24th NATIONAL VOCATIONAL EDUCATION AND TRAINING RESEARCH CONFERENCE

NO FRILLS

6-8 July 2015
Sydney, New South Wales

Youth ▪ Pathways ▪ Skills

CONFERENCE GUIDE

PROGRAM AND ABSTRACT BOOKLET

Presented by

NCVER

Co-hosted by

University of Western Sydney

TAFE NSW Western Sydney Institute WSI

TAFE NSW SWSi South Western Sydney Institute

Supported by

Australian Government
Department of Education and Training

Through the National Vocational Education and Training Research Program

Thank you to the following organisations for contributing to the 24th National Vocational Education and Training Research Conference 'No Frills'.

Co-hosts

NCVER

University of Western Sydney

TAFE NSW Western Sydney Institute WSI

TAFE NSW SWSi South Western Sydney Institute

Dinner

University of Western Sydney

Mobile APP

ACPET
AUSTRALIAN COUNCIL FOR PRIVATE EDUCATION AND TRAINING

Welcome Reception

TAFE Directors AUSTRALIA

Satchel Bag

Wallis strategic market & social research

Tea Break

AAIR
Australasian Association for Institutional Research

AVETRA
BRINGING AUSTRALIA'S VET RESEARCH COMMUNITY TOGETHER

Cummins

Table display sponsors

IBSA
Innovation & Business Skills Australia

ish® onCourse™

JobReady.

une University of New England

VET DEVELOPMENT CENTRE
Building Workforce Capability

WELCOME

On behalf of NCVER and co-hosts University of Western Sydney and TAFE NSW's Western Sydney and South Western Sydney Institutes, welcome to the 24th National Vocational Education and Training Research Conference 'No Frills'.

We're delighted Senator The Hon Simon Birmingham is joining us this year to address around 300 delegates from across Australia and overseas. We have an exciting program of over 50 presentations which features three key areas vital to developing the VET system and meeting future skills demand—youth, pathways and skills.

It is imperative that research and statistics are designed for maximum impact and this conference is part of our commitment to engage our community in research and build research capacity. It exposes VET practitioners to the value of research and is your opportunity to connect with leading researchers and professionals in the sector.

This event would not be possible without the contribution of our sponsors.

We hope you enjoy your time.

Dr Craig Fowler
Managing Director
National Centre for Vocational Education Research

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ABOUT THE CONFERENCE

This year's conference will be held over two full days on Tuesday, 7 July and Wednesday, 8 July, with optional pre-conference workshops on Monday, 6 July.

Conference highlights include an address by the Assistant Minister for Education and Training, Senator The Hon Simon Birmingham and keynote presentations from Professor Peter Shergold AC and international workforce development and apprenticeship expert, Nicholas Wyman.

The program features more than 50 presentations on the topics of Youth, Pathways and Skills, areas vital to development of the VET and the higher education sector.

FOR SPEAKERS

Presentations sent prior to the conference will be uploaded and saved on the computer desktop in allocated rooms, under your name. We ask that speakers check their presentation and audio visual material before presenting. If you have any concerns, please speak with Laura O'Connor or June Ingham (NCVER staff members) at the registration desk during the break preceding your presentation or at the beginning of each day.

REFEREED PAPERS

Papers annotated with a * in the abstract section have been refereed and will be considered for a book of conference proceedings published by NCVER. An anonymous refereeing process and an editorial panel were used during this process.

TABLE DISPLAYS

Table displays will be held in the exhibition space on the ground floor of EA Building, University of Western Sydney, Parramatta South campus:

- 12.45pm to 5.00pm on Monday, 6 July
- 8.15am to 4.45pm on Tuesday 7, July
- 8.15am to 2.30pm on Wednesday 8, July.

A floor plan of the venue is located on page 9 of this booklet.

CONFERENCE APP

The app allows you to use your mobile device to access session details; view keynote speaker bios, maps, sponsor and exhibitor information; connect with other attendees; take notes and receive event news. To access the app:

1. Visit the **Google play** or **App Store** on your mobile device.
2. Search for **NCVER events**.
3. Download the app and use the passcode "**nof15**" to access the event.
4. Login using an existing social media account or by creating a login with an email address.
5. Add yourself as an attendee by selecting the **Attendee** icon.

STAY CONNECTED

Follow us on social media:

National Centre for Vocational Education Research (NCVER)

@NCVER

TWITTER

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

Please note our Media and Communications Officer will be taking photos and tweeting during presentations.

GENERAL INFORMATION

CONFERENCE VENUE

The conference will be held at University of Western Sydney, Parramatta South campus, on the corner of James Ruse Drive and Victoria Road, Rydalmere.

REGISTRATION DESK

The registration desk is located on the ground floor of the EA Building, University of Western Sydney, Parramatta South campus. For the pre-conference workshops, the registration desk will be open from 12.45pm on Monday, 6 July.
The desk will be open from 8.15am on Tuesday and Wednesday.

NETWORKING HUB

Located in the exhibition space on the ground floor of the EA Building, delegates will have the opportunity to relax over a coffee, mingle with conference delegates and visit the exhibitors.

PRE-CONFERENCE WORKSHOPS

This year pre-conference workshops will commence at 1.30pm on Monday, 6 July in the EA Building. Delegates who have pre-paid and registered for the workshops will have their allocated workshop details on the back of their name badge.

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, the exhibition space, morning and afternoon teas, lunches, the welcome reception and conference dinner (if pre-paid).

SMOKING

The UWS campus is smoke-free with no designated smoking areas.

DRESS

Delegates may choose to wear comfortable smart casual clothing during the conference and social events. The conference venue has heating in most areas, so we do suggest wearing layered clothing during the sessions.

CLIMATE

During July, temperatures in Sydney range between 17°C maximum and 8°C minimum and it's wet around 40% of the time, so we recommend you have an umbrella on hand.

CATERING

Complimentary tea breaks are generously provided by AVETRA, the Australian Association for Institutional Research (AAIR) and Cummins South Pacific.

INTERNET ACCESS

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

MOBILE PHONES

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

PARKING

Free on-site parking is available on campus.

These two points need to be adhered to or parking fines may be incurred:

- The permit (provided on page 15) must be printed and displayed on your dash at all times when on campus.
- This permit entitles you to park in **blue bays only**. The bays are denoted by the ground lines, and blue does represent the majority of parking on this campus. ***You must not park in red bays under any circumstance***.

We cannot control, nor can we compensate/reimburse those who receive fines, so delegates and exhibitors must ensure they follow these instructions in order to avoid them.

TAXI

Premier Cabs 13 1017
Silver Top Taxi 13 5000
Sydney Maxi Taxi 0421 013 911

CONFERENCE EVALUATION

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

You also have the opportunity to rate the sessions you attend within the conference mobile app.

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.

POST-CONFERENCE

Following the conference, papers will be available from VOCEDplus <www.voced.edu.au>, the tertiary education research database produced by the National Centre for Vocational Education Research.

Please send an electronic copy of your paper/presentation to voced@ncver.edu.au by 31 July 2015. An email notification will be sent to conference delegates once all papers received are uploaded.

SOCIAL PROGRAM

WELCOME RECEPTION

Female Orphan School, EZ Building,
University of Western Sydney, Parramatta South campus
Corner James Ruse Drive and Victoria Road, Rydalmere
Monday 9 July, 5.00pm – 6.00pm

Delegates are invited to attend the Welcome Reception at the Female Orphan School. This is an opportunity for us to welcome you to the conference and for you to meet and network with other delegates.

Attending the Welcome Reception is included in your conference registration.

CONFERENCE DINNER

Janice Reid Pavilion, University of Western Sydney, Parramatta South campus
Corner James Ruse Drive and Victoria Road, Rydalmere
Tuesday 7 July, 6.30pm

Delegates are invited to attend a sumptuous three-course conference dinner including pre-dinner drinks, where they will experience innovative cuisine prepared by UWSConnect. The dinner will provide delegates with an opportunity to network with colleagues in a relaxed and informal setting.

We're delighted to welcome Jan Owen AM, CEO, Foundation for Young Australians as our guest speaker.

The red dot on your name tag denotes your registration for the conference dinner.

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

Dress is smart casual.

ABOUT OUR CO-HOSTS

Tel: (02) 9852 5222

Website: www.uws.edu.au

Celebrating its 25th anniversary in 2014, the University of Western Sydney (UWS) is one of Sydney's most accessible metropolitan universities, with multiple campuses operating across Greater Western Sydney. Each campus is directly linked to its community and reflects the cultural diversity, energy and growth of the region.

UWS is ranked as one of the world's top 100 universities under the age of 50 in the influential Times Higher Education rankings. Although a young university, UWS has a long tradition of providing higher education through their predecessor institutions. Today, UWS is one of the largest universities in Australia with 42,000 students.

Tel: 13 1870

Website: http://wsi.tafensw.edu.au/

WSI is a multi-award winning training organisation dedicated to supporting the aspirations of individuals, the community and industry in Western Sydney and beyond.

Recognised as the 2014 NSW Large Training Provider of the Year, and as the 2013 Australian Industry Collaboration Award winner, WSI provides high quality, progressive vocational education and training and workforce development services. More than 130,000 students enrol annually in the Institute's nationally recognised qualifications and customised courses which range from Statements of Attainment through to Advanced Diplomas, Graduate Certificates and Degree programs.

Tel: 13 7974

Website: https://swsi.tafensw.edu.au/

As an award-winning vocational education and training provider, TAFE SWSi provides quality education to one of the fastest growing and most dynamic regions in Australia.

One of Australia's largest training organisations, in 2013 SWSi was named both the national and New South Wales Large Training Provider of the Year. The Institute encompasses the city of Bankstown through to the city of Campbelltown and reaches out to the city of Parramatta and the semi-rural area of Wollondilly, located south of metropolitan Sydney. There are nine colleges in total, all with specialist centres of learning and training.

ABOUT OUR EXHIBITORS

Address: 11/176 Wellington Parade, East Melbourne VIC 3002
Tel: (03) 9815 7000
Email: craig.westwood@ibsa.org.au
Website: www.ibsa.org.au

Innovation & Business Skills Australia (IBSA) is one of eleven Industry Skills Councils authorised by the Australian Government to be an official voice on vocational education and training in the industry sectors we represent.

Our learning, facilitation, and assessment resources are designed to enable best practice and facilitate compliance.

Address: 30 Wilson Street, Newtown, NSW 2042
Tel: (02) 9550 5001
Email: salome@ish.com.au
Website: www.ish.com.au

ish onCourse provides student management software solutions to Australian RTOs of all shapes and sizes, including all state variations of AVETMISS, USI, and VET FEE-HELP reporting. onCourse includes integrated version-controlled document management, student and tutor portals, online enrolments, comprehensive CRM and marketing tools.

Address: PO Box 1514, Crows Nest, NSW 2065
Tel: (02) 9018 5525
Email: mikew@jobready.com.au
Website: www.jobready.com.au

JobReady.RTO is the smarter and faster Student Management System for RTOs.. You can integrate with your web site, finance and LMS systems for a clean, streamlined work flow. We take away the hassles of record-keeping and compliance so you can focus on growing your company.

Address: School of Health, Booloominbah Drive, Armidale NSW 2351
Tel: (02) 6773 3953
Email: jharris2@une.edu.au
Website: www.une.edu.au

University of New England's innovative health degrees, Bachelor of Health Practice, Bachelor of Community Services combine both vocational and theoretical study across majors in Case Work, Recreational Therapy, Case Management, Aboriginal Health and Community Care, and Services Coordination to produce work ready graduates for the health and community services sector.

Address: Level 1, 478 Albert Street, East Melbourne VIC 3002
Tel: (03) 9250 6000
Email: info@vetcentre.vic.edu.au
Website: www.vetcentre.vic.edu.au

The VET Development Centre is an Australian leader in developing the expertise of VET professionals.

The Centre's reputation is driven by our consistent performance in designing, managing and delivering both customised and open access professional development that defines best practice.

Address: Level 11, 33 King William Street, Adelaide SA 5000
Tel: (08) 8230 8645
Email: kelly.frazer@ncver.edu.au
Website: www.voced.edu.au

Produced by the National Centre for Vocational Education Research (NCVER), VOCEDplus is a free research database for tertiary education, especially as it relates to workforce needs, skills development, and social inclusion. It is international in scope and contains over 65 000 English language records, many with links to full text documents.

ABOUT OUR KEYNOTES

A highlight of this year's conference will be keynote presentations from two high-profile speakers:

Professor Peter Shergold AC, Chancellor of University of Western Sydney and chair of NCVER. Peter was a CEO in the Australian Public service for two decades, most recently as Secretary of the Department of the Prime Minister and Cabinet. He

was awarded the Order of Australia (AM) in 1996 and Companion in the Order of Australia (AC) for public service in 2007. He is now a non-executive Director of AMP Ltd, Veda Group and Corrs Chambers Westgarth and chair of Opal Aged Care. He also chairs QuintessenceLabs. He is still actively involved with government: chair of the NSW Public Service Commission Advisory Board and chair of the TEQSA Advisory Council. He is a member of the Queensland Public Sector Renewal Board and the Prime Minister's Indigenous Advisory Council. In the not-for-profit sector he is a patron of the Left Right Think Tank. He is also a senior visiting fellow of the Singapore Civil Service College.

Mr Nicholas Wyman, is a workforce development and apprenticeship expert, speaker, and author who applies real-world solutions to the challenges companies face in finding skilled employees. He is founder and CEO of the Institute for Workplace

Skills and Innovation that develops mentoring programs for various corporations in Australia, the USA, China and Singapore and employs over 700 people in skilled occupations. He is also CEO at WPC Group Ltd., Australia's leading providers of apprenticeships and traineeships. Nicholas co-founded the Skilling Australia Foundation, and is actively involved in the Australian Governments recently announced pilot of the STEM based P-TECH (Pathways in Technology) school model that will commence in 2016.

A hands-on leader in the field, Nicholas has spent nearly two decades developing skills-building, mentorship and apprenticeship programs that close the gap between education and careers. Nicholas works in partnership with schools, industry, community organisations and government to cultivate alternative pathways to employment and continual skills development. His work debunks the notion that a traditional university degree is "for everyone" and explores practical avenues to satisfying, well-paying skilled careers for individuals at any stage of life.

ABOUT OUR DINNER SPEAKER

Ms Jan Owen AM, CEO of the Foundation for Young Australians (FYA). In March 2014 Jan received the degree of Doctor of Letters (honoris causa) from the University of Sydney, in recognition of her significant contribution to young people and policy

in Australia. In 2012, Jan was named the inaugural Australian Financial Review & Westpac Group 'Woman of Influence 2012'. In 2000, she was awarded membership of the Order of Australia for services to children and young people and in 1999 received a fellowship for leadership and innovation to the Peter Drucker Foundation in the US. Jan is the author of Every Childhood Lasts a Lifetime (1996) and The Future Chasers (2014).

