen as effective at producing competent workers.

Increasingly industries are developing enterprise-based training and credentialing based on real life work outcomes to be assured of competency. They have also been seeking higher entry requirements for qualifications based on experience to ensure advanced qualifications cannot be gained by inexperienced people, i.e. people holding qualifications but not yet work based competent.

Based on industry consultations, the reality of competence outcomes is:

1. Workplace Safe to Practice: The level of competence attained through training only where a learner completes and has been assessed as competent.
2. Workplace Competency: The level of competence obtained through training supported by workplace-based practice where the learner is supervised and tested in real situations.
3. Mastery: The level of competence proven by performance in uncertain, changing and advanced environments.

The current VET system appears to be force RTOs to certify learners as competent when they are Workplace Safe to Practice, falling short of expectations from a range of stakeholders. This presentation proposes more nuanced approaches to competency assessment and certification.

Upgrade and update

POSTER

Chris Ho, Chisholm Institute

Using the Action Research methodology (Stringer 2013), our team looked at the journey of a group of teaching staff in upgrading their credentials to meet the ASQA requirement of having the TAE40116 qualification by 1st April 2019. The research is still in its progressive phase, yet we have learnt an enormous amount about the willingness of some Vocational practitioners to undertake the credential upgrade. We have also learnt about the different type of support needed by the VET practitioners to commence and/or partake in the credential upgrade program. There was also a lesson learnt in the design of teaching and assessing resources, in a blended context. Up to date (Dec 2018), our results indicate we have up to 65% of our cohort completed the credential upgrade. However, this figure may have changed with the beginning of a new year.

Why psychological wellbeing and resilience is critical for modern vocational education systems and what to do about it quickly



Keynote address

Gabrielle Kelly, Founding Director of SAHMRI Wellbeing and Resilience Centre

Lifelong learning, like slow food, was the leisurely promise of an enriched life. Now it's essential for a working life in any technical or fast evolving industry. They all are. Most people will have at least 3 careers in workplaces that include "start-up hell" and demand cultural diversity, flexibility, innovation and emotional intelligence. Accessing and integrating precision education, skills and knowledge repeatedly is the equally important 21st century requirement. How will educators and vocational students adapt and thrive in the world which doubles knowledge every two years and in which service/business models are changing fast? How will citizens manage work, family, life and play and not crumble under the pressure? Mental toughness, emotional strength and resilience are part of the answer. Nothing soft about it. How to systematise it quickly is the question. Gabrielle Kelly has some of the answers describing the world leading South Australian approach to building wellbeing at scale.



In the dance with technology: how do we ensure we lead?

Fiona Kerr, Neural and Systems Complexity Specialist, University of Adelaide

In our increasingly technologised world, what does the future look like in terms of work, education, health, ageing, family and being human? While we design transformative technologies, we also discover how unique and valuable human cognition and connection is. We better understand the neurophysiological effects of interaction between humans and technology, and how it relates to learning and adaptation. So how will we ensure that we construct education and work to take full advantage of both humans and technology going forward? Education will need to build new skills, often termed humanics, including critical and systems thinking, entrepreneurship, agility and an understanding of human interaction and cultural difference. The workplace needs to reflect changes in concepts such as worth, productivity, and value, and ensure human connection is still prioritised. Policy will need to dynamically adjust to ensure fair redistribution of risk and reward resulting from automation. All ensure a human centric outcome.

Embedding learner capabilities and using the I am Capable online validation tool to create the most employable graduates in NZ

LIFE SKILLS

Andy Kilsby & Amber Paterson, Otago Polytechnic

How can teaching institutions equip learners to be more employment ready for the fast-changing world of future work? Which capabilities or transferable skills are priorities for employers / stakeholders when they consider graduates as employees?

These questions are central to the development of the Learner Capability Framework (LCF) at Otago Polytechnic. It has been internationally recognised in the previous two decades that the nature of the workplace, the environment, technology, the economy and society is changing. Key to supporting learners for this changing environment is the development of capabilities, or transferable skills, that can be applied in multiple and fluid work situations.

Otago Polytechnic has embarked on a journey of research which initially connected lecturers with employers and stakeholders across fifteen identified clusters of programmes with a view towards inserting employer priorities with regard to capabilities into effective curriculum development. Otago Polytechnic will equip our learners with these prioritised capabilities and support them to provide evidence of having attained them. These capabilities will help our students to thrive, adapt and be effective in their chosen professions, trades and workplaces.

Our initial publication, the first in a set of eight envisaged to disseminate a whole journey over two and a half years, reflects the action research undertaken by Otago Polytechnic towards the development of a Learner Capability Employer Priority Index (LCEPI). This LCEPI explains to the learner and to educators the most desirable capabilities that have been indicated as a snapshot during semi-structured interviews with samples of employers and stakeholders.

This research is a first step towards addressing any existing imbalances between discipline-specific competencies and workplace capabilities in Otago Polytechnic's curricula. The project as a whole will enable learners in any discipline and at all levels to gain validated evidence of their transferable capabilities. An e-portfolio reflecting capabilities will complement the competencies gained in their education.

Rethinking the link between study and jobs

SKILLS & JOBS

Elizabeth Knight & Emma-Jane McCarroll, Education Services Australia

The rapid advancement of digital technology is transforming the Australian labour market. Jobs for life are no longer the norm and for the first time, young people starting out can expect to change roles multiple times across the course of their working lives.

Due to the growing complexity of the labour market, providing effective career advice to young people has never been more important. In the past, there has been a tendency to think about a definite career outcome when selecting a field of study. However, with the nature of jobs changing, students should now consider that the course they choose may be a pathway to a group of jobs which share similar skills, rather than a single occupation, drawing on the vocational streams approach (Wheelahan, Buchanan & Yu, 2015).

