

$(t)e=mc^{2017}$



eureka

revolutionary ideas

TEMG celebrating 40 years
1977 - 2017

17-20 SEPTEMBER 2017
Crown Conference Centre, Melbourne

TEMG



TEFMA

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Welcome to Melbourne and TEMC 2017

The Tertiary Education Management Conference (TEMC) brings leading professionals together to explore best practice, to learn and be inspired by others, and to take new knowledge back to their workplace. It's an important influence on how the higher education sector continues to grow and lead with innovative practice.

This year's theme 'eureka: Revolutionary Ideas' invites you to join in a learning journey with peers from Australia, New Zealand, Papua New Guinea and beyond. Together over three days we will explore the question of how to create open, innovative systems where bright ideas can become a reality, where we can expand our professional practice and become leading thinkers in our various professional fields.

If you have been to TEMC before, this year's experience will feel a bit different. In putting together the program we've designed an interactive space where delegates can meet and engage through new and creative means.

In this 40th year of TEMC, the program offers a broader range of panels, presentations and workshops: many thanks

to the presenters who were willing to try new formats for the plenary and concurrent sessions. The new concept of HEd talks gets its first run at this conference and our resident MindWorker, Jason Clarke, will be leading whole-of-conference discussions on revolutionary ideas that emerge over the three days.

So here's your challenge... how will you make the most of this opportunity?

Whether you have travelled across oceans or hopped on a tram to get here, thank you.

Melbourne is an inventive and exciting place. We hope that you can find some time to get out and explore our laneways and urban form, and experience first-hand the buzz and vibrancy of one of the world's leading cities.

Mary-Louise
on behalf of the 2017 Local Organising Committee
Colin, Joanne, Kain, Garry, Margaret, Michelle, Paul

The Interactive Learning Space is Going Tribal

It reflects the way people naturally connect, communicate, and collaborate each and every day. It's the catalyst and primary support mechanism of all learning.

Sebel has been working hard to innovate in this crucial arena – developing interactive learning spaces where higher order thinking

and deeper learning occur spontaneously. The educator has freedom to inspire, direct and guide engaged students who aren't constrained by the spatial setting but given the agency to learn more naturally.

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For further details please contact:
Robin Sweasey
Director, Project Management
National Head of Education, Aus/NZ
t: 07 3020 4766
e: robin.sweasey@ttthinc.com

Welcome from **ATEM** and **TEFMA PRESIDENTS**

Welcome to TEMC2017 ‘Eureka: Revolutionary Ideas’

In 2017, we celebrate the 40th anniversary of TEMC. Over the years our conference has grown to be one of the leading offerings within the higher education sector, bringing together more than 800 professionals to explore and share best practice within the sector, and influence its future success.

Over the next days you will have a wonderful opportunity to connect with what is happening in the sector. Our keynotes and reflection panels will provide the starting points for an exploration of the future of the sector, and we invite all conference delegates to join this discussion. There will be many opportunities to network and make connections through the wide range of presentations, workshops, conference tours and social events.

Both the Tertiary Education Facilities Management Association (TEFMA) and the Association for Tertiary Education Management (ATEM) are continuing to focus on providing services that are relevant to members, and are of the highest quality for the tertiary education sector. Delivering TEMC is part of this commitment.

Many people contribute to TEMC’s success. We would like to thank the Local Organising Committee, particularly our Conference Chair, Mary-Louise Huppatz, Garry Bradley, Michelle Gillespie, Margaret Ruwoldt, Colin Reiter, Joanne Austin, Kain Jarvis and Paul Abela for their work in delivering such an exciting and varied program.

We would also like to thank our conference organisers, Leishman Associates for their work in supporting the endeavours of our two organisations to deliver TEMC to such a high standard.

A special mention to the many sponsors and business partners who are a valued part of TEMC 2017; please make the time to visit our sponsors’ and exhibitor over the three days and learn about the innovations which they offer the sector.

We hope you have a wonderful time here in Melbourne – we trust you will enjoy your time at TEMC and return to your organisation, energised and with new ideas to shape the future of your work.

Carl Rallings
President ATEM

Steve Sullivan
President TEFMA



Accommodation that inspires

As Australia and New Zealand's leading student accommodation specialist, Campus Living Villages is dedicated to providing more than just a room. We are also dedicated to creating communities that enhance campus life.

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Association INFORMATION



Association for Tertiary Education Management (ATEM)

The Association for Tertiary Education Management Inc (ATEM Inc) is the pre-eminent professional body in Australasia for tertiary education administrators and managers. Established in 1976, today it has around 1,400 individual members and 62 corporate members. Members are found across the breadth of the academic environment, including universities, TAFEs, polytechnics and Wanagas, private providers, government departments and other related organisations.

ATEM connects individuals across institutions and disciplines, supports individuals to develop their management skills and knowledge, and challenges the sector to recognise the professional nature of tertiary education management. It does this by:

- growing careers: growing the careers of professional administrators and managers to enable them to have rewarding careers and contribute to the sector
- building professionalism: through relevant education and training, and recognising outstanding achievements in the sector,

- connecting people and groups: across the sector to promote sharing of programs, knowledge and practice, and
- understanding the sector: providing opportunities and resources for individuals and groups to better understand the tertiary education sector today and how it might evolve in the future.

For more information on ATEM, please contact:

Paul Abela
Executive Director
E: paul.abela@atem.org.au
P: +61 2 9351 9719
www.atem.org.au



Tertiary Education Facilities Management Association (TEFMA)

The Tertiary Education Facilities Management Association (TEFMA) is an independent association of facilities managers operating in the tertiary education sector of Australia, New Zealand, Hong Kong and Singapore. TEFMA assists facilities managers in universities, colleges and other educational institutions in the Asia-Pacific region by promoting excellence in the planning, construction, maintenance, operations and administration of educational facilities.

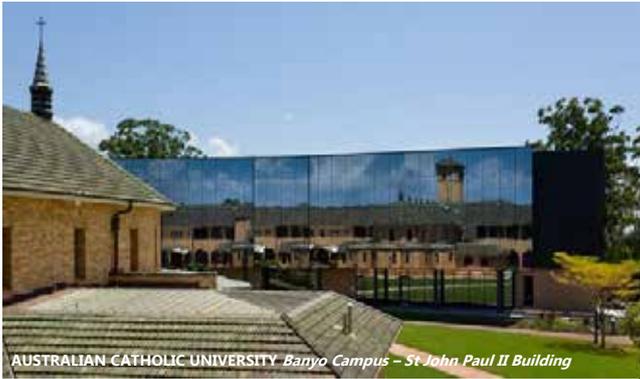
TEFMA serves the education community by conducting research, developing educational programs, holding conferences and workshops, producing publications, developing guidelines, and serving as a central information source for its members. TEFMA is acutely aware of the need to remain relevant in an ever changing tertiary and vocational education sector and is creating closer ties with Universities Australia and Universities New Zealand to this end. Sustainability and carbon emissions are major public policy issues and TEFMA is extending its annual benchmarking report to ensure our members track these important societal issues and assist their institutions in bringing around change.

TEFMA has some 1000 members representing 88 tertiary education institutions and 8 affiliated associations in Australasia.

TEFMA promotes engagement with industry through its 74 Business Partner members. TEFMA recognises the support and ongoing commitment by our Business Partners in ensuring our members remain current in contemporary FM practices. TEFMA members provide vital infrastructure and service in support of the effective operation of tertiary and vocational education in the Australasian region.

For more information on TEFMA please contact:

Victoria Chapman
TEFMA Secretariat
E: victoria@laevents.com.au
P: +61 3 6234 7844



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Conference and GENERAL INFORMATION

ACCOMMODATION

If you have any queries relating to your accommodation booking, first speak to the staff at your hotel, or alternatively, Leishman Events staff at the registration desk.

Your credit card details were supplied to the hotel you have selected, as security for your booking. If you have arrived 24 hours later than your indicated arrival day you may find that you have been charged a fee. You will be responsible for all room and incidental charges on check out and may be asked for an impression of your credit card for security against these charges. This is standard policy in many hotels.

ADDITIONAL TICKETS: CONFERENCE SOCIAL PROGRAM

The Welcome Reception and Conference Dinner are included in the cost of a full conference registration. Additional tickets for these events may still be available at a cost.

Check with staff at the registration desk if tickets are still available.



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ATM's

There are ATM's available throughout the Crown Conference Centre and Crown Promenade, Melbourne.

CONFERENCE NAME BADGES

All delegates, speakers, sponsors and exhibitors will be provided with a name badge, which must be worn at all times within the conference venue, as it is required for access to all the conference sessions and social functions.



DINNER SEATING

Table allocations for the TEMC Dinner on Wednesday 20 September (included in full registration) will be by way of sticker allocation. Please see the registration desk if you have any queries.

All delegates registered to attend the TEMC Dinner (included in full registration) will receive a sticker to be placed on the table sheets near the registration desk. These sheets will be available from Monday 18 September and will be taken down at the end of morning refreshments on Wednesday 20 September or as they become full.

All delegates registered to attend the TEFMA Awards Dinner will receive a sticker to be placed on the sheets near the registration desk. These sheets will be available from Monday morning and will be taken down at the end of lunch.

All delegates registered to attend the ATEM Awards Dinner will receive a sticker to be placed on the sheets near the registration desk. These sheets will be available from Monday morning, and will be taken down at the end of lunch on Monday.

If you do not have a sticker please see the registration desk staff. DO NOT write your name directly on the board, as you will NOT be allocated a seat.

DRESS

Dress throughout the day is smart casual or informal business

EMERGENCY MEDICAL CARE

For any medical emergency please telephone 000. The staff at your hotel will have information if you require contact details for a doctor, dentist or other health professional.

ENTRY TO CONFERENCE SESSIONS

It is suggested that delegates arrive at preferred sessions promptly to ensure a seat. If sessions become full then late delegates will not be allowed entry.

WIFI ACCESS

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With thanks to Architectus Free Wireless internet will be available throughout the conference venue for the duration of the conference. If you have trouble connecting please see the staff at the registration desk.

Network name: ARCHITECTUS
Password: TEMC_2017

MOBILE PHONES

As a courtesy to other delegates, please ensure that all mobile phones are turned off or in a silent mode during all sessions and social functions.

PARKING

Crown features two car parks in Melbourne, with over 5,000 parking spaces as well as valet parking services, for your convenience. For more details and pricing please **CLICK HERE**.

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PHOTOGRAPHS, VIDEOS, RECORDING OF SESSIONS

Delegates are not permitted to use any type of camera or recording device at any of the sessions unless written permission has been obtained from the relevant speaker.

A professional photographer will be taking photos throughout the conference with these photos available from the conference website shortly after the conference or from Leishman Associates, the Conference Managers.

If you do not wish to have your photo taken and/or published in future TEMC and Leishman Associates marketing material, please advise the registration desk staff and the photographer if they approach you for a photo.

REGISTRATION DESK

The Registration Desk is located on the Crown Conference Centre, Crown Promenade level.

Please direct any questions you may have regarding registration, accommodation, tours or social functions to Leishman Associates staff at this desk.

Registration Desk Opening Times

Sunday 17 September
– Promenade Foyer
12.00– 5.00 pm

Monday 18 September
8.00am – 5.00pm

Tuesday 19 September
8.00am – 4.30pm

Wednesday 20 September
8.00am – 5.00pm

SMOKING

The Crown Conference Centre and Crown Promenade are non-smoking.

Guests are allowed to smoke outside in designated areas.

SPEAKERS AND SPEAKERS PREPARATION ROOM

All speakers should present themselves to the Speakers Preparation Room, located in room M 14, 2-3 hours before their scheduled presentation time to upload their presentation.

Speakers are requested to assemble in their session room 5 minutes before the commencement of their session, to meet with their session chair and to familiarise themselves with the room and the audio visual equipment.

For information on the chairperson attending your session, please see the registration desk.

A technician will be present in the speakers' preparation room during registration hours. There will be facilities to test and modify your presentation as required.

SPECIAL DIETS

All catering venues have been advised of any special diet preferences you have indicated on your registration form. Please indicate this to the staff at each venue – they will be happy to assist in providing you with your appropriate food. A special table has been set aside in the trade exhibition area for dietary requirements; please see the venue staff for more information.

TEMC 2017 TRADE EXHIBITION COMPETITION

This year TEMC will be holding a handball competition throughout the conference.

Delegates will be required to visit the trade exhibitors and sponsors to collect tokens. Once you have 10 tokens you need to present yourself and the tokens to the TEMC handball area which will be located inside the trade exhibition area. Here you will be given 2 goes to demonstrate your handball skills.

Great prizes have been donated by the sponsors and exhibitors and are on display at the registration desk.

DISCLAIMER

The 2017 Tertiary Education Management Conference reserves the right to amend or alter any advertised details relating to dates, program and speakers if necessary, without notice, as a result of circumstances beyond their control. All attempts have been made to keep any changes to an absolute minimum.

HANSEN YUNCKEN

building on our respected
past, while daring to
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CONFERENCE APP

Download the conference app to enhance your event experience!

The dashboard keeps you organised with up-to-the-minute program, exhibitor, speaker and event information.

- Keep all event information in one place
- Create your own schedule
- Alerts will keep you up-to-date with important real-time communications
- Built-in twitter feed to stay up-to date during the conference
- Connect with other delegates using the delegates feature
- Be part of the action with the live polls

Downloading the conference app is easy!

Simply enter the unique URL, <https://eventmobi.com/temc2017/>, into your browser – that's it!

Once you've accessed the app, it will automatically save itself to your browser. Now, all you have to do is save it to your home screen for easy access later. To do so, follow the steps below:

iPhone

1. Access the app on your iPhone. This will elicit a pop-up with instructions for downloading the app icon to your home screen.
2. Click the menu button. It might look like a box with an arrow coming out of it.
3. Select **Add to Home Screen**
4. Enter the name you would like to appear under the icon.
5. Click the **Add** at the top-right of your screen.

iPad

1. Access the app on your iPad.
2. Click the **Plus** button at the top. On iPads running iOS 7, this is be a **Share** button that looks like a box with an arrow coming out of it.
3. Select **Add to Home Screen**.
4. Enter the name you would like to appear under the icon
5. Click the **Add** button.

Android

The process for saving the shortcut on your phone's homescreen differs depending on what OS your Android is running. For Androids running more recent operating systems, there should be an Add to Homescreen option in your browser menu.

If you have any questions relating to the use of the app please see the staff at the conference registration desk.



Conference MINDWORKER



Jason Clarke

Celebrated author, adventurer, gold medal Olympian and popular TV chef; Jason Clarke is none of these things. He is, however, one of the most sought-after creative minds in the country, but he thinks of himself a Plumber of the Mind, the guy you

go to when your head gets clogged.

As founder of Minds at Work, he's been helping people 'think again' since the end of the last century, working with clients across Australia in virtually every industry and government sector on issues ranging from creativity and trouble shooting to culture change and leadership.

His mission? To help people think. His vision? A future that works. He doesn't know what he'll be doing in 2030 but he's open to suggestions.

Keynote SPEAKERS

Professor Glyn Davis Vice Chancellor and Principal of the University of Melbourne



Glyn Davis is Professor of Political Science and Vice Chancellor and Principal of the University of Melbourne.

Professor Davis was educated in political science at the University of New South Wales and the Australian National University, before undertaking post-doctoral appointments as a Harkness Fellow at the University of California Berkeley, the Brookings Institution in Washington DC and the John F. Kennedy School of Government at Harvard University.

Professor Davis teaches and researches in the field of public policy. His public sector service includes terms as the Director-General of the Department of Premier and Cabinet in Queensland, and as Foundation Chair of the Australia and New Zealand School of Government.

He is a Fellow of the Academy of the Social Sciences in Australia and a Companion in the Order of Australia. He has served as Chair of the Group of Eight and Chair of Universities Australia.

In 2008 Professor Davis co-chaired the Australia 2020 Summit and, in the same year, served as a member of the Innovation Taskforce, an expert group commissioned to review Australia's research and innovation systems.

In 2010 Professor Davis presented the Boyer Lectures published as *The Republic of Learning*.

Title Dissolving the university?
Will higher education follow the
monasteries into ruin?

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Alex Hanlon

Executive Director,
Learning Resources



Alex is the Executive Director of Learning Resources at the University of Canterbury (UC) where she holds responsibility for property and remediation (Capital Works, Engineering Services, Campus Services & Field Stations); information technology (Operations and Infrastructure, Applications and Systems Support, and IT Project Management Office) and the University libraries (Central Library, E-Learning Support, Education Library, Engineering and Sciences Library, UC Archives and Rare Books & Art Collection).

Alex has over 20 years' experience working in the University and property industries in Australia and New Zealand. She has worked on a wide range of private and publicly funded business, technology and construction projects including governance reform, student accommodation, academic, learning and retail spaces, quality assurance and the financial management of a multi-million dollar capital development program. Her experience includes delivery of projects for multiple departments of the NSW Government, University of New South Wales, University of Western Sydney, University of Sydney and the Australian Broadcasting Authority. Alex is a previous Director of the Tertiary Education Facilities Management Association and of the NZ Green Building Council.

Title Innovation or Disruption:
How technological change may impact learning delivery in Universities

Dr Jenny Gray

Chief Executive Officer,
Zoos Victoria



Dr Jenny Gray is the Chief Executive Officer of Zoos Victoria, charged with the operation of the Melbourne Zoo, Healesville Sanctuary and the Werribee Open Range Zoo. Jenny has a wide range of public and private sector experience having worked in transportation, airlines and banking, before moving into the Zoo industry.

Jenny has qualifications in Civil Engineering, Transportation Engineering, Business Administration and Ethics. She brings a passion for animals and the environment to facilitate the transformation of Zoos Victoria into a Zoo Based Conservation Organisation. Her operational and financial skills will ensure that this is achieved in a financially sustainable manner.

In 2016 Jenny completed her PhD in ethics with her thesis on "An Ethical Defense of Modern Zoos." She is negotiating with a publisher to turn the thesis into a readable book.

Title Transforming to a Zoo Based Conservation Organisation

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Dr Jason Fox Author and Leadership Advisor

Dr Jason Fox is a modern day wizard-rogue, author and leadership adviser. With deep expertise in motivation design, Jason shows forward-thinking leaders around the world how to unlock new progress and build for the future of work.

In 2016 he was awarded Keynote Speaker of the Year by Professional Speakers Australia, entering him into the Speaker Hall of Fame. Frequently booked over a year in advance, Jason works particularly well with skeptical audiences who have 'seen it all before'. He delivers fresh thinking to instill new curiosity for future relevance, purpose and growth.

His clients include Fortune 500 companies such as Microsoft, PepsiCo, McDonalds and Beam Suntory, and other multinationals such as Toyota, Honda, Sony, Gartner, Telstra, Macquarie Group, Johnson & Johnson, Commonwealth Bank, Red Cross, Suncorp, Singtel Optus, Origin Energy, AMP, ANZ, NAB, Xero and The International Institute of Research.

Jason is the bestselling author of *The Game Changer*, and the author of the recently released book *How to Lead a Quest*. His research has been featured in the likes of *Smart Company*, *BRW* and *The Financial Review*. He is based in Melbourne, the dapper coffee capital of Australia.

Title Change the Game

How do you motivate people to progress through change and do great work? Not normal work—robots will soon handle that. Great work. The work that has us investing discretionary effort. Creating new value. Actually innovating (not just talking about it). Owning it. Leading, not waiting. How do you motivate people to do that?

Old-school approaches might have you set forth a crystal clear vision, with incentivised targets and performance measures to get there. But this only serves to fuel myopia and default thinking—fine for operational work with predictable outcomes, but terrible for pioneering work. And besides—it's not always feasible to rely upon extrinsic motivators. Nor should we default to hokey motivational clichés.

We can do better—and so, we shall. In this heretical session, you'll learn how to use the contemporary science of Motivation Design to influence behaviour, unlock progress, and build for the future of work.



Todd Sampson Award-winning documentary-maker & television presenter

The eclectic life of Todd Sampson began on Cape Breton Island, off the north east coast of Canada. He grew up in modest circumstances. His father was a factory worker for Coca-Cola and his mother a checkout girl for KFC. While neither of them had any formal education, Todd entered university onto full scholarship studying biology and economics and then went on to complete an MBA by age 24.

Todd was the CEO and Chairman of Leo Burnett Australia and sits on the board of both Fairfax and Qantas. He is the co-creator of the Earth Hour initiative—the largest environmental movements in history—reaching over 1.4 billion people in over 5500 cities.

The Financial Review and News Limited ranked him as one of the most influential executives in Australia. He has won CEO of the Year twice and has featured on the cover of *BRW* magazine.

Todd is also the breakout star and co-host of the smash hit ABC show *The Gruen Transfer*. This unique show is one of the most watched programs on Australian TV – winning multiple international awards including the prestigious Rose d'Or Award for entertainment. He is also a regular host on the Channel 10 news show *The Project* and has featured on CNN and Sky News.

Todd recently handed his brain over to science to become host and 'human lab rat' in a ground breaking science documentary series called *Redesign My Brain*. It was one of the most watched Australian science documentaries of all time and won the ACCTA Award (Australian Oscars) for Best TV Documentary of the Year. It's now being shown around the world on the Discovery Channel.

Todd is un-doubtedly one of Australia's freshest and interesting TV personalities with the ability to combine intelligent insight, with humility. One reviewer colourfully captured his unique 'science-adventurer' style, "If Bear Grylls had a love child with Brian Cox, it would be Todd Sampson".

He's also climbed to the top of Mount Everest, unguided.

Title Brain Power

Todd Sampson is the writer, host and human guinea pig of the award-winning Discovery Science Series called *REDESIGN MY BRAIN*. The premise of the series was simple. For over 70 years, science has told us that our brains are fixed.



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KEYNOTE SPEAKERS

You are born with the brain you have, it develops rapidly until age 7 and then it starts a steady decline from age 30 until you die. There was nothing you could do about it.

But science has now proven that to be false. In fact, modern science has now shown that our brain is plastic and that we ALL have the ability to improve it at any age and at any time. This presentation will show you how to boost your Creativity and Brain Power.

Todd will not only take you behind the scenes of this extraordinary scientific journey, he will also provide you with the practical tools, strategies and techniques to improve your brain. We are all capable of more than we realise ... and modern science is showing us how.

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design of world-
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teaching spaces.

Invited Panellists

Leah Armstrong, Director, Wollotuka Institute, University of Newcastle

Professor Cara Macnish, Senior Political and Policy Adviser, Universities Australia

Paul Roberts, Director of Turnberry Consulting

NICK KAYE

Nick Kaye brings more than 20 years of experience to his role as the founding Chief Executive Officer of the Sydney School of Entrepreneurship.

Prior to joining the Sydney School of Entrepreneurship, he was the Executive Director and Chief Executive Officer of the prestigious Stockholm School of Entrepreneurship for a decade.

Kaye holds certificates from the Harvard University Graduate School of Education, MIT Sloan School of Management, and The University of Chicago Booth School of Business. He was awarded a Master of Science Degree, with distinction, in international business and finance from the Stockholm School of Economics, and has Bachelor Degrees in Arts and in Commerce from the University of Melbourne.

Kaye continues to act as a Senior Advisor, International Relations, to the Stockholm School of Entrepreneurship.

He has served on the boards and steering committees of various organisations including the International Centre for Enterprise and Entrepreneurship Policy, TiE Nordic, the Center for Social Entrepreneurship in Stockholm, the Idea to Product Global Competition, the Transit Incubator, and Connect Eastern Sweden.

For all information about Sydney School of Entrepreneurship visit www.sse.edu.au and follow @SSENSW on Facebook, Twitter, Instagram, and LinkedIn.



JOHN DALEY

John Daley is one of Australia's leading public policy thinkers. He has been Chief Executive of the Grattan Institute since it was founded seven years ago.

Grattan Institute's work is independent, rigorous, and practical. It fosters informed public debate on the key domestic policy issues for Australia, through both private forums and public activities, engaging key decision makers and the broader community.

John graduated from the University of Oxford in 1999 with a DPhil in public law after completing an LLB (Hons) and a BSc from the University of Melbourne in 1990.

He has 25 years' experience spanning academic, government and corporate roles at the University of Melbourne, the University of Oxford, the Victorian Department of Premier and Cabinet, consulting firm McKinsey and Co and ANZ Bank.

John has published extensively on economic reform priorities, budget policy, and tax reform. This work is underpinned by themes of the importance of government prioritisation, and the limits to government effectiveness.

John is also a keen amateur pianist and gardener.



TERESA TJIA

Registrar – Student Services, and Institutional Planning & Performance, Victoria University, Melbourne.

Teresa has significant experience in leading complex teams, service improvement initiatives, infrastructure and digital transformation programs across a number of organisations. Student experience, staff engagement and service innovation informed by data and insights, is core focus of Teresa's roles and career achievements.