Before joining FYA, Jan was Executive Director of Social Ventures Australia, which aims to increase the impact of the Australian social sector. Prior to this, Jan founded the CREATE Foundation, the national consumer body for children and young people in out of home care. Jan has contributed to the establishment of many social change organisations in Australia and served on a wide range of Boards. She is currently Board Director, Australian National Development Index (ANDI); Chair, Bridges to Higher Education Partners Advisory group; Member, RMIT College of Business Industry Advisory Board; Chair of Advisory Board, Melbourne Social Equity Institute (University of Melbourne) and Patron of Vanish.

EA BUILDING, GROUND FLOOR - TABLE DISPLAYS

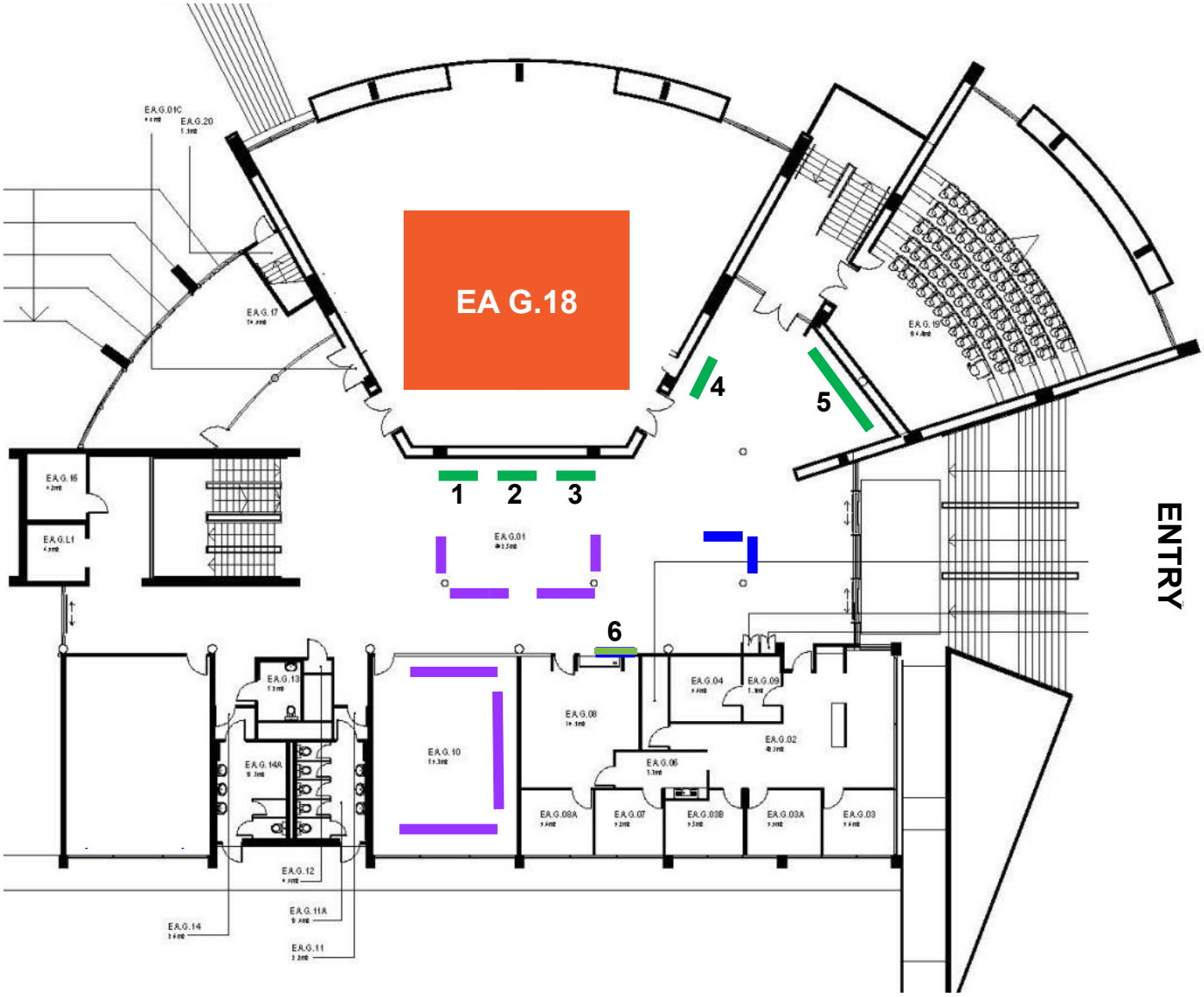


Table displays:

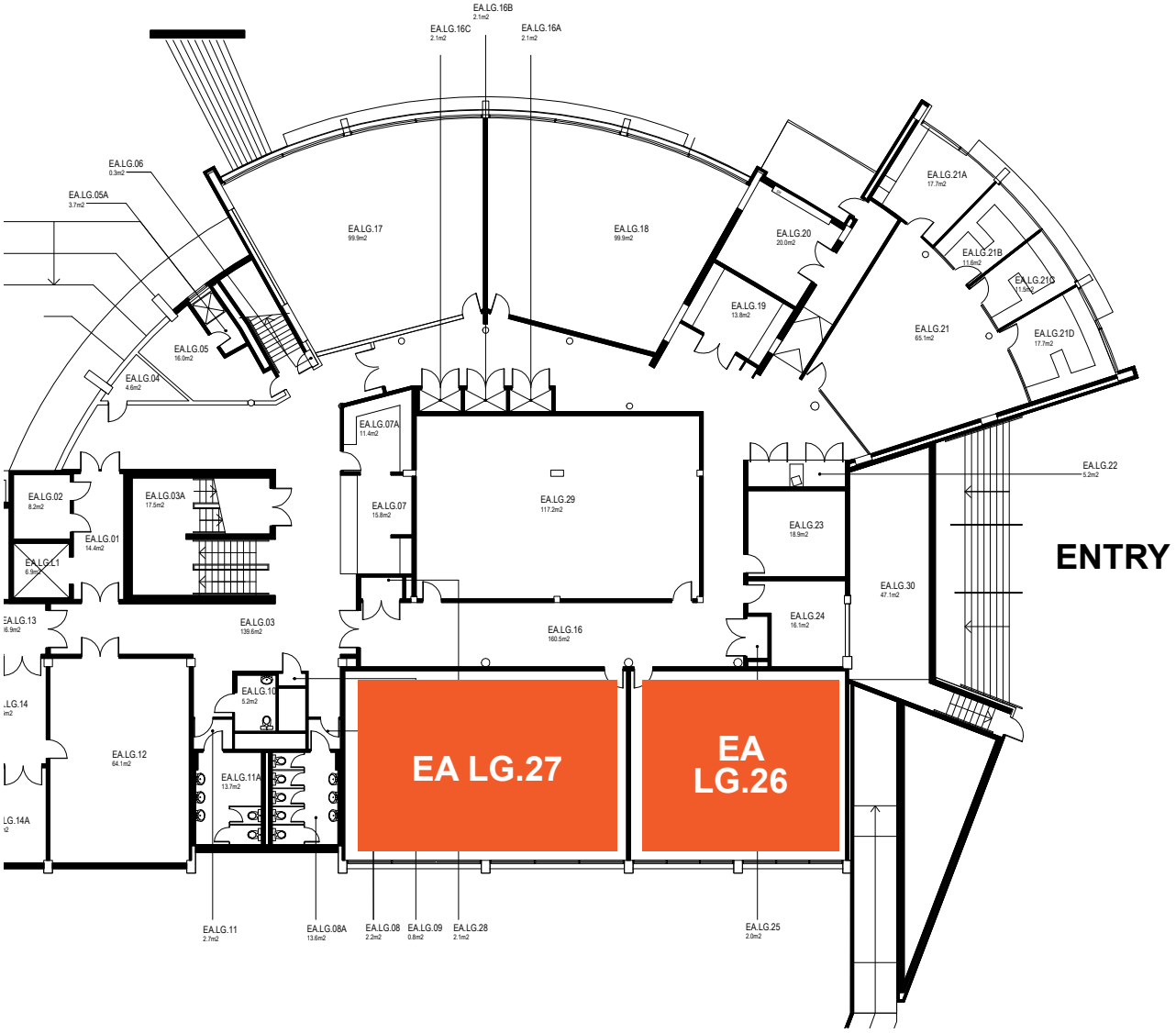
1. IBSA
2. VET Development Centre
3. University of New England
4. ish onCourse
5. JobReady.
6. VOCEDplus

- Catering
- NCVER
- Table displays
- Session room

EA BUILDING, GROUND FLOOR

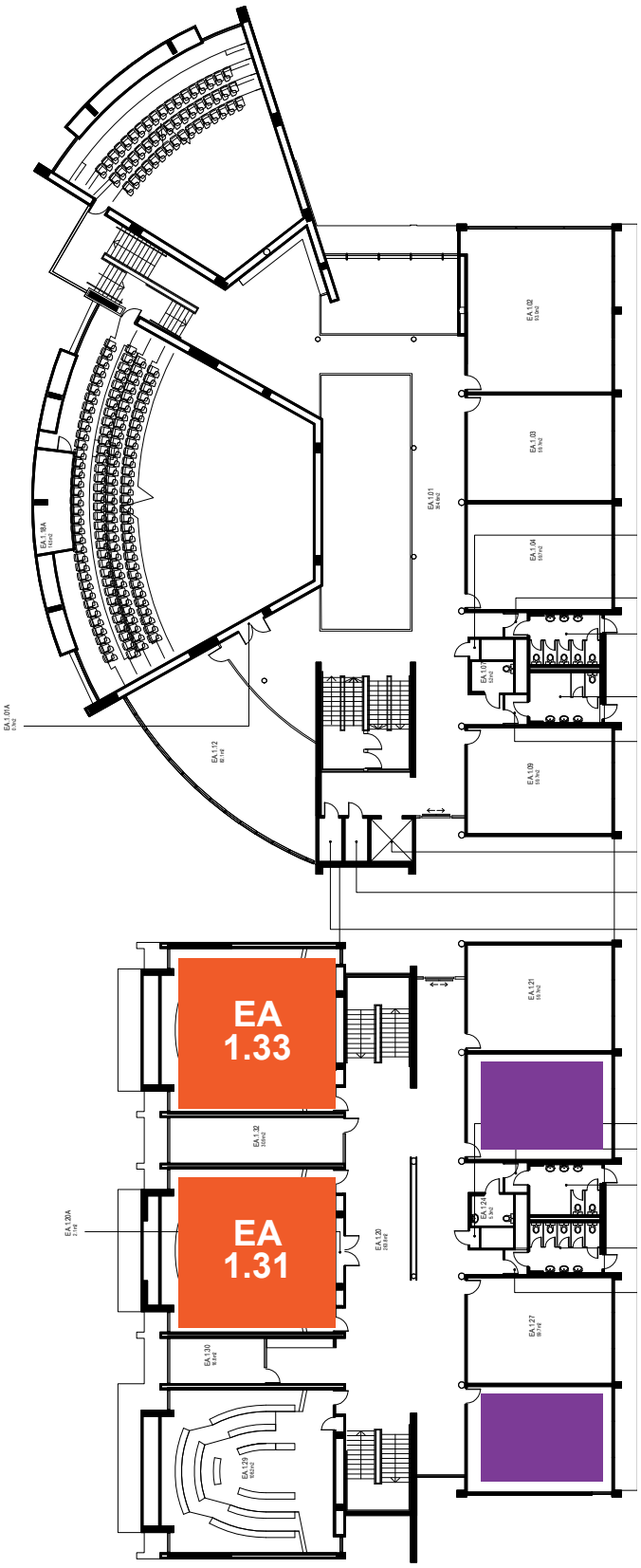
NO FRILLS

EA BUILDING, LOWER GROUND FLOOR



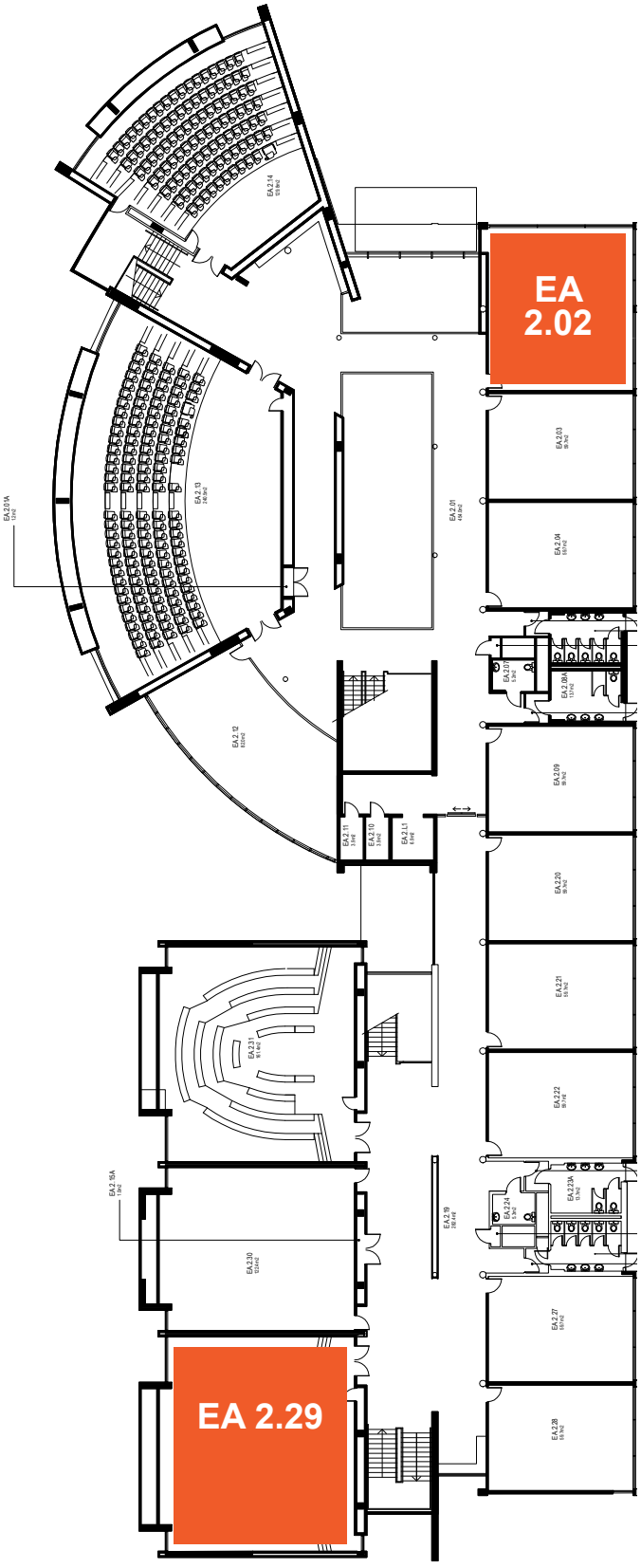
Session room

EA BUILDING, FIRST FLOOR



NO FRILLS

EA BUILDING, SECOND FLOOR



Session room

UNIVERSITY OF WESTERN SYDNEY
PARRAMATTA SOUTH CAMPUS

PARKING PERMIT

University of Western Sydney
Bringing knowledge to life

UWS 2015 Temporary Parking Permit

Event: NCVER 'No Frill' 2015

Date: 06/07/15 – 08/07/15

Authorised by Team Leader, Campus Safety and Security: Verity Foley

Please be advised the holder of this permit is permitted to park on Parramatta UWS Campus Only.