Myfuture recently examined potential new approaches to link study and job pathways, taking into consideration current and emerging labour market patterns. Using data from the Australian Census, we researched patterns between vocational and higher education qualifications and current job roles.

Through analysis of the data, we found that the strength of match between education and jobs ranged considerably. In some areas, matches were strong no matter how long ago the qualification, whereas other educational areas led to more diverse career outcomes. Our research showed that most occupations are much harder to predict, and most discipline areas have no clear occupational outcome.

Once we had looked at 4.4 million Census records and derived over 4000 matches between qualifications and occupational groups across the broad spectrum of jobs and education, we combined these insights with our existing knowledge to enhance the government-owned National Career Information Service. This approach supports Myfuture's aim of opening of career options for young people and presenting vocational pathways after school and their links to occupational areas.

Australian VET returns on investment

WORKSHOP 1

Genevieve Knight, Lisel O'Dwyer & Phil Loveder, NCVET

At many levels, people want to understand 'what's in it for them' from their investment in training; including individuals, employers, governments and training providers. Understanding the costs, benefits and returns to vocational education and training is seen by many stakeholders as a 'top priority' for action.

This presentation is provided in two parts. It firstly introduces a framework for better understanding return on investment (ROI) from VET for individuals, business and the broader economy, and notes that these returns are not independent of each other and that there are important flow-on effects.

It then showcases recent work undertaken by the NCVET using the Australian Bureau of Statistics (ABS) 2016 Census data which estimates Australian ROI for VET Certificates III and above. It uses a method previously adopted for published Higher Education estimates and discusses both the findings and the special tailoring needed for truthfully representing features of Australian VET.

Lifelong learning: a tale of one trainer's journey

WORKSHOP 5

Alan Maguire, On Target Work Skills

It was 1986 when I commenced employment as a full-time trainer. Amongst the training courses I delivered was Train-The-Trainer. I quickly settled into this new role and I decided that training would be my future career path. Over the years I have performed many roles: trainer, instructional designer, training consultant, quality manager, project manager, RTO auditor, program manager, RTO manager and VET adviser. I have worked for corporations, TAFEs, private RTOs and industry associations.

Six years after my career in training had begun, Australia's national training system was introduced, and this was the origin of today's competency-based VET system. One of the first sets of competencies to be developed were for Workplace Trainers. At this time, I held an executive position with the Australian Institute of Training and Development, and I had the privilege of being on a committee that reviewed these first competencies for trainers.

Another six years passed, when in 1998 the BSZ98 Training Package was released. This was the first Training Package covering trainer competencies and it consisted of two qualifications: BSZ40198 Certificate IV in Assessment and Workplace Training and BSZ50198 Diploma of Training and Assessment Systems. Like clockwork, every six years the Training Package covering trainers was replaced. In 2004, the TAA04 Training Package was released. In 2010, the TAE10 Training Package. And in 2016, the TAE Training Package.

My training career has been an incredible lifelong journey of learning and discovery. I have delivered Train-The-Trainer, TAA40104, TAE40110 and TAE40116 qualifications. My current research is about the skills trainers need. It has two parts: what has changed over the years? what skills are needed for the delivery quality training in today's changing workplace? The conference presentation shall cover my research about changes since 1986, and introduce the methodology being used to identify trainer skills needed for the future.

Skilling students in new and emerging learning environments

WORKSHOP 3

Kathryn McGilvray, eLearning Educational Solutions Pty Ltd

The furniture industry in Australia is a \$14 billion-dollar industry. This industry largely services the kitchens, cabinetry and upholstery markets in Australia. The greatest challenges to this industry come from globalisation, manufacturing in Asia and recruiting a new workforce who perceived the industry as being 'low- tech'. The Vocational training sector has been affected by perceptions that a trade job will provide limited income and career progression. More academically able students are not going into the trades as they do not

ABSTRACTS

see a career pathway that will bring financial stability and reward in the Vocational Trade areas. There is also pressure on the sector to provide support for disadvantaged students or students with disabilities. These students require a greater level of assistance during their training and this too is putting demands on trainers, training organisations and Institutions to support these students using a range of learning environments to ensure they too have a successful career pathway.

This research will provide insights into the proposed migration from paper-based to eLearning in collaboration with the Australian Cabinetry and Furniture Association and their trainers for the Certificate III in Cabinetry. A qualitative research approach has been taken and the initial results from interviews provide insights about the challenges and benefits of eLearning.

The research will present expectations around the implementation of the eLearning, accessibility, digital capability of students and trainers, the impact of the new learning environment on trainers and learners and what technologies could be used to deliver training in the future.

The different journeys taken by international VET students

SUPPORTING STUDENTS

Steve Nerlich, Australian Government Department of Education and Training

International student numbers in the VET sector are currently growing strongly and are expected to continue doing so over 2019. For international students, a VET course is often one step in a study pathway that extends across other education sectors. International students can also develop skills through work experience in Australia via access to part-time work rights while studying and they may be eligible for full-time work rights after graduation via a range of post-study work visas available in Australia.

The Australian Government Department of Education and Training (DET) releases data on international VET students studying in Australia and can track student movements through study pathways into other education sectors in Australia. To help gain a longer-term view, NCVET recently released survey findings about the 2018 graduate outcomes of international students who studied VET courses in Australia in 2017.

Australia's VET providers are also pursuing opportunities for expanding offshore delivery of VET to international students who may never study in Australia but still see an Australian VET qualification as a valuable asset. In 2018, DET commissioned the Australian Council for Educational Research to undertake the first national-level investigation into the experience of those offshore students. The research identified those students were on a somewhat different student journey to international students studying in Australia, though many similarities are also apparent.