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PRE CONFERENCE		SUNDAY 17 SEPTEMBER 2017
	PRE CONFERENCE WORKSHOP*	Room: M13
9.00 am-12.30 pm	<p>Making Things Better Making Things Better (MTB) is one such system...but with a twist. Rather than focusing on the big ideas it pursues revolution through the accumulation and implementation of many small ideas and incremental improvements. - Carol Harding</p>	
1.00-3.00 pm	PRE CONFERENCE TOUR*	The University of Melbourne
<p>1.00-3.00 pm The University of Melbourne is located just north of the CBD. Tour participants will need to make their own way to the tour starting point (corner of Swanston Street and Monash Road (outside tram stop)</p>	<p>Sustainability and Grounds Tour This walking tour explores the ways in which the University of Melbourne taps the renewable energy of the earth and sun, reduces waste, and creates green buildings. It also showcases the beautiful park-like setting of the Parkville Campus, visiting our heritage gardens, the largest 'green roof' in the southern hemisphere and our spectacular remnant urban Red Gums. Included in the tour will be visits to the new Arts West building and the Melbourne School of Design building - University of Melbourne</p>	
12.00-5.00 pm	REGISTRATION Promenade Foyer	
5.30-6.30 pm	FIRST TIMERS' WELCOME RECEPTION NGV International (National Gallery of Victoria)	
6.30-8.30 pm	TEMC 2017 WELCOME RECEPTION NGV International (National Gallery of Victoria) UniBank	

DAY ONE <i>Where are we at?</i>		MONDAY 18 SEPTEMBER 2017
8.00 am	REGISTRATION	Promenade Foyer Central
9.00-11.00 am	SESSION 1 OPENING PLENARY	Conference Hall
9.00-9.10 am	<p>Welcome to TEMC 2017 Jason Clarke, Conference MindWorker</p>	
9.10-9.20 am	<p>Welcome to Country Professor Mark McMillan, Deputy PVC, Indigenous Education and Engmt</p>	
9.20-9.30 am	<p>Official Conference Open & Welcome Mary-Louise Huppatz, Conference Chair</p>	
9.30-10.00 am	<p>Dissolving the university? Will higher education follow the monasteries into ruin? Professor Glyn Davis, Vice Chancellor and Principal of the University of Melbourne</p>	
10.00-10.40 am	<p>Reflection / Panel Discussion Professor Glyn Davis - Vice Chancellor and Principal of the University of Melbourne, John Daley - Chief Executive of the Grattan Institute, Paul Roberts - Turnberry Consulting, Professor Cara MacNish - Senior Political and Policy Adviser, Universities Australia, Facilitator: Jason Clarke, Conference MindWorker</p>	
10.40-11.00 am	<p>Sponsor Slams Cushman & Wakefield, Lyons, ATEM, TEFMA</p>	
11.00-11.30 am	MORNING TEA Promenade Foyer Central	   
	<p>HOT SPOT Innovative Universities embracing the power of mobility and BI - Malcolm Foort, Zuuse</p>	

11.30 am-1.05 pm		Day 1 - SESSION 2	
11.30 am-12.15 pm CONCURRENT A 		A1: ADAPTION Revolutionising Culture - Positive workplace culture for improved service and performance Elizabeth Wickham, QUT and Carmel Sang, QUT • Room: M 1&2	A2: WORKSHOP* (11.30 am-1.05 pm) Campus development strategy - how to plan for the future Paul Roberts, Turnberry Consulting • Room: M 5&6 
A3: WOMEN IN LEADERSHIP The UNZ New Zealand Women in Leadership Programme - a model to share Michelle Jordan-Tong, University of Waikato and Margaret Morgan, University of Otago • Conference Hall		A4: REDESIGNING FUTURES - WORKSHOP (11.30 am-1.05 pm) Addressing change through innovation by thinking like an entrepreneur Katt Robertson, University of Technology Sydney • Room: M 15&16	A5: TRANSFORMING EXPERIENCE The changing role of the Campus Library - Caulfield Library, Monash University Meaghan Dwyer, John Wardle Architects • Room: M 3&4
A6: WORKING TOGETHER TO REALISE BIG IDEAS Complex systems thinking: the key to developing a successful Asset Management Plan at Curtin University Dr Rocio Bona, Curtin University • Room: M 7&8		A7: THE NEW CAMPUS From plan to place transforming Monash Professor Rob McGauran, MGS Architects and Jocelyn Chiew, Monash University • Room: M 9&10	A8: THE NEW CAMPUS USC and The Mill at Moreton Bay - collaboration, innovation and transformation Kate Isles, Moreton Bay Regional Council and Iona Beaul, University of the Sunshine Coast • Room: M 11
12.20-1.05 pm CONCURRENT B 		B1: ADAPTION - HED TALKS 12.20-12.35 pm: Functional Biomimicry - a system for innovation Matthew Webb, Umow Lai Consulting Engineers 12.35-12.50 pm: Evolutionising higher education governance Damian Barry, The University Of Melbourne and Barry Business Services 12.50-1.05 pm: Small steps, giant leaps: It's all about being agile Anastasia Georgiou, Monash University • Room: M 1&2	A2: WORKSHOP* (11.30 am-1.05 pm) Campus development strategy - how to plan for the future Paul Roberts, Turnberry Consulting • Room: M 5&6 
B2: LEADERSHIP - PANEL Maturing a sense of leadership identity for tertiary education managers Dr Heather Davis, The University of Melbourne and Dr Carroll Graham, ATEM and Sabina Robertson, Deakin University • Conference Hall		A4: REDESIGNING FUTURES - WORKSHOP (11.30 am-1.05 pm) Addressing change through innovation by thinking like an entrepreneur Katt Robertson, University of Technology Sydney • Room: M 15&16	B3: TRANSFORMING EXPERIENCE University of Melbourne - Arts West Redevelopment Associate Marina Carroll, Architectus and Peter Bickle, Ashton Raggatt McDougall and A/Professor Parshia Lee-Stecum, and Associate Joanne Ligouris, The University of Melbourne • Room: M 3&4
B4: WORKING TOGETHER TO REALISE BIG IDEAS Asset Management Reboot at The University of Auckland Muru Mohan, The University Of Auckland and Emmett Mackle, The University of Auckland • Room: M 7&8		B5: THE NEW CAMPUS Understanding what Pedagogical Shift means for the Teaching Space Infrastructure Terry Roche David Reaney and Amanda Harris, Deakin University • Room: M 9&10	B6: THE SERVICE REVOLUTION USQ's Service Excellence Revolution Kathy Carey, University of Southern Queensland • Room: M 11
1.05-2.00 pm	LUNCH	Promenade Foyer Central	   

2.00–3.15 pm	Day 1 – SESSION 3 PLENARY		Conference Hall
2.00–3.00 pm	Innovation or Disruption: How technological change may impact learning delivery in Universities Alex Hanlon, Executive Director, Learning Resources, University of Canterbury		
3.00–3.15 pm	Sponsor Slams Campus Living Villages, Capital Insight, Unibank		
3.15–3.45 pm	AFTERNOON TEA Promenade Foyer Central    		
3.45–4.30 pm	Day 1 – SESSION 4		
3.45–4.30 pm CONCURRENT C	C1: ADAPTION Attendance at the AUA and visiting UK Universities Mara Eversons, University of Canberra • Room: M 15&16	C2: BIG DATA AND ANALYTICS The 40-year life cycle: a new approach to asset management Andrew Sun, RMIT • Room: M 9&10	
C3: WOMEN IN LEADERSHIP – PANEL It's a long way to the top if you start at the very bottom Jenny Purcell, Lauren Marsh and Susan Hudson, Western Sydney University • Room: 12&13	C4: REDESIGNING FUTURES Knowledge Masterplans: How La Trobe University's unique campus identities vary a shared ideation process Joshua Wheeler and Katherine Sundermann, MGS Architects and Stephen Morris, La Trobe University • Room: M 11	C5: TRANSFORMING EXPERIENCE New Academic Street, transforming the heart of the city campus Chris Hewison and Jeremy Elia and Fiona Ellis, RMIT University and Edward Berry, Lyons and Nick Bamford, AECOM • Conference Hall	
C6: WORKING TOGETHER TO REALISE BIG IDEAS Unlocking educational social value, at the New Sunshine Coast University Hospital Peter Dawson, Architectus and Jill Nicholson, Sunshine Coast University Hospital and Aditi Saha, Aurecon and James Wright, Lend Lease • Room: M 7&8	C7: THE NEW CAMPUS The Learning and Teaching Building: A Commitment to Campus Life Meaghan Dwyer, John Wardle Architects • Room: M 1&2	C8: THE SERVICE REVOLUTION HiQ: How can we help you? A new student service model for QUT Natalie Ryan and Stephen Low, Queensland University of Technology • Room: M 3&4	
6.30–9.30 pm	ATEM Awards Night The Pavillion, Arts Centre		
6.45–10.45 pm	TEFMA Awards Dinner Eureka Tower		

DAY TWO <i>Where are we going?</i>		TUESDAY 19 SEPTEMBER 2017
8.00 am	REGISTRATION	Promenade Foyer Central
9.00-10.30 am	SESSION 5 PLENARY	Conference Hall
9.00-9.10 am	Welcome and Housekeeping Jason Clarke, Conference MindWorker	
9.10-10.00 am	Transforming to a Zoo Based Conservation Organisation Dr Jenny Gray, CEO, Zoos Victoria	
10.00-10.20 am	Reflection / Panel Discussion Dr Jenny Gray, CEO, Zoos Victoria Teresa Tjia, Vice-President Planning, Registrar and University Secretary at Victoria University Facilitator - Jason Clarke, Conference MindWorker	
10.20-10.30 am	Sponsor Slams Root Partnerships, Turner & Townsend, Umow Lai	
10.30-11.00 am	MORNING TEA Promenade Foyer Central	  
11.00 am-12.35 pm	Day 2 - SESSION 6	
11.00-11.50 am CONCURRENT D	D1: BIG DATA AND ANALYTICS Transitioning to performance based (proactive) HVAC maintenance at University of Queensland Paul Gilmore, A.G. Coombs and Kevin O'Sullivan, University of Queensland • Room: M 12&13	D2: BIG DATA AND ANALYTICS University of Melbourne Smart Campus Initiative – Advanced data analytics in planning and management Dr Jan Dethlefs, Chancellery - Property & Sustainability and Jade Germantis, University of Melbourne • Room: M 15&16
D3: WOMEN IN LEADERSHIP - WORKSHOP (11.00 am-12.35 pm) The Path to Publishing: Write here, right now! Dr Carroll Graham, ATEM • Room: M 5&6 	D4: REDESIGNING FUTURES - WORKSHOP Maurie Pawsey Award - Campus space and utilisation Nicole Eaton, RMIT University • Room: M 3&4	D5: TRANSFORMING EXPERIENCE QUT LaunchPad: The Genesis of a Makerspace Jonathan James, Scott Abbett and Brian Logan, QUT • Room: M 1&2
D6: WORKING TOGETHER TO REALISE BIG IDEAS - PANEL Shaping new technologies, disrupting old business models, and resetting the boundaries of what's possible Dylan O'Donnell, Cushman & Wakefield • Room: M 11	D7: THE NEW CAMPUS Designing and managing the New Campus: The influences shaping today's university environment Sonia Monaghan and Scott Annand, Deakin University • Conference Hall	D8: THE SERVICE REVOLUTION The revolution is upon us: The movement towards shared services in the Australian Tertiary Sector Joanne Austin, RMIT University • Room: M 9&10
D9: SUSTAINABLE CAMPUS Sharing Sustainability Excellence - identify and learn from the leaders Sue Hopkins, Australasian Campuses towards Sustainability (ACTS) - including University of Queensland and RMIT University • Room: M 7&8		

11.00 am-12.35 pm		Day 2 – SESSION 6 (cont.)	
11.50 am-12.35 pm CONCURRENT E		E1: REDESIGNING FUTURES Implementing activity based work environments within a University - The Deakin Experience Terry Roche, Deakin University and Jo Dane, Woods Bagot • Room: M 12&13	E2: BIG DATA AND ANALYTICS KPI's to measure HE facilities performance / Predicting space needs for research Geoff Hanmer, Arina/UNSW and Rocio Bona, Curtin University • Room: M 15&16
D3: WOMEN IN LEADERSHIP – WORKSHOP (11.00 am-12.35 pm) The Path to Publishing: Write here, right now! Dr Carroll Graham, ATEM • Room: M 5&6 		E3: REDESIGNING FUTURES – HEd TALKS 11.50 am-12.05 pm: Break out your black turtle neck jumper - it's time to talk about design Adam Davies, Hassell 12.05-12.20 pm: Wicked problems – an opportunity to change our practice Linda Ward, Charles Sturt University 12.20-12.35 pm: Flexible Ventilation Design for Laboratories Hugh Wilson, Umow Lai • Room: M 1&2	E4: TRANSFORMING EXPERIENCE Transforming the Education Experience; and the Importance of the Learning Space Andrew Ford, Sebel Furniture • Room: M 3&4
E5: WORKING TOGETHER TO REALISE BIG IDEAS Paradox of a POE: Ambiguity and Reason Katherine McPherson, Developing Property Solutions and Leo Fincher-Johnson, University of Melbourne • Room: M 11		E6: THE NEW CAMPUS Lessons from the West Coast: The Twenty-First-Century Campus Paul Roberts, Turnberry Consulting • Conference Hall	E7: THE SERVICE REVOLUTION Year of Change: Enhancing maintenance strategies Kevin O’Sullivan, University of Queensland and Mick Serena, Donald Cant Watts Corke • Room: M 9&10
E8: SUSTAINABLE CAMPUS Carbon Neutrality and embedding sustainability into the curriculum - find out how! Wayne Millar, Director of Operational Services, Div of Facilities Management and Charles Sturt University and Corey Peterson - Sustainability Manager, University of Tasmani • Room: M 7&8			
12.35-1.30 pm	LUNCH	Promenade Foyer Central	  

1.30-3.00 pm	Day 2 - SESSION 7 PLENARY	Conference Hall
1.30-3.00 pm	Innovations & Entrepreneurship Panel Nick Kaye, CEO, Sydney School of Entrepreneurship Alex Hanlon, Executive Director Learning Resources, University of Canterbury Leah Armstrong, Director, Wollotuka Institute, University of Newcastle Facilitator: Jason Clarke, Conference MindWorker	
3.00-3.30 pm	AFTERNOON TEA Promenade Foyer Central	  



Day 2 - SESSION 8

3.30-4.15 pm	Day 2 - SESSION 8	
3.30-4.15 pm CONCURRENT F	F1: SUSTAINABLE CAMPUS - HED TALKS 3.30-3.45 pm: No budget? No problem - The no cost solution for a greener campus Guy Barnes, Northquest 3.45-4.00 pm: Not your average CarPool, University of Newcastle and Liftango innovating to solve "that parking problem" Tegan Betts, University of Newcastle and Kevin Orr, Liftango 4.00-4.15 pm: Beyond four walls - Curtin University's living laboratory Paul Dearlove, IBMS Pty Ltd • Room: M 1&2	F2: BIG DATA AND ANALYTICS Big Data's Big Impact on Facilities Operations and Organizations Donald Guckert, University of Iowa • Room: M 3&4
F3: THE SERVICE REVOLUTION Reciprocal loyalty: Using the experience of transitioning to a new Business school to evaluate and develop a community of practice in professional services teams Matthew Hisbent, Association of University Administrators (AUA) • Room: M 7&8	F4: REDESIGNING FUTURES Innovation in Brief Creation: Spatial Pedagogy Ben Lornie, Pttd • Room: M 5&6 	F5: TRANSFORMING EXPERIENCE - HED TALKS 3.30-3.50 pm: Creating meaningful 'Real World' learning experiences in the Virtual Age Sean Wooster, Umow Lai 3.50-4.10 pm: A flexible and intuitive framework for creative experience -QUT Creative Industries Precinct Stage 2 Mark Roehrs, Hassell and Lynn Green, Queensland University of Technology • Conference Hall
F6: WORKING TOGETHER TO REALISE BIG IDEAS Healthy Disregard for the Impossible Essential for The Macquarie University Incubator John Shi-Nash, Architectus and Nick Elias, Macquarie University and Chris Crick, Root Partnerships • Room: M 9&10	F7: THE NEW CAMPUS The Vertical City Campus - A course 'agnostic' approach Alan Duffy, Woods Bagot and Professor Denise Kirkpatrick, Western Sydney University • Room: M 11	F8: THE SERVICE REVOLUTION Creating the Ultimate Student Experience Adam Scott, Freestate • Room: M 12&13
F9: SUSTAINABLE CAMPUS Lessons learnt from the first 6 Star Green Star Communities rated university campus Dr Gerard Healey, The University of Melbourne • Room: M 15&16		

4.30-6.00 pm TEMC 2017 SPONSORS/EXHIBITORS THANK YOU FUNCTION (invitation only)

6.00 pm ATEM Ghosts Soiree (invitation only)

DAY THREE <i>Where to from here?</i>		WEDNESDAY 20 SEPTEMBER 2017
8.00 am	REGISTRATION	Promenade Foyer Central
9.00-10.30 am	SESSION 5 PLENARY	Conference Hall
9.00-9.10 am	Welcome and Housekeeping Jason Clarke, Conference MindWorker	
9.10-10.00 am	Change the Game Dr Jason Fox, Author and Leadership Advisor	
10.00-10.20 am	Reflection / Panel Discussion Dr Jason Fox, Author and Leadership Advisor Facilitator - Jason Clarke, Conference MindWorker	DesignInc
10.20-10.30 am	Sponsor Slams AG Coombs, DesignInc, Onset Design	
10.30-11.00 am	MORNING TEA Promenade Foyer Central Jason Fox – Book signing	   

11.00 am-12.30 pm	Day 3 - SESSION 10	
11.00-11.45 am CONCURRENT G	G1: SUSTAINABLE CAMPUS - PANEL The Closed Loop Campus - A sustainable future Sonya Montgomerie, Designinc and Dr Rob Brimblecombe, Monash University and Alex Rodger, Norman Disney Young and Martin Reeves, Outlines Landscape Architects • Room: M 11	G2: BIG DATA AND ANALYTICS Digital Utilisation Data Collection Frequency and Occupancy of learning and teaching spaces in real time Christina Peace and Nicole Eaton, RMIT • Room: M 1&2
G3: LEADERSHIP - HED TALKS 11.00-11.15 am: Testing a revolutionary idea for career enhancement Mary-Louise Huppatz, The University of Melbourne 11.15-11.30 am: Work-Life Equilibrium - Confession of an engineering project leader, a wife, mom, and church leader Cynthia Suminto, Aecom 11.30-11.45 am: Can you 'design' success in your own life/ your own work? Carol Harding, Australian Innovation Research Centre 11.45 am-12.00 pm: How a power outlet led me to quit my job. Sonia Monaghan, Deakin University 12.00-12.30 pm: Designing your professional life Interactive session Facilitator: Carol Harding • Conference Hall	G4: REDESIGNING FUTURES - WORKSHOP (11.00 am-12.30 pm) Conversations of Intrigue: Creating conversations for change Meredith Lewis, Dangerous Meredith • Room: M 5&6	G5: TRANSFORMING EXPERIENCE Student accommodation, culture or cringe? Shannon Joe, Warren and Mahoney and Micheal Rengers, University of Auckland • Room: M 3&4
G6: WORKING TOGETHER TO REALISE BIG IDEAS Internal reviews: a holistic approach to change Megan Wilson, University of Otago • Room: M 12&13	G7: THE NEW CAMPUS Reshaping building projects with a game changing delivery model David Tweedie, Hayball and Richard Lindner, La Trobe University • Room: M 7&8	G8: THE SERVICE REVOLUTION CSI Waikato: Investigation into contract cheating Renee Boyer, University of Waikato • Room: M 9&10



11.00 am-12.30 pm		Day 3 - SESSION 10 (cont.)	
11.45 am-12.30 pm CONCURRENT H		<p>H1: SUSTAINABLE CAMPUS - HEd TALKS</p> <p>11.45 am-12.00 pm: Is your university ready for The Wellness Revolution? Jeff Robinson, Aurecon</p> <p>12.00-12.15 pm: Designing our Infrastructure for a resilient future David Jarratt, Aecom and Gerard Healey, University of Melbourne</p> <p>12.15-12.30 pm: Applying Parametric Design on the University Scale, from Campus to Comfort Richard Stokes, Arup</p> <p>• Room: M 1&2</p>	<p>H2: BIG DATA AND ANALYTICS - HEd TALKS</p> <p>11.45 am-12.00 pm: Machine learning course planning engine Sachith Thomas, The University of Melbourne</p> <p>12.00-12.15 pm: Review of Academic Progress - The Mammoth Beast Tamed Shellie O'Meara, Loretta Paine and Kim Broadley, The University of Newcastle</p> <p>• Room: M 11</p>
<p>G3: LEADERSHIP - HEd TALKS</p> <p>11.00-11.15 am, 11.15-11.30 am, 11.30-11.45 am, 11.45 am-12.00 pm and 12.00-12.30 pm - SEE PAGE 20</p> <p>• Conference Hall</p>		<p>G4: REDESIGNING FUTURES - WORKSHOP</p> <p>(11.00 am-12.30 pm)</p> <p>Conversations of Intrigue: Creating conversations for change </p> <p>Meredith Lewis, Dangerous Meredith</p> <p>• Room: M 5&6</p>	<p>H3: TRANSFORMING EXPERIENCE</p> <p>What if academics at your university interacted as much as the students?</p> <p>Nathan Humphries, Hassell and Anne Hellstedt, The University of Melbourne</p> <p>• Room: M 3&4</p>
<p>H4: WORKING TOGETHER TO REALISE BIG IDEAS</p> <p>Working towards utopia: The journey of a university's planning cycle</p> <p>Bridget Soulsby, LaTrobe University</p> <p>• Room: M 12&13</p>		<p>H5</p> <p>A World Perspective on Facilities: The View from 3 Continents</p> <p>Donald Guckert, University of Iowa and Mike Clark, University of Brighton and Venessa Ranjit, Tshwane University of Technology</p> <p>• Room: M 7&8</p>	<p>H6: THE SERVICE REVOLUTION</p> <p>Discover, dream, design and deliver your destiny! Appreciative advising and the student experience</p> <p>Dr Kristina McGuinness-King and Paul Edwards, Victoria University of Wellington</p> <p>• Room: M 9&10</p>
12.30-1.30 pm	LUNCH	Promenade Foyer Central	   

1.30-3.00 pm	Day 3 - SESSION 11	
<p>1.30-2.15 pm CONCURRENT I</p>	<p>I1: SUSTAINABLE CAMPUS The business case for batteries Andrew Wilson, University of Queensland • Room: M 7&8</p>	<p>I2: BIG DATA AND ANALYTICS When Pam Met Kamal: Using data to improve inclusion & attract students Stephen Minning, BrandCulture & Pam Wayfinding and Kamal Kopparapu, University of Canberra • Room: M 9&10</p>
<p>I3: LEADERSHIP The view from the back row - a strategy for growing self directed innovative teams Glenda Haines, University of Auckland • Conference Hall</p>	<p>I4: REDESIGNING FUTURES The importance of incremental innovation - Nurturing innovation inside bureaucratic organisations Nik Linnell, Australian Catholic University • Room: M 12&13</p>	<p>I5: TRANSFORMING EXPERIENCE - WORKSHOP (LIMIT 30) (1.30-3.00 pm) Reimagining the Faculty Workplace: What are the big questions we should be asking? Susan Whitmer, Herman Miller, Inc. Florida, USA • Room: M 5&6</p> 
<p>I6: WORKING TOGETHER TO REALISE BIG IDEAS Making good business sense: Supporting start-ups in the Tertiary Realm Matthew Salier, Flinders University and David Homburg, Hassell • Room: M 3&4</p>	<p>I7: THE NEW CAMPUS - HED TALKS 1.30-1.45 pm: Bridging the Campus The joining together of the Burwood Campus, bridging public land, engaging with the community and the culmination of more than a decade of planning Yvonne Yip, Deakin University 1.45-2.00 pm: Working Together to Realise Big ideas-creating a new environment for collaborative research James Mooney, Architectus • Room: M 1&2</p>	<p>I8: THE SERVICE REVOLUTION Complaints - what's not to love about them? Four positive reasons to welcome the negative Karen Docking & Emma Lincoln, Swinburne University of Technology • Room: M 11</p>

1.30-3.00 pm	Day 3 – SESSION 11 (cont.)	
2.15-3.00 pm CONCURRENT J	J1: SUSTAINABLE CAMPUS – HED TALKS Understanding the Impact of Indoor Environment Quality (IEQ) on occupant wellbeing and productivity in universities Ben Lindsay, Cetec Pty Ltd • Room: M 7&8	
J2: LEADERSHIP – HED TALKS E+M=POWER, combining Education and Mentoring to enhance women’s leadership and career development Kirrily Anderson and Kate Ramzan-Levy, The University of Newcastle • Conference Hall	J3: REDESIGNING FUTURES Why did we do this? Additional offerings of Engineering and Built Environment degrees over multiple campuses Dr Kimberley Vincent and Michael Walsh, Western Sydney University • Room: M 12&13	I5: TRANSFORMING EXPERIENCE – WORKSHOP (LIMIT 30) (1.30-3.00 pm) Reimagining the Faculty Workplace: What are the big questions we should be asking? Susan Whitmer, Herman Miller, Inc. Florida, USA • Room: M 5&6 
J4: WORKING TOGETHER TO REALISE BIG IDEAS – HED TALKS 2.15-2.30 pm: Working together to realise big ideas: World Café: a simple technique for solving complicated problems Laurie Ransom, LaTrobe University 2.30-2.45 pm: The quiet revolution: boosting international enrolments and internationalising research training in engineering Natalie Downing & Jo Midwinter, The University of Newcastle • Room: M 3&4	J5: THE NEW CAMPUS – HED TALKS 2.15-2.30 pm: Millennials, Food & Shopping Suzee Brain, Brain & Poulter 2.30-2.45 pm: How to deliver retail choice, competition, and campus culture on a shoestring Kate Robertson and Iona Bealy, University of The Sunshine Coast • Room: M 1&2	J6: THE SERVICE REVOLUTION – PANEL Brand new day: the revolutionary ideas transforming student experience Matt Dailey, Monash University and Mark Gandolfo, GRIT and Jamie McDonald, Federation University and Trisca Scott-Branagan, Deakin University and Michelle Gillespie, Swinburne University • Room: M 11
3.00-3.30 pm	AFTERNOON TEA Promenade Foyer Central	   
3.30-4.45 pm	Day 3 – SESSION 12 CLOSING PLENARY Conference Hall	
3.30-3.40 pm	Sponsor Slams Woods Bagot	
3.40-4.30 pm	Brain Power Todd Sampson	
4.30-4.40 pm	TEMC 2018 Launch Rocio Bona, TEMC 2018 Convenor	
4.40-4.45 pm	Thank You & Close Mary-Louise Huppatz, Conference Chair and Jason Clarke, Conference MindWorker	
4.45 pm	CONFERENCE CLOSE	
7.00-11.30 pm	TEMC 2017 CONFERENCE DINNER	
		 

POST CONFERENCE THURSDAY 21 SEPTEMBER 2017

	POST CONFERENCE TOUR* RMIT Melbourne City Campus	
9.30-11.30 am	New Academic Street Project The New Academic Street (NAS) project has transformed the heart of the city campus by creating new facilities enabling RMIT to deliver better services for students. Over a two year period this project has been undertaken within buildings open for normal business, presenting many logistical challenges.	