This permit is valid on the above listed dates ONLY. Please be advised that misuse of this permit or parking illegally on UWS Campus may incur the holder to receive a penalty notice.

PROGRAM

Please note: program and speakers are subject to change without notice.

PRE-CONFERENCE WORKSHOPS: MONDAY 6 JULY

12:45 **Registration and exhibition area open (Ground Floor, EA Building, University of Western Sydney (UWS), Parramatta South campus)**

13:30 **Pre-conference workshops (EA Building, University of Western Sydney, Parramatta South campus)**

Room 2.29

Workshop 1: Promoting industry engagement with VET

Engagement between industry and the vocational education and training (VET) system is an essential part in ensuring that training meets the diverse needs of enterprises and the broader labour market. As part of the current National Reform Agenda, increasing the level of this engagement is taking ever greater prominence.

But what is industry? And what is industry engagement? This workshop explores some of the notions behind industry engagement and showcases two real examples of good practice models of promoting VET-industry engagement through an innovative partnership approach.

Phil Loveder, NCVER

Maya Spannari, TAFE NSW North Coast Institute

Trish Griffin, TAFE NSW Hunter Institute.

LG.26

Workshop 2: VOCEDplus: research with new frills

VOCEDplus has a new look and enhanced search functionality. This workshop provides a 'hands on' tour of the VOCEDplus database with a focus on new features including:

- Advanced Search page that now offers a much simpler guided search and a new expert search tool
- Conference page offering links to papers from key VET conferences
- Pod Network page featuring 'readymade clusters' of theme-based information.

You'll learn tips and techniques for finding relevant information using the enhanced features as well as gain a refresher on accessing and using VOCEDplus to discover current and past research, including NCVER publications, landmark reports, and grey literature.

Kelly Frazer, NCVER

15:00 **Afternoon tea**

15:30 **Pre-conference workshops**

2.02

Workshop 3: Maximising and assessing the impact of your research

NCVER is one of the forerunners in the Australian research community for our ability to recognise and report on the benefits of research in a systematic way, having developed a model for assessing impact in 2009.

This workshop is an opportunity to immerse yourself in the world of impact – and will take you through NCVER's model and how it has been refined over the years. The broader implications and approaches for assessing impact in the both Australian and UK contexts will be deliberated. Importantly, various pathways to maximising research impact will be considered – from your grant application; through to knowledge translation activities; interpreting your research findings for different audiences; and promoting your research through the media.

Jo Hargreaves and **Rebecca Farrell,** NCVER

LG.27

Workshop 4: Total VET Activity: a clearer picture of training and what that means for you

For the first time, NCVER has collected both government-funded and fee-for-service training activity data from all registered training organisations (RTOs) in Australia. This picture of the VET sector is known as 'Total VET Activity' (TVA).

This workshop provides a hands-on introduction to this new data collection. We explain the breadth of TVA (what's in, what's out) and how it differs from what has been reported up to now. We'll also present the publications and other data resources that will be produced by NCVER from this collection, where people will be able to find these resources, and how they will be able to use them. This workshop is useful for both experienced and new VET data users.

Peter Mlotkowski, NCVER

17:00 **Welcome Reception *kindly sponsored by TAFE Directors Australia*** **(Female Orphan School, EZ Building, University of Western Sydney, Parramatta South campus)**

DAY 1: TUESDAY 7 JULY

08:15 Registration and exhibition area open (EA Building, University of Western Sydney, Parramatta South campus)

09:00 Welcome and keynote address

Room G.18

Welcome to Country: Aunty Norma Shelley, University of Western Sydney Elder on Campus

Welcome and co-host address: Dr Craig Fowler, Managing Director, NCVER and Professor Barney Glover, Vice-Chancellor and President, University of Western Sydney

Address by Senator The Hon Simon Birmingham, Assistant Minister for Education and Training

Keynote address: Professor Peter Shergold AC, Chancellor, University of Western Sydney; Chair, NCVER Board

Big data: Big opportunities

10:45 Morning tea *kindly sponsored by AVETRA*

11:15 Concurrent sessions

G.34	Adult trade apprentices and RPL: a perfect match or a rocky relationship? **– Jo Hargreaves, NCVER**
G.36	Using integrated VET and Census of Population and Housing data to measure educational outcomes **– Regina Kraayenbrink and Luke Verghese, Australian Bureau of Statistics**
G.38	Getting it right! Meeting the needs of stakeholders **– Sue Roberts, Careerforce**
1.31	Future-proofing local government: strategies to address language, literacy and numeracy (LLN) skills in the local government workforce **– John Martin, La Trobe University; Alex Kats and Angela Zivkovic, Local Government Managers Australia**
1.33	The occupational mobility and employment outcomes of employer sponsored and non-employer sponsored skilled migrant: findings from the Continuous Survey of Australia's Migrants **– Don Tennakoon, RMIT University**

12:00 Concurrent sessions

G.34	Funding VET in Victoria: a historical tale through the Service Skills lens **– Hugh Guthrie, Victoria University**
G.36	Engaging and supporting students with disability to succeed in education and training **– Nicole Ison, University of Western Sydney**
G.38	Engaging employers in regional workforce development **– Wendy Perry, Workforce BluePrint and Glenn Stewart, Advancing Country Towns**
1.31	Who is delivering foundation skills? **– Michelle Circelli, NCVER**
1.33	Negotiating pathways through secondary school: do humanitarian immigrants and refugees risk disengagement? **– Alison Childs and Jenny Chesters, University of Canberra**

12:45 Lunch

13:45 Concurrent sessions

G.34	Market rules? Where are women in skills provision in 21st century vocational education and training? **– Linda Simon, Women in Adult Vocational Education (WAVE)**
G.36	The influence of mentoring on the quality of mentoring engagement and provision for apprentice learning and retention **– Lesley Petersen, Petersen Consulting**
G.38	A binary system of tertiary education: past ideas and contemporary policy **– Francesca Beddie, University of Canberra**
1.31	Improving the literacy and numeracy skills of trainees and apprentices in the workplace **– Heather McDonald and Anne Alkema, Heathrose Research**
1.33	Moderation versus validation: policy and practices in higher education at TAFE **– Emmy Pham, Holmesglen**

Alignment to conference themes:
Youth Pathways Skills Other

14:30 **Afternoon tea *kindly sponsored by Australian Association for Institutional Research (AAIR)* and Poster Session (Ground Floor, EA Building, UWS, Parramatta South campus)**

Poster sessions

TV imaging of the trades: the case of chefs and cooks **– Richard Robinson, The University of Queensland**

An historical review of how the Australian Army has related to the national system of vocational education and training (VET) **– Carolyn Johnstone, Federation University**

The extreme need for HVACR training **– Tim Edwards, Australian Refrigeration Association**

15:15 **Concurrent sessions**

Room G.34 — Growing importance of science and maths skills in the workforce **– Tony Pensabene, Victorian Department of Education and Training**

G.36 — The meaning of skill and the quest for a 'magic' recipe for a combination of skills needed for innovation **– Michael Walsh, Charles Sturt University***

G.38 — Aligning library instruction with the information literacy needs of TAFE students at diploma level and above **– Brenda Burr, Wodonga Institute of TAFE**

1.31 — The Singapore way of professionalising the Adult Educator **– Xiangcen Guo, Institute for Adult Learning Singapore**

1.33 — Post-secondary pathways for cultural and linguistically diverse (CALD) immigrant young people in south east Queensland (SEQ) **– Matthew Glen, Griffith University**

16:00 **Concurrent sessions**

G.34 — Gender and mathematics: Pathways to degree completion in the mathematically intensive sciences in Australia **– Helen Law, Australian National University**

G.36 — Mature-age up-skilling entitlements: who responds and what course choices do they make? **– Cain Polidano, University of Melbourne**

G.38 — The value of skills in Singapore **– Emily Low, Institute for Adult Learning Singapore**

1.31 — Challenges in professional development: the Workplace Literacy Adult Educator's learning journey **– Xiangcen Guo, Institute for Adult Learning Singapore**

1.33 — A foot in the door: barriers faced by skilled refugees and asylum seekers in search of employment in Australia **– Annie Macdonald, VETASSESS**

16:45 **Concurrent sessions end**

18:30 **Pre-dinner drinks (Auditorium, EE Building, UWS, Parramatta South campus)**

19:00 **Conference Dinner *kindly sponsored by University of Western Sydney* (Janice Reid Pavilion, EEa Building, UWS, Parramatta South campus)**

Dinner speaker: Ms Jan Owen AM, CEO, Foundation for Young Australians

Our investment in young Australians - and why this is important now

We must prepare our young people for constant and evolving economic, social, cultural and environmental change in Australia and the region. Young Australians will need to be more confident, connected, enterprising, innovative, optimistic and generous than any generation before them.

Government, businesses, young people and the broader community must work together to find solutions to help build the confidence and capabilities of our young people. To kick start the conversation, Jan will share the practical work of FYA and Unlimited Potential – an online data and information resource on young Australians – and how this information can help us to better connect and prepare our young people for what lies ahead – both in work and life.

Speakers and presentations are subject to change without notice

* Denotes a refereed paper

DAY 2: WEDNESDAY 8 JULY

08:15	**Registration and exhibition area open (EA Building, University of Western Sydney, Parramatta South campus)**
09:00	**Keynote address**
Room G.18	**Nicholas Wyman –** founder and CEO, Institute for Workplace Skills and Innovation, and CEO, WPC Group Ltd **People without jobs and jobs without people: Bridging the skills gap**
09:45	**Concurrent sessions**
Room G.34	TAFE to university transitions: the student voice **– Jane Anderson, TAFE NSW Sydney Institute**
G.36	International students in Australia's vocational education and training sector **– Steve Nerlich, Department of Education and Training, Australian Government**
G.38	Profiling diversity of VET providers within the Australian vocational education and training industry **– Ruth Schubert, LH Martin Institute**
1.31	Employers' views of work integrated learning: engineering as a case study **– Georgina Atkinson, NCVER**
1.33	Finding the capacity to resolve challenging problems **– Anthony Arrowsmith, Career Employment Group**
10:30	**Morning tea *kindly sponsored by Cummins South Pacific***
11:00	**Concurrent sessions**
G.34	Success in education for early school leavers **– Beryl Wilcox, Community Colleges NZ**
G.36	Diploma Plus: design + collaboration + engagement = new integrated pathways model **– Janelle Davis, University of Western Sydney; Jane Kelly, TAFE NSW South Western Sydney Institute and Susan Westbrook, TAFE NSW Western Sydney Institute**
G.38	A dynamic tension: consistency with flexibility in Australia's national training system **– Kaye Bowman and Suzy McKenna, Kaye Bowman Consulting**
1.31	Child protection: is online training the answer? **– Daniela Francavilla, NSW Health**
1.33	From TAFE diploma to university degree in Architecture **– George Loupis, Sydney Institute TAFE**
11:45	**Concurrent sessions**
G.34	Unearthing the digital landscape: Innovating the pedagogic practices of the Victorian VET workforce **– Leo Gregorc, VET Development Centre**
G.36	Understanding the needs of VET students articulating to second-year university **– Mark Symmons, Australian Institute of Psychology***
G.38	Funding schemes in post-secondary education and disadvantaged students **– Gerald Burke, Monash University**
1.31	Learning preferences of enrolled nursing students, educational preparation and training for workplace readiness **– Kalpana Raghunathan, Monash University***
1.33	Finding out who you are and where you come from: vocational education and young Indigenous prisoners **– Charlie Chambers, Mark Doran and Alicia Toohey, Australian Skills Management Institute**

Alignment to conference themes:
Youth Pathways Skills Other

12:30	**Lunch**
13:15	**Concurrent sessions**
G.36	Who chooses VET and why: initial analysis of student survey response from the Aspirations Longitudinal Study **– Hywel Ellis, University of Newcastle**
G.38	Changing occupational and skills demand in Australia: implications for cross-occupational skills transferability for workers in transition **– Darryn Snell, RMIT University**
1.31	The 'so what'? Ensuring that training effectively transfers to better job performance and work outcomes **– Nicky Murray, Careerforce**
1.33	Positive transformations: community driven solutions for further education in remote and very remote communities of the Northern Territory **– Peta Fraser, Donna Robbins and Matalena Tofa, Charles Darwin University**
14:00	**Afternoon tea**
14:30	**Concurrent sessions**
G.34	Shedding light: private commercial RTO training for young early school leavers **– George Myconos, Brotherhood of St Laurence**
G.36	The TAFE/VET student experience at UWS: 2010-2013 **– Rose Cutts, University of Western Sydney**
G.38	Skills transfer, re-skilling and training of older workers in response to industry restructuring **– Victor Callan and Kaye Bowman, Callan Consulting Group**
1.33	Developmental research: attitudes and behaviours to VET **– Melissa McEwen, Department of Education and Training, Australian Government**
15:15	**Concurrent sessions**
G.34	University Technical Colleges: a new generation of STEM schools in England **– David Harbourne, Edge Foundation**
G.36	The pathway into employment for Anangu is not straight forward – how can VET facilitate? **– Janet Skewes, TAFE SA**
G.38	Case study in workforce development: improving TAFE teacher skills **– Anne Dening, Flinders University***
1.33	Learning safety safely: developing job readiness for graduates in high risk vocations **– Melenie Ross, University of Western Sydney***
16:00	**Close**

Speakers and presentations are subject to change without notice

* Denotes a refereed paper

ABSTRACTS

(IN ORDER OF PROGRAM)

Papers annotated with an * have been refereed and will be considered for a book of conference proceedings published by NCVER.
A 'double blind' refereeing process and an editorial panel were used during this process.