This presentation will consider the role of VET in providing both on and offshore international students with skills for a life-long learning journey and will also provide some insights into the value an Australian VET qualification in the global job market.

Provision of foundation skills by community education providers in regional Australia — what does it look like and does it help get people into VET?

LIFE SKILLS

Lisel O'Dwyer, NCVET & Evelyn Goodwin, Community Colleges Australia

Although many of the community and private providers catering to disadvantaged learners are known to be small, the ACE sector offers largely unacknowledged access to foundation skills (language, literacy and numeracy and employment skills). The specific characteristics of ACE can help engage hard-to-reach learners and thus support the VET system's performance by improving access to VET for people with low skills. We focus on regional Australia where LLN skills are comparatively poorer with great diversity in community profiles between different places. We also ask whether completion of foundations skills courses with ACE helps to develop social capital and has a wider, albeit indirect, impact on individuals' communities. Using the results of a national survey and in-depth case studies in different locations across Australia, we identify the range of delivery models and providers' views and experiences of demand and impact. We present what is known about the outcomes for learners. Key findings to date are: almost 90% of ACE providers offer foundation courses and so they should be seen as significant players in preparation for entry to VET; regional providers are more likely than metropolitan providers to experience difficulties in delivering courses, usually related to funding but also legislation and compliance requirements and assessment procedures; soft entry was slightly more common and completion rates slightly higher in regional areas; regional and metropolitan learners have different reasons for dropping out; all providers use a similar range of teaching strategies but regional providers were more likely to use humour and common ground and to share relevant material from their own lives; regional providers are more likely to report that their learners discover new options and improved independence and more likely to be able to track outcomes for their learners through informal networks, but both rural and metropolitan ACE providers have insufficient time and funding for formal tracking.

Just what skills are required for life

LIFE SKILLS

Serryn O'Regan, Evolve College

Job Skilling for the future must anticipate the needs of future employers, industry and the economy. Tomorrow's world will look nothing like today's world. We are in for a time of rapid and large change - technologically as well as in the types of jobs we do. To prepare our workers of tomorrow, we need not only to train them in technical prowess and digitisation skills we know of NOW, but skills that will arm them to be able to deal with the jobs of tomorrow that we as a society cannot even foresee yet - this is what is required to educate new entrants and upskill workers for the markets, industries and economy of tomorrow. Evolve College will share exactly what this means from its team's 20 years' experience in soft skills training, as part of its national educational program. Evolve College is entirely focused on integrity and quality in education. To us, qualifying a student is not just about competency satisfaction, but ensuring the student is fully prepared in every way possible for what they will face in their chosen career. The presentation will share the transformation in students' growth through a focus on what matters most in all education - people and their development. Insights into what is required for the education of tomorrow, to meet demands yet unknown, will be shared, with a sharp focus on the role of soft skills.

Occupational outcomes' influence on students' choices of higher vocational education in Australia

ACCESS & EQUITY

Stephen Parker, University of Glasgow & Elizabeth Knight, Monash University

This paper examines the take up of Bachelor degree offerings from government-owned vocational institutions in Australia within a heavily marketised, high-participation context. Given its small but increasingly important part of the sector, and given the intersection of VET and HE, very little is known about who takes up these new degree offerings (Bathmaker 2016), and the aspirations and archives of experience (Appadurai 2004) that lead them to do so. This is in contrast to the large body of research on HE and career aspirations in Australia, the UK and other European nations (e.g. Gale & Parker 2015; Spohrer, 2016; Baillergeau & Duyvendak 2017).

In this paper we identify a new emerging group in relation to aspirations for higher education tertiary education that are complex. Traditionally, the literature tends to consider two aspirational groups: those with 'high' aspirations who seek out high status institutions and courses, contrasted with those from disadvantaged backgrounds often positioned as having few educational aspirations (e.g. Archer, Hollingworth & Halsall 2007). We identify a third group that draws on a different 'archive of experience' and aspirational capacities (Appadurai 2004), privileging subject content over positionality.

We argue that the association between HiVE participation and familial traditions of higher education for people studying higher vocational degrees is less clear than it is for traditional university participation in Australia and different to patterns of participation in the UK and European contexts. Specifically, we identify previous experience with post-secondary education and particularly an expressed interest in the subject matter drawing on conceptions of occupational outcomes as particular characteristics of their archives of experience. We conclude that students in the research are 'cartographers' in that they are not following an established map but working out their own routes to known destinations.

An industry training organisation perspective of strategic planning for future workplace learning and assessment innovation in New Zealand

WORKFORCE / EMPLOYMENT

Reena Patel, The Skills Organisation, New Zealand

Industry Training Organisations (ITOs) support workplace training by engaging with employers to provide training that meets industry needs. Research alludes to a changing workplace environment characterised by technological innovation, globalisation and changing demographics. The government is encouraging the tertiary education sector to be responsive to change. Research points to today's workers having less than five minutes a day to devote to professional development, yet learners are expected to have additional skillsets. This study aims to understand how middle- and senior-level management interpret the Tertiary Education Strategy in the context of future workplace learning and assessment innovation, to explore the strategic planning for it and to understand the challenges in implementing the innovations in ITOs in New Zealand. An interpretive approach was adopted for this qualitative study involving an in-depth investigation of eight participant's views across five ITOs.

The research method used was semi-structured interviews. This research identifies innovation was unanimously defined as, 'different ways of doing things. However, it was applied subjectively. A key finding is that ITOs believe they work closely with employers, clients and learners as part of their role despite there being no legislative requirement to plan for skills leadership. Another key finding confirms that ITOs have experienced changes through advancements in technology, a changing workforce and globalisation

themselves or within the industries they work with. Findings also indicate that regulatory quality assurance processes are viewed as one of the barriers to innovation. An implication of the study is that the government's intended outcomes for innovation may or may not be met as innovation is applied subjectively. The study concludes that stringent regulatory quality requirements could stifle innovation and instil fear of the consequences of non-compliance within the ITOs.

doorways2construction — a pathway success?