Social PROGRAM

Entry to these events should have been booked with your registration. Please check availability with Leishman Associates staff at the conference Registration Desk. Payment will be required at time of booking.

NEWCOMERS FUNCTION

The Newcomers Function will be held prior to the Welcome Reception and will be held at NGV International (National Gallery of Victoria). Commonly known as the NGV, it is Australia's oldest and largest art museum which was founded in 1861.

Guests will need to make their own way there, being only a short walk away from Crown Melbourne.

When Sunday 17 September 2017
Where NGV International (National Gallery of Victoria)
180 St Kilda Road, Melbourne
Enter via North Foyer Entrance
Time 5.30–6.30 pm
Dress Smart Casual with a touch of French
Cost Inclusive in your full registration. If a guest ticket has been purchased for the Welcome Reception delegates are welcome to attend this function as well.

WELCOME RECEPTION

The Welcome Reception for TEMC 2017 will be held at NGV International (National Gallery of Victoria). Commonly known as the NGV, it is Australia's oldest and largest art museum which was founded in 1861.

Guests will need to make their own way there, being only a short walk away from Crown Melbourne.

For a special treat on the night, guests will be able to view the **House of Dior** exhibition! This is included with your Welcome Reception ticket.

When Sunday 17 September 2017
Where Great Hall, NGV International (National Gallery of Victoria)
180 St Kilda Road, Melbourne
Enter via Waterwall from St Kilda Road
Time 6.30–8.30 pm
Dress Smart casual with a touch of French
Cost Inclusive in your full registration. Guest tickets can be purchased for \$100.00

WELCOME RECEPTION SPONSOR

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CONFERENCE DINNER

An event not to be missed, the Conference dinner is a perfect way to end your TEMC experience.

When Wednesday 20 September 2017
Where Palladium Ballroom, Crown Towers
Time 7.00–11.30 pm
Theme Steampunk
Dress Cocktail or Steampunk (**costume ideas 1**) (**costume ideas 2**)
Cost Inclusive in your full registration. Additional tickets can be purchased as follows:
With a Day Registration: \$170.00
Guest Ticket: \$180.00

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TEFMA AWARDS DINNER



Enjoy an evening celebrating the achievements of TEFMA members while experiencing the best views Melbourne has to offer from the iconic Eureka Tower.

Tickets to the TEFMA Awards Night can be purchased through the registration process, or by emailing bree@laevents.com.au. Please note this event is open to TEFMA Members Only. Business Partners are limited to 3 tickets per business.

When Monday 18 September 2017
Where Eureka 89, Eureka Tower, 7 Riverside Quay, Southbank 6.45-10.45 pm
Time After 5
Dress Member tickets: \$90 Guest tickets: \$140
Cost

TEFMA AWARDS DINNER SPONSOR

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Hosted by: Shane Jacobson

ATEM AWARDS NIGHT



The 6th ATEM/CAMPUS REVIEW Best Practice Awards Dinner and presentation evening will be held on 18 September at the Arts Centre Melbourne, as part of the TEM Conference 2017.

The evening will be a great networking opportunity and a fantastic celebration of the great work being done in the sector, with the announcement and presentation for the **2017 Best Practice Awards**, along with the **ATEM Member Awards**.

Our special guest speaker for the evening will be Alan Brough, author, director, broadcaster, musician and comedian, perhaps best known for his role as a team captain on Spicks and Specks.

Tickets to the ATEM Awards Night can be purchased through the registration process or by emailing bree@laevents.com.au

When Monday 18 September 2017
Where The Pavilion, The Arts Centre, 100 St Kilda Road, Melbourne
Time 6.30pm
Dress Lounge Suit/Cocktail
Cost \$95

AWARDS DINNER SPONSOR



Special Guest: Alan Brough



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The Vegemite Sponsor – Keynote Speaker

Umow Lai

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The Vegemite Sponsor – Expert Panel Session

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Abstracts

**Monday 18
September 2017**

**SESSION 2
11.30 am - 1.05 pm**

CONCURRENT A

**A1: Revolutionising Culture –
Positive workplace culture for
improved service and performance**

Elizabeth Wickham, QUT and Carmel Sang, QUT

Biography: Elizabeth Wickham is Faculty Manager for the Science and Engineering Faculty at QUT. She has worked in a variety of roles in higher education in Australia and abroad, as well as in publishing and health, as Director of a management consultancy and has held several Board appointments.

Working in the sector since 1992, Carmel Sang is the Professional Services Manager, Science and Engineering Faculty, QUT. Awarded QUT VC Performance Awards in 2009, 2011, 2012 and 2014, nominated for the 2015 VC Excellence Award, Carmel is renowned for building high performance teams, business process improvement and project management.

Abstract: Can you really change culture? Are your team-building efforts working? Is your team productive AND happy? How can you measure your team's performance in a meaningful way?

We think we are on the right track in achieving all of these. In this presentation, we will share our experiences, profile the activities that have worked and explain the measuring tools that evidence the impact of our efforts.

The Faculty Services Team in the Science and Engineering Faculty at QUT has invested in a unique program to create a culture that is productive, constructive, positive and team-based. We seek to mirror and represent our Faculty values of being bold, excellent, innovative, collegial, inclusive, safe/well and operating with integrity.

Our model is designed to work systematically towards building a positive culture. We place our values at the centre of all we do, communicate purposefully, set clear expectations, model behaviour that is consistent, trusted and compassionate, and inject a bit of fun and humour along the way.

Activities like the SEF Olympics, Multicultural Carnivale, trivia events, Aspiring Leaders workshops, site visits, might sound as if they go beyond the usual boundaries of a workplace. But we use these and many other unique approaches to bring our large team together, with the underlying intent of creating a workplace that people want to be part of and a team that is productive, aspirational and service-focussed. We are proud of our high performing team!

Don't just believe us. We can show you the evidence! The Net Promotor Score (NPS), used widely in industry, is less well-known in our sector. We will share our results from two NPS surveys and explain how you could easily implement this in your team, providing the capability to provide real data to your Executives.

**A2: Campus development strategy – how to
plan for the future**

Paul Roberts, Turnberry Consulting

Biography: As Director of Turnberry Consulting, Paul Roberts has been involved in a wide range of international planning and development projects for tertiary education institutions, including the University of Oxford, University of Edinburgh, Trinity College Dublin and University of Melbourne. Roberts regularly lectures and publishes on campus planning and design. Publications include a comprehensive survey of university planning history, 'University Planning and Architecture: The Search for Perfection' (Routledge, 2015) and a profile of current campus planning and architecture, 'University Trends: Contemporary Campus Design' (Routledge, 2014).

Abstract: 'Eureka' – the state motto of California is where Paul Roberts's talk draws its starting point. The nature of university education and the development of its physical campuses in California, and the West Coast of the United States as a whole, shares significant similarities with that of the Australasian region. Their historical evolution follows an analogous pattern; there is climatic comparability; and they often compete for a similar pool of international students. Likewise are West Coast institutions facing a range of issues comparable to their Australian and New Zealand counterparts: squeezed public funding; suburban, commuter-dominated campuses; escalating inter-institutional competition; changing societal role; and the need to commodify research.

Roberts's concurrent session examines the innovative, place-based approaches that US West Coast universities are employing to address these challenges, distilling practical lessons that can be applied to the Australasian campus. By profiling key trends in campus development at West Coast institutions, including innovation hubs, living-learning communities and investment in arts infrastructure, the session will explore best-practice methodology for driving growth through physical estate. Through this lecture-style presentation and Q&A, attendees will engage with cutting-edge, international case studies in master planning and building typologies that have real relevance to their own campus contexts, thereby stimulating meaningful discourse about the campus of the future in Australia, New Zealand and beyond. It will be an indispensable learning experience for all those responsible for the management and development of tertiary education estates.

A3: The UNZ New Zealand Women in Leadership Programme - a model to share

Michelle Jordan-Tong, University of Waikato and Margaret Morgan, University of Otago

Biography: Michelle Jordan-Tong is Assistant Vice-Chancellor Students and Information at University of Waikato, NZ. She leads university-wide service integration and business solutions related to student experience, information, systems and technology. Michelle has a BA (Waikato) and Master of Public Management (Victoria, Wellington). Michelle is ATEM's Vice-President Aotearoa.

Margaret Morgan is Director, Quality Advancement at University of Otago, Dunedin, New Zealand. She leads the University's Quality Advancement Unit and provides oversight for the University's core reviews, surveys and academic audit programmes. Margaret has an MA (Otago) and DipArch/RecMgmt (Monash).

Michelle and Margaret are members of the NZ Women in Leadership Steering Group.

Abstract: The UNZ New Zealand Women in Leadership Programme - a model to share

Diversity in leadership, promoting better sector performance
New Zealand universities share a challenge with universities and organisations worldwide; namely how to increase the number of women in leadership positions. Despite pressures on universities to make better use of their talent pool, and despite the fact that more women than men obtain degree level qualifications, women are still seriously underrepresented at higher levels within the tertiary sector - in both academic and general staff roles.

The NZWiL programme was designed in 2006 by women, for women. The primary goal is to recognise and to enhance

women's leadership capacities and influence within the NZ universities. The programme is designed to help participants to:

1. explore what makes a successful leader in the tertiary education sector
2. reflect on the strategies needed to promote and support leadership
3. increase knowledge of the skills and competencies women need to be leaders
4. develop strategies for increasing research and leadership capabilities
5. build personal and professional networks nationwide.*

NZWiL operates under the auspices of Universities NZ and is supported by all eight universities. The week long, residential programme has run 20 times since 2007. An academic staff programme and a professional staff programme is offered each year and all programmes have 20 participants, with a minimum of two participants from each university. Two NZWiL scholarship places which provide partial funding for Māori and Pasifika women have been available on all programmes since 2011.

The NZWiL programme is an effective, collaborative, 'real-world' learning experience, which focuses on building participants' confidence and capacity to undertake leadership roles.

Margaret Morgan (NZWiL Alumna 2009) and Michelle Jordan-Tong (NZWiL presenter) are both current members of the NZWiL Steering Group and of ATEM. On behalf of the NZWiL Steering Group they will share with session attendees the key aspects of the NZWiL model, its successes and lessons learnt. The presentation will draw on direct experiences of the programme, the NZWiL Booklet, participant surveys and independent evaluations.

The NZWiL programme provides a valuable model for others who want to increase, enable and encourage more diverse leadership in their sector or locality.

"Ko te Pūāwaitanga o ngā Moemoeā, me whakamahi" (Dreams become a reality, when we take action) - Te Puea Hērangi

* NZWiL Booklet, commissioned by the 2015 NZWiL Steering Group, ISBN 978-0-473-32995-2

A4: Addressing change through innovation by thinking like an entrepreneur

Katt Robertson, University of Technology Sydney

Biography: My role at UTS involves managing an annual innovation and entrepreneurship competition for students. I am also a coach at the Hatchery, a start-up incubator at UTS. Additionally, I design and facilitate an entrepreneurship program as part of the university's outreach for High School students from low socio-economic backgrounds. I have a degree in Adult Education and I am currently undertaking an MBA. I am in the process of designing an entrepreneurship program, which I will take to Nepal in December 2017, to help cultivate entrepreneurship in one of the world's poorest countries.

ABSTRACTS

Abstract: If we are to address change through innovation, we must all learn to think like an entrepreneur. Entrepreneurs are action orientated individuals; they are quick to recognise performance gaps and unmet needs, they're always looking for ways to make things better. We often do the things we do because someone showed us what to do or we learned from watching someone. What would surface if we asked ourselves "How would I do this job, if nobody showed me how to do it?"

Youngest female self-made billionaire, Sarah Blakely says "real change only happens when you do it differently than everybody else".

What separates entrepreneurs from everyone else is not just their way of thinking by action, entrepreneurs also think in possibilities. Entrepreneurs don't wait for everything to be just right and for resources to be in place before pursuing an opportunity. They see the promise of possibilities and iterate and prototype their way to finding solutions.

Howard Stevenson from Harvard Business School says "entrepreneurs pursue opportunities without regard to resources currently controlled"

Entrepreneurship is not just about making money; at the core of social entrepreneurship is a way of thinking that hopes to make a difference, to make our world a better place. Making a profit is a means to that end, not an end in itself.

Social entrepreneur, Bill Drayton says "social entrepreneurs are not content just to give a fish or teach how to fish. They will not rest until they have revolutionized the fishing industry".

Thinking like an entrepreneur whether in your own business or from inside an organisation is a strength that can reveal possibilities and solutions. These days we call the outcome of these insights, innovation. The entrepreneur's ability to do this can be developed; we can all learn how to think like an entrepreneur.

This 90 minute workshop introduces the concept of entrepreneurship, prototyping, recognizing possibilities for solutions to problems, the challenges of failure and how to view it as an opportunity for growth. The Sarah Blakely and Bill Drayton of this world made an impact with their products and services precisely because they stopped being on autopilot, instead they started rethinking and reshaping, coming up with innovations to make things better. They learned to think like an entrepreneur.

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A5: The changing role of the Campus Library - Caulfield Library, Monash University

Meaghan Dwyer, John Wardle Architects

Biography: Meaghan is a Principal at John Wardle Architects. She has partnered with a number of universities to design and deliver projects across several states of Australia. Her experience spans a wide range of project types - libraries and learning centres, art galleries, schools of art and architecture, scientific research buildings and buildings for the visual and performing arts. In each case she and the team at JWA have created contemporary learning settings that are deeply connected to place, and fondly adopted as a part of everyday university life.

Abstract: Often referred to as 'digital natives', the use of information and communication technologies (ICT's) is second nature for Millennials. Millennials are early adopters of technology. A very high proportion of Millennials own mobile phones and have access to broadband internet. An increasing proportion have their own laptop computers, and for them, technology is likely to become increasingly embedded, networked and intuitive. It is often assumed that learning is more and more likely to take place outside of the classroom, within the learner's own environments, both real and virtual.

Recent surveys conducted at Perdue University established that many undergraduate students prefer to study in the library, or in a library like space because being there helps them focus, feel comfortable and secure, and do good work. This research also established the need to provide study settings that support both individual work and group work, and that relatively unadorned spaces that are equipped for serious, focused work collaboration and communication and high productivity were preferred over grandiose spaces, and expensive architectural flourishes. It was further concluded that the concept of the library is changing so rapidly that it is hard to predict future needs. The researchers concluded that their new building would be an open, fluid collection of small and large spaces for learning, meeting, and working, with spaces for groups of various sizes. This format would allow for flexibility and change in work practices and technology. This research informed the refurbishment of the library at Monash University Caulfield Campus.

Located at the centre of the Caulfield Campus Building A was a concrete brutalist building that accommodated amongst other things, the campus library. This building was closed to its surrounds and in need of a full refurbishment. With extensions to the south and west, and with substantial interventions into the concrete frame and existing north and east facades, the building has been transformed into a light, bright and open interior that is strongly connected to the external environment. The floor plates are largely open with more intimate settings defined by open timber portal frames. A large steel and mesh shadehouse is cantilevered off the facade of the building to protect the interior from the west sun while also providing a semi protected external space adjacent to the entry and cafe.

A6: Complex systems thinking: the key to developing a successful Asset Management Plan at Curtin University

Dr Rocio Bona, Curtin University

Biography: Dr. Bona brings eighteen years experience across a broad range of strategy development, urban planning, design, sustainability and corporate responsibility functions working with leading educational and public and private sector organisations in countries such as Australia, Canada, Mexico and Indonesia.

As Planning Director at Curtin University, Rocio leads the development of the University's Strategic Asset Management Plan. She is passionate about driving the delivery of impactful projects where a systems thinking approach is required.

Rocio holds a PhD in Environmental Design, a Masters degree in Technology and a Bachelors of Architecture.

Abstract: Complex systems, such as a university are made up of multiple, interrelated and interdependent business areas, and the difficulty of addressing asset management across departments has always been a challenge. A systems thinking approach in higher education has much to contribute to asset management discourses, providing a solid foundation for inter-departmental discussions and alignment of goals and strategies.

The success of the Strategic Asset Management at Curtin University hinges on the implementation of an integrated approach to bringing together the institution's operations, maintenance, development - capital investment, asset disposal, space management - reporting obligations and governance structures.

Curtin University's overall asset management goals are reflected in a number of programs and activities that address asset prioritisation, condition and functionality auditing, performance requirements, data management and sustainability. The programs align with the University's vision to ensure estates adequately support the institution's strategic objectives by applying a whole-of- life approach and optimising capital expenditure.

In 2012 the University completed its master plan, which will see 114 hectares of the Bentley Campus transform through urban regeneration into a vibrant economic and innovative hub with diversity in culture and the arts - a district that celebrates the University's creative knowledge. In addition, it is expected that the University's student population will reach close to 34,000 Equivalent Full Time Student Load (EFTSL) by 2031 and that research will continue to grow, requiring new facilities along with the repurposing and refurbishment of the existing stock.

In 2015, Curtin was awarded Australia's first 5 Star Green Star-Communities rating by the Green Building Council of Australia's (GBCA) for its master plan, setting for the first time clear performance targets. Performance was assessed against best practice benchmarks in governance and innovation, design excellence, environmental sustainability, economic prosperity and liveability.

The implementation of an integrated data management system is seen as paramount to the success of the project. With the numerous stakeholders involved in the delivery of such an ambitious project, understanding data hierarchy and information requirements required at different levels within the organisation has further benefited from a systems thinking approach.

The challenge is to achieve a genuine collaborative approach, where stakeholders can work together to accomplish a shared vision. This presentation will outline how, using a complex systems thinking approach, the numerous projects and commitments are integrated across departments and measured against asset management best practices.

A7: From plan to place transforming Monash

Professor Rob McGauran, MGS Architects and Jocelyn Chiew, Monash University

Biography: Rob McGauran is Adjunct Professor of Architecture Practice, MADA at Monash University & Professorial Fellow Urban Design, MSD at The University of Melbourne. He was University Architect for Monash University 2010-2016 and University Masterplanner for the main Clayton Campus and a Founding Director of the award winning design practice MGS Architects.

Rob will talk about the plan, the lessons learnt as a designer and the new challenges facing the Masterplan update 6 years on.

Abstract: In 2011, Monash Clayton like many Australian university campuses found itself at a crucial turning point. Designed and constructed in the mid-20th century, many buildings were ageing and no longer suited to contemporary learning and teaching, and the spaces between them were often neglected and dominated by car parking and service roads. The campus as a consequence was introverted and disconnected from its neighbours and the broader precinct. Research questions that required integrated cross-disciplinary collaboration were undermined by this siloed characteristic and the experience of the campus and hours of operation were diminished as a result. Most campus visitors arrived at the campus by private vehicle with limited public transport options available. A disaggregated capital works decision-making process and poor accountability had resulted in projects of variable design quality that at times compromised the amenity of the surrounding campus.

These challenges, poor feedback on student experience at that time and a declining bottom line, required radical rethinking of governance of the campuses, the capital program priorities and the vision and masterplan framework that would guide the change and agreed measures of success. 6 years into the transformation acknowledged with multiple National and State Masterplanning, Urban Design, Education and Architecture awards, leadership has been rewarded with transformation in

stakeholder responses to the campus and its use, student and research performance and global rankings.

The masterplan was developed in order to create a unifying vision and decision-making framework and a tool around which the Monash community could develop a shared ambition for transformation of the organisation and the Monash Experience.

Significant 'places' have been realised, delivering on a masterplan ambition to complete cohesive precincts of the campus, both the buildings and their associated public realm, at the same time. The first to be completed was the North West Precinct, with Rainforest Walk as its spine linking CSIRO to the campus core. This walk is anchored by the new, iconic learning, teaching and research buildings New Horizons and Green Chemical Futures. The Engineering and Science Library and Hargreaves Square were created through the partial demolition and re-purposing of two flanking buildings. The Eastern Residential Precinct has also been completed, hosting four new student halls with community orientated spaces at ground floor fronting onto associated diverse landscape spaces. A more frequent and direct bus service has been introduced, creating a dramatic shift in how students, staff and students access the campus, with a 25% increase in average weekly passengers via this mode

Whilst a work in progress, the Monash Clayton campus shows what can be delivered with ambition and collaboration. This Case Study, through the dual lens of the former University Architect and current Clayton Campus Masterplanner, and the Manager Campus Design, Quality and Planning will resonate with many who are in similar roles and the challenges they face. It will provide delegates with relevant and timely evidence of an action plan and outcomes, means of measuring success, and lessons that can be applied using three exemplar placemaking transformations of the Clayton Campus Context - the most awarded campus in Australia in the past five years.

A8: USC and The Mill at Moreton Bay - collaboration, innovation and transformation

Kate Isles, Moreton Bay Regional Council and Iona Beaulieu, University of the Sunshine Coast

Abstract: Moreton Bay Regional Council (MBRC) is creating a thriving new major precinct that will generate thousands of local higher education and employment opportunities for the region, an area currently significantly under-served in terms of tertiary education places.

The Mill at Moreton Bay Priority Development Area is approximately 460 hectares and is located within the suburbs of Petrie, Kallangur and Lawnton. It will be a place where people can work, live and play around education, with a range of commercial, residential and recreational facilities, and easy access to the South East Queensland rail and road networks.

In 2015, the University of the Sunshine Coast (USC) was selected by MBRC as its Anchor Education Partner at the

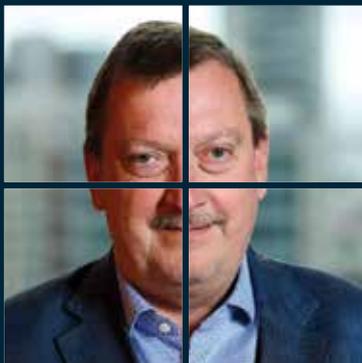
ABSTRACTS

Mill. USC Moreton Bay will be a full-service campus, offering a comprehensive range of courses and specialist offerings with a focus on innovation, science and technology. The campus is due to open in 2020, supported by additional work, study and community facilities, and will cater for up to 10,000 university students in its first 10 years.