KEYNOTES

BIG DATA: BIG OPPORTUNITIES - *Professor Peter Shergold AC, Chancellor, University of Western Sydney; Chair, NCVER Board*

NCVER has big data. Its statistical storehouse provides a strong foundation for evidence-based policy, stimulates creative research and (increasingly significant) informs a contestable public market for the provision of vocational education and training. With the advent of reporting on Total VET Activity (TVA) and the introduction of a Unique Student Identifier (USI), 2015 may represent an inflection point. TVA and USI can together be transformative, vastly increasing our understanding of how citizens exercise educational choice. This paper examines the potential impact of new data on public policy.

PEOPLE WITHOUT JOBS AND JOBS WITHOUT PEOPLE: BRIDGING THE SKILLS GAP – *Nicholas Wyman – founder and CEO, Institute for Workplace Skills and Innovation, and CEO, WPC Group Ltd*

Today, many Australians remain unemployed, while thousands of positions remain unfilled. Why? Because businesses can't find people with the right skills to do the jobs they need. Meanwhile, education costs are rising exponentially and many graduates are unemployed or underemployed. Nick's presentation will look at the issues behind this often quoted "skills gap" or as he refers to it, the problem of "people without jobs and jobs without people." Drawing on his work with the organisations, governments, and educational institutions from around the globe who are pioneering the most cutting-edge solutions to the skills-gap problem, Nicholas offers a roadmap for how organisations, communities, and educators can come together to develop the human capital needed to keep our businesses innovative and profitable, our economy healthy and humming, and our nation sustainably competitive in today's global economy.

TUESDAY 7 JULY

ADULT TRADE APPRENTICES AND RPL: A PERFECT MATCH OR A ROCKY RELATIONSHIP? – *Jo Hargreaves, NCVER*

The nature of apprenticeships is changing, with significantly more people over the age of 25 commencing a trade today compared to 10 years ago. In addition the amount of recognition of prior learning (RPL) occurring in the vocational education and training (VET) sector is increasing. On the surface these two should be perfect partners, but this study reveals a number of cracks affecting what could be a match made in heaven. The extent to which adult apprentices are using RPL is explored, as is the pay-off to completion in terms of employment outcomes and wages. This is considered against a backdrop of cultural and systemic issues in both the apprenticeship and training system in Australia.

USING INTEGRATED VET AND CENSUS OF POPULATION AND HOUSING DATA TO MEASURE EDUCATIONAL OUTCOMES – *Regina Kraayenbrink and Luke Verghese, Australian Bureau of Statistics*

VET in Schools programs provide secondary school students with an alternative or complementary course of study to the standard academic curriculum otherwise available to them. Vocational subjects are intended to prepare students for life after school with a particular focus on getting them ready to enter the labour force. The efficacy of VET in Schools is of particular interest to governments and researchers as it is intended to aid transitions to work and the programs engage young people at a time when they will be making decisions about employment and study after school.

The Australian Bureau of Statistics recently led a series of studies to integrate VET in Schools data with 2011 Census of Population and Housing (Census) data. Integrating VET in Schools and Census data provides a new opportunity to analyse the longitudinal outcomes of VET in Schools students, and assess how those outcomes are moderated by student characteristics and the type of VET that school students undertake. Importantly, the integrated dataset allows reliable conclusions to be drawn about differences between population groups as is not restricted by the small sample sizes often present in surveys. In particular, the integrated data allows analysis on interesting elements, such as field of study and occupation, to be performed at a high level of detail.

These studies aimed to test the feasibility of linkage of these datasets and to provide a stronger evidence base for informing research and government policy development and decision making in education and training sectors. These studies will be of interest to researchers and policy makers such as those who are interested in longitudinal outcomes from participation in VET.

GETTING IT RIGHT! MEETING THE NEEDS OF STAKEHOLDERS – *Sue Roberts, Careerforce*

Careerforce is the industry training organisation for the health and community support sector in New Zealand. Through developing qualifications and supporting workplace training, they help to improve the health and well-being of everyday New Zealanders.

The New Zealand Qualifications Authority (NZQA) has the role of ensuring that New Zealand qualifications are accepted as credible and robust, nationally and internationally, in order to help learners success in their chosen endeavours and to contribute to New Zealand society.

In 2008 NZQA commenced a Targeted Review of Qualifications at levels 1-6 on New Zealand's ten-level qualification framework. The review aimed to ensure that New Zealand qualifications are useful and relevant to current and future learners, employers and stakeholders.

One of the problems identified in the review was that the qualification system was difficult for learners, employers and industry to understand because it contained a large number of similar qualifications which made distinguishing between qualifications and identifying education/career pathways difficult. As a result one of the recommendations from the review is the requirement of mandatory period reviews of qualifications to determine whether qualifications are still fit for purpose.

This presentation reports on the two stage applied research project that was led by Careerforce to complete the initial review of qualifications at levels 1-6 listed on the New Zealand Qualifications Framework (NZQF) in Health, Disability and Social Services and what we learnt on the way.

Stage one was completed within a 12 month period with a submission to NZQA recommending reduction of qualifications from 84 to 24 through the development of new qualifications. Stage two which encompasses the development of the new qualifications is currently being completed over a two year period and as a result of further consultation is looking to reduce the number of qualifications to seven.

FUTURE-PROOFING LOCAL GOVERNMENT: STRATEGIES TO ADDRESS LANGUAGE, LITERACY AND NUMERACY (LLN) SKILLS IN THE LOCAL GOVERNMENT WORKFORCE – *John Martin, La Trobe University; Alex Kats and Angela Zivkovic, Local Government Managers Australia*

In August 2013, Local Government Managers Australia (LGMA) on behalf of the Australian Centre of Excellence for Local Government (ACELG), released Future-Proofing Local Government: The National Workforce Strategy 2013-2020. The Strategy lists a number of areas for development and research to 2020 and beyond. The aim is to ensure that local government moves towards a more sustainable workforce through effective retention, attraction and development strategies. Successful implementation of the Strategy will help ensure a workforce that has the capacity and the capability to meet the needs and aspirations of Australian communities.

One of the areas identified in the Strategy requiring further development and capacity building is that of language, literacy and numeracy (LLN) skills, which is a significant concern not just for the local government sector, but for the entire Australian workforce, as identified in the Industry Skills Councils' 2011 report: No More Excuses. Local government is a significant employer in local communities and has a responsibility to play its part in addressing the LLN challenge.

In response to the Strategy and the initiatives of local governments, this paper addresses LLN implementation developments, as well as factors that could encourage councils without a LLN program to develop and implement one. The discussion draws on survey-based research into council intentions concerning LLN programs, as reported by their human resource managers, using the "planned behaviour" or "reasoned action" approach of Ajzen, 2006, and Fishbein and Ajzen, 2010. One of the aims is to assist councils by ideally enabling them systematically to address a key workforce issue as they seek to become more productive and effective institutions.

THE OCCUPATIONAL MOBILITY AND EMPLOYMENT OUTCOMES OF EMPLOYER SPONSORED AND NON-EMPLOYER SPONSORED SKILLED MIGRANT: FINDINGS FROM THE CONTINUOUS SURVEY OF AUSTRALIA'S MIGRANTS – *Don Tennakoon, RMIT University*

Skilled migration features prominently in Australia's migration policies and programmes. How skilled migrants have performed in the Australian labour market has been a subject of numerous studies. Australia's skilled migration pathways consist of both employer sponsored streams and non-employer sponsored streams. Some evidence suggests skilled migrants are relatively successful in obtaining paid employment and skilled work in the occupations they are qualified. For example, the Continuous Survey of Australia's Migrants (Cohort 1 to 5 Report 2009-11) evidenced 68% of the primary applicants granted visas through the Skilled Stream were working in skilled jobs after six months of their arrival or granted visa. However, it is unclear if both employer sponsored, and non-employer sponsored skilled migrants experience similar occupational outcomes. Drawing on the Continuous Survey of Australia's Migrants conducted by the Department of Immigration and Border Protection, this paper investigates the employment and occupational outcomes of non-employer sponsored skilled migrants against employer-sponsored skilled migrants. It considers the skill and occupational profile of these two groups and their occupational mobility. The paper seeks to advance the understanding of the skilled migrant experience and how employer sponsorship influences migrant experiences.

FUNDING VET IN VICTORIA: A HISTORICAL TALE THROUGH THE SERVICE SKILLS LENS – *Hugh Guthrie, Victoria University*

This paper reports on research commissioned by Service Skills Victoria and undertaken by a research team drawn from Victoria and Federation Universities. It examines the effects of funding changes in Victoria on the range of industries covered by Service Skills Training Packages and qualifications over the period 2008 to 2013. Broadly, the industries in the Service Skills profile cover wholesale, retail and personal services; tourism, travel and hospitality and sport, fitness and recreation. The research approach included quantitative analysis of time-series data from NCVER and other sources, and a qualitative approach involving invitational forums with employer bodies, private and public providers, and targeted interviews with a range of industry associations, employers, and private and public providers. Submissions were also sought.

Victoria was the first jurisdiction to introduce contestable funding and an entitlement scheme. The Victorian approach, implemented over the past five years, is the first and most radical of the jurisdictional approaches and has attracted much criticism. Recognising the controversial nature of the reforms, the paper presents views on the reforms, using a critique of contracted training (Toner 2014) as an analytical framework.

The research found that growth in Service Skills student load, already relatively high in 2008, grew very rapidly and then fell significantly in 2013. This was due to the relative ease with which many of these qualifications could be offered by a wide range of providers, including those that are less than scrupulous. In addition, growth in Service Skills enrolments was higher than the overall rate of enrolment growth in Victoria from 2009 to 2011. It fell back in 2012 and crashed in 2013. In contrast, the rest of Australia was characterised by a far greater stability in the provision of Service Skills qualifications than Victoria from 2008 to 2013. Thus the funding arrangements can be said to have significantly distorted Service Skills training provision in Victoria. VET providers were significantly affected by the (then) Victorian Government's approaches to market control by using 'price' as a major and blunt control leaver. Evidence suggests that providers had to use a variety of coping mechanisms to maintain provision which, in turn, affected the quality of provision. The research concludes that an urgent rethink of the Victorian VET funding model was needed if the system was not to collapse, and if the confidence of both the Service Skills industries and training providers in the Service Skills market were to be restored. Such a review is now taking place.

ENGAGING AND SUPPORTING STUDENTS WITH DISABILITY TO SUCCEED IN EDUCATION AND TRAINING
– *Nicole Ison, University of Western Sydney*

Well over four million Australians have a disability; 18.5% of our population. The definition under the Disability Discrimination Act (DDA) is broad and includes mental illness, chronic medical conditions and learning disabilities. This means that nearly one in five students and potential students in vocational education and training (VET) are likely to have a disability and may require support to succeed in their studies and make a successful transition to employment. Historically, many students with disability have chosen, and been encouraged, to attend public providers of vocational training because of their well-established disability support services, specialist staff, and the availability of fee concessions and exemptions. In the new NSW training environment of Smart and Skilled, private providers are also able to offer fee exemptions and concessions to students with disability and will receive additional funding to support these students. It is now more vital than ever that all providers of VET are able to meet their obligations under the DDA and Disability Standards for Education. This presentation will detail the benefits of taking proactive steps towards disability confidence, both in terms of business development and compliance with legal obligations. It will introduce key concepts, strategies and useful resources to build training organisations' awareness and practical application of:

- statutory obligations for trainers and educators to provide support for students with disability at all stages from enrolment to graduation
- reasonable adjustments
- inherent requirements of courses and how these impact students with disability
- proactive ways that training organisations can identify indicators that a student may have a disability, manage disclosure, and implement reasonable adjustments
- resources and referral sources that training providers can utilise to support graduates to make a successful transition into employment.

ENGAGING EMPLOYERS IN REGIONAL WORKFORCE DEVELOPMENT – *Wendy Perry, Workforce BluePrint*

Providing career and employment opportunities for local communities, is often the key driver for regional employers. Where there are common workforce issues and training needs, it makes sense to collaborate with employers and stakeholders to design new initiatives. This presentation will highlight a successful case study from Robinvale in Victoria that was supported through the Advancing Country Towns strategy working with major employers in olive oil and almond processing.

Robinvale regional employers need skilled local people to support exporting food to Asia, for business growth and productivity improvements. The region is envisaged to grow rapidly with the expected future expansion of both the almond and olive industries due to new opportunities being opened up through the recently signed Free Trade Agreements with China, Korea and Japan. The Robinvale Agribusiness Workforce Development Strategy uncovered interesting findings including a skills profile for entry level and management job roles. After agreeing upon critical job roles, skills profiled were developed and mapped to units of competency, across a number of National Training Packages. Evidence of skills and gaps were identified with employees from each employer through undertaking a training needs analysis.

Workforce development strategies are being implemented and next steps include the design of a Robinvale Future Workforce Strategy focusing on:

1. Leadership development for potential and current leaders and managers

2. Regional employment and encouraging entrepreneurship

3. Skills development for growth and productivity

WHO IS DELIVERING FOUNDATION SKILLS? – *Michelle Circelli, NCVER*

Building the capacity of those who deliver foundation skills is a key component of the National Foundation Skills Strategy for Adults, 2012-2020. Foundation skills encompasses both English language, literacy (including digital) and numeracy skills as well as employability skills, such as problem solving, collaboration and self-management. An element of the National Foundation Skills Strategy Project is to 'identify and qualify professional practice in foundation skills'. This session will focus on the outcomes of two inter-related activities undertaken as a means of addressing this element.

The first was an online survey undertaken by NCVER in 2014. This survey provides fresh national data about the diverse range of practitioners across Australia who are teaching or helping people develop their foundation skills, either in a paid or voluntary capacity. The survey focused on the demographic characteristics of those delivering foundation skills, the skills and expertise they bring with them, the professional development they have had, and the skills they would like to develop further. The second activity, 'Stories from the Field', is a collection of narratives gathered from practitioners that give us a clearer understanding of the range of credentials, experience and professional development approaches that contribute to the professional identity of practitioners currently delivering foundation skills. Together these activities provide a rich data set that not only tell us about the skills and expertise practitioners bring to their work, but the skills and professional development needed to continue to deliver the right mix of skills to learners to help them meet the challenges of living, learning and working in Australia now and into the future. This session will report on the findings from both the survey and practitioner narratives.