APPRENTICES & TRAINEES

Marie Paterson & Eric Parnis, Construction Industry Training Board (CITB)

The Construction Industry Training Board (CITB) administers and provides funding for the doorway2construction (D2C) VET in Schools program in South Australia. D2C delivers Certificate I and II qualifications in Construction and Construction Pathways to Year 10-12 students. As well, CITB funds a D2C plus program which delivers partial Cert III qualifications in Carpentry, Bricklaying and Plumbing to senior school students. Both D2C and D2C plus have structured work experience for students embedded in their program design. Since commencement in 2000, over 10,000 South Australian school students have participated in the program, across 40 host schools across the state. CITB's unique database can capture all D2C student's construction journey. This research, undertaken with support from the Department for Industry and Skills, looks at the effectiveness of the D2C program from inception across the following variables:

- D2C student conversion to apprenticeship or traineeship
- Completion rate of these apprenticeships compared with those who did not participate in the D2C program
- The percentage of D2C plus students who have undertaken construction apprenticeships
- The number of D2C students who undertake a vocational path through a contract of training in non-construction occupations
- The importance of participation in the D2C plus program for SACE completion.

Apprenticeships continue to be the bedrock for skills development throughout the construction industry. As the construction workforce ages and skill shortages intensify in some occupations, making construction apprenticeships attractive to school leavers is of major importance. Therefore, effective pre-vocational programs such as D2C play an important role in facilitating the entry of school students to industry. The learnings of this flagship program can be replicated to ensure successful school to employment outcomes are achieved to meet future employment challenges across multiple industry sectors.

Employability skills: have we had it wrong?

LIFE SKILLS

Kate Perkins, Australian Council for Educational Research (ACER)

Thirty years ago, the Mayer Key Competencies were developed in response to concerns that young people did not have the non-technical skills to thrive in what, even then, was seen as 'the changing world of work'. Since then, it has been generally agreed that these employability skills are critical for getting a job, doing a job and building a career. Predicated on the assumption that the skills are transferable across contexts, much of the effort has gone into getting the 'right' list of common skills, with discussion seldom moving past broad labels like communication or teamwork.

There has been little research on how these skills manifest 'in the wild'. Two federally funded studies set out to gain a better understanding of employability skills in entry level roles in STEM-rich and care/support industries. They used the Core Skills for Work developmental Framework (CSfW) to provide common reference points for employer, trainer and learner interviews, job analysis and qualification mapping. The CSfW made it possible to describe employability skill needs with a precision and provided a basis for the development of detailed skill profiles for each job role.

The studies found that context is critical, influencing not only which employability skills are essential within a job role, but also the degree of skill sophistication required. Nor were non-technical skills immediately transferable, with learners often needing explicit training in strategies to adapt and apply these skills. However, with some notable exceptions, essential employability skills were not codified in relevant qualifications, and trainers did not necessarily address them unless they were to be explicitly assessed.

Has the focus on lists and labels, and assumptions about transferability, led us up a blind alley? In this interactive presentation, participants will explore the studies' implications, and consider practical ways in which we could lay foundations for change.

Factoring in equality of opportunity: a case study of Western Sydney VET

ACCESS & EQUITY

Don Perlgut & Evelyn Goodwin, Community Colleges Australia

Western Sydney is Australia's third largest economy outside of Sydney and Melbourne CBDs. It is a microcosm of the issues facing Australian society in terms of urban density, economics and of the skills needed for work and life. It is growing rapidly, with a population of more than 2.2 million, including residents from more than 170 countries, speaking more than 100 languages. Despite booming growth, the region's economy has been unable to keep up, with the ratio of jobs to residents falling consistently since 2000, and persistently higher unemployment than the rest of Sydney. How can the region's post-secondary education infrastructure meet the needs of its population? Community Colleges Australia (CCA) undertook a project to explore how Western Sydney could become a stronger and more connected region through the training and other efforts of its 13 NFP adult and community education providers, by:

- surveying and mapping the skills and economic development activities of Western Sydney community education providers;
- detailing case studies for models of future economic development; and
- holding a public regional economic development forum.

This presentation details the findings:

- 13 community VET providers operating from 200+ sites, with large potential but needing to work together as part of a consortium of formal network
- a TAFE system which has slashed its place-based outreach programs
- large areas of socio-economic disadvantage juxtaposed against areas of dynamic growth such as Parramatta CBD and the new airport
- examples of unusual training innovation and success
- dynamic local councils developing education plans 'unique in Australia' that link universities and higher-level educational precincts to new and existing town centres
- development opportunities with local government, state development corporations and local developers.

The 4th Industrial Revolution and VET: the relevance of entrepreneurship education in Australia

LIFE SKILLS

Wendy Perry, Workforce BluePrint

Technological changes, changing growth industries and how workers engage with labour market are among a range of economic forces changing the future of work and the skills required by the Australian workforce. It is imperative that training products and entrepreneurial experiences remain adaptable to a range of factors that will affect workforce trends and to provide learners with the skills and capacity to enable them to achieve a broader range of employment opportunities or further study. The scope of this study is to answer the following questions:

- How can entrepreneurship education through VET support the implementation of the National Innovation and Science Agenda in Australia?
- How does or could entrepreneurship education relate to Australia's National Training Packages (VET curriculum)?
- What are some current examples of entrepreneurship education in VET programs across Australia?
- Into the future, how can entrepreneurship education through VET address Industry 4.0 and Workforce 4.0 requirements, including 21st Century capabilities and training products?