On 2 September 2016, the Deputy Premier and Minister responsible for Economic Development Queensland declared The Mill at Moreton Bay as a Priority Development Area (PDA). Giving a site PDA status recognises its potential to drive economic growth, and streamlines the planning, approval and development process to fast-track development for community benefit. The PDA will also deliver strong environmental outcomes, conserving more than 110 hectares of bushland and lakes for the region's future.

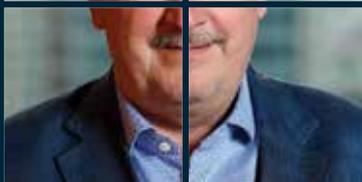
To enable a comprehensive and integrated approach to planning of the precinct, MBRC, USC and their respective consultants have worked closely throughout the development of the precinct planning process, to ensure that the USC Moreton Bay campus contributes to the wider aims of enhancing the viability of the region.

This presentation will focus on the collaborative planning process undertaken to enable transformation of not only USC, but the wider Moreton Bay region; will examine new campus design and the opportunities the project presents to support new forms of learning and engagement; and, demonstrates, through a strong focus on innovation, how to provide a community asset that is relevant, engaging and evolves to meet the needs of disruptive change as it occurs.



◀
Professor Leo Goedegebuure
LH Martin Institute

▼
Professor Merle Jacob
Director,
Research Policy
Institute,
Lund University,
Sweden



◀
Dr Jeanette Baird
Vice-President,
Quality Assurance
and Strategic Planning,
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CONCURRENT B

B1: Functional Biomimicry - a system for innovation

Matthew Webb, Umow Lai Consulting Engineers

Biography: Matthew achieved his undergraduate studies with an Honours double degree in Engineering and Science at the University of Melbourne. After working in automotive manufacturing, HVAC consulting and in the biotechnology industry, Matthew joined Umow Lai Consulting Engineers as a sustainability consultant. Matthew is currently working as a simulation and energy management specialist with Umow Lai while completing his PhD with the Department of Infrastructure Engineering at the University of Melbourne. Matthew's PhD investigates the application of functional biomimicry to non-residential buildings. He is using knowledge of biological systems and emulating key characteristics in facade designs to improve thermal performance.

Biomimicry - innovation inspired by nature - offers designers opportunities to develop new ideas, products, processes and technology in nearly all facets of human endeavour. In the past 20 years, there have been a number of biomimetic initiatives across a range of human technologies that have demonstrated the potential for biomimicry to significantly improve human design and challenge conventional thinking.

Abstract: Human design has taken inspiration from the natural world from its very beginnings. Today, however, functional biomimicry offers a more sophisticated approach: a practice that successfully translates characteristics from biological knowledge to human design, engineering and problem-solving. The goal of functional biomimicry is to deeply understand the biological world and then abstract that knowledge - in detail - to human problems. In this detailed application, biomimicry can present innovative solutions to technological, environmental, educational and social challenges facing human society today.

This presentation presents an overview of biomimetic methods and how these can be applied as innovative problem-solving techniques. There are three key requirements to effectively applying biomimicry to innovation: (1) the design problem and its biological analog must be understood, (2) a suitable characteristic, species or ecosystem must be identified, and (3) a viable process is required to successfully translate ideas from the natural world to the technological, educational, or social domain. There are several methodologies available ranging from a simple adoption of principles through to sophisticated techniques that can assist in solving intractable problems.

Dedicated examples will be described to demonstrate the capabilities of biomimicry to deliver innovation. The diversity and structure in coral reefs can inspire new ideas in urban planning. The flow dynamics and streamlining that occurs in natural form can lead to more efficient water pumps. The study of single-celled organisms can lead to new methods of

structural efficiency. In particular, the application of functional biomimicry to building facade design will illustrate how adapting and translating thermal strategies from nature - namely fur coats and blood flow - can improve a building's energy performance. Engineering modelling has shown that a biomimetic facade design can reduce the operational energy consumption by more than 17% while maintaining occupant thermal comfort.

The scope for identifying biological inspiration to solve design problems is virtually limitless. Access to abundant biological information, along with relevant methodologies for abstraction and translation, provides for an acceleration of functional biomimicry in human design in the near future.

B1: Evolutionising higher education governance

Damian Barry, The University Of Melbourne / Barry Business Services

Biography: Damian is a self employed consultant in higher education and a non-executive company director in the not for profit sector. Previously, he spent 25 years as a manager in legal services, health and higher education, working in universities, private providers and the public sector. He has qualifications in law and economics, information systems; a Master in tertiary education management and is currently a PhD candidate research higher education. governance in Australia

Abstract: Higher education in Australia and elsewhere is under constant pressure from a range of local and global trends. These trends range from the broader impacts of globalisation and the hyper increase in information technology penetration into communities; to increased competition for academic and professional staff; students and resources. The increase in competition is not only at the resource level but also at the fundamental degree level. ICT and online education is starting to seriously question the structure, role and purpose of the underlying bachelor degree. In addition to these trends is the global change in attitude to higher education and its purpose - a move from being seen as a public good to the more utilitarian view of the university degree as the pathway to valuable work. The attitude of students, governments and the general population has changed in the last half century and universities are adapting to these changes -slowly in some cases. The way our higher education system and universities is governed is still based on the traditional models of universities and their purpose. The approach to governance at both system level and institutional level needs to evolve quicker to enable the system and universities to better address the current and future challenges that are on the horizon. In this talk I will look at how governance of the system and universities might evolve to best meet these challenges. The governance model and the tools used is critical to setting the foundation for effective adaptation and I argue that the current approach to governance by governments and institutions in Australia needs to evolve quicker and adopt a more "radical" approach.

B1: Small steps, giant leaps: It's all about being agile

Anastasia Georgiou, Monash University

Biography: A creative and dedicated professional with a focus on; strategic planning and implementation; process improvement; and exceptional customer service, with nearly 15 years of experience within the Tertiary Education Sector

Abstract: Change in a university can take many, many months. Firstly we need a new process. Then we need to get feedback and everyone to agree with the new process. Next we need to get it approved at all the right committees. On other words there are many cogs to turn and lots of red tape to negotiate. Now consider adding a system change. This will take years!

But what if the key people (e.g. system developer, business process owner, subject matter expert/s, change specialist and business analyst) physically worked together and made frequent incremental changes? What if we looked at one feature at a time and collected regular feedback on those changes? And then used that feedback to continuously improve the process?

We can, and we do.

B2: Maturing a sense of leadership identity for tertiary education managers

Dr Heather Davis, The University Of Melbourne and Dr Carroll Graham, ATEM and Sabina Robertson, Deakin University

Biography: Heather Davis, is the Program Director – Awards at the LH Martin Institute including responsibilities for the Emerging Leaders and Managers Program (eLAMP).

Sabina Robertson is the Manager, Faculty of Science, Engineering and Built Environment Library Services, Deakin University Library. Sabina has extensive experience of working in school, TAFE, public and academic libraries and completed the Master of Tertiary Education Management from LH Martin Institute, University in 2016.

Carroll Graham is a third space professional with more than two decades' experience in the TE sector. Following completion of her doctorate, Carroll now consults across the sector in leadership and management.



ABSTRACTS

Abstract: In order to support necessary mindset shifts to be able to adapt and re-design the futures to be discussed at this conference, a maturing sense of leadership identity for all of us who work in the tertiary education sector is just as important as the work itself.

Building on the adage that there is 'nothing so practical as a good theory' this panel is intent on unpacking the likely mindset and skillset shifts ahead in order to be agile enough to work with disruptions ahead and the unceasing transformation of tertiary education institutions already being experienced.

The anchor for all presentations for this panel is Self-Determination Theory's three elements: competence, autonomy and relatedness which are also mapped the idea of the 'T-shaped professional' that covers both the 'soft' and 'hard' skills necessary in knowledge-intensive work.

Panellists will briefly outline how they have used Self-Determination Theory in their practice-led research endeavours to set the scene for a lively discussion to follow.

Heather Davis will discuss these ideas in relation to leadership development as part of the Emerging Leaders and Manager's program's Module 1: Leading and Managing the Self and will facilitate the discussion to follow.

Sabina Robertson, presents findings from an evaluation of an in-house staff development program for liaison librarians also affected by shifts within the wider university settings regarding

research support and academic instructional models which is challenging librarians to rethink their roles in the knowledge intensive era and determine how they can capitalise strategic alliances with academics and partner in developing learning environments which support academics and engage students.

The expanding and changing roles of librarians is a mix of exciting prospects and challenges as libraries need to recruit not only staff with skills, knowledge and capacity to adapt to new ways of interacting with students and academics but to also commit to providing relevant ongoing capacity building programs.

B3: University of Melbourne - Arts West Redevelopment

Associate Marina Carroll, Architectus and Peter Bickle, Ashton Raggatt McDougall and A/ Professor Parshia Lee-Stecum, The University of Melbourne and Associate Joanne Ligouris, The University of Melbourne

Biography: Marina Carroll is an Associate at Architectus and leads the practices' activities in the tertiary education sector. Marina has particular expertise in learning space design and led the user group process on the University of Melbourne's Arts



West Redevelopment. She worked full time on the project from early concepts through to final completion in 2016.

Joanne Ligouris is the Executive Director of the Faculty of Arts, University of Melbourne. In partnership with the Dean, Joanne led the Arts West Redevelopment project from the initial business-planning phase through to design and construction.

Associate Professor Parshia Lee-Stecum is the Associate Dean, Teaching and Learning and Program Director of the Bachelor of Arts, Faculty of Arts, University of Melbourne. Parshia played a key role in leading the development of the teaching and learning principles that guided the design of the building's 24 new teaching spaces.

Peter Bickle is a Principal at ARM Architecture who's design skills and project management experience, gained over 30 years, have equipped him to manage the design and delivery of any building type on any scale. Peter likes to work on public buildings that clearly contribute to a city and local society. He was Project Architect on the Arts West redevelopment.

Abstract: The increasing sophistication and accessibility of on-line learning requires educational institutions to reassess the meaning and value of the on-campus learning experience. The Faculty of Arts, University of Melbourne has re-focused its attention on providing enriched, campus-based, face-to-face experiences for its undergraduate students. The Arts West Redevelopment reflects this commitment and provides a rich, memorable and meaningful student experience that cannot be replicated online.

ARM Architecture + Architectus were engaged to support this aspiration in the form of a new building for future generations of Bachelor of Arts students. The challenge was to translate the Faculty's vision for the student learning experience into architecture.

The ambition was to create an environment which promoted active, experiential and peer learning. Fostering student/teacher engagement and collaboration within and beyond the classroom is at the core of the design. The building's emphasis on interactive, collaborative learning and media-based activities connect traditional disciplines with new tools and methodologies. Informal learning spaces are integrated with formal teaching zones. These spaces feel homely; students can study, engage or simply hang. Arts West has become an identifiable hub for Arts students.

An exciting initiative was to create a purpose-built building that realised the full teaching potential of the University's significant cultural collections and supported object-based learning (OBL). OBL provides a springboard for deep learning with improved retention and ability to recall. It offers a tactile and authentic learning experience that cannot be mimicked digitally.

This modality was embraced not only in the specialised OBL Labs but also in the manifestation of the built form, inside and out. The entire building can be curated. The circulation spaces incorporate display cases for cultural collections. The teaching rooms include selected spaces elaborated as cabinets

of curiosity using historically themed interior decoration. This approach generates a remarkable atmosphere for the learning environment.

The exterior of the building continues the theme of OBL. The façade contains images of objects from the University's cultural collections making visible the rich, cultural and historical interdisciplinary traditions that underpin the Faculty. Images appear and evaporate as you pass by. The architecture celebrates scholarship as an interactive and celebratory experience.

In this presentation the Faculty of Arts (UoM) will describe the impetus and aspirations of the Arts West Redevelopment, while ARM + Architectus will outline the process and design response. The Faculty will then explain how the building works today to transform the on-campus experience of their students.

B4: Asset Management Reboot at The University of Auckland

Muru Mohan, The University of Auckland and Emmett Mackle, The University of Auckland

Biography: Emmett Mackle is the Associate Director - Facilities at The University of Auckland and been with the University since 1989. Besides managing the operations of the University's 600,000m2 property portfolio with a replacement value of over \$3Bn, he is extensively involved in a wide range of planning and development projects.

Muru Mohan leads the Asset Team within the University's Property Services. He has worked in the infrastructure and property sector for the past 20 years. Throughout his career, Muru has undertaken various asset management roles covering complex portfolios like wastewater, healthcare, oil & gas, correction and now higher learning.

Abstract: Asset management practices have been intrinsically but sporadically present in the management of assets. While this situation served the needs of that time the realisation in the recent times is that asset management is a systematic and coordinated process or activity within an organisation, which is required to realise value from the assets. An asset is beyond the financial definition. It is an item that has potential or actual value to an organisation. These fundamental facts have made The University of Auckland realise that for it to sustain successfully in the asset management journey, continuous improvement is pertinent. In order to do that it had to know and understand it's current stand in the asset management maturity level and where it need to be. Only then an improvement plan can be developed and set in motion an asset management reboot that will enhance the maturity level across the University.

During the 2015 independent asset management maturity assessment, which is a mandatory requirement by the Tertiary Education Commission of New Zealand, areas for improvement

were identified but the absence of dedicated resources for asset management casted the doubt on the ability of the University to effectively and efficiently address the gaps. Dedicated resources was also one of the improvement areas found during that exercise. This finding strengthened the business case to develop an asset management team within the University's largest asset base owner – Property Services group. The team formation began in mid-2016 with roles covering planning, analysis, information management and quality areas of asset management. The team kick-started the asset management journey by establishing the focus areas that encompass each facet of asset lifecycle:

- Strengthening Asset Management Fundamentals
- Improving Asset Information Management
- Enhancing Proactive Maintenance Strategy
- Effective Asset Planning
- Effective Asset Performance Monitoring
- Progressive Quality Assurance

The first step in the asset management reboot is developing an asset management policy. The policy is a critical enabler for the asset team to engage with the wider stakeholders within the University and create the required awareness. The policy is currently going through a formal consultation process after being accepted by the University's senior leadership team. A

significant small step in the big journey. This paper is about the journey that initiated the asset management reboot in the University and the small steps towards creating a sustainable and coherent asset management culture in the organisation.

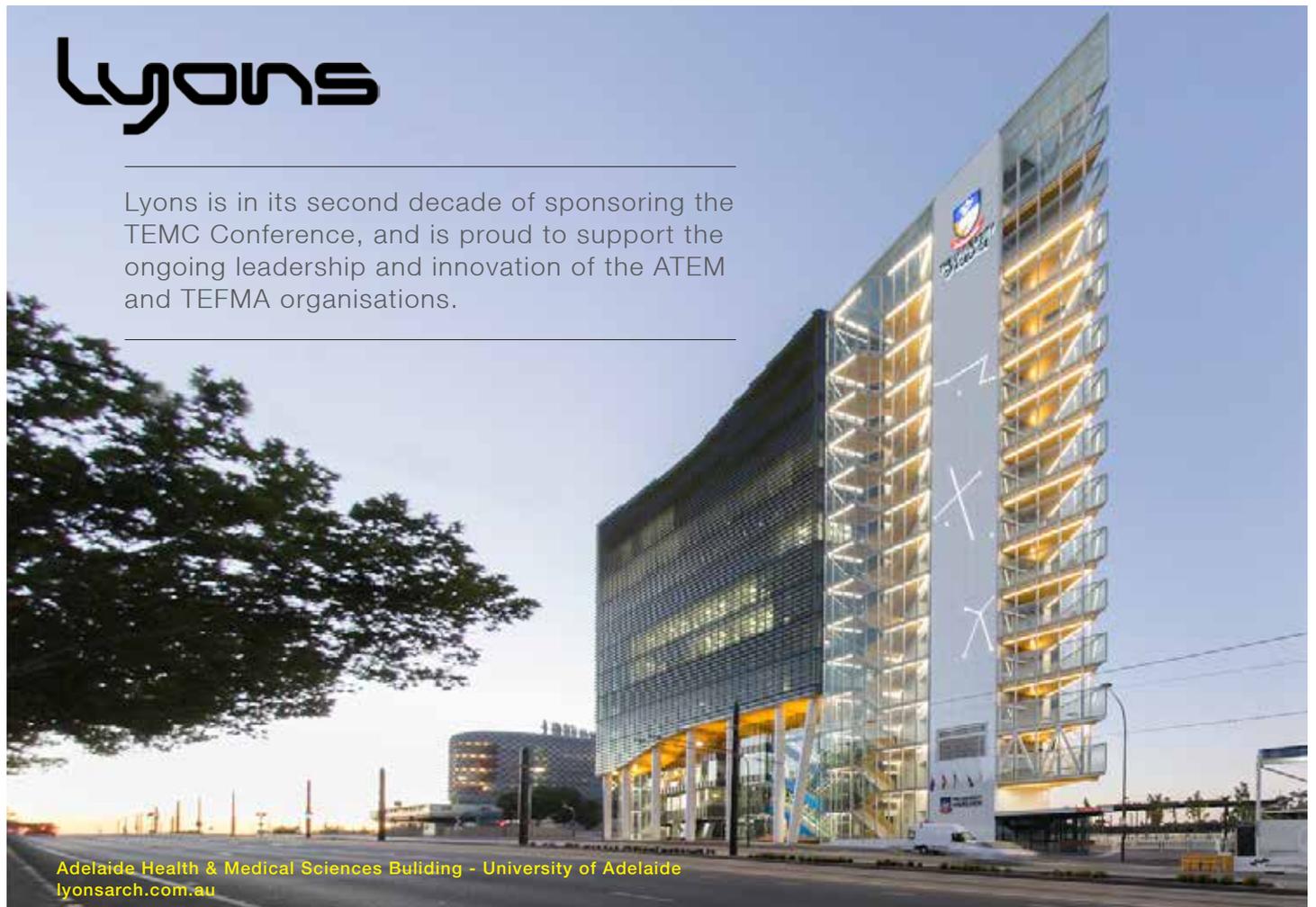
B5: Understanding what Pedagogical Shift means for the Teaching Space Infrastructure

Terry Roche and David Reanney and Amanda Harris, Deakin University

Biography: Terry is Manager, Space Management and Planning at Deakin University. In this role he is responsible for ensuring the University is using its space optimally and for identifying and responding to future space needs including teaching space, research space, student support spaces and staff accommodation. Terry has over 25 years in strategic space planning and management with a number of Victorian Universities and a UK University. He has consulted on strategic space planning within Australia, the Middle East and the United Kingdom. He is a Senior Fellow at the LH Martin Institute at the University of Melbourne.

Lyons

Lyons is in its second decade of sponsoring the TEMC Conference, and is proud to support the ongoing leadership and innovation of the ATEM and TEFMA organisations.



Adelaide Health & Medical Sciences Building - University of Adelaide
lyonsarch.com.au

Abstract: The implementation of the Student Learning and Experience Plan at Deakin University requires a shift from a didactic pedagogy to more active and collaborative student delivery. This necessitates a space type that supports collaborative learning, typically in the form of large flat floor spaces with flexible furniture.

The Burwood Campus of the University has a significant student population and a heavily utilised teaching space. With frequency rates for large teaching spaces at 90% across a 60 hour teaching week Deakin is faced with two challenges. Firstly to accommodate growth on the campus with no spare capacity and secondly accommodating the change in pedagogy and the type of teaching space required.

Over the past twelve months Deakin staff have undertaken a detailed analysis of the impact of meeting both challenges, providing additional capacity and providing a new type of space. Driving the analysis was the need to allow an increase of almost 200% in terms of the amount of space required per student in a collaborative learning space compared to a traditional lecture theatre space. There could be no loss of capacity from within the current teaching spaces, there could be no programmed upgrade that took rooms off line, and existing spaces by and large, would not lend themselves to conversion into active student learning spaces.

Faced with these challenges the obvious solution was to construct new teaching facilities. A consultative process was undertaken with the University's Campus Learning Spaces Committee as to the number and profile of rooms required. This meant estimating the pace of pedagogical shift over time, forecasting the expected demand for active student learning spaces over the period to 2025. The presentation will explore the assumptions used in this modelling and present the outcomes in terms of the room profile. Another key factor in the implementation of the Student Learning and Experience Plan is to significantly increase the provision of informal learning spaces, contiguous with formal spaces. To meet this requirement then any new space had to connect the two types in a way that facilitated the learning process.

The planned response became the Learning Research Community Building (Building LC).

The presentation will then go through the key aspects of the new building, which is the largest single construction undertaken by Deakin University. It is anticipated that construction will commence in early 2018 and be operational in July 2020.

B6: USQ's Service Excellence Revolution

Kathy Carey, University of Southern Queensland

Biography: Kathy has over 20 years' professional work experience across customer service, sales and marketing including Retail Sales, Banking and Finance, and Business Management. Kathy has worked in the Higher Education sector at the University of Southern Queensland for over 5 years and is currently the Student Experience Coordinator. Kathy is responsible for ensuring a positive student experience for all students through ensuring implementation of best practice service delivery across multiple student communication channels. Kathy also works part-time as the Regional Executive Officer for the Association of Tertiary Education Management (ATEM) Queensland Region.

Abstract: The introduction of the demand-driven funding model in 2012 has contributed to the continued increasing competition in the higher education sector and in turn has produced the 'Service Revolution'. 18 months ago 'customer' service was not a well versed word within Universities but now it seems to be a buzz word!

At the University of Southern Queensland we have been undergoing our own 'service revolution' spanning eight years, with a commitment to providing an enriching and supportive student experience through a centralised service delivery model. Our current service delivery extending across multiple communication channels and time zones with utilisation of a sophisticated CRM system.

To keep up with current service trends and to address the challenges of servicing our unique student cohort (the majority online students), the Service Excellence Framework has been developed along with our current self-service channel undergoing an extensive make-over. This framework includes addressing increasing service expectations, planning for Millennials, accommodating global time zones, evolving technologies, tightening of university budgets and staffing number restrictions and the necessity to engage and support our students on a 24/7 basis.

This presentation will explore the elements of the framework, the challenges faced, the technologies utilised, the governance structure, capitalising on the opportunities, the sustainability and the strategies implemented.

In 2011, Gartner predicted by 2020 "customers will manage 85% of their relationship with the enterprise without interacting with a human". Self-service is a substantial part of that trend — and in 2017, it's inevitable.

This presentation will challenge the audience to consider the changing face of the student experience, the empowerment of frontline staff and embracing the rise of the digital employee.

SESSION 4

4.00 – 4.45 pm

CONCURRENT C

C1: Attendance at the AUA and visiting UK Universities

Mara Eversons, University of Canberra

Biography: I am a University professional with 17 years' experience in the higher education sector, most of those with the University of Canberra. I am currently acting as the Director of Student Administration, leading the unit through a university restructure and unit review.

I have experience working within the academic areas as well as both a Faculty Student Affairs Manager and as Faculty Business Manager.

My expertise is in staff leadership and development. I value the student as an educational partner and work with my teams to ensure we engage most appropriately with all students, staff and stakeholders within the sector.

Abstract: Overseas Conference attendance - What an opportunity! Why not throw your hat in the ring and give it a go? Keep an eye on the ATEM website for details.

I did just this and in 2016 was awarded the Association of University Administrators Conference Award - I was off to Manchester in April 2017. What an amazing opportunity.

The Association of University Administrators is basically the UK equivalent of ATEM; an association for those who aspire to work in the fields of administration and management within the Higher Education sector. The Conference theme this year was Transformation. Transformation of self, others, organisations and the higher education sector. As an ATEM representative, I was offered a presentation slot which I eagerly accepted. At UC we had been working on an Admissions Transformation program which fit perfectly into the conference theme and so became the basis of my presentation.

Not wanting to waste the trip, I was eager to see what else I could possibly get out of the trip?

I was lucky to be fully supported by my University and so arranged to visit six UK Universities. My objective was to meet with representatives of Student Administration and the student services areas. I wanted to talk about the student experience; how the universities ensured excellence, worked towards and improved services in the student journey. I was also eager to see if UK universities organised their student administration areas similarly to Australian universities and if not, what the significant differences were. I spent time at the University of Manchester, Leeds University, Loughborough University, Sheffield Hallam

University, Manchester Metropolitan University and De Montfort University - each ensuring I met with relevant staff and got a great overview of their campuses.

The experience has given me increased motivation to aim higher; ideas for working with staff and providing for students; relevant contacts in the areas of student administration and student services; and a multitude of networking opportunities.

I'd like to share my experience and some of the learnings as well as encourage others to apply for the same and similar opportunities.