NEGOTIATING PATHWAYS THROUGH SECONDARY SCHOOL: DO HUMANITARIAN IMMIGRANTS AND REFUGEES RISK DISENGAGEMENT? – *Alison Childs and Jenny Chesters, University of Canberra*

Although the majority of immigrants enter Australia via the skilled migration program, a sizeable minority enter as refugees and humanitarian immigrants and thus have varying levels of education and skills. Refugees and humanitarian immigrants experience a range of challenges in adapting to Australian society. Young people in humanitarian need may face an increased likelihood of becoming disengaged from school. Therefore, this particular group of young people are likely to need additional support to successfully negotiate the complex pathways from secondary school into employment. Improving the transitions of young people from school into further education, training and employment is one of the key objectives of the National Partnership on Youth Attainment and Transitions. Hence, an examination of whether country of origin plays any role in education and employment outcomes is timely. Previous research shows that, overall, young immigrants, and the children of immigrants, have both higher rates of engagement in post-school study, and higher rates of unemployment. In this paper, we analyse the first five waves of data collected by the Longitudinal Surveys of Australian Youth from the 2003 cohort (LSAY03) to examine whether young people from refugee source countries are disadvantaged in terms of their education and employment outcomes compared to their peers born in Australia or in non-refugee source countries.

MARKET RULES? WHERE ARE WOMEN IN SKILLS PROVISION IN 21ST CENTURY VOCATIONAL EDUCATION AND TRAINING? – *Linda Simon, Women in Adult Vocational Education (WAVE)*

In 1999, Butler and Ferrier wrote a landmark report for NCVER entitled Don't be too polite girls. As part of this extensive literature research and review, the authors noted that women's participation rate in VET had improved, but that there were continuing problems, including women "... clustering in fields of study and at lower levels, less employer support for external training, under-representation and low completion rates in apprenticeships in non-traditional areas ..."(1999:vii). They also observed that the diminishing commitment to equity in a marketised VET system would present even greater challenges for many women (Butler and Ferrier, 1999).

Sixteen years have passed, with the VET system being subject to ongoing significant changes including the 2012 agreement on a new market-driven funding model for vocational education. "Markets require a rationing of education and the creation of hierarchies and mechanisms of competition" (Connell, 2013:99). VET is now a highly complex public/private industry firmly located within a competitive market place. What has this meant for women and girls engaging in VET?

Drawing on our research over this period, this paper considers equity and gender equity in C21 VET provision, especially in light of the G20 commitment by Australia (amongst other countries) to reduce the gap in workforce participation rates between men and women by 25% within the next 10 years.

The marketised VET system in Australia has recently seen the demise of the National VET Equity Advisory Council (NVEAC) and little focus on equity and equality. Have we moved on since 1999, or are women and girls facing the same challenges as then? Could the situation be even worse as a result of government commitment to markets in education? This paper compares the VET landscapes of 1999 and 2015, focusing on equity policy, framing equity and equity-related strategies, and implications for women.

THE INFLUENCE OF MENTORING ON THE QUALITY OF MENTORING ENGAGEMENT AND PROVISION FOR APPRENTICE LEARNING AND RETENTION – *Lesley Petersen, Petersen Consulting*

Does the provision of mentoring support for apprentices completing vocational education qualifications positively influence the success of their learning journey? This presentation will report on two projects which investigated how the provision of targeted mentoring support for apprentices by employers, training advisors and voluntary mentors influences apprentice learning success. Success was defined as encompassing retention, completion and progression, credit achievement and learning experiences.

Participatory action research provided the methodological framework for one of the projects, which involved the collaboration of two New Zealand Industry Training Organisations (ITOs) where mentoring support provided by training advisors is a core activity of the apprentice's programme of learning. A significant focus of this project was the engagement of employers as mentors of their apprentices and how the employer provides a complementary support mechanism to the training advisor's mentoring role.

Over a period of six months, the training advisors, employers and apprentices engaged in mentoring training workshops and subsequent dyadic mentoring partnerships. During this period of mentoring activity, semi-structured interviews were conducted via telephone and/or face to face meetings in the workplace setting, establishing both formative and a final summative data collection process. Feedback from the three participant groups has informed the development of a mentoring programme model as a formal support mechanism that can be customised for and integrated in apprenticeship schemes.

Using case study methodology, the second project evaluated a current mentoring programme for trainees in another New Zealand ITO, which included a review of the mentoring programme structure and interviews with three stakeholder groups. An evidence-based mentoring model (Petersen, 2011) was used to guide the evaluation of the programme structures and processes, ascertain good practices that positively influence trainees' learning experiences and outcomes, and broaden the knowledge about mentoring approaches and methods that are effective for trainees in the vocational education space.

A BINARY SYSTEM OF TERTIARY EDUCATION: PAST IDEAS AND CONTEMPORARY POLICY – *Francesca Beddie, University of Canberra*

Australian tertiary education policy is in tumult, with new governance, funding and institutional arrangements in place or mooted across the higher education-vocational divide. While the politics are all about money, it's time to think about the fundamental structures in the system. This is what happened in the 1960s, with the Menzies/Gorton government responding to the Martin inquiry by introducing a binary system of higher education. In this system, universities were to have responsibilities for higher learning and research, while the colleges of advanced education were primarily to offer higher-level vocationally oriented qualifications. By the 1980s the aspiration for a set of institutions that was equal but different had not been able to withstand the funding squeeze and an engrained hierarchy of prestige. In 1988 the binary system was swept away by the Dawkins reforms. Now Dawkins' unified national system of higher education is fracturing.

This NCVER-funded project revisited the binary system. It did not find any blueprint for further reform but did highlight persistent problems for any mass tertiary education system. The study also illuminated the complex interplay of institutional structures and behaviours in policy implementation.

The project's methodology aimed to demonstrate the utility of an historical perspective. It was conducted in two parts: 1) a review of primary and secondary materials; and 2) a roundtable at which the historical essay was critiqued and its implications for current policy directions discussed.

The paper argues it is time to create entirely new institutions that can cater to the sophisticated mix of vocational and creative skills all graduates now need.

IMPROVING LITERACY AND NUMERACY OUTCOMES FOR INDUSTRY TRAINEES: EMBEDDING POLICY AND PRACTICE IN NEW ZEALAND WORKPLACE-BASED LEARNING 2009-2014 – *Heather McDonald and Anne Alkema, Heathrose Research*

Since the mid 2000s New Zealand's Tertiary Education Commission, the agency with responsibility for funding tertiary education, has promoted a policy for the integration of literacy and numeracy into lower level vocational qualifications. In the New Zealand context this is referred to as 'embedding'.

This has seen a period of major educational change within vocational training. Industry Training Organisations (ITOs) have played a substantial role in leading and working with industry, employers, education providers and trainees to find the most feasible ways to have literacy and numeracy incorporated into training materials and into on- and off-job training. It has been an iterative and challenging process given that a substantial amount of vocational education takes place in the workplace.

From 2009-11 Heathrose Research conducted a formative evaluation of the embedded approach and in 2014 conducted a further progress study. Both evaluations sought to describe workable models for embedding literacy and numeracy. Both studies however conclude that the diversity of industry, of training approaches and workplaces means that distinct models, while containing some common elements, have not emerged over this time. Rather industries have and continue to develop bespoke arrangements that best meet their particular needs.

This presentation describes the approaches and practices that are being used by ITOs, employers and education providers to improve literacy and numeracy outcomes and subsequently completion rates for trainees; and describes the outcomes of these approaches. The presentation concludes with a discussion of the elements of embedded practice. These encapsulate strategic, operational and employer–trainee elements and are an adaptation of embedding that have been developed to meet the requirements of a predominantly workplace-based learning context.

MODERATION VERSUS VALIDATION: POLICY AND PRACTICES IN HIGHER EDUCATION AT TAFE – *Emmy Pham, Holmesglen*

Current studies conducted by NCVER and others in a vocational setting suggest that practitioners at TAFE are quite clear about validation, but much more needs to be done to ensure that the concept and practice of moderation is clearly understood and implemented within the sector.

This preliminary study further investigates the nature and extent of moderation policies and practices in higher education programs at a TAFE Institute. The study firstly explores staff perceptions that underlie their experiences in relation to the moderation policy and practice within a department. The preliminary findings will be used to explore, review and evaluate the consistency, reliability and comparability of assessment judgment from different departments within the institute. The scope will then be extended to a nation-wide basis, surveying Australian TAFE Higher Education Providers members to compare understandings and practices of moderation to seek ways to improve the practice in order to meet TESQA requirements, which demands evidence of

"details of moderation and any other arrangements that will be used to support consistency and reliability of assessment and grading across each subject in the course study, noting any differences in these processes across delivery methods, delivery sites, and/or student cohorts" (TESQA 2012, p.32).

The final stage of the study will be further broadened internationally, comparing New Zealand, UK, Australia, Canada and the United States under similar settings, for international comparison and analysis. The aim of the research is to better understand the issues and challenges in relation to the quality and rigour of assessments within an institute, nationally and internationally.

GROWING IMPORTANCE OF SCIENCE AND MATHS SKILLS IN THE WORKFORCE – *Tony Pensabene, Victorian Department of Education and Training*

This presentation will report on work recently completed by the Victorian Department of Education and Training into science and maths skills in the Victorian workforce.

For the first time, the workforce (covering over 475 occupations) has been classified according to the extent science and maths (SM) skills underpin employment. The research incorporates a broader definition of SM skills beyond the traditional STEMS (science, technology, engineering and maths) methodology, to incorporate other science and maths based occupations, such as medicine, accounting and architecture.

Based on Census analysis of the workforce, it is estimated that around 36.5% of people employed had completed a science or maths field of study in 2011, rising from 33.4% in 2006. This percentage is forecast to rise to 38.6% by 2016.

Occupations are classified according to whether they have a high, medium or low intensity in SM skills. The proportion of people employed with high SM skills increased from 12.3 to 13.9% of the workforce, while the proportion with medium skills similarly increased, from 22.0 to 22.5%, between 2006 and 2011. In contrast, the proportion of employees with low SM skills fell from 65.7 to 61.6%. Over time, more occupations are becoming high SM as employees with SM fields of study spread across the workforce generally.

Employment in occupations with high SM skills is growing between two and four times faster than in occupations with low or no SM skills. Both domestic training and skilled migration is contributing to the rapid growth in high SM occupations.

THE MEANING OF SKILL AND THE QUEST FOR A 'MAGIC' RECIPE FOR A COMBINATION OF SKILLS NEEDED FOR INNOVATION – *Michael Walsh, Charles Sturt University**

This research argues that there has been little explicit empirical research or theoretical writing on how skills and skill-formation contributes to innovation. While there are researchers working and writing in both areas, there appears to be limited research and literature linking the two. In addition, there appears to be little communication between the two groups. A review of the literature covering both fields shows that the terms 'skill' and 'innovation' have been defined imprecisely, resulting in a range of inconsistent and contested meanings. It also shows that although its benefits have long been recognised, at any point in time, most organisations are not engaged in innovation through formal research and development activities. Innovation that does occur usually emerges as a result of incremental changes to existing processes and products, and is limited in scope. In the limited literature that looks at the link between skills and innovation, there is recognition that the relationship is complicated. However, information is limited on the combination of skills thought to be necessary for innovation to occur.

This paper argues that there is a need for greater clarity and consistency in the definition of the key concepts of skill and innovation, and suggests a possible way forward, by highlighting the need for an integrated approach to skills and arguing for a more robust and versatile definition of skill. In relation to innovation it is noted that the best definition at the present time is that contained in the Oslo Manual, although this is a large 'fit all' definition. It is also argued that there is a need for a more integrated approach to research into the links between the two concepts to achieve better explanatory and practical outcomes.

ALIGNING LIBRARY INSTRUCTION WITH THE INFORMATION LITERACY NEEDS OF TAFE STUDENTS AT DIPLOMA LEVEL AND ABOVE – *Brenda Burr, Wodonga Institute of TAFE*

This presentation details action research examining the information literacy needs of TAFE students at Diploma level and above. This research aimed to improving the relevancy and reach of information literacy programs offered by the library to support learning and teaching within the institute. Feedback was sought from students and teachers using surveys and interviews, which identified a need to provide more extensive and structured support for the development of information literacies, academic skills and digital literacies at Diploma level and above. An investigation of the Core Skills for Work development framework (CSfW) and the Australian Core Skills Framework (ACSF) informed the development of a Digital Literacy Strategy for the library which includes information literacies.

THE SINGAPORE WAY OF PROFESSIONALISING THE ADULT EDUCATOR – *Xiangcen Guo, Institute for Adult Learning Singapore*

In this knowledge economy where information exchange is key, Adult Educators (AEs) have an important role to play in shaping the quality of knowledge acquisition and utilisation in any country. The AEs' contribution to learning and teaching extend beyond just knowledge sharing and transfer, and gradually moves into facilitating direct knowledge to skill application within specific contexts and workplaces. With greater emphasis now on workplace-based learning and determining the right skills for the future, it is imperative that we consider the quality of the trainers that we have in our midst. While post-secondary educational institutions and institutions of higher learning have traditionally been accountable for ensuring the recruitment of quality pedagogical experts, there is increasingly, a greater national need to ensure that quality standards underpin overall skill development and training practice. Research shows that skill development directly affects business outcomes and productivity at the national level. Implicitly, the quality of any vocational system is tagged to the quality of training delivery and ultimately, the quality of trainers or adult educators. It therefore implies that there is a need to deliberately seed the growth and have an overview of AEs who are lifelong learners keen on their own professional development. Quality AEs strengthen the basis of any Continuing Education and Training (CET) system. It comes as no surprise then that AEs reside at the heart of the CET system and is a key lever which enables the national move into the future skills agenda.

This presentation focuses on the efforts to professionalise the Adult Educators within the Singapore CET system. It shares the different frameworks that underpin the professionalisation agenda with reference to international practices; and highlights some of the challenges in embarking on such a top-down professionalisation effort.

POST-SECONDARY PATHWAYS FOR CULTURAL AND LINGUISTICALLY DIVERSE (CALD) IMMIGRANT YOUNG PEOPLE IN SOUTH EAST QUEENSLAND (SEQ) – Matthew Glen, Griffith University

This study explores the post-secondary destinations of over 650 young people, the majority of whom had moved to SEQ either as humanitarian refugees or special category visa holders through New Zealand. Participants originated from an array of countries of origin, including Pacific Island, African, Middle Eastern and south east Asian nations. The diversity of participants is reflected in the wide range of home language backgrounds, ethnicity, nationality, cultural identity and socio-economic status (SES).

Three exploratory research questions guided the mixed-methods study:

1. Where do young people from specific CALD immigrant communities go after secondary school?
2. What differences emerge based on ethnicity, citizenship, cultural identity, SES and related factors?
3. What enables and inhibits these young people in their further education and training pathways?