Whilst Australia has many entrepreneurial education programs on offer, they are often outside of formal education and curriculum outcomes. Moreover, there is debate over whether 'entrepreneurship' can be taught.

Methodologies such as business model canvas, lean startup, acceleration and incubation, coaching and mentoring, pitch competitions and international experiences, supported by co-working, introductions and delegations are more of the approach to build entrepreneurial capabilities. This is across primary school, high school and University with VET/TVET lacking in examples of entrepreneurial programs. This is due in part to the heavy focus on compliance and regulation, lack of entrepreneurial skills in competencies, qualifications and Training Packages, and a lack of innovation or connection with local entrepreneurial ecosystems.

ABSTRACTS

VOCEDplus: resource discovery to support practitioners

WORKSHOP 6

Rose-Anne Polvere & Kelly Frazer, NCVET

Skilling the workers of the future is becoming increasingly challenging for practitioners due to rapid changes in technology and an explosion of online information.

As practitioners working in this environment, how do you find high quality, relevant information that enable you to develop and guide the student journey? The answer is VOCEDplus.

This workshop is aimed at teaching and learning practitioners and managers working in the sector who are looking for authoritative, current (and older, well respected) information to inform teaching and learning practice, assessment, and planning of content and delivery systems.

The workshop will explore value-added resources on VOCEDplus aimed at practitioners, such as the new VET practitioners' resource and the refreshed Pod Network which provide instant and convenient access to relevant information.

Scenarios based on potential information needs of both practitioners and education managers will be used to build awareness and understanding of how the resources and services available via VOCEDplus can support and build confidence in both practice and educational planning and decision making.

The significance of higher vocational education in Australia

TRAINING & ASSESSMENT

Shaun Rawolle, Deakin University

This research paper responds to a central research problem: what is the significance of higher vocational education, in Federal systems where there are existing settlements between the roles played by Vocational Education and Training (VET) and Higher Education (HE)? The paper responds to this problem with data and findings from a research project about higher vocational education in Australia and the UK. The paper draws on a current Australian government funded empirical study of the growth of higher education in the vocational education sector.

Taking a case study approach with both deep and shallow sites the project has undertaken interviews, collected publicly available materials and surveyed students. Analysis is provided of policy documents, interviews with national and institutional stakeholders, as well as national data sets on student enrolments, experiences and outcomes in order to explore and understand how higher education is developing in the non-university sector in Australia.

The paper discusses the rightness of fit in structures and traditions and explores problems they may be creating in hindering the development of HiVE in Australia, effectively distracting policy makers and practitioners from the potential of HiVE to undertake equity work and contribute to Australian society and its economy. It considers how the government structures due to the Australian Federation of States and Territories impacts on the provision of higher education TVET and seeks to draw parallels from international experience.

These challenges may explain why higher education in TAFE remains less than 1% of the Australian higher education enrolments, a small majority of whom are full-fee international students and provide insight into how the higher education in TVET can be impacted by government policy or policy vacuums.

Case studies of good practice in parent engagement in career education

YOUNG PEOPLE

Lauren Renshaw, Australian Research Alliance for Children and Youth (ARACY)

Parents and families play a pivotal role in the career choices for young people. The levels of engagement between schools and parents to assist with these decisions, however, is highly variable and in most cases relies on chance rather than systemic factors. This situation is further compounded by prevalent misconceptions, especially among parents, around the value of vocational pathways.

In 2018 the Australian Government Department of Education and Training (DET) funded the Australian Research Alliance for Children and Youth (ARACY) to find examples of schools, programs and communities demonstrating good practice approaches in engaging parents and families to support their children in career education, in response to a suite of recommendations identified by the National Career Education Strategy Working Group. The resulting case studies developed by ARACY demonstrate innovative, place-based solutions to career guidance approaches that rely on effective engagement between schools, young people and their families.

This paper presents the themes and broader learnings from these case studies, specifically around strategies undertaken to empower parents and family members to support the career and education decisions of their children, showcasing examples that:

- promote the consistency and accuracy of information children and young people receive about career development from schools and their families
- highlight multifaceted approaches in engaging parents and families across a range of mediums
- focus on key transition points for children and young people (Year 6-7, 9-10, 11-12), and
- meaningfully engage with parents and families.

Skilling up: intervention strategies for career development

SKILLS & JOBS

Andrea Rivett, Wise Employment t/a Interskills

Vocational Education and Training (VET) provides “skills for work”. As a result, in recent years there has been a focus to ensure VET learners have the required language, literacy and numeracy (LLN) skills to meet course demands as they transition in to VET studies. To compliment this, since 2016 the Department of Industry and Skills (South Australia) has had a focus on improving learners’ foundation skills within, and alongside training courses to support the transition into the workplace.

A collaboration between the Department of Industry and Skills, a private training provider, and industry, support a career development intervention to improve the written skills of practicing and experienced Early Childhood Educators to enhance communication with external stakeholders.

This project seeks to not only upskill by increasing the participants’ Australian Core Skills Framework (ACSF) writing levels, but also to streamline the efficiency of written communication within 14 South Australian childcare centres to improve productivity.

The weekly contextualised training highlights the importance of ongoing professional development within industry to improve workplace written skills, and to standardise writing practices within an organization.

Shaping the skills of our future workforce

WORKFORCE / EMPLOYMENT

Sharon Robertson, IBSA

A skilled workforce is a priority for governments and businesses alike as economies and organisations continue to respond to industry changes. Skills development that meets emerging industry needs and enables future generations to build capabilities throughout their career is top of mind for decision makers.

This presentation will examine:

- What the industry is saying about the changing nature of the workforce
- How Vocational Training can prepare employees and future generations to thrive in shifting landscapes
- The environment needed to enable future skills development.