C2: The 40-year life cycle: a new approach to asset management

Andrew Sun, RMIT

Biography: Andrew Sun is the Senior Manager, Asset Planning working within Property Services RMIT University. He is responsible for all things within the asset management space. In achieving this, leading subject matter experts and leverage condition assessment methodologies, life cycle analysis, data modelling, regular asset information reviews and leading edge technologies.

He holds a Bachelor degree in Electrical Engineering, a Masters Degree in Maintenance & Reliability, a teaching qualification and a MBA. Outside of work his hobbies include bike riding, visiting wineries and hiking.

Abstract: The management of physical assets for RMIT is a core business activity and integral to extending the effective life of assets. Assets need to be designed, acquired and maintained with careful consideration to ensure facilities operate at peak functionality, providing reliability for students and staff. A robust Life Cycle program will extend the life of assets and reduce replacement period and cost.

Development of the Australian campus life cycle model and the initiation of a more comprehensive asset management approach to maintenance within Property Services will improve asset data at RMIT to support a comprehensive maintenance planning framework that has previously been lacking.

RMIT Property Services life cycle analysis is the first of its kind for any University in Australia and substantially differs from TEFMA Backlog Maintenance.

This important delineation is crucial to enable performance metrics to be measured and monitored to enable targeted and predictive maintenance regimes to extend the effective life of the Property portfolio.

A Life Cycle program is the representation of the sum total of the present value of all asset costs incurred in the operation over its anticipated lifespan and then provides the metrics to make planned strategic decisions relating to refurbishment vs. replacement and the impact on the portfolio.

C3: It's a long way to the top if you start at the very bottom!

Jenny Purcell and Lauren Marsh and Susan Hudson, Western Sydney University

Abstract: It's a long way to the top if you start at the very bottom !

Achievement, career success, attainment is something that we all strive for Whether overtly or not, we all have a desire to be that bit better, that much more successful, and be recognised and respected by our peers, colleagues, friends and family.

It is invariably a long journey to a senior leadership role. However for women, the road to managerial roles and senior leadership positions can be far more difficult to traverse than it is for men. Much has been written on career trajectories for women and how a career can be affected and influenced by a range of disruptions and events.

In this presentation, three current ATEM members share their stories as they progressed from administration assistants to management roles; and, in one case to Executive Director level. These three women will share their journeys, discussing how they made the most of opportunities as they arose and increased their career development prospects through training and education.

This presentation has something for men and women alike, while it is the journey of three women, the take away messages are not-gender-specific and will enable you to think about how you could be shaping your own career trajectory.

C4: Knowledge Masterplans: How La Trobe University's unique campus identities vary a shared ideation process

Joshua Wheeler, MGS Architects and Katherine Sundermann, MGS Architects and Stephen Morris, La Trobe University

Biography: Joshua Wheeler is a Director of Melbourne based MGS Architects. Joshua has overseas and local experience in architecture well as urban design and master planning.

Current projects include the delivery of 70 independent living units for the Old Colonists' Association of Victoria, the Accommodation and Homeless Resource Centre for VincentCare, and a Sports and U3A Centre for the City of Boroondara. Joshua's past projects include the AIA Regional Prize winning Bendigo Library, the strategic Masterplan for La Trobe University Bendigo, the Hampton/Willis Street Precinct Urban Design Framework, and the Glen Waverley Activity Centre Master Plan for the City of Monash.

Abstract: Stephen started his career as a hospital architect & after 10 years of practice completed a Grad Dip in Project Management & then a Master of Engineering. His work on major projects throughout Australasia led to his appointment as Head of Projects & Development for Tan & Tan Developments in Kuala Lumpur in 1994, leading the initiation & delivery of major health, retail, commercial & residential projects.

Since returning to Melbourne in 1998, Stephen has occupied executive positions with major consulting, contracting & development companies in the retail, commercial & aviation sectors. Stephen joined La Trobe University in 2010 as Director of Planning & Development responsible for strategic planning, master planning, space planning, leasing and property development for La Trobe's 6 campuses in Melbourne & regional Victoria.

Many Australian university campuses are at a crucial turning point. Often designed and constructed in the mid-twentieth century, many buildings are ageing and no longer suited for contemporary learning and teaching, and the spaces between them are often neglected and dominated by car parking. This presents an opportunity to strategically rethink the campus as a welcoming knowledge neighbourhood: one that supports innovation, partnerships and contemporary pedagogy with all the services and vitality of a University Town.

This presentation looks at three recent case studies of La Trobe University campuses that MGS Architects have master planned to create ambitious frameworks for change. Each is aligned with the unique campus identity and capacity of the University.

La Trobe University, Melbourne Campus
When instituted, La Trobe University's Melbourne Campus was located in a field on the periphery of the city, a citadel campus accessed primarily by car. Now, almost 50 years on it is strategically positioned in the heart of Melbourne's suburban north, a rapidly growing region with demand for dynamic centers of education and employment. Consequently a key priority of the masterplan is to turn the campus 'inside out' to ensure meaningful connections with the surrounding community and transform the campus into a vibrant University Town.

La Trobe University, Bendigo Campus
Located in the regional city of Bendigo, Victoria, La Trobe University's Bendigo Campus has similar objectives to the Melbourne Campus: to reach out and embrace the city and welcome the community onto the campus, while regenerating key learning and teaching spaces and public realm. However the scale and context of this campus are very different to its Melbourne counterpart. The campus does not expect dramatic growth in student numbers, and is currently well-provisioned for teaching space. This requires a sensitive approach to interventions, ensuring that relatively small moves can have a larger cumulative effect.

La Trobe University, Albury-Wodonga
Significantly smaller than the main Melbourne campus and the regionally significant Bendigo Campus, the overarching

ABSTRACTS

goal of the Albury-Wodonga Masterplan is to create a vibrant knowledge campus, which places people at its heart. A key focus of the new and upgraded campus will be at the intersection of University Drive, and a new central pedestrian path 'Discovery Way'. Forming a gateway to the 'Knowledge Village', this intersection will also offer a meeting place for Wodonga TAFE and La Trobe University staff and students, as well as members of the local community.

C5: New Academic Street, transforming the heart of the city campus

Chris Hewison, RMIT University and Edward Berry, Lyons and Nick Bamford, AECOM and Jeremy Elia, RMIT University and Fiona Ellis, RMIT University

Biography: Jeremy Elia is a Project Director and Corporate Real Estate Executive with qualifications in Architecture and Commerce including extensive experience in the leading major built environment projects requiring extensive change management, communications, staff and student engagement, complex stakeholder engagement and business continuity. Jeremy is now applying his extensive experience in managing

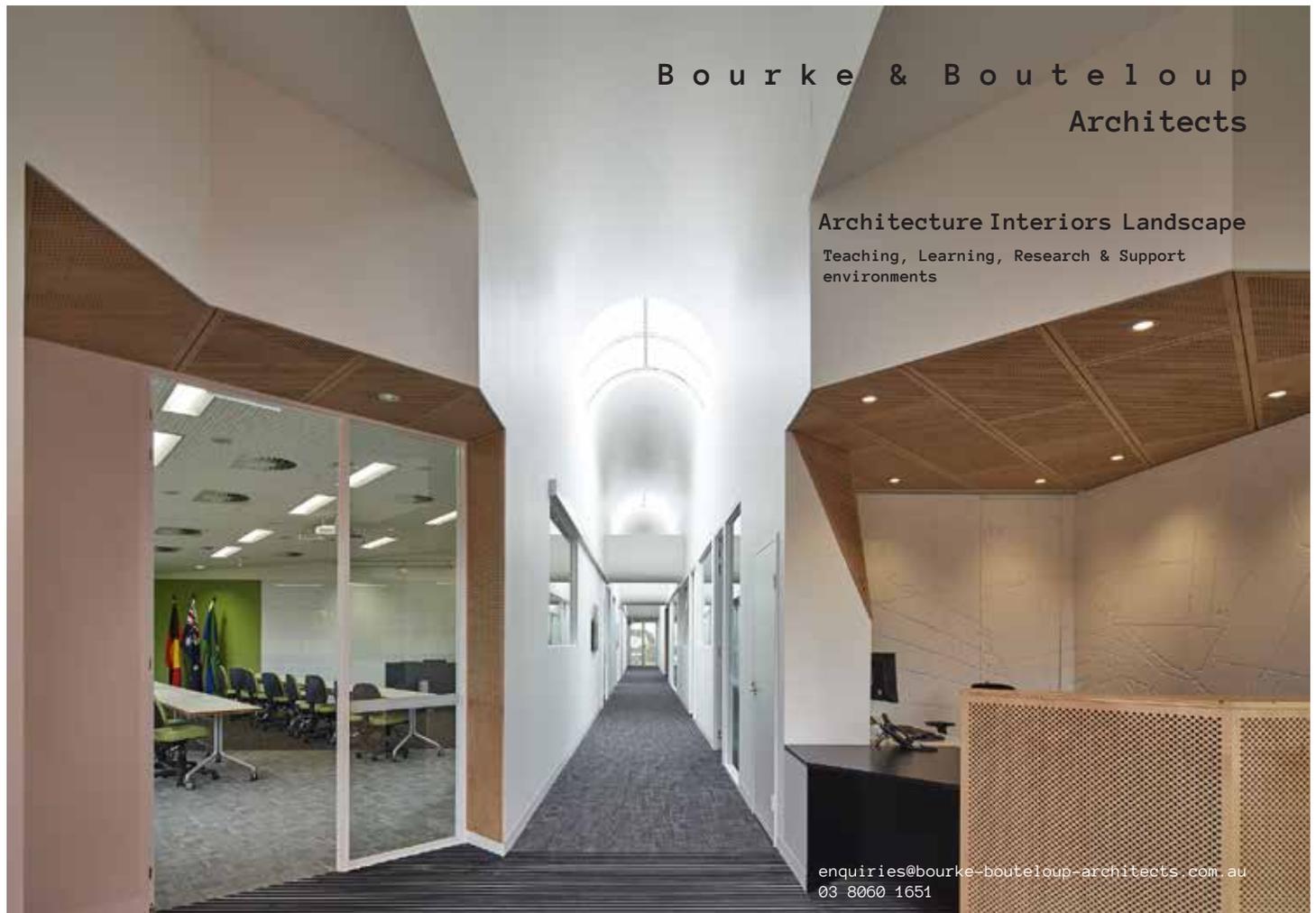
the RMIT's New Academic Street project, a major construction project that will transform the heart of the city campus by creating new facilities that is enabling RMIT to deliver better services to students.

Abstract: The New Academic Street (NAS) project will transform the heart of the RMIT City campus by creating new facilities that will enable RMIT to deliver better services for students.

A carefully planned construction program is upgrading facilities that really matter to students - the Swanston library, RMIT Connect, collaboration spaces and food options - to improve life on campus.

Students tell us they love being part of the city, but it's hard to find space to relax and enjoy campus life. Students want more places to collaborate and study and enrolment and program queries to be managed easily and efficiently without waiting in a queue.

Therefore the centre of the campus is being transformed and the lower levels of four existing buildings refurbished and the creation of three new buildings. NAS will provide additional light filled student spaces, new entrances from Swanston Street, a new library, innovative food and beverage precinct and a media precinct utilising state-of-the-art technology.



The NAS Project Office has been set up with dedicated staff to:

- Maintain business continuity throughout the life of the project
- Enhance student experience throughout the life of the project
- Take staff on the NAS journey, and
- Implement effective communications, change management and campaign activation to support the project

Major demolition and construction work is being carried out directly below operational areas, including teaching/learning spaces, research facilities, the library and laboratories, all of which are sensitive to noise, dust and vibration. Due to the nature of the staged works, access paths to operational areas have also changed throughout the life of the project. Therefore a carefully planned business continuity strategy has been developed to ensure the University continues to operate during the construction.

The project has offered RMIT students a unique opportunity to learn and interact with a major construction project. Student impacts and opportunities to engage with the project have been identified, with a strong focus on Work Integrated Learning (WIL). Whether it's by attending public lectures delivered by industry leaders working on the construction program, creating art to be displayed on the hoarding or photographing the new spaces, NAS provides a variety of ways for students to get involved.

The project has been supported by a communications and engagement strategy that has seen awareness, sentiment and attitude towards the project increase throughout the life of the project at the same time the construction impacts have increased.

C6: Unlocking educational social value, at the New Sunshine Coast University Hospital

Dr Stephen Long, Architectus and Jill Nicholson, Sunshine Coast University Hospital and Aditi Saha, Aurecon and James Wright, Lend Lease

Biography: This paper is co-authored by the team that lead the design and construction of the Sunshine Coast Health Institute at the Sunshine Coast University. Jill Nicholson RN, DipNursing, BSc(Hons), MA lead the development of SCHI on behalf of Queensland Health. Stephen Long Phd, BArch (Hons I), Architectus, was the lead design architect for SCHI. Aurecon were the engineers and are represented by Aditi Saha BE Mechatronics, CPEng, RCDD. Lend Lease were the contractors responsible for the project and they are represented by James Wright DipSurv., MSC.

Abstract: Early collaboration between users, designers, and the builder has led to the most spectacular results at the new Sunshine Coast University Hospital, where the early design process envisaged a highly integrated education community; collocating contemporary teaching space, research space, and collaboration spaces, with front line clinicians within this tertiary hospital campus.

The Sunshine Coast University Hospital (SCUH) is a \$1.8bn project built in a private/public partnership by Exemplar Health for Queensland Health. Exemplar Health won the project in a competitive bid led by Lendlease with an architectural team of Architectus Brisbane in association with clinical architects HDR Rice Daubney, and supported by Aurecon engineers.

The Sunshine Coast Health Institute (SCHI) is an integrated and comprehensive education, skills training and research facility for health professionals and vocational students. The institute is a partnership between the Sunshine Coast Hospital and Health Service, the University of the Sunshine Coast, TAFE Queensland – East Coast, and a medical school provider. The uniqueness of the tertiary health/education partnership, with collaboration and co-operation at the heart, was key to achieving an outstanding integrated education/ health facility

The presenters from the SCUH project:

- Jill Nicholson RN, DipNursing, BSc(Hons), MA – SCHI/ SCHHS
- Stephen Long Phd, BArch (Hons I). – Architectus
- Aditi Saha BE Mechatronics, CPEng, RCDD. – Aurecon
- James Wright DipSurv., MSC. – Lendlease Healthcare and Scientific Research

The presenters will focus on key design and contemporary teaching space drivers that evolved the SCUH/SCHI partners vision within a collaborative design process and delivery period:

- Creating an innovative environment for student development – user experience
- Movement towards social connection – statistics for collocation
- Co-locating SCHI partners – creating synergy
- Unlocking the potential of campus – innovation
- Mix of uses and mix of inside and outside spaces – importance of the ground plane to connect people
- Connectivity in design
 - Physical urban planning
 - Front line clinicians
 - ICT and technologies (including simulation suites, human visualisation, and digital library)
- Future planning

C7: The Learning and Teaching Building: A Commitment to Campus Life

Meaghan Dwyer, John Wardle Architects

Biography: Meaghan is a Principal at John Wardle Architects. She has partnered with a number of universities to design and deliver projects across several states of Australia. Her experience spans a wide range of project types - libraries and learning centres, art galleries, schools of art and architecture, scientific research buildings and buildings for the visual and performing arts. In each case she and the team at JWA have created contemporary learning settings that are deeply connected to place, and fondly adopted as a part of everyday university life.

Abstract: The new \$275M Learning and Teaching Building at Monash University Clayton Campus represents current market capability in prefabrication to support early delivery within a design and construct procurement methodology. This approach has enabled the rapid delivery of 28,000m² in total area, comprising over 70 centrally bookable learning spaces for a range of cohorts - 30, 60, 90 and 120 and 180, 240, 700 informal study seats, and new offices for the Faculty of Education.

The Better Teaching Better Learning Agenda proposes a shift away from predominantly didactic teaching practices toward a student-centred approach that is characterised by discovery, creativity and opportunity. The Learning and Teaching Building will be a bellwether for the transformation of learning and teaching at Monash University.

A particularly ambitious program of 34 months from engagement of the design team to completion was set given the pressing need for learning and teaching spaces of this kind. The challenge for the design team has been to work with the contractor to integrate substantial prefabricated elements into the design with a view to meeting program.

Amongst other elements, large sections of the sawtooth roof were prefabricated in a nearby warehouse - installation of insulation and cladding complete, and craned into position, one after the other until all 12 were in place. Each section of roof spans 24 meters, rises 3 meters in height and occupies a foot print 6 meters deep. The timber trusses have been fabricated with laminated veneer lumber manufactured with sustainably sourced Radiata Pine (FSC certified), and finished with white tinted polyurethane finish to even out the visual features - knots, splice joints and the like, to achieve an architectural finish. Each section is designed with south-facing glazing to allow diffuse natural light to a series of internal atria below.

Monash University recognises the benefits of prefabrication and subsequently commissioned a research report that is being co-authored by JWA, AECOM, and MULTIPLEX. This report is intended to provide greater insight into the opportunities for the application of prefabrication to future capital works programs at Monash University.

C8: HiQ: How can we help you? A new student service model for QUT

Natalie Ryan and Stephen Low, Queensland University of Technology

Biography: Natalie Ryan is a project manager who specialises in engaging staff in the design of new services to bring about university-wide change.

Stephen Low is an experienced capital works manager with a strong interest in creating a sticky campus that enhances the student experience.

Abstract: QUT has embarked on a transformational program to develop a university-wide service model for student services that blends physical and digital service provision. QUT HiQ represents a new approach to connecting students with services and features a purpose built space on each of our city campuses, a new mobile app, redesigned web resources and a new service model.

At the heart of HiQ is a university-wide tiered service model that is based on a distributed partnership approach. All areas of QUT that provide services to students participate in this model with agreed handover triage and processes, cross-service training and knowledge sharing, and shared physical and digital spaces for the delivery and promotion of student services and activities. The HiQ governance model includes representation for all services, experience measure analytics and a dedicated role in the HiQ team to lead quality assurance and continuous improvement.

The physical spaces for QUT HiQ have been strategically located on the ground floor of the main library building on each campus. This central location takes advantage of the existing student activity in those areas, which supports promotion of the new HiQ service. The HiQ physical space for QUT's Gardens Point campus required a major refurbishment of approximately 1200m² which included the new service space, student lounge and collaboration areas, café, student activity room and contact centre. The flexible HiQ spaces have been designed to be utilised by the whole QUT community and have been equipped with the latest technologies.

The Gardens Point space features a 17.5-metre-wide (42 m²), ultra-high definition interactive digital wall, with a smaller wall at Kelvin Grove, complemented by self-service touchscreens giving students access to a wealth of information from on-campus events to computer availability. The main wall uses 'gesture and swipe' interactivity enabled by Kinect cameras, similar to that used in video gaming.

This session will give an overview of the new HiQ model and space. We will showcase the approaches to physical and digital design that have allowed us to develop an entirely new approach to student service in eight months from proposal in August 2016 to doors open in April 2017. The session will also detail the ways that the project has brought about a cultural change within the university from siloed service provision to a shared service delivery model and a shared desire for the success of HiQ.

Tuesday 19 September 2017

SESSION 6

11.00 am – 12.35 pm

CONCURRENT D

D1: Transitioning to performance based (proactive) HVAC maintenance at University of Queensland

Paul Gilmore, A.G. Coombs and Kevin O'Sullivan, University of Queensland

Biography: Paul Gilmore joined the A.G. Coombs Group in 2014 as Executive Manager Group Business Development. Prior to this, over a 25-year period, Paul has held various senior functional and executive management roles in private and public (ASX100) companies spanning a broad range of industries, including the facilities management services sectors. Specialising in the areas of manufacturing, marketing, operations and product development. Paul has led the development of various facilities management and maintenance models focusing on process improvement to drive efficiency and reduce ongoing costs to deliver higher quality measurable service outcomes.

Abstract: The University of Queensland (UQ) approached the market in 2015 seeking a specialist building services provider to deliver a holistic solution to their Heating, Ventilation and Air Conditioning (HVAC) lifecycle and maintenance program - HVAC Maintenance Solution.

Historically the management and maintenance of the HVAC equipment and systems was task based routines, with repairs and rectifications primarily reactive, often leading to inconvenience and unplanned costs.

The University has a diverse base of HVAC assets over 300 buildings across twelve (12) campuses and required maintenance strategies to optimise performance over the short, medium and long-term whereby the HVAC assets are not maintained as individual parts but maintained holistically as systems and subsystems.

UQ appointed A.G. Coombs (QLD) to implement a performance based delivery model, with the key objectives of this model to include the development of maintenance strategies to optimise system performance and environmental outcomes across the Universities large and diverse building portfolio.

Taking a systems-based approach to maintenance, as opposed to looking at individual assets, the maintenance methodologies consider each component as a part of a larger system and works to ensure these systems integrate in the best possible way to deliver the best operational and environmental outcomes for the buildings.

The service delivery framework also addresses the technical redundancy or obsolescence of aging assets, broader environmental and lifecycle considerations, operational performance, and condition and/or risk-based decision making.

The collaborative journey between University and A.G. Coombs has required an ideological shift to performance based maintenance strategies delivered through a staged approach, together with a commitment and significant effort from both organisations to ensure the processes match to the outcomes.

This joint presentation will provide insights from the University (Customer) and A.G. Coombs (Service Provider) perspectives on the journey so far; the Eureka moment 'revolutionary thinking' initiated by the University. A collaborative process to implement this new and innovative Performance Based maintenance solution, including the planning, systems, technology and analytics which have been leveraged into the second year of the contact.

D2: University of Melbourne Smart Campus Initiative – Advanced data analytics in planning and management

Dr Jan Dethlefs, Chancellery - Property & Sustainability and Jade Germantis, University of Melbourne

Biography: Dr Jan Dethlefs has worked for 10 years at the University of Melbourne. In 2016 he developed the Location Analytics Project to support campus analytics using wireless data. This project supports various divisions in infrastructure planning with in-depth wireless and contextual data analytics.

Jade Germantis leads the Spatial Data team at The University of Melbourne and transformed the static-information based environment into a dynamic resource of 'live' spatial information supporting university operations.

Jade leads a team of technical specialists in driving the optimal utilisation of the University's portfolio of space.

Abstract: Agile data analytics opens new possibilities for business and management on a daily basis. Not only can we collect information faster and better, but we can also distribute information faster, more target specific and facilitate timely decision making.

As the 5th largest 'city' in Victoria the University has a huge economic, environmental and social impact on its surroundings and the city of Melbourne. More than 200,000 visitors travel across the campus on a daily basis during the semester periods. The University started the Big Data Wireless project in January 2016 to better understand how the campus functions given the large number of people who visit, study, work, live and shop on campus.

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Over the last year the University of Melbourne was able to demonstrate that integrated analytics will fundamentally change the approach to managing and operating its facilities by combining real-time data with conventional data systems.

Data from various sources are correlated with WiFi analytics to analyse the performance of the multiple campuses and guide maintenance, space planning, resource distribution, refurbishments and other aspects of space and infrastructure management.

Capital planning, business case development, reducing greenhouse emissions, providing a campus that is better tailored to the needs of its occupants, targeted waste collection and maintenance are just a few of the goals of this project.

We will demonstrate some of the use cases and results from the big data analytics project.

Agile Big Data Analytics has improved our understanding how to build a more sustainable and efficient campus to compete globally in the 21st century.

D3: The Path to Publishing: Write here, right now!

Dr Carroll Graham, ATEM

Biography: Carroll Graham is a third space professional with more than two decades' experience in the TE sector. Following completion of her doctorate, Carroll now consults across the sector in leadership and management. Carroll now co-edits the Journal of Higher Education Policy and Management, ATEM's journal

Abstract: This workshop is held on behalf of the Journal of Higher Education Policy and Management, which is published six times a year. The workshop is aimed at facilitating ATEM and TEFMA members to publish, particularly in this journal but also in others. After an introduction and framing of the requirements for writing and publishing in a peer-reviewed journal, participants will be given the opportunity to work on a idea of their own, with the view to developing a future publication.



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- One volume of your 'target' journal.
- A copy of an example article — this could be from a different volume to the one you bring.
- An idea for your own paper.
- Writing and drawing materials.

On completion of this workshop, a participant should be able to:

- Discuss the benefits of writing a journal article as a tertiary education professional.
- Identify some of the constraints that may exist in making the decision to write a journal article.
- Discuss practical ideas for overcoming barriers to writing and publishing.
- Know how to identify an appropriate journal for a particular paper.
- Describe the key features that editors look for in a publishable paper.
- Be more enabled to convert a coursework article, or work report, into a publishable paper.
- Appreciate the importance of a well-crafted abstract.

D4: Maurie Pawsey Award - Campus space and utilisation

Nicole Eaton, RMIT University

Biography: Nicole Eaton is the Associate Director, Planning & Asset Utilisation within Property Services, RMIT. Responsible for 5 year property planning, space management, space utilisation/optimisation including maintenance of space database/drawings, and timetabling. Nicole has presented at various forums in Aust, NZ and South-East Asia on virtual timetable modelling to inform building requirements / design.