The study has involved three overlapping phases:

A. A literature review of contemporary research and policy documents associated with the refugee background and Pacific Island communities in Australia, and which was organised into an annotated bibliography.

B. Administration of a 20-item two-part survey that obtained responses from over 650 young people from humanitarian refugee or immigrant backgrounds, exploring their respective pathways, achievements and attitudes towards post-secondary education and training. The quantitative data from the survey has been analysed with selected descriptive and inferential statistics.

C. A small number of focus group sessions and individual interviews with a sample of young people drawn from the original survey participants; the qualitative data from these sessions and interviews has been coded and analysed in a thematic analysis framework.

Study findings indicate that many of the Pacific Island young people are much less likely to continue with post-secondary education or training compared with the refugee peer group. They also typically possess lower levels of post-secondary qualifications and are under-represented in technical and further education institutions; are more likely to be employed in unskilled or insecure work settings with low-skill level requirements; and consistently report high unemployment rates that exceed 25%.

GENDER AND MATHEMATICS: PATHWAYS TO DEGREE COMPLETION IN THE MATHEMATICALLY INTENSIVE SCIENCES IN AUSTRALIA – *Helen Law, Australian National University*

While prior research has studied the gendered pathways of Australian youth to post-secondary education in the life and physical sciences, it has not examined the impact of secondary school characteristics and degree completion in such areas. I use data from the 2003 Longitudinal Study of Australian Youth (LSAY) and multilevel modelling to study the gendered pathways to degree completion in the maths-intensive and life sciences at the baccalaureate level. This shows that women are less likely to complete degree programs in the maths-intensive sciences, but are more likely to complete degrees in the life sciences.

Degree completion in the sciences follows gendered patterns in subject choices and career plans in secondary school. Students who studied advanced mathematics and maths-intensive science subjects in Year 12 are more likely to complete degree programs in the maths-intensive sciences. By contrast, students who studied life science subjects in Year 12 are less likely to complete degrees in the maths-intensive sciences. Students who selected maths-intensive and life science subjects in Year 12 are more likely to complete degrees in the life sciences. Those who aspired to a maths-intensive science career when they were 15 years old are less likely to complete degrees in the life sciences, but are more likely to complete degrees in the maths-intensive sciences. As men tended to have a career plan in the maths-intensive sciences and study maths-intensive subjects in Year 12, they are more likely to complete degree programs in the maths-intensive sciences than women. Family background and secondary school characteristics cannot predict the gender gap in degree completion in the sciences.

After controlling for a variety of individual and school factors, gender differences remain, thus suggesting that gender segregation in the sciences is driven more broadly by a culture that associates particular science fields with a specific gender.

MATURE-AGE UP-SKILLING ENTITLEMENTS: WHO RESPONDS AND WHAT COURSE CHOICES DO THEY MAKE? – *Cain Polidano, University of Melbourne*

The decline of Australian manufacturing, from employing one in four workers in the 1960s to one in 12 workers today, is a stark example of the changing economic conditions that working Australians face. In this context, training undertaken throughout the working lifetime can be crucially important for developing and maintaining marketable skills. In contrast to the extensive literature that has explored education and training amongst younger people, however, training later in life has received relatively little attention. This distinction is important because young people at the beginning of their working lifetime are likely to face very different motivations toward training than an older people with substantial work experience.

This report, funded under the 2014 NVETR program, aims to improve the understanding of the responsiveness of mature-age workers, aged 25 and over, to government subsidies for up-skilling. A key focus is in measuring different enrolment and course choice responses, especially different responses between employed and unemployed individuals. Results from the analysis are important in identifying groups of individuals that may benefit from targeted support. This conference will be an important forum for us to present preliminary findings for discussion.

THE VALUE OF SKILLS IN SINGAPORE – *Emily Low, Institute for Adult Learning Singapore*

Singapore has always viewed skills acquisition as pivotal to raising employability of its workforce, increasing firms' productivity and promoting economic growth inclusively. With a new set of national empirical data collected in 2013, we can now showcase the benefits of training and its impact on the improvement of skills. Under this backdrop, this presentation examines the value of skills based on a set of generic skills (in particular influencing and leadership skills), qualifications attained and the complex computing skills. It also presents the changes in skills use in the respondents' jobs over the years which help explain the need to encourage training and skills upgrading.

CHALLENGES IN PROFESSIONAL DEVELOPMENT: THE WORKPLACE LITERACY ADULT EDUCATOR'S LEARNING JOURNEY – Xiangcen Guo, Institute for Adult Learning Singapore

The national Centre for Workplace Literacy (CWPL) was established in late 2011 to look into a specific segment of a fragmented trainer pool, often considered as the ones who are "left-behind" – the Workplace Literacy (WPL) Adult Educators (AEs) – who quietly play a critical role in teaching English to the lower-waged/lower-skilled Singaporeans in order to help them become more employable. Initial studies have shown that these WPL AEs enter the system with less-than-internationally-recognised teaching qualifications, and classroom observations indicate that they lack the appropriate adult teaching pedagogies. In order to professionally develop this WPL AE pool, learning opportunities in the form of training courses have been rolled out by the CWPL since 2011. In addition, there is also now greater emphasis on the need for continual professional development and learning by the Continuing Education and Training (CET) Centres that hire these WPL AEs.

At this timely three-year mark, through a thematic analysis of eight in-depth, semi-structured interviews and an online questionnaire with the WPL AEs, this study seeks to understand if the WPL AEs have increased in their learning through the current national professional development approach undertaken by the CWPL, and their motivations and attitudes towards learning. Second, it will examine how the WPL AEs view the workplace learning opportunities afforded to them and whether that has resulted in learning since our initial study has shown that all the CET Centres do provide for learning opportunities, with some appearing to have more expansive environments than others. This in-depth overview and understanding of current learning opportunities from the WPL AEs' point of view would inform the national policy and practice efforts on the next phases of learning and professional development efforts for the WPL AEs.

A FOOT IN THE DOOR: BARRIERS FACED BY SKILLED REFUGEES AND ASYLUM SEEKERS IN SEARCH OF EMPLOYMENT IN AUSTRALIA – *Annie Macdonald, VETASSESS*

Skilled refugees and asylum seekers face a number of barriers when seeking employment in their trade in Australia. It is critical that Australian employers have access to a skilled labour pool and that individuals are able to leverage off their trade skills developed overseas. Research has indicated lack of access to trade skill recognition, training opportunities and employment experience in Australian companies are some of the main barriers.

The Migrant Skills Recognition Service (MSRS) is a government funded pilot conducted by VETASSESS and in its first stage identified and assessed over 140 skilled refugees in Queensland, NSW and Victoria.

VETASSESS is currently conducting a second pilot, researching whether Australian context training, qualification currency, LLN support and access to Australian workplaces can remove some of these barriers for this cohort and provide 'a foot in the door' to employment.

WEDNESDAY 8 JULY

TAFE TO UNIVERSITY TRANSITIONS: THE STUDENT VOICE – *Jane Anderson, TAFE NSW Sydney Institute*

This presentation will describe the results of a study to investigate the learner experience and outcomes for students transitioning from TAFE to university. The study is designed to elicit information from learners to improve support strategies for those choosing this pathway thus promoting successful outcomes.

Griffin (2014) states: "Largely missing from the literature is the student voice". One of the main aims of this paper was to investigate transitions from the students' perspectives, but the evidence around this was scarce. The National VET Equity Advisory Council emphasises the importance of listening to the voice of the learner in further designing the VET system, designating it as a reform area in their equity blueprint for 2011—16 (NVEAC 2011)." There are two key phases, phase one conducted before learners go to university and phase two after they have been there three months.

Phase one: TAFE pre university

- decision making
- pre-conceptions
- support from TAFE
- contact from university

Phase two: Post TAFE semester one university

- reasons for not proceeding
- pre-conceptions versus reality
- support from university

The focus is on the student voice. Phase one will gather information from Sydney TAFE students before they go to university and Phase two will gather information from the students during their first semester at university. This will include students who applied for but did not go to university.

The information gathered will be used to improve strategies to support transitioning students.

INTERNATIONAL STUDENTS IN AUSTRALIA'S VOCATIONAL EDUCATION AND TRAINING SECTOR – *Steve Nerlich, Australian Government Department of Education and Training*

The presence of international students in Australia's vocational education and training (VET) sector enriches the cultural diversity of the student population and creates opportunities for enhancing the global awareness and intercultural competence of all students. International student numbers in the VET sector have fluctuated in recent years, but are currently growing and are expected to continue doing so over 2015, with many of these students keen to pursue opportunities available in Australia for work-integrated learning.

Australia's VET providers are also pursuing opportunities for offshore delivery of VET to international students, who may never study in Australia but see an Australian VET qualification as a valuable asset, which may enable them to pursue a career either in their home country or elsewhere in the world. There is much scope in this area for innovation in pedagogy and curriculum, with a growing demand for an education that is relevant to local conditions, rather than a duplication of course material designed for students in Australia. There is also much potential for expanding the use of online course delivery in this area.

This presentation will also consider Australian VET students who become international students through studying abroad in other countries. This growing area is supported by government funding with the intention of giving students new skills and perspectives, so that they can work effectively within the increasingly-globalised workplaces of the twenty first century.

PROFILING DIVERSITY OF VET PROVIDERS WITHIN THE AUSTRALIAN VOCATIONAL EDUCATION AND TRAINING INDUSTRY – *Ruth Schubert, LH Martin Institute*

Australia's vocational education and training (VET) sector contains a diverse mix of public and private institutions providing a variety of training programs, and there is a good deal of consensus in the research literature that diversity in tertiary education is a good thing. The conceptual and empirical work by Birnbaum (1983) and van Vught (2008) provides a succinct summary of the evidence. Firstly, more diverse systems better meet the diverse needs of students by allowing students to choose the institution and program that best reflects their preferences and abilities, thereby optimising the chances of completion. Secondly, a diverse system stimulates social mobility. This is particularly the case for the VET sector, where there are multiple access points and progression pathways, providing greater access to participation from the lower socio-economic strata and other equity groups. Thirdly, a diverse range of institutions and programs better responds to the increasingly differentiated needs of the labour market.

However, to date there has been no comprehensive study of diversity within the sector. The research aims to profile institutional diversity across five broad dimensions: teaching and learning; student profile; applied research, industry collaboration, partnerships; international orientation; and context. The project has been coordinated by the LH Martin Institute (LHMI). The National Centre for Vocational Education Research (NCVER) is a partner in the project, and TAFE Directors Australia (TDA) and the Australian Council for Private Education and Training (ACPET) have both actively supported the process. The Commonwealth VET Reform Taskforce has also been briefed about the project and will provide input into the report stage. Our analysis will be drawn upon publically available data provided through NCVER, and that supplied directly by the top 100 providers.

EMPLOYERS' VIEWS OF WORK INTEGRATED LEARNING: ENGINEERING AS A CASE STUDY – *Georgina Atkinson, NCVER*

Work integrated learning (WIL) and the various activities it comprises is one method for increasing employer engagement with education and training at universities. The aim of WIL is to develop students' employability skills and knowledge of the workplace and there is an underlying assumption that these skills cannot be learned in the classroom. The benefits of WIL to students are well documented. They include increasing students' experience with employment and the workplace, improving students' generic and employability skills, WIL can assist with career planning, and act as an opportunity to make networks in the industry. However, WIL from the employers' perspective is less well known. This paper examines employer's reasons for offering WIL opportunities to students, the benefits to employers, some of the constraints and barriers to providing WIL, and the interactions and experiences between employers, students, and university partners. The presentation has a particular focus on small/medium enterprises, which tend not to be as engaged in WIL as larger organisations, and looks at how WIL can increase employers' engagement in education and training.

FINDING THE CAPACITY TO RESOLVE CHALLENGING PROBLEMS – *Anthony Arrowsmith, Career Employment Group*

This presentation reports on research into the skill levels of mobile equipment technicians in the mining industry. It finds current technician skills provide adequate capacity for both routine and non-routine problems. Tradespersons maintaining this equipment were considered highly skilled in the limited areas of tradecraft they used, but not all have the capacity to resolve challenging, non-routine problems. This is particularly important when balancing workforce skills needs and managing the introduction of new technology.

It finds two distinct groups of equipment technicians: those who perform routine tasks competently and those who can diagnose complex non-routine issues. The evidence strongly suggests that standard training pathways explain skill development suitable for (a) general servicing, and (b) equipment maintenance and repair but does not account for the development of high-order human capital in tradespersons able to diagnose complex, non-routine faults and maintenance problems.

An analysis of those with the capacity to perform at higher skill levels shows they are intrinsically motivated. They build their capacity through strong informal learning networks, specific service training and most importantly, the adoption of fundamental problem-solving techniques that serve to guide them through the most challenging issues. A surprising finding was that many personnel working at the mine sites studied see employment in the industry as a short term stage in order to support other career goals and ambitions. This short-term perspective suggests a plausible explanation for the unwillingness of some technicians to invest in their own human capital development.

There is a need to develop closer partnerships between mine sites, dealerships and registered training organisations to improve skills development for tradespersons in the industry. The research has possible relevance to other trade occupations and industries. Recommendations are offered for mining industry representatives, policy makers, training organisations, and human resource personnel.

SUCCESS IN EDUCATION FOR EARLY SCHOOL LEAVERS – *Beryl Wilcox, Community Colleges NZ*

This research presentation explores what educational success may look like for early school leavers and for effective organisational practices.

The project's literature review includes impacts and trends, globally and within New Zealand, to address the problems of early school leaving with policies targeted to address student educational achievement for those most at risk. An early school leaver's profile is outlined and the challenges for Community Colleges NZ (and other foundation education providers) is reviewed especially in terms of meeting educational funding targets.

The subject of disengaged students has been researched widely, particularly in terms of economic detrimental factors. Lack of qualifications, low literacy and numeracy, poor employment prospects, and the cost of justice and health impacts are all negative indicators that have affected society's well-being.

Yet despite this grim outline of early school leaving information, there is also a wealth of interest by the student project-participants, with a real willingness to share personal stories and a genuine commitment to achieve despite their experiences and behaviours.

A mixed method research approach is used to analyse both quantitative and qualitative data by means of a colleges-wide survey questionnaire and individual semi-structured interviews with students. Focus discussions with parents adds their perspectives to the project topic.

The topic of disengagement, the nature of a successful learning environment and the knowledge of the desired future outcomes that is important for these learners, provides valuable information to be used to seek achievement in education practice.