Exploring data from the Longitudinal Surveys of Australian Youth (LSAY)

WORKSHOP 2

Ronnie Semo & Olivia Gu, NCVET

For over 20 years the Longitudinal Surveys of Australian Youth (LSAY) have provided researchers, policy makers and education practitioners with a valuable resource capturing the pathways of young people as they make their way from school to post-school education and training and into the workforce.

LSAY covers topics relating to education, employment, living arrangements and wellbeing and includes information that isn’t captured by administrative data such as attitudes, engagement, satisfaction and soft skills. To date, more than 60,000 young people have participated in LSAY across six distinct cohorts, providing users with a vast evidence base for exploring youth transitions over the decades.

This workshop will introduce participants to LSAY and the many resources available to help use and understand the data. Particular focus will be given to LSAY data tools that give users quick access to survey results, which can be easily filtered by a range of demographic variables and used to explore changes over time. These tools will be demonstrated ‘hands on’ and provide participants with opportunities to work through examples, explore the data and ask questions.

ABSTRACTS

Collaborative teaching model to amalgamate vocational education skills into tertiary programs

POSTER

Shweta Singh, University of Queensland

UQ-Skills is a vocational arm of the University of Queensland. This paper will highlight the untapped potential of vocational education to play a significant role in the learning journey of tertiary university students. This paper will introduce the idea of packaging vocational skill set program into a university degree program which enhances the learning experience. The paper will also illustrate how a practical knowledge along with strong academic knowledge can be an addendum to student's holistic learning which prepares them for the workforce.

This study explores the impact of collaboration, packaging the unit of competencies, designing of modules, work placement, self-directed learning aides a complementary approach towards a holistic educational experience to ensure all academic students receive sound and applied practicum to enhance the graduate attributes.

This exceptional training model is to facilitate students learning to integrate their theoretical study and hands-on experience by supporting a sequential, embedded accomplishment of dual qualifications across both VET and University study in the Bachelor of Veterinary Technology and Captive Animals degrees providing increased amounts of industry-specific practical skills with underpinning knowledge. This contributes to students gaining increased levels of employability skills. It also provides UQ-Skills with a core role to support the Faculty and its programs delivery to deliver applied teaching with accreditation.

Achieving multiple student finalists in the Queensland training awards is a testimony to the quality training delivered in the program. In 2007, 100% of the students had employment outcome. It also supports the overarching requirement of the Australian Government to articulate graduate outcomes in employment.

Preparing our workforce for the future: putting the 'New Work Mindset' into action

WORKFORCE / EMPLOYMENT

Alex Snow, Foundation for Young Australians (FYA) & Belinda Kim, South West TAFE

The exponential change to work is unlike any previous generations' experience and has significant impacts on how we're training and reskilling for work. So how can we support our workforce to prepare for a lifetime of careers instead of the career of a lifetime? In this new world of work, lifelong learning and an ability to navigate rapid change is essential. But it's not just workers that need to adapt — we need to create a system that cultivates lifelong learning and supports continuous upskilling and reskilling to afford Australians the flexibility to move throughout their working lives.

The Foundation for Young Australians' (FYA) New Work Mindset report identifies how we can support our workforce to navigate this changing landscape. This research has come to life in a collaboration between the South West TAFE (SWTAFE), FYA and Aged Care Providers in South West Victoria that aims to shift mindsets from linear careers to a more dynamic world of work where a portfolio of skills will be crucial to navigating the future.

This ambitious project seeks to inform, develop and test new career development and management processes and tools for SWTAFE students, staff and Aged Care employees to help design a more responsive training system that can keep up with this rapid change.

Underpinned by localised research that identifies skills mismatch between industry demands and training supply, it will showcase a new learning model through the development of micro-credentials, a new approach to workforce planning and an online career assessment tool that provides users with a skills profile and accurate, future focussed information on job vacancies.

An innovation hub offering immersive, peer-to-peer learning will focus on enabling an entrepreneurship ecosystem to thrive in the region; ensuring people can become job creators as well as job seekers. The presentation will present findings from the research together with insights into the impact of the tools.

Are skill sets booming? Use and utility of skill sets

SKILLS & JOBS

John Stanwick, NCVET

The demands of today's workplace and constant technological change mean that worker's skills need to be constantly refreshed and updated in line with changes to work roles and occupations. There are also increasingly regulation or licensing requirements associated with jobs. With occupations increasingly dissected into tasks and skills, and with automation scores attached to these, VET skill set

programs may be a key response to future-proof a worker's career and job resilience. Skill sets can be defined as a clustering of one or more units on a competency below the level of a full qualification that meet an explicit client need.

This presentation will provide interim findings from a NCVET project focused on the reporting, uptake and utility of skill set programs in the VET system. To date, there has been little investigation of these skill sets and hence there are considerable gaps in our knowledge about how they are being used. Using data from the National VET Provider Collection and interviews with government and industry representatives we find that skill sets are used for a variety of purposes, but that there are some cautionary notes around their use. This presentation will provide an opportunity to discuss these findings in more detail.

Evaluating the effectiveness of support interventions for adult dyslexic learners in multiple tertiary learning environments

SUPPORTING STUDENTS

Michael Styles, Primary Industry Training Organisation

This research examined how best to support adults with dyslexia achieve to their potential in a range of tertiary education environments. There were 5 research partners covering off 3 different Industry Training Organisations (apprentices), one Polytechnic and a Wellington based Private Training Establishment

The research tested the effectiveness of a wrap-around holistic support package developed by the Primary Industry Training Organisation.

The support package has 5 components:

1. A screening to identify the presence (or not) of dyslexia.
2. The provision of quality information about dyslexia- both the challenges and the positive features.
3. Coaching and supporting the student to own their dyslexia.
4. The provision of quality information and training to all those who interact with the dyslexic student.
5. Accessing human and technological supports to assist the dyslexic learner achieve.