Nicole has a strong interest in new generation learning spaces and technologies to support the optimisation of space to support the University's growth.

Abstract: As the 2016 Maurie Pawsey Award winner, Nicole has attended the 2017 annual APPA conference held in San Francisco, California.

In addition to attending the conference Nicole has visited Universities in Finland, the United Kingdom and United States of America reviewing:

- * Space Management solutions.
- * Space Utilisation measurement and monitoring techniques.
- * Innovative space design particularly learning spaces and incubators.

At this session Nicole will share her experience and learnings.

D5: QUT LaunchPad: The Genesis of a Makerspace

Jonathan James, Scott Abbett and Brian Logan, QUT

Biography: Jonathan James, Scott Abbett and Brian Logan work within the Science and Engineering Faculty at QUT.

Jonathan is the Technical Services Manager, leading a team of 51 highly specialised technical staff who manage the Faculty's experiential learning and research environments.

Scott is the Supervising Technician for the Engineering Precinct team, overseeing a team of 10 highly specialised staff and laboratory facilities including the LaunchPad.

Brian is the Health Safety and Environment Manager, and works very closely with the technical services team.

Abstract: As Universities attempt to engage the current generation of learners, physical transformations are underway creating technologically rich, team-based learning spaces combined with warm social environments. Similarly, laboratories are being re-positioned to accommodate an increasingly diverse range of activities while enabling significantly larger class sizes. This modernisation of facilities has been hugely successful in transforming the 'stickiness' of a campus, although an emerging student-driven 'maker-culture' is changing the way the Science and Engineering Faculty (SEF) at QUT is conceiving student engagement.

Makerspaces have been aligned with Universities for many years. Since the introduction of 'Hackerspaces' in the mid 1990's the popularity of student-driven experiential laboratories has grown markedly with the 2015 NMC Horizon Report for Higher Education identifying Makerspaces as important developmental environments over the next 2-3 years. In 2017, SEF opened its first dedicated Makerspace termed the 'LaunchPad'. Although in its infancy, this space has exceeded all expectations and challenged our thinking about how we can best engage our learners.

The LaunchPad was developed in response to community feedback seeking an accessible laboratory environment to undertake physical hands-on work associated with coursework, research projects or skills development. Drawing on a wealth of literature plus several site tours across the country, a joint Technical Services and Health, Safety & Environment team was formed to undertake the design and implementation of this facility. This partnership approach has been key to implementing a streamlined access methodology while embedding fundamental safety principles.

The introduction of the LaunchPad has delivered a vibrant and heavily utilised facility drawing users from multiple disciplines and courses. With over 900 users completing inductions in the first six weeks of operation, and the laboratory now

consistently at capacity, the faculty is seeking to assess the impact on student experience. Measuring the success of such an environment is an important challenge requiring more than utilisation figures alone, however by uniquely linking this facility to many faculty teaching programs, sustained attendance is projected.

The sustainable operation of such a facility is now being evaluated. With impact to both financial and staffing resources, the faculty has implemented several innovative solutions to enable increased student leadership while maintaining ongoing viability. There has been much to learn from the development of such an environment and we are far from understanding the true nature of effective operation, however the overwhelmingly positive feedback from both users and course coordinators indicates that a significant need is being met.

D6: Shaping new technologies, disrupting old business models, and resetting the boundaries of what's possible

Dylan O'Donnell, Cushman & Wakefield

Biography: Dylan is responsible for the Victorian Global Occupier Services and the growth and success of our real estate services platform for our occupier clients. In this capacity, he drives whole-of-business initiatives for consistency and value in

the following areas:

- Strategic engagement with clients across their property requirements
- Development of innovative leasing strategies, acquisitions and divestments
- Lease management and compliance.

Dylan's strengths lie in harnessing the collective knowledge and expertise of our global occupier services, tenant advisory and commercial real estate businesses, plus strategic partners to deliver the most valuable real estate solutions possible for occupiers in Australia and New Zealand.

Abstract: Founded in 2012, 1871 was created to support Chicago's digital startup community. Since that time, it has become the hub for the city's thriving technology and entrepreneurial ecosystem. Today 1871 is the home of more than 400 early-stage, high-growth digital startups. Located in The Merchandise Mart, this 12,000 square metre facility is also the headquarters of nationally recognized accelerators, industry-specific incubators, tech talent schools, the Illinois Science and Technology Coalition — the state's leading technology advocate, a number of Chicago-based VCs, and satellite offices for Northwestern University, University of Illinois, University of Chicago, Loyola University Chicago, Illinois Institute of Technology, DeVry University, and DePaul University. Chicago's brightest digital designers, engineers and entrepreneurs are shaping new technologies, disrupting old



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- University of Queensland's Forgan Smith redevelopment for the School of Law
- Sydney Research Centre— a Strategic Plan, Business Case and Design for a \$300m facility collocating 5 major research organisations
- Materials Science & Engineering Building - a \$145m development for UNSW
- Ingham Institute for Applied Medical Research – including a skills simulation centre and MRI-Linac bunker
- various business cases and feasibility studies for UQ, UNSW, WIMR, UOW and Monash.

Some projects underway include:

- University of Wollongong's \$70m Molecular & Life Sciences building
- Macquarie University's 'The Arts Precinct', a \$150m signature facility
- UNSW's \$210m Science & Engineering Building - new teaching and research facilities for the Schools of Chemistry and Chemical Engineering
- procurement management of a PPP initiative for the University of Wollongong's new Health Precinct on the Innovation Campus
- business case for UQ's proposed new Student Hub complex.

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business models, and resetting the boundaries of what's possible.

Cushman & Wakefield will provide an overview of this successful collaboration between universities and a diverse range of start-ups and established corporates, accelerators and venture funds. We will look at a local example, the Start-Up Precinct in Brisbane, a Queensland government initiative to support their local start-up community. We will also discuss the role similar adaptive, co-working facilities could play in Australia to foster collaboration between universities and the corporate sector and start-up communities. What lessons can be learned from Chicago 1871 that can be applied to a local context in Australia?

D7: Designing and managing the New Campus: The influences shaping today's university environment.

Sonia Monaghan and Scott Annand, Deakin University

Biography: Scott Annand is a highly motivated project manager within Capital Projects at Deakin University. He possesses vast experience in the construction industry providing a pragmatic yet creative approach to problem solving. Scott's passion for working with people is reflective in the strong working teams he builds on each of his projects.

Sonia Monaghan is a registered architect working within Facilities Services Division at Deakin University. She draws from knowledge gained in private practice to push the architectural agenda in complex projects, often with challenging stakeholder requirements. Sonia has a strong interest in universal design and has recently undertaken a Diploma of Access Consulting.

Abstract: What exactly is The New Campus? Do we need to understand the Old Campus, before we can identify the new?

Social culture, expectations and changing pedagogies are contributing to dramatic changes in how the built environment of a university looks and feels. This presentation explores these elements and asks is the biggest contributor to the New Campus perhaps the shift in audience? If so, who are we designing for? How do we design and manage spaces that are highly specialised, yet also multi-use and highly flexible? How can the built environment attract partnerships and business opportunities, while simultaneously enhancing graduate's agility, resilience and critical thinking- attributes, deemed key to employability.

The presentation (lecture format, concurrent session) will explore these concepts and how Deakin University has found solutions to address the challenges and opportunities created by The New Campus. The premise of the argument: Don't reinvent the wheel. Be clever, considered and practical.

The presenters, project manager Scott Annand and architect Sonia Monaghan, will showcase four recent capital work projects at Deakin University to underpin discussion

Burwood Central Precinct and Burwood Atrium projects will demonstrate how dynamic student expectations and shifting social cultures have been embraced. The discussion examines how highly considered yet seemingly simple solutions have had significant impact on student experience and campus identity, by converting forgotten space into multifunctional and purposeful places for learning and collaborating.

Waurm Ponds Building IB Learning Space Design will examine the constantly evolving forms of learning, the challenge of balancing flexibility with highly specialised stakeholder requirements, and how space constraints and economic pressure have driven innovative solutions.

The final example will demonstrate community connectedness through the Elite Sports Precinct, a facility that has enabled Deakin University to collaborate effectively with external parties in new ways. The project highlights that connected thinking and a heavy investment in planning has achieved substantial benefits for students, local community, and the sports industry, ultimately translating into enhanced community engagement and a significant business success for the University.

D8: The revolution is upon us: The movement towards shared services in the Australian Tertiary Sector

Joanne Austin, RMIT University

Biography: Joanne Austin has worked in the Australian tertiary education sector for over 28 years and has held an array of leadership positions in Higher Education, the current being Director, Planning and Resources in the College of Business at RMIT University in Melbourne. Joanne also taught as a sessional academic for 7 years and has undertaken consultancy to review faculty functions for another university. She is a Vice-President of ATEM and holds three degrees including a Masters of Tertiary Education Management (UniMelb). She is currently enrolled in a PhD exploring the provision of Shared Services in Higher Education in Australia.

Abstract: Australia's higher education sector is currently being revolutionised in terms of its operations of core administration and student facing service functions. The reasons are many, including past and proposed funding cuts, increased competition, rising technology developments and the changing nature of the student.

As a result of these changes, universities are being forced to become more competitive and review how they are allocating and spending their resources – and in steps the

concept of shared services. However, taking a corporate world concept and fitting it to the tertiary sector is a challenge given the complexity of campus locations, clients and service requirements. In addition, there is not always a full understanding of what 'shared services' means. Some universities have implemented a mix of faculty-based services coupled with university-wide services whilst others have centralised all services. This paper explores what shared services actually is, how this has been implemented in the Tertiary education sector and discusses the movement towards shared services in four Australian universities. It was found that all are implementing various versions of shared services but that the planning and implementation of these has been ad-hoc, siloed and with an internal focus, which it is argued is not the best approach for a sustainable customer focused future.

D9: Australasian Campuses Towards Sustainability

ACTS

Abstract: There are many amazing, world class, sustainability initiatives taking place in Australasian tertiary education institutions, but how does our sector identify and learn from the leaders and the best initiatives? Delivered by ACTS in collaboration with two or more institutional partners, this presentation showcases a diverse range of best practice initiatives from the 2016 Green Gown Awards Australasia (GGAA) winners across 10 categories including Facilities & Services, Built Environment, Carbon Reduction, Learning & Teaching, Student Engagement and Continuous Improvement as well as three individual winner categories. The presentation includes at least two case studies with short videos from winning institutions in the Built Environment, Facilities & Services and/or Carbon Reduction categories. The annual GGAA recognises institutions for their achievements and disseminates these best practice initiatives both nationally and internationally via case studies, videos and presentations available on the ACTS website. The Awards are truly global and while delivered regionally in Australasia, UK and French-speaking Europe and Canada, these winners then compete for the coveted international title in multiple categories.

CONCURRENT E

E1: Implementing activity based work environments within a University - The Deakin Experience

Terry Roche, Deakin University and Jo Dane, Woods Bagot

Biography: Terry is Manager, Space Management and Planning at Deakin University. In this role he is responsible for ensuring the University is using its space optimally and for identifying and responding to future space needs including teaching space, research space, student support spaces and staff accommodation. Terry has over 25 years in strategic space planning and management with a number of Victorian Universities and a UK University. He has consulted on strategic space planning within Australia, the Middle East and the United Kingdom. He is a Senior Fellow at the LH Martin Institute at the University of Melbourne.

Abstract: Over the recent decade there has been considerable interest in the corporate world on the implementation of Activity Based Work environments, or ABW for short. Numerous examples exist in the Banking and Finance sector of a large scale shift to what is proclaimed to be a superior work environment. The champions see these ABW as providing more engaging, relevant and adaptable work spaces for staff. This, the theory goes, leads to improved staff satisfaction and reduced real estate costs. The detractors however have been equally vocal, particularly the academic community, where there has been some strong resistance to the move away from enclosed office spaces. Whilst some institutions are grappling with the concept of moving academics out of offices to open plan areas, Deakin University has been undertaking a number of projects that employ key principles of activity based work, with one project in particular involving academic and research staff.

The presentation will explore the drivers behind Deakin's decision to implement Activity Based Work settings in a number of projects. Lessons learned from previous implementations of open plan accommodation, particularly for academic staff will be explored and shown how they have led to the shift from open plan to ABW.

Currently Deakin is designing two projects for an ABW implementation, one for solely professional staff and the other for academic, HDR and professional staff. The presentation will share the design processes undertaken, focusing in inputs and outputs through a detailed engagement with the areas relocating to an ABW environment.

The presentation will also address issues that impact on the lived experience for staff within such environments, and the methods Deakin is putting in place to achieve the balance between good space use and good work environments for staff.

The presentation will focus on addressing the issue of staff space satisfaction within the ABW environment and its suitability to an academic institution. A comparison will be made of a recent UK experience for the University of Manchester, where the Faculty of Science and Engineering is undertaking planning for the relocation of academic staff to open plan as part of a new construction. Lessons learnt from this process will be examined as to their applicability within both Deakin specifically and Australian Universities generally.

E2: KPI's to measure HE facilities performance / Predicting space needs for research

Geoff Hanmer, Arina/UNSW and Rocio Bona, Curtin University

Biography: Geoff Hanmer is the Managing Director of ARINA, a consultancy specialising in the strategic planning and delivery of HE facilities in Australian and SE Asia. ARINA have worked with 34 of the 39 universities in Australia and with universities throughout SE Asia, including the National University of Singapore and the Asian University for Women in Chittagong. Current projects include the development of a Science Capital Program for Curtin University, the Monash University Biomedical Teaching and Learning Building (with DCM), a masterplan for the ACU North Sydney Library and the School of Indigenous Studies for UWA (with Kerry Hill Architects).

Dr Rocio Bona is the Planning Director of Curtin University. Her mission is to 'make Curtin a greater place' by ensuring the quality of Curtin's physical environment supports excellence in teaching, learning and research by:

- 1) Providing strategic advice on existing and future facilities, land-use planning, capital investment, and sustainable development for the long-term viability of the University.
- 2) Collaborating with faculty, clients, stakeholders, researchers, businesses, neighbours and the broader community to grow the intellectual capacity of the University for the benefit of all Australians.

E3: Break out your black turtle neck jumper - it's time to talk about design

Adam Davies, Hassell

Biography: Adam Davies once delivered a two day workshop for 30 Scottish and 30 Dutch landscape architects; successfully. He specialises in campus design, masterplanning and urban design for the higher education and health sectors. Prior to his role as a Principal in the international design firm HASSELL he held senior positions at Architecture and Design Scotland in

Edinburgh and the Commission for Architecture and the Built Environment in London.

In the late 1990's and throughout the 2000's a revolution swept across Great Britain and parts of Europe that began to elevate the importance of thinking about the role design plays in creating better places, better health facilities and schools, better towns and better cities. Arms-length government funded organisations such as the Commission for Architecture and the Built Environment, Architecture and Design Scotland and the Design Commission for Wales were established, born out of their early Royal Fine Art roots.

Abstract: These organisations were empowered with reconsidering how good design was enabled, and what tools and techniques could be put in place that contributed to places that brought joy, safety, job creation, investment, health and a greater sense of community. They principally worked across major public procuring and regeneration bodies, helping clients to deliver better outcomes. They were contributors to the establishment of a solid research and evidence base, and advocated for the creation and adoption of better policy.

So what's the point? What's this got to do with the higher education sector in Australia?

Higher education providers throughout Australia are amongst some of the most altruistic clients in the country - deeply committed and aspiring to the creation of enduring value for their students, staff, partners and the community at large. Some of the greatest drivers that we face on campus today are influenced by the role of design - student experience, flexibility and adaptability, resilience, technological change, financial sustainability, brand and dare we say it - beauty.

So it's time to lay some of those design enabling tools and techniques bare for examination and scrutiny. Time to reconsider whether a few of these techniques can make your institution a better client, who strives for greater coordination, engagement and improved design outcomes.

This talk will build upon the lessons learnt in Australia to outline the behaviours, resources and processes used to increase the chances of great facilities, and campuses and happy communities.

In the late 1990's and throughout the 2000's a revolution swept across Great Britain and parts of Europe that began to elevate the importance of thinking about the role design plays in creating better places, better health facilities and schools, better towns and better cities. Arms-length government funded organisations such as the Commission for Architecture and the Built Environment, Architecture and Design Scotland and the Design Commission for Wales were established, born out of their early Royal Fine Art roots.

E3: Wicked problems – an opportunity to change our practice

Linda Ward, Charles Sturt University

Biography: Linda Ward is the Professional Learning Manager, Division of Student Learning at Charles Sturt University. Her responsibilities include the coordination of professional learning and development across a large division to Schools and Faculties. Linda has worked in Higher Education for 10 years as an Educational Designer and Manager of Learning Design teams. Her interests lie in the areas of course design, use of educational technology in Higher Education and professional learning. Linda is a member of ASCILITE.

Abstract: Eureka! I have a problem! Many in fact! But they are not discrete problems; they are interconnected, involving multiple stakeholders who have different priorities and ideas. Nailing down the exact nature of the problem is also tricky and elusive. It seems to change and morph with every attempt to solve it. My normal approach to problem solving just doesn't work. Argh! Could this be a wicked problem? Krause (2012) draws on the work of Rittle and Webber (1973) to describe wicked problems as; "ill defined, views on possible solutions vary widely across diverse parties with vested interest in the problems and how to address them, the problems change in

scope and nature on a daily basis and according to the setting in which they are addressed and today's apparent solution is no guarantee of tomorrow's success" (Krause, 2012, p.286).

As the Higher Education sector is facing unprecedented challenges and Universities undergo organisational change processes, professional staff and middle management need to learn new ways of working in an environment that is volatile, uncertain, complex and ambiguous (Shapland, 2013; Johansen, 2009).

My presentation will explore the following;

- What is a wicked problem?
- Why do I need to know about wicked problems?
- How do I solve wicked problems?
- What skills do I need to develop?

The concept of wicked problems challenges our current notion of problem solving and requires us to think outside of the square, to move outside of our comfort zone, to find a shared commitment to action a problem rather than a complete solution. To do this, requires skills in engagement and collaboration to build new working relationships across Schools & Faculties, Divisions or even across organisations. The concept of wicked problems underpins the themes of the conference – unless we reassess some of our traditional ways of working and solving problems how can we get our revolutionary ideas to fruition?

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E3: Flexible Ventilation Design for Laboratories

Hugh Wilson, Umow Lai

Biography: Hugh is a mechanical engineering consultant with a keen interest in Tertiary education and Laboratory building design. For the past decade or more, Hugh has been providing mechanical design solutions for a wide range of laboratories – including PC1, PC2, PC3, Clean room to name a few.

Abstract: How can you design mechanical services for a lab when you don't know who is going to use it???

A challenge recently faced by the Umow Lai HVAC team in Sydney was to provide HVAC system design for a large laboratory building that would offer total flexibility for the future tenants. The catch: there is no information about what tenants might lease the lab spaces!

The technical challenge is to provide a future proofed HVAC design that will cater for just about any Laboratory user, without the need for major building works to facilitate exhausts and the like. The brief required that an unidentified number of fume cupboards should be allowed for, as well as anything that could be reasonably foreseen as required for any lab space.

In rising to this challenge, Umow Lai's mechanical engineers developed an innovative system design that can be built as a fully commissionable "warm shell" such that tenants can move in and utilise the centralised HVAC services for just about any laboratory system they require, in a very simple plug-and-play manner – without knocking down walls or putting ductwork on the outside of the building!

The aim of this presentation is to share the challenges faced by the design team, and to provide an overview of the proposed system which will see room exhaust, fume cupboards, specialty exhausts and smoke management system exhaust all combined into a single system which offers full flexibility of use, with significant space savings

The learning outcome is the design of flexible laboratory systems that can be commissioned to a PC2 level without

any tenants, and can be gradually occupied and modified without impact to the operation of the building or any adjacent tenancies/spaces.

The format would be a succinct powerpoint slide show that would accompany the verbal presentation, and is likely to be best suited as a HED talk.

The preferred learning environment for this presentation would be a lecture or conference room (or similar) with simple audio visual capabilities (projector/microphone).

E4: Transforming the Education Experience; and the Importance of the Learning Space

Andrew Ford, Sebel Furniture

Biography: As a Change Agent, Andrew helps create pathways to deal with uncertainty and provide lasting change.

Since 2010 Andrew has worked within the education sector to facilitate change and transformation for both K-12 and Universities, creating Learning Environments that work for all stakeholders.

Andrew's 2014 TED-X talk on delivering change within the education system references to the evidence of a systemic problem and to possible solutions. Andrew regularly speaks at conferences and has conducted change management workshops within 100 schools colleges and Universities with over 2500 educators, empowering them to transform their learning environments.

Abstract: "We are ALWAYS learning; but what are we being taught?"

I don't know where this quote comes from. Maybe I just made it up. However, it is very true and has a real sting when you consider how we prepare students for the future. So, what has this got to do with the Learning Space?

Since students are always learning, the experience of learning occurs the very minute the student enters the campus; is re-enforced by how the educator engages with them; and it does not end when they receive their grading. The students continue to learn the value of what was taught when they apply for a job. Here is where the student learns their real grade. Their real value! A federal government survey in 2015 found that after 4 months, over 28% were still seeking full-time employment. Why doesn't their degree lead to immediate full-time employment? If I did a trade apprenticeship, I would probably have a job immediately after the structured learning experience.

What is missing? And again; what has this got to do with space? The answer? Lots! (sounds lame but wait!)

Students are being taught a bucket load of theory but what industry also wants is 'practical application'. Students want this

also. The 2015 'Future Leaders Index' reported that 64% of HE students believe that the university is not providing the practical skills needed for application of theory. And this is where the Learning Space becomes so important!

In 1997 Thornburg wrote a paper 'Campfires in Cyberspace'. Within it he discussed how, over the millennia of time, humans have not changed. He talked about how when we were tribal we gathered in different group settings for different reasons; and since we are ALWAYS learning, each of these settings was a learning space. It included the large campfire setting where we all gathered to hear from 'the guru' (a lecture theatre – but who is the guru?) Tribally, we didn't live life in the campfire. We spend most of our time in small groups, collaborating, strategizing, creating, discussing, critiquing. All of us had time alone to either think deep thoughts (a cave) or to think big ideas (a lookout). All of this still happens every day in both formal and casual places.

How does this play out in an 'always learning' campus and what does the space look like to support it?

E5: Paradox of a POE: Ambiguity and Reason

Katherine McPherson, Developing Property Solutions and Leo Fincher-Johnson, University of Melbourne

Biography: Katherine McPherson is an Architect and workplace strategy lead at Developing Property Solutions, an independent property consultancy in Melbourne. With over 30 years' experience nationally in corporate, education, and local government projects, including roles at BVN and Geyer, she has a rich blend of brief development, design, and fitout delivery experience. Her skill is working at the boundaries of projects, integrating the place making and learning opportunities.

Leo Fincher-Johnson is a senior manager and engineer currently at the University of Melbourne with a diverse background and extensive experience in strategic planning, public procurement, construction and contracting, including delivery of significant capital projects and programs exceeding \$450m. Leo's skills are regularly used to develop major project contracts; financial and risk management; governance; and probity protocols.

Abstract:

Context

'Buildings by themselves are passive, but as a means to an end they facilitate dynamic and productive collaborations between researchers, across disciplines, and between the University and its partners.'

A post occupancy evaluation (POE) is a project review typically undertaken as part of a 'one off' building project delivery contractual obligation. Ideally the POE process is generative, contributing learnings to all stakeholders. However depending

on intent, the sponsor and the timeframe, it is common for a POE to be misunderstood and for outcomes to vary.

Relevance

The POE becomes a strategic business tool, when considering the task from the outset as part of a continual learning opportunity - first linking outcomes to project intent, then linking one project to another.

Initiated in the last 6 years by the University of Melbourne Project Services to overcome a stereotype, the comparative POE process is an example of an innovative approach. Now it is valued for its alignment with the University of Melbourne's (OC21) strategic plan Growing Esteem. This comparative POE approach demonstrates the capacity of groups and the individual, inside, outside and across organisations, working together to realise big ideas.

Focus

The aim is to unashamedly share the process and outcomes of a comparative POE including functional performance and delivery process from inception to completion on three complex building projects. This was undertaken as collaboration between the University Services and an independent property consulting practice. The presentation provides insights into the complex, delicate, and somewhat paradoxical POE task as well as the collective aspirations for current and future project reviews.

Method

This comparative case study looks at the comparative Strategic Post Occupancy Review process, considering the functional performance from an end user perspective and the delivery process from inception to completion. The presentation adopts an action learning perspective.