One key way that success in education for early school leavers can be measured, strived for and valued is by listening to the voices of those who have been disengaged from their learning. By understanding their aspirations and hopes, changes or improvements can be made to ensure their successes now and in the future.

DIPLOMA PLUS: DESIGN + COLLABORATION + ENGAGEMENT = NEW INTEGRATED PATHWAYS MODEL – *Janelle Davis, University of Western Sydney; Jane Kelly, South Western Sydney Institute of TAFE and Susan Westbrook, Western Sydney Institute of TAFE*

Diploma Plus is a collaborative pathways initiative, piloted in 2014 and 2015 by TAFE NSW South Western Sydney and Western Sydney Institutes, together with the University of Western Sydney (UWS). This innovative supported pathway model is designed to enhance student learning by embedding elements of university teaching conventions as part of a Diploma program. The key focus of Diploma Plus is to enhance research skills and build professional capabilities for participating students. The integrated model highlights the importance of co-operative planning and design to produce a pathway program that offers complementary co-delivery by TAFE teachers and university lecturers of selected Diploma content throughout the student's TAFE enrolment. In addition, Diploma students receive co-enrolment at UWS while completing their TAFE studies, with access to all associated resources and facilities, creating opportunities to develop a connection with their local university and build aspirations as to the potential for future education.

There are both challenges and rewards in planting a hybrid and seeing a new variety of growth emerge, and we invite you to share in our learning from piloting a truly integrated pathway model. This session will deliver an overview of the program conception, development, implementation and pilot results, showing success reached through positive cross-sectoral collaboration of teaching, academic and administrative stakeholders across three institutions.

A DYNAMIC TENSION: CONSISTENCY WITH FLEXIBILITY IN AUSTRALIA'S NATIONAL TRAINING SYSTEM – *Kaye Bowman and Suzy McKenna, Kaye Bowman Consulting*

This presentation provides the (interim) findings of a research project funded through the NVETR program in 2014-15.

There has always been tension between achieving national consistency in VET for the benefit of its clients, both industry and students, whilst allowing for flexibility and responsiveness to local conditions. The issue is where to draw the line.

The research explored jurisdictional approaches being taken to the introduction of a student entitlement funding model and associated provider quality standards in VET. The issue investigated is whether these approaches are merely enactments of the jurisdictional flexibility allowed and required within the national training system or whether they are challenging the essential elements of a functional national training system and its sustainability.

Research questions included: what was the purpose of developing a national training system and what are its key elements? What is the contemporary concept held by key stakeholders of a functional 'national training system' and its essential elements? How consistent/coherent with a national training system approach are current jurisdictional approaches to a VET entitlement funding and provider quality standards? How material are any found differences? What are the implications of the findings for future VET reform?

CHILD PROTECTION: IS ONLINE TRAINING THE ANSWER? – *Daniela Francavilla, NSW Health*

Online delivery is an increasingly popular option for the provision of professional training. Economic considerations make online learning particularly attractive in an environment where the sheer amount of information and the range and kinds of skills needing to be transferred from a very large organisation to its staff can be daunting. But is online learning the answer for all training needs?

Recently NSW Health has moved away from face-to-face training of child protection for all its workers to an online program. Child protection training has always offered its own particular challenges, including the challenge of raising, examining and dispelling commonly held beliefs and values which, as research suggests, can and do act as obstacles to workers meeting their legal and organisational responsibilities. Can online training effectively address these beliefs and values? The consequences of a workforce in the health sector not responding appropriately to concerns for the safety of children and young people can be extremely serious for vulnerable children, their families and the entire community. A comparative study of online learning versus face-to-face learning by Health staff in child protection is the focus of research currently underway. The proposed research will compare the face-to-face two hour session with the online training to determine whether mode of delivery affects attitudes supportive of required behaviours (the primary outcome), acquisition of knowledge content, confidence (in performing required behaviours) and subjective impact of training experience. This paper will discuss the development of the scales used, results arising from initial piloting of the scales and emerging trends.

FROM TAFE DIPLOMA TO UNIVERSITY DEGREE IN ARCHITECTURE – *George Loupis, Sydney Institute TAFE*

Since 1993 TAFE NSW Diploma of Architectural Drafting graduates have been accepted into Architecture degree programs, with advanced standing, in numerous universities. This pathway was initially facilitated through an informal arrangement between TAFE teaching sections and the universities, but is now a formally-accepted articulation pattern. In 1993 only about 15% of the TAFE graduates entered Architecture degree courses, whereas over the last 5 years, an average of 50% of Diploma graduates from Sydney Institute have been accepted into university courses.

This paper discusses the Pathway and Student Satisfaction surveys that the author has conducted with students from NSW's Sydney Institute of TAFE. The surveys confirm that the Diploma of Architectural Technology has become recognised as a second-chance qualification for entry into the Architecture degree course at any of the four universities in NSW and the one in the ACT which offers the Architecture degree courses. The paper analyses the survey results for both St George College and Ultimo College. The paper concludes that the Architectural Drafting Diploma course has been successful in meeting the objectives of the 2005 TAFE NSW/Universities credit transfer and articulation policy as well as the federal government's 2009 Programs and Pathway policy.

UNEARTHING THE DIGITAL LANDSCAPE – INNOVATING THE PEDAGOGIC PRACTICES OF THE VICTORIAN VET WORKFORCE – *Leo Gregorc, VET Development Centre*

The development of an effective professional development (PD) program to advance the digital capability of the VET workforce is a contemporary challenge. The disruptive nature of technology, particularly in the education space, coupled with the varying levels of digital maturity of students, parents, peers and the community make implementing a one-size-fits-all approach counter-intuitive.

The current need to improve the digital capability of Victorian VET practitioners has been identified by government, industry, employers and training providers alike, and is noted as a sector wide key strategic directive for 2015. The VET Development Centre, recognised as a leader in building VET workforce capability nationally, is implementing a three year initiative aimed at improving the use and uptake of digital technologies by VET practitioners in their teaching practices. Recently the Centre undertook qualitative research to explore the skills landscape required to effectively deliver a professional development program to expand the digital pedagogical practices within VET education frameworks.

By way of focus groups, semi structured interviews, desktop research and an online survey, the Centre consulted with a broad cross section of VET practitioners and organisations. The research aim was to secure focused qualitative data about what kind of professional learning specifically supports the sustained use of and the impediments to adopting digital learning technologies.

This presentation reports on these findings and provides an overview of the newly developed VET Innovation in Learning Program (#ILeP) – an adaptive professional development model focused on improving the understanding of how digital technologies can be an inclusive part of successful pedagogic practice.

UNDERSTANDING THE NEEDS OF VET STUDENTS ARTICULATING TO SECOND-YEAR UNIVERSITY – *Mark Symmons, Australian Institute of Psychology**

Generally negotiated course-by-course, an increasing number of pathways are being opened to VET students to transition directly into second-year university, with blanket credit for first-year content. Such arrangements exist for disciplines including nursing, teaching, business, and applied science, among others. The negotiations revolve around content, and how well the TAFE course maps to the content of or meets the needs of the university course. They do not, however, take account of differences in the learning and teaching environment of the two sectors.

It could be argued that TAFE students articulating into second-year university should be at an advantage to their university colleagues: they have completed more post-secondary education; and they will have amassed significant discipline-relevant practical experience, from substantial field placements and often paid and volunteer work in the sector before and during the TAFE course. Yet anecdotal reports from a number of university academics who deal with these students indicate that they often struggle. This might be because they have missed the formal and informal aspects of being introduced to university at the beginning of (and often across) first year, critical aspects of which might be academic or social or practical. An as-yet unpublished report by the authors found an academic performance deficit for these students compared to their university counterparts, but does not point to the reasons for it.

A larger ongoing Office for Learning & Teaching-funded project is working towards developing a transition course for these students to better prepare them for starting university at second year. Part of that project involves developing a better understanding from the students in question of the elements required. This presentation will report on the quantitative and qualitative data collection from TAFE students planning to make the transition and those who have already done so.

FUNDING SCHEMES IN POST-SECONDARY EDUCATION AND DISADVANTAGED STUDENTS – *Gerald Burke, Monash University*

Post-secondary education considered in this paper comprises higher education and vocational education and training (VET). Funding arrangements have been undergoing change and the future is uncertain. The Australian Government has provided grants to public higher education institutions for about 60% of the tuition costs for domestic students with the fees for the remainder, largely funded by income contingent loans. The publicly subsidised VET sector has been supported until recently largely by government grants, with relatively low fees and often near exemption for the least advantaged. In 2012 the Australian Government removed caps on the number of bachelor degree places it funds in higher education. Open ended entitlement schemes for many VET courses have been introduced by some state governments with the public funds available to both public and private providers but with the loan scheme so far only available at diploma and higher level. This presentation outlines the structure of post-secondary education, participation rates (in total, and for less advantaged students), and considers these against the funding arrangements.

LEARNING PREFERENCES OF ENROLLED NURSING STUDENTS, EDUCATIONAL PREPARATION AND TRAINING FOR WORKPLACE READINESS – *Kalpana Raghunathan, Monash University**

In Australia there are two entry levels in nursing, the Registered Nurse (RN) and Enrolled Nurse (EN). The focus of nursing education research is predominately attentive to the RN and post-graduate nursing students in higher education, hence the educational preferences of EN students in the vocational education and training (VET) setting has not been recognised or identified. EN students have unique educational needs as they transition through education and training into the workforce due to their diversity in terms of learner characteristics and background. As the role of ENs continues to expand in the workplace to meet the demand of the health workforce, attention to educational preparation of this cohort of learners is especially relevant and timely. This requires targeted attention regarding educational learning methodologies to support learner preferences in the planning and delivery of education and training for EN students.

A research study was undertaken to identify specific learner preferences for teaching modalities among EN students in a Diploma of Nursing program. A qualitative research methodology using an explorative descriptive approach in the naturalistic setting was adopted for this study. The study was set in a private registered training organisation (RTO). Data was collected through focus group discussions with data analysis involving a thematic framework. Five main themes were identified through the thematic analysis: variety of teaching and assessment methods, educator directed or guided learning, practical application and simulated learning, face to face learning and closer integration of theory to clinical practicum. Through the study specific learning needs of EN students from the learner's perspective were identified. The knowledge generated from this study will help guide future planning strategies in education for the Diploma of Nursing (EN) program and can be applied to the wider VET sector.

FINDING OUT WHO YOU ARE AND WHERE YOU COME FROM: VOCATIONAL EDUCATION AND YOUNG INDIGENOUS PRISONERS – *Charlie Chambers, Mark Doran and Alicia Toohey, Australian Skills Management Institute*

In February, the seventh Closing the Gap Report since targets were set in 2008 was published. It states, "increasing Aboriginal and Torres Strait Islander peoples' participation in further training and education resulting in employment is critical to Indigenous economic development" (p. 23). This paper will report on how the unique features of a vocational education qualification have enabled a specific group of Aboriginal and Islander people to participate in further training and education i.e. male prisoners in two south east Queensland correctional centres. The initiative was conceived of and implemented by members of local Indigenous communities in the region (in collaboration with a local RTO) and focuses on teaching the Certificate III in Aboriginal or Torres Strait Islander Cultural Arts to mainly young men in prison. Based on the results of three years of delivery so far, 50 graduates and 50 more current students, this presentation will discuss not only matters such as students' pathways to further study and work, but how the process of getting the qualification itself achieved outcomes that go well beyond (and therefore greatly enhance) the merely vocational. Studying the certificate has enabled these men to explore very personal and fundamental questions of identity: how can you know where you are going, if you first do not know who you are and where you come from? The findings of this paper may have valuable applications to other community and correctional settings.

WHO CHOOSES VET AND WHY: INITIAL ANALYSIS OF STUDENT SURVEY RESPONSE FROM THE ASPIRATIONS LONGITUDINAL STUDY – *Hywel Ellis, University of Newcastle*

With the Australian tertiary education sector churning and TAFE enrolments decreasing, understanding who is choosing TVET pathways and why is increasingly important. The traditional distinction between TVET for hands-on jobs and university for more theory-based jobs, a heuristic that many school students will hear when seeking advice on tertiary education, is changing. The current move away from TVET courses as 50:50 theory and practical toward 80:20 in favour of theory parallels the transition from the Industrial to the Information Age (Maclean and Lai, 2011) and challenges the existing role of TVET in contemporary Australia.

In this shifting context, the research examines survey responses (n=1,250) and other linked data for students who indicate an intention to take a vocational pathway after completing their schooling. These NSW students are from Years 3 to 11 as part of a larger study of educational and career aspirations in the middle years of schooling (ARC LP12000130). The analysis focuses on the characteristics of these students exploring such variables as: prior achievement, socioeconomic status, gender, and parent's/carer's occupation. It also analyses the reasons students give for their chosen educational and career pathway.

It found that traditional gendered occupations remain prominent and that males more often choose work or apprenticeships. Students' intention to take a TVET pathway firms up as they approach the end of their schooling. A TVET pathway or apprenticeship has more resonance with students from lower-SES backgrounds, who also indicate a narrower awareness of the range of occupations available to them.

This presentation argues that critical insights into the future of the TVET sector, and in relation to these data for TAFE NSW, lie in understanding who is choosing TVET and why, supplementing the analysis produced by the Productivity Commission (2011). The implications of this research for schools and tertiary education policy are discussed.

CHANGING OCCUPATIONAL AND SKILLS DEMAND IN AUSTRALIA: IMPLICATIONS FOR CROSS-OCCUPATIONAL SKILLS TRANSFERABILITY FOR WORKERS IN TRANSITION – *Darryn Snell, RMIT University*

In rapidly changing economies where industries are being restructured and occupations are changing cross-occupational transferability is vital for employers and workers to flexibly meet varying employment demands. There is considerable speculation about the facilitators and barriers to occupational mobility and skills transferability within the Australian labour market (Mayer Committee, 1992; Misko, 1998; Patridge, Chapman and O'Neil, 2009; Roberts, 2011). The tendency has been to focus on the skills capabilities, work experiences and other employability attributes of individuals when considering occupational mobility prospects with little consideration of structural changes that influence how well ones skills translate from one context to another (Curtis and McKenzie, 2001; Misko, 1999; 1995).

This paper considers how structural and industrial change in Australia has impacted on the occupational mobility and skills transferability opportunities and choices of workers in transition. Drawing upon ABS Census and Labour Force Survey data the study analyses changes in occupational and skill-level demands to understand how occupational mobility and skills transferability is structurally conditioned. The research was conducted as the first stage of a three stage National VET Research Program-funded study on cross-occupational skills transfer. The research seeks to assist skills councils, training providers, employment policy makers, employers and employment support agencies in better understanding skills transferability and the tools and methods to facilitate occupational pathways to aid individuals.