The results confirm that:

- It is possible to achieve significant improvements in outcomes for students with dyslexia
- Major improvements can be achieved for modest amounts of money
- Central to dyslexic learner success is the presence of "significant others"
- If sustainable progress for the 10+% of the population who are dyslexic we need to apply some education and training to team leaders, supervisors and employers.

The research findings provided some concrete guidance to tutors and others in the education sector how they can better meet the needs of dyslexic students and others with learning differences. The research also served to confirm that behaviours exhibited by successful adults with dyslexia and how those good behaviours could be shared with others.

Recognition of structured workplace learning for senior secondary students undertaking VET

YOUNG PEOPLE

Daryl Sutton, Victorian Curriculum and Assessment Authority

Victorian senior secondary students have long undertaken VET and participated in structured workplace learning however the 2 were seldom linked. Following international research, the Victorian Curriculum and Assessment Authority has developed a mechanism for greater recognition of the time a student spends in a workplace aligned to a VET qualification. The SWL Recognition arrangements apply to students who are undertaking VET at their school / RTO or through a school-based apprenticeship or traineeship arrangement.

The recognition is through a direct contribution of up to 4 units towards the completion requirements of either the Victorian Certificate of Education or the Victorian Certificate of Applied Learning.

Students are required to record their reflections against 3 questions per unit of competency and prepare a report on the employability skills gained and a summary of their industry learning. Teachers from the student's school are required to discuss and review student responses prior to the awarding of VCE or VCAL credit.

ABSTRACTS

The student journey — building resilience as a key life skill

SUPPORTING STUDENTS

Amanda Torr, Te Runanganui o Te Atiawa & Hinemoa Priest, WelTec

This presentation will use case studies to illustrate the role social connection, cultural identity and whanau (family) support play in building student's resilience, confidence and persistence to succeed in their study. We will describe how the Tamaiti Whangai Team at Wellington Institute of Technology use indigenous concepts of family (whakawhaungatanga) alongside the values of respect for all cultures (manaakitanga), reciprocity in learning (Ako) and self-determination (rangatiratanga) to support students to succeed.

Under this model, success goes beyond outputs such as completing a course of study, to measuring outcomes using a wellbeing framework that encompasses health, employment, social and cultural connection and living environment, and minimising destructive behaviours such as overuse of alcohol and drugs, antisocial behaviour, violence or crime. Our practice is based on the belief that skilling for life involves developing people to be independent, responsible and self-actualising and that these attributes prepare them for life.

Our model of support, illustrated through the case studies presented, is based on the concepts of Whanau Ora, where the individual is seen as connect to and not separate from their whanau or family, where family is a self-determined construct that may be familial or constructed from supportive relationships.

Unaccredited training: why employers use it and does it meet their skill needs?

WORKFORCE / EMPLOYMENT

Ian White, NCVET

Employers make a significant contribution to the skilling of the workforce and use a variety of training approaches, including accredited, unaccredited and informal training

The use of unaccredited training by employers was the focus of a recent NCVET project. Unaccredited training refers to a program of structured training or instruction that does not lead to the attainment of a formal qualification or award, for example, short courses, product-specific training and industry or organisation-specific training.

As unaccredited training sits outside the mandatory reporting requirements of the nationally recognised accredited training system, administrative data relating to its use are not systematically collected in the National VET Provider Collection, therefore the true extent of its uptake in Australia is largely unknown. The NCVET research therefore, used the 2017 Survey of Employers' Use and Views of the VET System to investigate why employers use unaccredited training, why they choose unaccredited training in preference to accredited training, and whether it meets their skills needs.

This presentation will discuss these key findings in greater detail and provide an opportunity to learn more about the potential benefits and drawbacks in the use of unaccredited training for the employee in comparison to accredited training.

Investing in our future: how can educators identify and minimise students' detrimental individual differences while strengthening their positive characteristics?

SUPPORTING STUDENTS

Cameron Williams, Black Dog Institute (University of New South Wales)

NCVET EARLY CAREER RESEARCHER SCHOLARSHIP RECIPIENT

To address the high levels of student distress and demotivation/disengagement within educational systems, it is important to consider which psychological-based individual differences often contribute to these problems (and can prevent life-long learning). This presentation will focus on various key factors (such as imposterism and maladaptive perfectionism) which affect at least one-third of students, contribute to feelings of inadequacy, and limit the development of essential 'soft skills'. Despite the many detrimental consequences that these characteristics can lead to (e.g., burnout/depression, dropout intentions), many educators only have a limited awareness of these psychological constructs. Therefore, given that even some knowledge of these individual differences can be beneficial, this presentation offers a much-needed review to increase general understandings within the VET system.

Ultimately, by considering existing literature and novel survey results (from thousands of students), this presentation will address the following questions: What are some key psychological factors that are detrimental for students (e.g., perfectionism, imposterism)? How

can we identify students with high levels of these factors? Why should we care about these individual differences (i.e., what are the consequences for students, educational institutions, and future workforces)? What can be done about these factors (by educators)? Lastly, how can we address our own detrimental individual differences (as practitioners/academic staff)?

In addition, we will also discuss a range of positive factors or 'soft skills' that can be enhanced within student populations, to optimise outcomes and promote life-long learning (e.g., resilience, self-compassion, grit).

Ultimately, this presentation will help ensure that educators are aware of potentially-damaging individual differences, and of positive factors which they can help students develop (thus enhancing future work and education).

Employers' perspectives of the benefits and barriers to women in trades and what needs to change

APPRENTICES & TRAINEES

Mark Williams, Building & Construction Industry Training Organisation (BCITO)

NCVER RESEARCHER SCHOLARSHIP RECIPIENT

The New Zealand Women in Trades Research Consortia undertook research in 2018 focusing on the enablers of and barriers to the success of women in trades from the viewpoint of employers.