Analysis

Achievements and opportunities were identified by individuals and groups working together. Representative learnings include:

- beginning with a 'continuous review mindset'
- identification of sponsors and participation of stakeholders
- inclusion of asset management expertise to facilitate effective handover and minimise end user specific operational risk

Learning Outcomes

Presentation material will be structured to clearly articulate the tips and traps of the methodology used for data collection and synthesis from a range of sources including proprietary surveys, interviews, focus groups, and reporting functions. It will also highlight changed processes and further opportunities for improvements.

The Paradox a POE: Ambiguity and Reasoning

E6: Lessons from the West Coast: The Twenty-First-Century Campus

Paul Roberts, Turnberry Consulting

Biography: As Director of Turnberry Consulting, Paul Roberts has been involved in a wide range of international planning and development projects for tertiary education institutions, including the University of Oxford, University of Edinburgh, Trinity College Dublin and University of Melbourne. Roberts regularly lectures and publishes on campus planning and design. Publications include a comprehensive survey of university planning history, 'University Planning and Architecture: The Search for Perfection' (Routledge, 2015) and a profile of current campus planning and architecture, 'University Trends: Contemporary Campus Design' (Routledge, 2014).

Abstract: 'Eureka' - the state motto of California is where Paul Roberts's talk draws its starting point. The nature of university education and the development of its physical campuses in California, and the West Coast of the United States as a whole, shares significant similarities with that of the Australasian region. Their historical evolution follows an analogous pattern; there is climatic comparability; and they often compete for a similar pool of international students. Likewise are West Coast institutions facing a range of issues comparable to their Australian and New Zealand counterparts: squeezed public funding; suburban, commuter-dominated campuses; escalating inter-institutional competition; changing societal role; and the need to commodify research.

Roberts's concurrent session examines the innovative, place-based approaches that US West Coast universities are employing to address these challenges, distilling practical lessons that can be applied to the Australasian campus. By profiling key trends in campus development at West Coast institutions, including innovation hubs, living-learning communities and investment in arts infrastructure, the session will explore best-practice methodology for driving growth through physical estate. Through this lecture-style presentation and Q&A, attendees will engage with cutting-edge, international case studies in master planning and building typologies that have real relevance to their own campus contexts, thereby stimulating meaningful discourse about the campus of the future in Australia, New Zealand and beyond. It will be an indispensable learning experience for all those responsible for the management and development of tertiary education estates.

E7: Year of Change: Enhancing maintenance strategies

Kevin O'Sullivan, University of Queensland and Mick Serena, Donald Cant Watts Corke

Biography: Kevin O'Sullivan is the Associate Director, Asset Services at the University of Queensland. Kevin oversees maintenance operations at UQ and brings 22 year's experience in facilities management. He has a Diploma in Business Administration, an Advance Diploma in Project Management, a Diploma in Project Management and an Associate Diploma in Electrical Engineering.

Mick Serena is the Managing Director of DCWC Strategic Asset and Facilities Management (SAFM). He is experienced in project delivery, strategic planning, facilities and infrastructure management, business improvement and organisational change and has worked in a number of Director level roles at Universities to deliver innovative infrastructure solutions.

Abstract: This presentation outlines how to improve service delivery to support University goals including the student experience. Attendees will learn about a managed approach to business improvement.

Many FM organisations are looking for better ways to deliver services. However, are we on the right path and are we making sound decisions?

Looking at your business more broadly allows you to connect disparate information and see how everything fits together. The Eureka moment occurs when you see the end game and how you can move your institution to a better place.

This presentation focuses on work undertaken by UQ to better understand existing maintenance practices, optimise service delivery and to set a course to best practice in FM service delivery.

In 2015 UQ reviewed their maintenance services to baseline current maintenance practices and to develop a roadmap to best practice in maintenance management. Working with DCWC (SAFM), we measured the maturity of our maintenance systems against PAS 55.

This provided a detailed gap analysis and a prioritised development program to improve all areas associated with service delivery and assisted UQ to define its business model and related strategies for the provision of maintenance activities.

This work was supported by an Estate Performance Assessment (EPA) in 2016 to determine if UQ's asset portfolio aligned with the strategic objectives and services delivery outcomes of the University.

ABSTRACTS

The EPA provided UQ with an appreciation of whether the University's assets are aligned with UQs strategic plans and the funds that UQ should allocate over the next ten years to ensure that its asset portfolio is capable of supporting the University's strategic plan and objectives.

Through this work we learned that while we had been developing systems and processes, it wasn't being done in a co-ordinated and comprehensive way. These two reviews have provided information to make sound decisions based on empirical data assessed against best practice standards.

This has provided UQ with a best practice framework to reorganise our maintenance activities, communicate the need for extra funding and has also greatly assisted in engaging the UQ Executive in the development of the Strategic Asset Management Plan (SAMP).

We are now developing our SAMP, establishing more effective maintenance contracts, enhancing building condition assessments and effectively articulating our current backlog liability to UQ executives and are confident that we are aligning our practices and processes with best practice to better deliver appropriate maintenance services for UQ.

E8: ACTS Presentation

Wayne Miller - Charles Sturt University and University of Tasmania

Abstract: Carbon Neutrality and embedding sustainability into the curriculum - find out how!

There are many amazing, world class, sustainability initiatives taking place in Australasian tertiary education institutions, but how does our sector identify and learn from the leaders and the best initiatives? Following on from the ACTS delivered presentation, this session focuses on two key winners from the 2016 Green Gown Awards Australasia. Learn from Charles Sturt University and the University of Tasmania, when they provide in depth case studies on their award winning initiatives. Find out how Charles Sturt became the first Australasian institution to become Carbon Neutral in 2016 and how the university of Tasmania has taken learning to the next level by embedding sustainability across their curriculum through their student integration program. Both institutions will cover what the benefits of their programs have been, the challenges and how they have leveraged off their Award win.

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F1: No budget? No problem – The no cost solution for a greener campus

Guy Barnes, Northquest

Biography: Guy Barnes is a Director and Shareholder of Northquest, which he helped start 10 years ago. Guy has over 20 years experience in Finance and Consulting, culminating in his role at Northquest which combines both disciplines by offering innovative funding solutions for investments in Sustainability infrastructure.

Abstract: The two reasons most often cited by CFOs to explain why they don't invest in Energy Efficiency or Sustainability projects is that the payback is too long or the capital budget is not available. CFOs in the Tertiary education sector are no exception.

The Tertiary sector is compelled to achieve lower carbon emissions and more sustainable campuses. The costs to convert and transform their working environment can, however, be prohibitive. Access to capital is always an issue and pressure on paybacks is increasing.

Compounding the challenge is a new global Accounting standard (IFRS 16) released in 2016 that requires all operating leases to be disclosed on balance sheet from 2019 onwards.

Northquest has developed funding solutions for energy efficiency and sustainability infrastructure that address these challenges. Specifically, Northquest offers a Managed Services funding model which delivers the following outcomes.

- No capital required (paid for out of Opex budgets)
- Off Balance Sheet outcomes (even post 2019 IFRS16)
- Cash flow positive positive from day 1
- Transfers performance risk through Performance Guarantees
- Underpinned by long-term funding (10+ Years)

This session will demonstrate how to generate immediate net cash benefits for your organisation with no capital outlay.

Our Speakers will outline recent changes to the leasing standard, walk through how Northquest's solutions addresses the new changes, and demonstrate with case studies how organisations can achieve opex-funded sustainability solutions with immediate net cash benefits, no balance sheet impact and all operating risks transferred.

F1: Not your average CarPool, University of Newcastle and Liftango innovating to solve "that parking problem"

Tegan Betts, University of Newcastle and Kevin Orr, Liftango

Biography: Trystan is an operational excellence management consultant, now applying the 10+ years of experience earned across a wide range of industries to the tech start-up as COO of Liftango.

Innovation, technology and transport sectors have been the key aspects of his consulting experience, lending itself naturally to the development of the shared mobility service Liftango.

A natural affinity with people, influencing skills and an ability to quickly build relationships, yields a strong sales and business development capability.

Education: Master of Mechanical Engineering (Honours Degree) and Certified Project Manager (Australian Institute of Project Managers)

Abstract:

Context

The University of Newcastle faced the problem of car parking usage on campus. It's a perennial problem faced by many tertiary education institutions – which includes enhancing the student experience, managing the resources, and our impact on the community in which we reside and driving a personal modal shift (we plan to interact here through zeetings) The eureka moment came when the UON began working with Liftango – a technology start-up developing a car-pooling mobile app to solve this problem!

Relevance

Driving a commuting modal shift from single occupancy vehicles to shared mobility adds value to the fight against parking woes and harmful emissions. While carpooling programs may not be a new concept, the approach taken by the UON was unique.

The way the team worked through the process of solving the problem was innovative in its approach. The team adopted a Lean start-up methodology to develop, test and adapt the solution to make the greatest impact.

Together, the team have answered the question; "how do you encourage staff and students out of their well-established routine of driving solo to campus"

Infrastructure facilities and site management professionals would gain value from this talk, anyone with the following issues:

- commercially driven parking pressures e.g. new facility, increased staff/students

ABSTRACTS

- media-driven parking pressures on campus
- environmental policy goals
- social campus policy goals

Focus

What is the secret to reducing single occupancy vehicles driving to park on our campus? How can we get students car-pooling to campus, turning 3 cars into 1.

Method

Tegan Betts (Engagement Officer at UON) and Kevin Orr (Liftango CEO) have been working on this problem for over 12 months. The case study will share what worked, what didn't, what we are trying next and the future for the RideShare Revolution at the UON.

Analysis

We have found that the secret to successful modal shift is a combination of:

- incentives to encourage behaviour change
- convenience to reduce barriers-to-use through technology
- marketing growth hacks
- diligent operations implementation

Learning Outcomes

Insights into increasing social carpooling/rideshare for Universities. What is important/critical, unimportant, where to focus energy. Participants will gain insights on implementation strategy, the UON case study. Also, how large and traditionally cumbersome institutions can partner with start-ups to leverage their agility to drive innovation.

F1: Beyond four walls - Curtin University's living laboratory

Paul Dearlove, IBMS Pty Ltd

Biography: As Technical Director and one of the founders of IBMS Pty Ltd, Paul Dearlove, is recognised as one of the industry's technical leaders. Paul has been heavily involved in developing and deploying cutting edge technology in the built environment for over 30 years. He has extensive experience in building controls, the Internet of Things and is the original designer of IELVS (Integration of Extra Low Voltage Systems).

Abstract: The Engineering Pavilion was designed to showcase Curtin University's innovative and interactive learning culture. The intention of this project was to provide students with a world-class example of sustainable building design and an alternative pedagogical approach to education. Students learn by 'doing' and use the building as a scientific instrument, which demonstrates the core principles of engineering and the complexity of how a building needs to be designed in terms of structure and comfort. The building has transformed the traditional learning approach by examining static buildings as a "Living Laboratory".

A key component of the Living Laboratory was the Integrated Visualisation Platform (IVP) which is explored and demonstrated in this presentation. The IVP has helped transform the Engineering Pavilion from a static building into an innovative and interactive learning tool.

Project Elements

An Internet of Things network consisting of nearly 200 sensors installed in the building monitor the structure and environment. These sensors are linked to the IVP, which can continuously gather data from every device at up to 400 samples per second. All data is normalised, stored and rendered for display using a web server available via touchscreen kiosks in the building or mobile devices connected to the university network. Students can record a wide range of events and see the impact of their actions on the building.

• Structural Monitoring

Accelerometers and strain gauges mounted throughout the building structure capture forces and movement in the building elements. The impact of someone walking up a staircase or across a suspended walkway can be measured, recorded and then replayed for study.

• Mechanical Services

Data on the building's environment including temperature, humidity, carbon dioxide content and air pressure are measured and recorded. Students can analyse input and outputs of the air conditioning system to explore how different processes impact energy balance and indoor environment.

The IVP is extensible; any new project can be added to the system in the future.

Delivering the IVP required collaboration between various stakeholders including faculty, facilities management, ICT, technology suppliers and software developers. Starting with a broad collection of engineering topics, the design was sketched out and refined to a point where implementation could proceed. A key learning outcome of this presentation will be an examination of the delivery process and what was learnt.

F2: Big Data's Big Impact on Facilities Operations and Organizations

Donald Guckert, University of Iowa

Biography: Don Guckert is President-Elect of APPA and serves as the Associate Vice President for Facilities Management at the University of Iowa where he is responsible for campus planning, space planning and utilization, design and construction, energy management, custodial and landscape services, operations and maintenance, and utilities. He has thirty years of experience in higher education an additional ten years of construction industry experience. The Fellow Award and Meritorious Service Award are among the several awards and recognition Don has received from APPA. He is a licensed professional engineer and

holds a master's and two bachelor's degrees from Penn State University.

Abstract: The Big Data revolution is changing everything in our business and personal lives; credit cards, social media, on-line commerce, travel, automobiles and more. Higher education facilities management is just beginning to see the significant impacts and opportunities shaping our work, our facilities and our organizations. Even though the amount of information collected, analyzed and acted upon today is staggering, we are only in the early stages of a geometric explosion of change over the next decade. The experiences of the auto industry foretell similar changes that our utilities systems and building operations will experience. We need to be ready for the embedded technology, predictive analytics, and optimization that will require the development of new skills for our existing workforce and hiring new professionals to transform volumes of data into actionable information.

Learning Outcomes

- An understanding of the driving forces behind Big Data and the Internet of Things revolution.
- The lessons the building industry can learn from the Big Data analytics that fundamentally changed the auto industry.
- How the emergence of Fault Detection & Diagnostics is quickly moving our organizations into a more predictive maintenance mode and enabling continuous commissioning.
- Understanding the human resource talents and skills necessary to address the opportunities and challenges with the Big Data revolution.

F3: Reciprocal loyalty: Using the experience of transitioning to a new Business school to evaluate and develop a community of practice in professional services teams

Matthew Hisbent, Association of University Administrators (AUA)

Biography: Matthew Hisbent is currently Head of Operations in Oxford Brookes Business School in Oxford, UK. He leads a team of 8 senior managers with extended teams covering all aspects of professional services related to student and staff support, business development and research. His career has included roles in UK Scientific Research, the retail sector and similar roles in four other UK universities which he says has afforded him a broad perspective on managing teams and in particular within Higher Education. He has been a mentor on the PG Certificate in Professional Practice since its inception and he continues to value this as a key element in his own ongoing development. His current research focusses on Job Embeddedness and Job loyalty. In 2007 he was a team leader for the 'Professionalism and Excellence' team on the AUA study tour of tertiary education in New Zealand and he is a current

member of the Chartered Association of Business Schools Professional Managers Development Group. A graduate of the Open University in the UK his personal interests include the History of Corfu, cycling, travelling, writing fiction and working as a voluntary Trustee to a local charity.

Abstract: The 'Eureka' theme of the 2017 Conference suggests that 'all ideas start somewhere...a scribble on paper, a light-bulb moment in the bath, a spark from a conversation.' The spark for our Eureka moment was initiation of the project to move our entire Business School from the village of Wheatley into brand new bespoke premises in Oxford. The physical move seemed straightforward and largely about logistics and communication. We believed there was much more to it and that understanding the multi-layered human dimension to the relocation was crucial to it being successful.

With support from the Leadership Foundation in the UK we embarked upon a project called Reciprocal loyalty: Using the experience of transitioning to a new Business school to evaluate and develop a community of practice in professional services teams. Initially it was a case study which sought to consider the experience of transitioning to a new Business school through the lens of theoretical models of job embeddedness and to consider the impact on the staff experience of an established multi-team 'community of practice' in professional services teams. During our research we came to appreciate how important this topic was to an international audience and this has fuelled a follow-up project to widen the scope to other institutions of Higher (Tertiary) Education during 2018. This session will review the work done in the original project and signpost future directions we hope to follow.

F4: Innovation in Brief Creation: Spatial Pedagogy (or how re-framing the question led to design innovation)

Ben Lornie, Pttd

Biography: Ben Lornie is the education sector lead for PTID and has been innovating in the education environment for more than 10 years, working across four continents of projects for some of the most prestigious Universities and Corporate clients.

Abstract: The topic of innovation through the planning and briefing process is a key underpinning theme to Eureka moment for learning environment design. This topic also explores ways to transform future experiences, campuses and ensure that campus environments remain current to the changing trends of learning, and the millennial's who are increasingly the dominant cohort. This methodology when applied to planning and briefing unlocks the previously unrealised potential for projects to be customised and transformative.

For educators, facility managers, architects and designers this session will explore how changing the tools we use to capture information at the start of a project can radically improve the outcome- without adding time or cost to the project. This

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can increase space utilisation and education outcomes across campuses everywhere.

The session focuses on the bringing together of a future focused briefing session looking at pedagogies of the near future, and an architectural briefing tool; that separates the pedagogy from the spatial environment- focusing on the how of education- not the where, called Spatial Pedagogy. This tool supports the innovation of new environments that are tailored to the new parameters, without the historic baggage of the classroom.

The session – and subsequent paper- will be co hosted by Associate Professor Dr Wes Imms, Learning Environments Applied Research Network, Head, Visual Art and Design Education at the Melbourne Graduate School of Education; and Ben Lornie.

Ben Lornie is the education sector lead for PTID and has been innovating in the education environment for more than 10 years, working across four continents of projects for some of the most prestigious Universities and Corporate clients.

Spatial Pedagogy has been used to develop the brief for studioFive at the University of Melbourne. This environment is a highly unique environment with many pedagogy led innovations in design and planning. The session will show how the process

supported these varied innovations, how the innovations went from the Eureka moment to a fully realised idea and explore how this tool could be implemented to significantly better outcomes in future projects.

F5: Creating meaningful 'Real World' learning experiences in the Virtual Age

Sean Wooster, Umow Lai

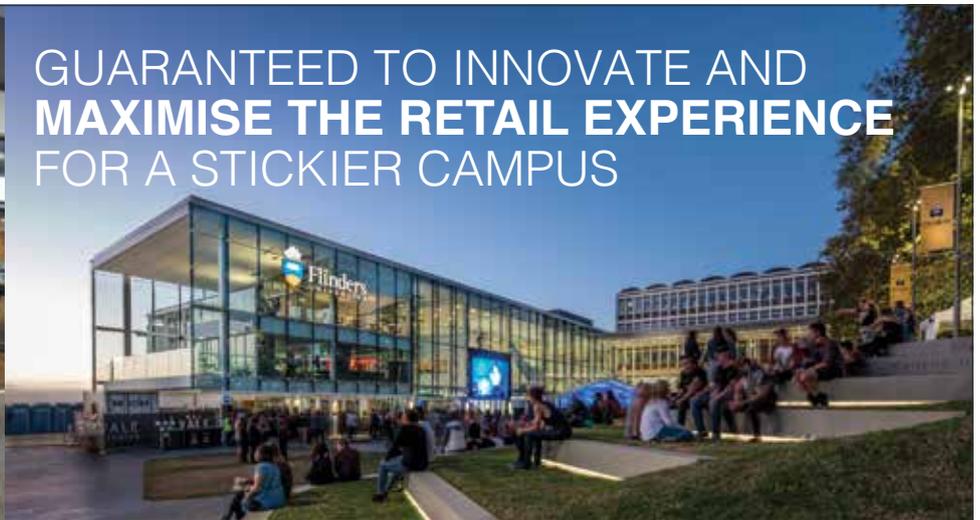
Biography: Sean is a Technology Consultant with 25 years' experience across a number of industry sectors. He is passionate about effectively integrating technology at all levels, not only in the built environment, but across the myriad of organisation and consumer-level systems, ensuring holistic design responses.

Abstract: Conference attendees will learn about:

- transformational forces impacting delivery of learning services
- unique skills needed by 21st century workers
- planning strategies for agile and engaging physical learning environments



GYG UQ. Photo by GYG.



Flinders Hub & Plaza. Photo by Peter Barnes.

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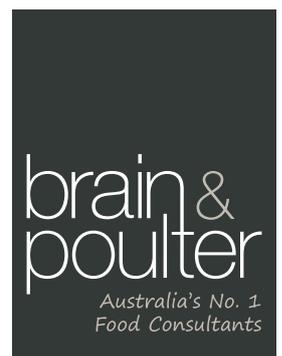
New Zealand: UoA, UoC, Lincoln, Otago

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As with our social and economic lives, education is being transformed by new models of service delivery, changing organisational processes, infrastructure and supporting physical spaces.

The past decade saw a shift from dominant teacher-centric pedagogy to collaborative environments supporting peer-to-peer learning (with focused support from teachers/instructors), largely enabled by technology. Other trends include shifts from impersonal room-based systems to human-scale learning experiences, hardware to software solutions, enhanced levels of digital immersion, and natural human-machine interfaces.

As change gathers momentum, digital transformation in learning services delivery has only just scratched the surface. Emerging technologies are heralded regularly, with abilities to augment or fully replace functions (physical and cognitive) long considered the exclusive domain of humans. Whilst Artificial Intelligence, Virtual or Augmented Reality, and Brain Computer Interfaces won't become mainstream for some years, they will profoundly impact society in all our lifetimes.

Millennials entering tertiary education conduct much of their lives in a digital domain, and are keen to explore and discover new experiences. In contrast, the buildings in which they learn have lifespans of many decades, and are often incapable of supporting new modes of learning. An essential consideration in planning new or refurbished physical learning environments must be the potential impact of learning sector transformation in the near term.

Social, technological and economic volatility appears to be the 'new normal' in which all service providers must operate and compete. Against this backdrop, how can learning institutions create highly engaging physical environments that not only provide students with skills to find meaning in the 21st Century workplace, but are agile enough to change the nature of their function and aesthetics frequently?

The ability of current approaches to learning environments to support the coming shifts in learning services delivery will be outlined through analysis of case studies for recently completed projects, combined with findings from study tours of 'world best practice' environments in learning and workplace sectors.

Several key shortcomings are identified in 'typical' design approaches to physical learning spaces, and also to the wider building support infrastructure. Such shortcomings often limit potential for ongoing functional adaptation, or impose significant cost penalties when implementing likely future changes.

F5: A flexible and intuitive framework for creative experience -QUT Creative Industries Precinct Stage 2

Mark Roehrs, Hassell and Lynn Green, Queensland University of Technology

Biography: Lynn Green, Associate Director, Major Projects, Queensland University of Technology

Lynn Green is responsible for the delivery of major new building projects at QUT. He was responsible for all phases of the delivery of The Creative Industries Precinct Stage 2 and is currently delivering the new Education Precinct Building.

Mark Roehrs, Principal, Education Sector Leader, HASSELL

Mark Roehrs has led the delivery of a significant portfolio of innovative and award winning education projects that have explored the potential of flexible and adaptable next generation learning and research environments that optimise student and staff experience.

Abstract: How do you provide a flexible framework for a transformative and enriched experience for creative millennials and their mentors?

The Creative Industries Precinct Stage 2 (CIP2) at QUT facilitates contemporary creative practice across dance, music, drama and visual arts where the boundaries between disciplines is increasingly blurred. It does this by providing flexible high-performance studios that can accommodate multi-disciplinary learning, research, rehearsal, and performance supported by an extensive distributed informal learning domain.

24/7 student occupancy and enriched experience is supported by an informal learning domain of diverse intimate settings including open kitchens on each level. Enhanced engagement between students and staff is facilitated by the interleaving of staff and student activities on alternate levels with high levels of transparency between studios, academic workplace, informal learning and circulation domains all connected by an intuitive circulation system of open staircases and stepped atriums over 6 levels.

Extending the Creative Industries Precinct into a heritage listed precinct CIP2 sets up a framework for future expansion whilst delivering an activated urban realm that encourages public access whilst providing safe student access.

Providing an enriched student experience with 24/7 access in facilities that are flexible and adaptable for the long term are key challenges for all universities. This project provides a compelling and exciting insight into this potential.

ABSTRACTS

Comparative post-occupancy evaluation into the informal learning domain and the academic workplace underpins the insights on student and staff experience outcomes with an entertaining insight into student feedback in the social media domain.

The post-occupancy analysis has showed a high level of collaborative engagement between students, staff and students, and between staff. Inter-disciplinary creative practice has been facilitated and enriched by the new flexible multi-disciplinary facilities with students spending significantly more time engaged in creative practice.

Learning outcomes for conference participants will be an insight into the workings of an innovative new model for the collocation of arts disciplines that interleaves student and staff occupancy in an open interactive collaborative domain over 6 levels.