THE 'SO WHAT'? ENSURING THAT TRAINING EFFECTIVELY TRANSFERS TO BETTER JOB PERFORMANCE AND WORK OUTCOMES – *Nicky Murray, Careerforce*

Careerforce is the industry training organisation for the health and community support sector in New Zealand. A key driver for the organisation is to ensure that the learning that Careerforce trainees participate in is successfully transferred to better job performance, resulting in sustainable improvements to the health and well-being of New Zealanders.

There are two aspects to understanding how this transfer of learning occurs; the first revolves around the trainee – the pedagogical processes that support and enhance transfer, and the second revolves around the organisation – the workplace environment and 'affordances' that allow the learning to be fully utilised.

This presentation reports on three pieces of research that will contribute to building understanding in this area:

- Developing critical thinking skills in industry trainees: this project focuses on enabling workplace trainers to deliver tailored and contextualised critical thinking skill development and support to their trainees. Building the critical thinking skills of trainees will support the 'deep' learning that is required for successful transfer.
- Reporting the value-add of industry training: using a balanced scorecard approach, we are developing case studies where organisations select and report on key metrics. The aim is to help them (and Careerforce) build a business case for investment in training. The effectiveness of training is a key dimension of this work.
- Learning transfer research project: the aim of this significant piece of work is to better understand learning transfer so that Careerforce can:
    - articulate what difference learning transfer makes to the performance and/or work outcomes of learners/workers, with a view to attracting a broader base of support for training from employers and government
    - work with employing organisations to develop their learning cultures
    - develop knowledge that can be used to suggest adjustments to training programmes, pedagogies and organisational structures that may make a crucial difference in learner achievement.

POSITIVE TRANSFORMATIONS: COMMUNITY DRIVEN SOLUTIONS FOR FURTHER EDUCATION IN REMOTE AND VERY REMOTE COMMUNITIES OF THE NORTHERN TERRITORY – *Peta Fraser, Donna Robbins and Matalena Tofa, Charles Darwin University*

This paper draws on data collected through the Higher Education Participation and Partnerships Program - Whole of Community Engagement (HEPP-WCE) initiative led by the Office of the Pro-Vice Chancellor - Indigenous Leadership within Charles Darwin University. The initiative utilises ground-up community driven approaches to build aspiration, expectation and capacity within remote and very remote Indigenous communities of the Northern Territory focused on participation in higher education. The vocational education and training (VET) sector, like all educational institutions offers a challenging and often complex environment. These challenges are exacerbated in remote and very remote communities where geographical isolation and challenges such as access to enrolment, academic and financial support and course variety require a refocus on partnerships and delivery models that provide language, literacy and learner support and also address wider community needs.

The HEPPP-WCE initiative has an opportunity to work closely across a range of community sectors involved in VET and higher education delivery to provide strategic further education pathways. Through recent HEPPP-WCE community-based engagement processes we have documented a need for the expansion of VET, including creating further understanding of models that include cultural and language needs; and enhance support to be embedded within the delivery of such training. Community consultations also suggest there is a need, and desire, for clearly articulated pathways from VET to higher education.

This presentation will provide an outline of community consultations and the work developed through the HEPPP-WCE initiative by sharing accumulated evidence and several case studies from across the Northern Territory.

SHEDDING LIGHT: PRIVATE COMMERCIAL RTO TRAINING FOR YOUNG EARLY SCHOOL LEAVERS – *George Myconos, Brotherhood of St Laurence*

Educational pathways for young people cannot be viewed as a linear progression through primary, secondary, and tertiary level institutions. The number of young people aged between 15-19 who have not attained their senior school certificate, and who are undertaking VET, exceeds 127 000. Yet, vocational training can also be complex, undertaken within and beyond the mainstream secondary school context, and often in both simultaneously. In addition, we can no longer assume that vocational training for young people will take place solely within large, state funded institutions such as TAFEs.

A greater reliance by state and federal governments on market driven funding models – as well as on subsidised training entitlements – has contributed to a rapid growth in the number of private commercial registered training organisations (PCRTOs) that are training the 15-19 year old cohort. Little is known about how this much commented upon provider type approaches the training of 15-19 year old, and particularly those that had failed to attain year 12 level.

This presentation conveys findings of NCVER funded research into the role played by PCRTOs in delivering entry-level programs (Certificates I and II) for 15-19 year old early school leavers. It draws on nation-wide semi-quantitative surveying of private providers, interviews with industry stakeholders, and with those working in case study PCRTOs in Victoria, South Australia and Queensland. It shows how PCRTOs respond to the needs of early school leavers, as well as the role played by entry level vocational programs in this context.

It will identify innovation and adaptation of conventional approaches to vocational training, as well as the changes that may be needed to ensure that this growing cohort of often disadvantaged learners achieve successful outcomes.

THE TAFE/VET STUDENT EXPERIENCE AT UWS: 2010-2013 – *Rose Cutts, University of Western Sydney*

Pathways to university study are beneficial at many different levels. For students, pathways widen access and provide an opportunity for further study be it through raising students' awareness of opportunities to progress to higher education, or by providing an alternate means of entry.

For institutions in the TAFE/VET sector, pathways may be used as a promotional device to enhance the attractiveness of their offerings, whilst at the tertiary level pathways provide a pipeline. Providing opportunity and access to higher education through a diverse range of pathways and strengthening partnerships with pathways providers to expand access and aspirational achievement are attributes of the UWS Securing Success: 2015-2020 Discussion Paper. Pathways to higher education also feature prominently in state and Commonwealth government education reform plans.

In light of the increased focus on increased participation in higher education and pathways, this report seeks to analyse and document statistics pertaining to the participation and performance of TAFE/VET students at UWS over the period 2010-2013. Findings with respect to many of the key statistics in this study including the proportion of commencing students with a TAFE qualification, and their relative performance appear in contrast to those observed elsewhere in the sector and in the relevant academic literature.

In terms of both relative attrition rates and relative GPAs, there is no consistent evidence to suggest that TAFE/VET pathways students with lower AQF Level qualifications are any worse prepared for tertiary study than those with higher Level qualifications. This shows that the TAFE/VET commencing student experience at UWS is unique and that transition and support programs should likewise be bespoke to this cohort.

SKILLS TRANSFER, RE-SKILLING AND TRAINING OF OLDER WORKERS IN RESPONSE TO INDUSTRY RESTRUCTURING – *Victor Callan and Kaye Bowman, Callan Consulting Group*

Industry restructuring involving job losses is an enduring feature of the Australian economy. In the absence of effective responses many displaced workers will add to unemployment numbers or retire by default when they fail to find new employment.

With awarded funding from NCVER's NVETR program for 2014-15 the presenters have investigated effective approaches to helping displaced older workers to overcome job loss through effective skills transfer, re-skilling and training. Past approaches have been investigated via a review of national and international literature and current approaches via case studies undertaken in four regions of Australia.

Older workers displaced from lower skilled jobs have been the focus as they typically face greater challenges in finding new jobs, whereas more skilled and highly qualified workers have more readily transferable skills and they gain new jobs more readily.

The findings of the research project are presented in this session and in the form of a good practice model. The good practice model for effective skills transfer, re-skilling and training of older workers displaced from lower skilled jobs due to the industry restructuring takes into account identified critical enablers and barriers for this cohort of displaced workers. The model includes skills transfer, re-skilling and training activities in combination with other essential activities. It is anticipated that the model may inform work with other vulnerable cohorts of job seekers.

DEVELOPMENTAL RESEARCH: ATTITUDES AND BEHAVIOURS TO VET – *Melissa McEwen, Australian Government Department of Education and Training*

Vocational education and training (VET) provides every day Australians with real world qualifications and the skills they need for greater employability, greater choices for work options, and, for many people, a better life. VET also supplies businesses with the opportunity to grow the skills of their workforce, and enhance productivity levels. However, research has shown that VET is not perceived as a first choice career pathway for many Australians and the general community are not aware of the many potential benefits VET can offer its participants.

Over the last 10 years, research commissioned by the Australian Government has indicated that there has generally been a low preference for the VET sector among many in our community. While a low preference for a VET qualification can be for a variety of reasons, evidence from the most recent national research conducted in 2008 found that the general perception was that VET is not as good as a university education, with a view that it requires a limited set of skills, is mostly trade-focused and is the option for those not academically talented. Further evidence supporting this notion became available via the national stakeholder workshop consultations undertaken this year by the VET Reform Taskforce in 2014 which provided anecdotal evidence that the VET sector was still experiencing low preference with little attitudinal shift from 2008.

In January and February 2015, the Department commissioned market research agency GFK Australia Pty Ltd and Quay Connection Pty Ltd to undertake market research on attitudes and behaviours to VET by people of all ages, career advisors, parents and employers to see how much attitudes and behaviours have changed since the 2008 research and to seek recommendations going forward to challenge negative attitudes and behaviours and perceptions. The Department would like to share these findings with the sector.

UNIVERSITY TECHNICAL COLLEGES: A NEW GENERATION OF STEM SCHOOLS IN ENGLAND – *David Harbourne, Edge Foundation*

University Technical Colleges (UTCs) are 14-19 schools, each specialising in at least one branch of science, engineering or technology. They are being established in all regions of England, with cross-party support and funding from central government. Thirty are now open and 30 more will open in the next two years. UTCs integrate technical, practical and academic learning and create an environment where students can thrive and develop the abilities that industry needs. To do this, a UTC:

- focuses on one or two technical specialisms
- works with employers and a local university to develop and deliver their curriculum
- provides essential academic education and relates this to the technical specialisms
- has the latest equipment and technology used by industry
- dedicates at least 40% of the timetable to the technical specialism including design and building, working in teams and problem solving.

UTCs specialise in subjects where there are skills shortages, including:

- Engineering
- Manufacturing
- Health sciences
- Product design
- Digital technologies
- Built environment

By working with a university and local employers, UTC students benefit from access to:

- the latest research, industry experts and specialist facilities
- real-life employer projects that stretch their technical skills and creative thinking
- teaching and mentoring from specialists who currently work in industry
- UTCs are smaller than traditional secondary schools: typically, they have 600 students. They are not academically selective and charge no fees. On leaving a UTC, most students progress to higher education or apprenticeships in their chosen specialist field.

This presentation will provide an overview of UTCs' origins, aims and progress to date, supported by early evidence from current research and evaluation projects.

THE PATHWAY INTO EMPLOYMENT FOR ANANGU IS NOT STRAIGHTFORWARD – HOW CAN VET FACILITATE?
– Janet Skewes, TAFE SA

This presentation explores the complexity of the interface between the workplace and Anangu from the remote Indigenous communities of the APY Lands, north-west of SA. Transitioning through education and training into the workforce is a pathway few have followed. Understanding the complexity has the potential to inform the role for VET.

Story of work is one of change and the implications of differing world views in an employment context dominated by government policies and remoteness is challenging for the job seeker, employee, employer and trainer. The labour market is dominated by the tyranny of distance with a low population in small communities spread across a vast area. Increasing legislation and specialisation is a reality that currently results in a workforce reliant on outsiders.

VET outcomes are mixed. The Prime Minister recently acknowledged how the employment gap for Indigenous job seekers remains and the intent of government is to provide pathways to real employment with further reforms. Indigenous communities are critical of VET, as the political adage of training for employment is not seen in practice. Often there is reference made to training for training sake, and at the same time the need for more training is expressed.

This presentation will highlight the differing world views that effect being a part of the market economy and relook at the role of VET in the APY Lands. The intelligence on how to improve the transition into and within the workforce is essential for reviewing VET and for changing current workforce demographics.

Consideration of the cultural interface between Anangu the workplace, and the characteristics of the local labour market in the APY Lands, will inform the role of VET.

CASE STUDY IN WORKFORCE DEVELOPMENT: IMPROVING TAFE TEACHER SKILLS *– Anne Dening, Flinders University**

This paper discusses a workforce development case study undertaken by TAFE SA Regional Institute between 2010 and 2013. This case study is informing a doctoral study at Flinders University which is investigating the unique characteristics of VET teaching, the skills that VET teaching staff must have, and how those skills are to be acquired to enable teachers to transition from novice to advanced practice. This doctoral study builds on a range of studies of the VET practitioner in the previous decade including Mitchell (2009) and Wheelahan (2010) and investigates how practice-based education theory and research and workplace learning may assist in understanding effective ways of providing professional development for teaching staff.

The workforce development case study began in June 2010 when TAFE SA Regional Institute staff participated in two self-rating surveys; VETCAT® which measures the teaching skills of VET practitioners; and CURCAT® which measures their use of 27 strategies to remain current with their industry. A targeted professional development program was implemented following the survey analysis. The surveys were repeated in late 2012 and showed an increase in ratings of around 5% for most items across the teaching cohort. In both cases the quantitative data generated from the survey was complemented by qualitative data gained from Institute staff.

Approximately 400 lecturers responded to the survey in 2010 and 250 in 2012. Fortuitously, most of the 100 lecturers in the largest faculty who completed the survey in 2010 undertook it again in 2012, providing an important focus for the case study.

This paper will help to identify which strategies were most effective for improving the skills and currency of VET practitioners in TAFE SA Regional from mid 2010 to late 2012. It is expected that those strategies will include a mix of interventions by the organisation, by faculties and by individuals.

LEARNING SAFETY SAFELY: DEVELOPING JOB READINESS FOR GRADUATES IN HIGH RISK VOCATIONS

*– Melenie Ross, University of Western Sydney**

Vocational education and training (VET) conjures ideas of training which is intrinsically linked to ones' vocation, work or job. Research illustrates the relationship between VET and transition to employment is not always smooth. However, limited research has been carried out into vocational education delivered within high risk workplaces, where safety is critical in both the learning environment and the work environment. This study uses data from an Australian registered training organisation to examine the importance of the VET/workplace relationship, and how such relationships influence training outcomes in high risk vocations.

The notion of 'job ready' within the VET environment is explored, to reveal the multi-faceted nature of both the learning network and the work network. Employing a layered case study approach, where cases linked by a training program traverse across three sites, both within Australia and overseas, data has been gathered from documentation, observation and interview with trainers, management and learners. Combining the cases to analyse the VET environment and the workplace, the findings suggest vocational education delivered to ensure job ready graduates requires strong links between all stakeholders, especially when the dimension of safety and risk is added into the equation.

The complexities of these relationships escalate to include regulatory bodies, drift in focus, and added burden to training staff and the workplace. The findings reveal that experiential and authentic VET for high risk work vocations is a necessary prerequisite to ensure learners learn 'safety', whilst simultaneously learning safely.

NO FRILLS