The project sought to identify unconscious bias in employers by deliberately sampling a balanced mix of employers who are currently training in residential, commercial or civil construction as well as mechanical and automotive engineering. The final sample consisted of 565 employers with 45% having employed women in a trade role.

The presentation will focus on three aspects of the employer research:

- The benefits of employing women and the underpinning behaviours and beliefs that underpin the perceptions;
- The perceived barriers of employing women and the underpinning behaviours and beliefs that underpin the opinions; and
- Changes that can help an employer and collectively an industry be more gender diverse.

This research project is part of a wider research program seeking to increase the participation and success of women in trades where they have been historically underrepresented. This presentation focuses on the demand side of the employment equation. It complements consortia research presented at the 2018 No Frills Conference focusing on the perspectives of successful women in trades which reflects the supply side of the employment equation. The presentation will also include information on the third pillar of the research program data. This will focus on the insights available to us through the New Zealand Government's Integrated Data Infrastructure about a range of topics including:

- The learner's journey prior to and following engagement with VET in the construction and mechanical engineering fields;
- The connection of schools-based trades training and industry employment/training; and
- The income potential of trades people

Harnessing social and cultural capital for life skills — women who 'can talk the tools' and 'walk the work'!

APPRENTICES & TRAINEES

Elizabeth Wulff, Charles Sturt University

Social and cultural capital have long been considered valuable assets that assist individuals to succeed in education and work. Social capital is about relationships and networks, 'it's not what you know but who you know' is a good example. Knowing the right people will provide opportunities, role models and experiences that attain position and reward. Cultural capital assists individuals to understand the language, behaviour and values appropriate to a given situation. In workplaces, cultural capital translates into looking and sounding right, knowing how to 'fit in'. Having or acquiring capital is important for women integrating into the male dominated trades (such as construction, electro-technology, automotive and plumbing).

This paper reports on an aspect of a wider research project investigating women's experience of the manual trades. Here we report on how the possession of capital assists women in VET 'talk the tools' and 'walk the work' Our research found that capital aids the success of young women throughout their VET journey. The women who have this capital, which comes in the form of family/friends, role models and mentors, find the VET journey less daunting, are more quickly accepted and feel they belong. Capital affords women assets in the form of practical knowledge that quickly translates into skills and an increased confidence to navigate their apprenticeship.

ABSTRACTS

In the changing world of work, diversity and inclusion is a priority and when enrolments in the manual trades are up but completion rates are down (NCVER 2018) the theory of capital is an illuminating lens to understand the advantage some students utilise. In the masculine culture of the workplace, this capital is more complex but in the VET classroom where the playing field is somewhat levelled, understanding how capital works, recognising its value and replicating its techniques enhances the experience and ensures the success of students.

Looking inside — new tools for training package transparency

TRAINING & ASSESSMENT

Michael Wyndham, Australian Government Department of Employment, Skills, Small and Family Business

The problem of skilling for life means extending skills within a job and extending skills to transition between jobs. Upskilling and re-skilling choices can benefit from knowledge of the relationship between the competency standards underpinning VET training products and the skills in demand in the market. The corpus of training package documents is very large and research into these relationships requires effective tools to increase the transparency of this rich corpus of documents.

The Department of Education and Training has developed a search and cluster tool to facilitate enquiries into the contents of around 17,000 units of competency. The search function searches on the whole of unit content, not just titles, using words and word combinations the researcher chooses. The search returns a unit title list, ordered by relevance, and hot linked through to the units in training.gov.au for deeper investigation.

The clustering function is driven by a widely used machine learning algorithm called Latent Dirichlet Allocation. The researcher chooses a basket of units for clustering and the function returns a unit list classified into groups of similarity and a visual representation of the classification and sub-classifications.

The tool was developed to assist skills service organisations in the development of training packages. It can also be used by academic researchers to identify and classify units of interest to an enquiry and by RTOs searching for imported units to include in a qualification for a specific purpose. The tool opens a line of enquiry, using machine learning, that would relate units of competency, and the qualifications and skill sets containing them, to skills-in-demand profiles, such as those found in job advertisements.

The tool is hosted on training.gov.au. It is seen as a first iteration and the Department seeks feedback from registered tool users to guide and drive subsequent developments.

Student choice and lifelong learning: who you gonna call?

ACCESS & EQUITY

Don Zoellner, Charles Darwin University

This paper explores some specific results that have arisen as a result of the progressive implementation of national competition and new public management policies favouring increased user choice. Vocational education and training strategies have consistently advocated for greater levels of student choice of provider in a contestable market since the mid-1990s. In addition to noting the significance of choice, the Kangan Review of TAFE also ensured that the post-school, non-university educational option was intimately linked to notions of access and equity in support of lifelong learning. The National Vocational Education and Training Provider Collection provides the data used to compare student and training package characteristics from different years selected because they mark key policy and program developments on the journey of implementation of the mature contestable training market in which over 4,000 providers compete. In particular, the impact of increased student choice on measures of access and equity is identified through a trend analysis. The specific characteristics include system-wide numbers of students and enrolments as well as the number of students by enrolment in the top 20 training packages, the various fields of education, level of relative remoteness/access to services, Indigenous status and level of relative socio-economic disadvantage. If the introduction of contestable markets has delivered the anticipated benefits in access, equity and choice that were anticipated in the various state and territory training entitlements/guarantees it would be expected that the trends would show larger numbers of students from each equity group and region obtaining qualifications in a wider range of occupations. If not, the ability of the national training system to produce a nation of lifelong learners who experience equitable access by exercising a wide variety of choices is called into question; as is 25 years of bi-partisan public policy consistency.