F6: Healthy Disregard for the Impossible Essential for The Macquarie University Incubator

John Shi-Nash, Architectus and Nick Elias, Macquarie University and Chris Crick, Root Partnerships

Biography:

Nick Elias, Architectus

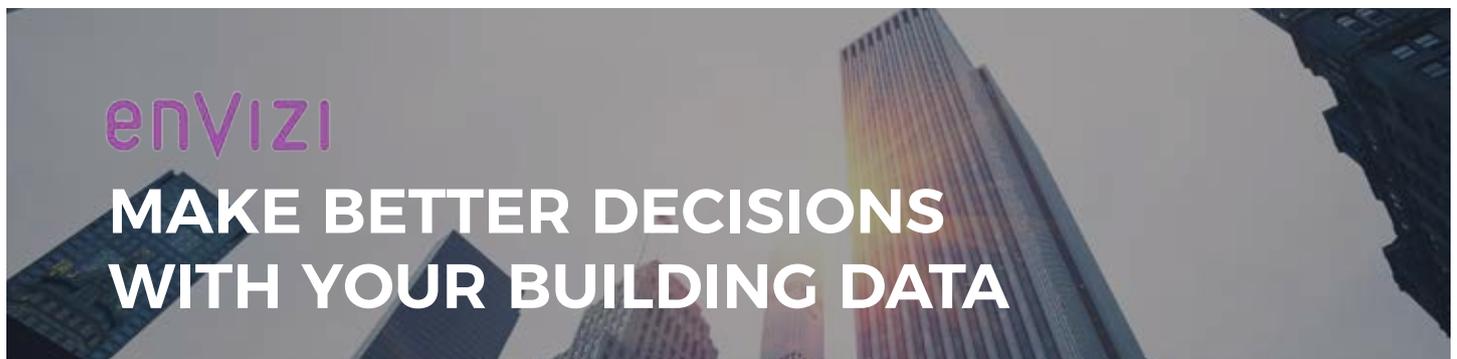
Nicholas is a highly creative architectural designer with strong technical expertise. He is also an accomplished sculptor.

Chris Crick, Root Partnerships

Chris Associate Director has extensive experience in project direction and management with a particular passion for educational projects and innovative delivery methods. Chris has been with Root Partnerships for almost 20 years.

John Shi-Nash, Macquarie University

John is the Director Incubation and Entrepreneurship at Macquarie University MBA and is passionate about generating a thriving creative ecosystem at the University, to provide student opportunity and produce impactful solutions to worlds problems.



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Abstract: The Macquarie University Incubator was born from a complex mesh of creative constraints – limited time, brief, budget, even limited permanency. But it was these constraints that fuelled the fire of innovation necessary to deliver the project. This presentation will reveal how the team designed and built the Hub within one year of inception by reinventing how they worked.

Macquarie University focused their attention on engagement with industry, government, not-for-profits and entrepreneurs, and in 2016 wanted to create a space that fostered fluid collaboration, a creative community and an architectural expression that captured the innovation within. Macquarie University, Root Partnerships, Architectus and the consultant team had one year from inception to occupation. Together, they rose to the challenge of developing, designing and delivering these aspirations in the form of the new Incubator.

The ambition for the Incubator is to attract high calibre partners, researchers and students with a unique and inspiring work setting, allowing them to grow in a hotbed of ideas and network of intense pursuit, competition, support and collaboration.

This inspirational vision was filtered through the whole consultant team. Upon success in the design competition, Architectus had six weeks to design and document the project for tender. It had to be flexible to enable the evolving brief, temporary and reconfigurable, and quick to erect to meet the tight timeframe. The design team worked furiously against these constraints to develop a cross laminated, prefabricated timber cassette structure. What evolved was a column-free, large span timber shell that can adapt with its creative occupants.

While innovation was engrained in the design, tight timelines required Root Partnerships to rethink the approval and delivery process. Communication and early involvement with the building contractor was key, with 25 strong project team developing the design and go to tender in just six weeks. The design needed to advance at a rapid rate while still enabling the briefing process to evolve. The team reconsidered contract procurement and tendered early with a performance specification to ensure design integrity. Smart design and prefabrication reduced time on site, meeting the semester two deadline.

Audience members will be invited to experience the Macquarie University Incubator themselves, through Virtual Reality.

F7: The Vertical City Campus - A course 'agnostic' approach

Alan Duffy, Woods Bagot and Professor Denise Kirkpatrick, Western Sydney University

Biography: Alan is a Senior Design Leader at woods bagot, with a passion for education and the arts. Having worked on a diverse range and scale of projects, Alan has harnessed his artistic approach to architecture. Highly skilled in conveying design ideas through hand sketching encourages innovative solutions with clients and collaborators.

Recently, Alan's role as Regional Education Sector Leader has allowed him to focus on education projects, where he has led the design for WSU CBD Campus, Macquarie University Spatial Experience (MUSE) and the "flipped classroom" at the Australian School of Business at UNSW.

A highly-regarded academic and senior manager, Professor Kirkpatrick has been at the forefront of developing strategies to enhance teaching and learning at many of Australia's leading universities, and has led major projects designed to invigorate the academic program and improve the student experience.

In particular, she brings to Western Sydney University (WSU) extensive knowledge and experience in developing open, distance and e-learning initiatives at universities such as Monash University, the University of Adelaide, as well as internationally, having been Pro Vice-Chancellor (Learning, Teaching and Quality) at the Open University UK.

Abstract: The nature of the university campus is changing with increasing emphasis on asset performance and space utilisation. Vertical building typologies are becoming more prevalent to respond to higher density requirements. This trend, bolstered by tech-enabled pedagogy, presents opportunities for university life outside of the traditional campus boundaries, driving industry participation and cross-location collaborations. The need for flexible and adaptable space to allow for increased collaboration, presents new design challenges. This informs how tall buildings are used for tertiary learning spaces that can prepare students to be job ready and agile in their ability to think creatively in a competitive commercial environment.

This paper explores Western Sydney University's new CBD Campus known as 1PSQ in Parramatta, Sydney as a case study – designed by Woods Bagot.

The New City Campus

Situated in the heart of the Parramatta CBD, Western Sydney University (WSU) is a pivotal campus connected to business and the community; a showpiece for a blended learning pedagogy in a future-focused, spatially diverse and student-centred environment.

Adaptability – A new approach

The vision was to create a city campus, multidisciplinary in function, innovative in approach and entrepreneurial in spirit. With an 'agnostic' approach to the interior fit-out, the design allows for truly flexible and future-proofed learning environments.

The CBD campus includes substantial informal learning space and no lecture theatres, by providing flipped classrooms instead. The 'learning studio' concept emerged during the design process to create a unifying, central and flexible vertical campus environment for WSU Students encouraging 'peer to peer' engagement.

Responding to a flexible brief allowed the design team to test the blend between formal and informal learning spaces. The outcome is a flexible and adaptive environment that encourages learning through conversation.

Technology

Blended learning and the use of virtual technologies are prominent features of WSU's engagement with learning. At IPSQ, a variety of new technologies have been implemented to support blended and collaborative learning.

Academic Workplace

For the academic workplace zones, an open plan office pod design enables a more fluent and cost efficient utilisation of space. There are no individual offices in this building. By embracing principles of open plan and moving away from the traditional cellular office model, WSU staff are invited to co-mingle with students, breaking down traditional campus hierarchies.

F8: Creating the Ultimate Student Experience

Adam Scott, Freestate

Biography: Adam is Founder and Executive Creative Director for pioneering Experience Masterplanners FreeState, he is Global Head of Design at leading international design practice HASSELL. He is internationally recognised as an expert in experience design and is personally responsible for storyboarding some of the world's greatest brands and stands at the forefront of a very modern and multi-sensory wave of experience design for cities.

Abstract: We are now living in an experience era where everything - work, study and play - is increasingly being viewed through an 'experience lens'. The traditional model of 'build and they will come' is no longer capable of providing attraction, involvement and a sense of belonging which are essential to enabling the creation of the ultimate student experience. We acknowledge that people want to be part of a vibrant, engaging and activated campus, one that is attractive because it understands the interests, activities and opinions of its users to ensure relevance and engagement.

In this presentation, Adam Scott, Founder and Creative Director of London's world-leading Experience Design Agency FreeState, will help us to understand how to create the ultimate student experience as the foundation for the ultimate student environment.

CREATING THE ULTIMATE STUDENT EXPERIENCE

We are now living in an experience era where everything - work, study and play - is increasingly being viewed through an 'experience lens'. The traditional model of 'build and they will come' is no longer capable of providing attraction, involvement and a sense of belonging which are essential to enabling the creation of the ultimate student experience. We acknowledge that people want to be part of a vibrant, engaging and activated campus, one that is attractive because it understands the interests, activities and opinions of its users to ensure relevance and engagement.

In this presentation, Adam Scott, Founder and Creative Director of London's world-leading Experience Design Agency FreeState, will help us to understand how to create the ultimate student experience as the foundation for the ultimate student environment.

F9: Lessons learnt from the first 6 Star Green Star Communities rated university campus

Dr Gerard Healey, The University of Melbourne

Abstract:

Background

In June 2013, the University of Melbourne became the first University to commit to achieving a Green Star Communities rating. In June 2017, it became the first and only University to achieve a 6 Star Communities rating – equating to world leadership – for its Parkville campus, which is over 159 buildings and 66 hectares.

Back in 2013, the University recognised that environmental action and liveability are important to staff and students, and the communities rating was an opportunity to demonstrate University-wide commitment to sustainability, beyond the three Green Star rated buildings at Parkville at the time.

Process

The University used the Green Star Communities framework to assess its campus planning and operations. The University's 5 year plan, Growing Esteem, called for the University to be recognised as a leader in embedding sustainability in all its activities and the Communities rating tool provided best practice benchmarks to measure against.

In 2013, the target rating was 5 stars - Australian excellence - however following significant work on a Sustainability Charter and Plan, the University was able to achieve the 6 Star rating.

Notable achievements / commitments

Notable achievements include:

- First 6 Star Green Star Communities rating for a University
- Achieved 9 out of 10 possible innovation points
- Commitment to zero net carbon emissions from electricity by 2021 and carbon neutrality before 2030
- First University in Australia to undertake a Nitrogen footprint of its operations
- First University in Australia to use the Green Impact sustainability engagement programme
- Recognition of all the planning and activities that the University does to foster the health and well-being of staff, students and visitors, including:
 - Tobacco free campus
 - Tools and training to support better mental health
 - Extensive sport and fitness facilities
 - Infrastructure and promotion of cycling
 - Green spaces
 - Access to medical, dental, optical and mental health services
 - Safer Community Program
- The Climate Change Adaptation and Resilience Plan created as part of the Communities rating for Parkville will become an integral part of a University-wide (all campuses) climate change adaptation plan
- Recognition of the University's extensive digital infrastructure and the Smart Campus analytics overlay to enable better informed decision-making
- Recognition of how the University makes sustainability meaningful for staff, students and visitors through surveys and consultation, and promotes the outcomes and benefits.
- Recognition of how the University uses its campus as a living lab: a demonstrator for course-work students and a test-bed for researchers

Wednesday 20 September 2017
SESSION 10
11.00 am - 12.30 pm

CONCURRENT G

G1: The Closed Loop Campus - A sustainable future

Sonya Montgomerie, Designinc and Dr Rob Brimblecombe, Monash University and Alex Rodger, Norman Disney Young and Martin Reeves, Outlines Landscape Architects

Biography: Sonya has worked with many tertiary institutions across Australia, along with local government organizations. She has an outcome-focused approach driven by integrated, sustainable outcomes.

Rob manages Monash University's Engineering and Sustainability team and has spent the last seven years developing and implementing campus sustainable development programs. He also lectures in energy efficiency and renewables, holds a PhD in Bio-inspired solar energy.

Alex has extensive experience in large multi-disciplinary owner/occupier precincts. He contributes key decision making on design system selection, plant space planning and infrastructure distribution philosophy, embedded energy efficiency, low carbon design and sustainability.

Abstract: 'The Closed Loop Campus' is about the future, The Sustainable Campus, we present ideas about Precinct/Campus planning that challenge the way we all think about how a tertiary campus can thrive in an uncertain future.

In future, the sustainable campus will be self-generating, sustainable and financially resilient in an uncertain future. What are other sectors doing, what can we learn from the health sector about campus planning strategy?

We are working with large Health Providers to develop an evidence based, model for health precincts to provide Whole of Life service provision for Health precincts. We will share with you this compelling design response, that we see as directly relevant to the Tertiary Sector.

The idea of the Closed Loop Campus considers;

Urban Cultivation, the connection between wellbeing and the natural environment, resource independence, integrated building services and self-sufficiency.

Local Economies, innovative ways to turn expense items into revenue streams through connecting building waste production, utility service provision, consumables and enterprise opportunities

ABSTRACTS

Place Making, enhancing student experience with a crafted program of living, learning and social activities embedded in the built and natural landscape

Our panel of experts will present exemplar models of Precinct/Campus strategies which expose opportunities for transformative thinking about places for living, learning and economic success.

Through live surveys, polls, comments and questions our panel will engage with the delegates directly; Can we flip our collective thinking from “that’s impossible” to “that sounds difficult”, to “maybe that’s a thing we should consider...”

We intend to open the mind of Facilities Managers, Chancellery, and Campus Planners to a new framework for considering the future of their campus. A self-supporting model of service provision and asset management.

G2: Digital Utilisation Data Collection Frequency and Occupancy of learning and teaching spaces in real time

Christina Peace and Nicole Eaton, RMIT

Biography: Christina Peace, Senior Advisor, Space Optimisation has been with RMIT for the past four years. She has qualifications in law and human resources management. Her work history includes a mix of customer service, complaint handling and organisational development in the non for profit and tertiary education sectors.

Nicole Eaton, Associate Director, Planning & Asset Utilisation is responsible for RMIT’s strategic property planning, space management, space utilisation/optimisation including maintenance of space database/drawings, and timetabling. Nicole has presented at various forums in Aust, NZ and South-East Asia on virtual timetable modelling to inform building requirements / design.

Abstract: This presentation will discuss the implementation, benefits and outcomes of a real-time digital data collection tool that is designed to integrate utilisation data with the timetabling system data.

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ABSTRACTS

With space at a premium the effective measurement of space utilisation of the University's built environment is key to optimising both usage and allocation of space; informing strategies to improve usage and support the future growth of the University in learning, teaching and research.

As with many universities, RMIT has traditionally undertaken a comprehensive and labour intensive space audit for a single week of use in the first semester of each year. Results are slow in being calculated and require manual integration with timetable data extracts, by which time the impact of the results has been lost, providing only an indicative guide on use of the learning and teaching facilities.

To improve the quality and frequency of utilisation data, RMIT conducted an investigation into digital data collection methods, including WiFi based technology and Thermal Sensor solutions; with the latter selected for implementation. The Thermal Sensor solution is able to be immediately integrated with timetable data producing real time web based utilisation reports.

The key short term benefits of continuous data collection since implementation of the Thermal Sensors are reports highlighting scheduled teaching events with no attendance, early finishes and classes that are over/under capacity. This allows for immediate adjustments to timetables resulting in space being freed up for other activities.

Longer term benefits are anticipated to include the ability to display ongoing utilisation trends per room, area and building with underutilised spaces being identified and refurbished or repurposed. Occupancy information over the full semester will provide Learning Analytics to Academic Units enabling valuable insight into student attendance. Overall the data collected from space utilisation counters will support better planning and strategic decisions and provide a more detailed understanding of the population profile identifying the University's future vertical transport, security and facility management requirements.

G3: Testing a revolutionary idea for career enhancement

Mary-Louise Huppatz, The University of Melbourne

Biography: Mary-Louise is currently learning about all things government in a year-long secondment to Sustainability Victoria. Her role as Manager, Strategy and Planning aligns strongly with her passion for improving organisational capabilities, focusing on people, processes and systems. In her 12 years within the higher ed sector, Mary-Louise has worked at the Universities of Sydney and Melbourne, both at faculty level and on large scale change projects. In her spare time, Mary-Louise moonlights as the Bass Regional Chair for ATEM, and has led the fantastic team who have created TEMC2017.

Abstract: At the start of 2017, I came upon with what seemed a truly revolutionary idea for a career in higher education ... to leave the sector.

At a crossroad, a mentoring conversation sparked a revolutionary thought ... could time away from the sector enhance professional practice and career prospects?

Thinking quickly turned into reality when an initial application to 'test the waters' led to an exciting one year opportunity leading strategy and planning for Sustainability Victoria. Deep breath, dive in, go.

Six months in, I'd like to share my experience and learnings so far. To critically reflect upon whether I will be able to realise the benefits envisaged for both myself, and my institution. Is time out of the sector enhancing my leadership skills or am I being left behind by my peers? And to explore the question - what does a leadership role in the Higher Education sector look like from the other side?

G3: Work-Life Equilibrium – Confession of an engineering project leader, a wife, mom, and church leader

Cynthia Suminto, Aecom

Biography: With over 8+ years industry experience, Cynthia Suminto is part of AECOM's Information Communications Technology (ICT) consulting group for ANZ. She has experienced various roles as ICT/AV project leader for various major projects and ICT state advisor for PPP projects. An experienced Senior AV, ICT and Security Consultant, Cynthia has a Bachelor of Engineering (Electrical and Computer Systems) from Monash University, Melbourne.

Outside work life she holds roles including a wife, mother, church family group leader, young family Melbourne eastern suburbs coordinator, and music team leader.

She has a passion for women's active involvements in workforce and leadership roles.

Abstract: Women have made great contributions in economic and social aspects of our society, yet inequality persists.

Women achievement in itself is not an issue. Of all women aged 25-29, 39.6% have achieved a bachelor degree or above, compared to 30.4% of men of the same age bracket.

Issues arise when women try to balance work and family with the expectation of carrying most of the caregiving responsibilities while at the same time responding to workforce demands to be available all the time.

These issues are not personal issues rather it will be nation-wide issues when women decide to postpone or diminishing family planning altogether.

How an old saying of "it takes a village to raise a child" will greatly support women's active involvements in workforce and leadership roles.

G3: Can you 'design' success in your own life/ your own work?

Carol Harding, Australian Innovation Research Centre

Biography: Carol has been Deputy Director of the Australian Innovation Research Centre (AIRC) for the past decade and has a deep passion for innovation and operating by design, not default. She is an innovation and design thinking practitioner, advisor, trainer and design sprint maverick. Carol has helped government, universities, business and community organisations - nationally and internationally - build capability in innovation, creative thinking, design thinking and the development of innovation programs. Carol's major focus is on professional staff in the tertiary education sector. She also helps people use design thinking to design and live their best life.

Abstract: If design thinking can deliver growth and success in organisations, why can't it be used to design growth and success in our own lives/our own work? Well, I think it can! And to test my hypothesis I've decided to design my very best life, the one that I'd want to live if all things were possible.

Following the advice of Benjamin Disraeli - who said that the most dangerous strategy is to jump a chasm in two leaps - I've leapt in boots and all. I've used the mindsets, process and tools of design thinking, along with the very useful ideas of Professor Bernard Roth - co-founder of the Stanford University d.school whose focus around design thinking is on personal transformation and empowerment - to design my best life.

I'm writing this abstract at the Tullamarine airport on the first day of the rest of my life. I'm heading off to go bicycling and camping through France for 2 months. I've been on a bicycle only 12 times in my whole life and haven't camped since I was 18. Factor in the rest of my chasm leaping designs and the question has to be asked: will it end in tears or triumph?!

In this HEd talk I'll be sharing my success or failure thus far. Is this relevant to a conference focused on Eureka moments in the tertiary education sector? Oh yes! If you can learn and use the mindsets and processes of design thinking to transform your own life, you'll definitely be using it to design your work too.

G3: How a power outlet led me to quit my job

Sonia Monaghan, Deakin University

Biography: Sonia Monaghan is a registered architect working within Facilities Services Division at Deakin University. She draws from knowledge gained in private practice to push the architectural agenda in complex projects, often with challenging stakeholder requirements. Sonia has a strong interest in universal design and has recently undertaken a Diploma of Access Consulting.

Abstract: I was working as an architect on high-value multi-residential developments. When I lost an argument about a power point, I realised that working on architectural projects that so blatantly ignored user experience was not only unfulfilling, it was disheartening.

In the university sector, however, we have to care about user experience. We have to care because we own, operate and maintain the built environment, so we need to get it right. We have to care because a great built environment means the users are happier to walk in the door, more productive in their studies or profession, more capable of retaining information, and as a result, more likely to achieve their goals. The business of University relies on good user experience- and the built environment is a fundamental component of that.

This presentation is an honest account of the professional experiences that have shaped my career choices and led to my current role as Deakin University's in-house architect. It reflects on key moments that have influenced my career confidence and informed both my values and my measures of success. The presentation highlights the importance of translating lessons learned from one project to the next- both architecturally and personally; and asks, how do we achieve influence when faced with various hurdles?

G3: Designing your professional life

Interactive session

Facilitator - Carol Harding

G4: Conversations of Intrigue: Creating conversations for change

Meredith Lewis, Dangerous Meredith

Biography: Meredith Lewis has over 25 years' experience of working in the tertiary, creative, and community sectors as a manager, project manager, trainer, choreographer and performer. She specialises in leading workshops that help develop strategies to anchor and promote creative thinking, humane values, and adaptability. Having worked both as a creative and as a manager she is ideally placed to negotiate the processes of turning visionary ideas into deliverable plans.

"Meredith is gifted at facilitating group processes and organisational strategic planning. Meredith brings brilliant, creative and innovative ideas which deal with subtle organisational and group dynamics." ~ Consultant Dr. Louise Greenstock

Abstract: "Many emerge from the confluence of half ideas thoughts and hunches which then find a connection, create ideas and transform futures." This workshop will demonstrate a technique that enables connections to be found.

Context:

The challenge of 'redesigning futures' can be fraught with anxiety for many making communication between colleagues defensive or circumspect. This workshop will demonstrate an innovative way to approach discussion about change and how it affects workplace culture.

Relevance:

Conversations of Intrigue will be useful to anyone who has to help colleagues nudge their way past stale groupthink and challenge the status quo. Useful for managers, project managers, HR officers and change management consultants, applications could include team building, leadership development, and employee engagement.

Focus:

How can we "create open and innovative systems which expand our professional practice" in helping the groups we work with adapt to change and build the workplace culture they need? The TEMC call for abstracts mentions that "Spaces will be created..." at the conference. My workshop will demonstrate how a conversational space can be created to help people understand the organisational narrative within which they are working.

Method:

Conversations of Intrigue are 1.5-2 hour facilitated conversations that use extracts from literature and / or images from art or pop culture to get past people's defences and guide them into having rich and profound conversations about their workplace.

Over the past two years Conversations of Intrigue have been facilitated with groups including ATEM members from the University of Melbourne, and groups of individuals (including

consultants, managers, trainers, project managers) at sessions held at Ross House.

Analysis:

Testimonials attest to the success of past workshops:

- "Awesome".
- "Rich social dialogue."
- "Often enough in facilitation the task is to prod and even provoke conversation – Meredith's approach offers an interesting way of framing an invitation to reflect. Meredith's idea provides a counterpoint from which to compare and contrast. A Conversations of Intrigue approach is interesting in part because it draws on a fictional world which seems to offer more freedoms for conversation and more scope for trying out thoughts about who we are and what we do."

Learning outcomes:

Participants in this workshop will experience firsthand an innovative technique for being able to:

- Discuss workplace culture and organisational function free of judgement and blame;
- Take the pulse of team morale and identify issues;
- Identify appropriate further action to be taken.

G5: Student accommodation, culture or cringe?

Shannon Joe, Warren And Mahoney

Biography: Shannon Joe is motivated by translating culture into built form. Shannon believes that who we are – our drivers, ideals and values – should influence our habitats. Describing our designs as student-centric, Warren&Mahoney develop spaces to reflect the evolving learning landscape. Shannon has been a Principal since 2010.

Dr Donna Wheatley's approach to space planning is evidence based and data driven, and also draws on broader social and economic influences on space. Donna leads our strategy and design work, has a PhD in environmental psychology, and is a registered architect.

Abstract: Intended or not, student accommodation reflects and shapes culture. Culture is the learned behaviour of a group of people. It can be shaped by spatial arrangements, objects and aesthetics, things that comprise a student residence. The significant impact of accommodation on overall student experience is rarely mapped out. Warren and Mahoney have developed a method for eliciting desired culture and behaviours in the briefing stages, but just as importantly, we deploy a Post Occupancy Evaluation (POE) survey in order to understand the outcomes of our projects. The POE tool is an online student survey, so our findings reflect the student's own point of view. The survey also measures experiences outside student

accommodation, to pick up on broader student experience and expectations.

In this talk Warren and Mahoney will share methods in eliciting the cultural requirements of student accommodation and then share the post occupancy evaluation technique and results. This will be explained through three case studies.

The 2015 Papua New Guinea University Student Accommodation won the PNG Institute of Architects Best Overall Project last year. It began life as accommodation for the 2015 Pacific Games and seamlessly transitioned into campus digs. Art, colour, and indigenous architectural patterning were introduced into the planning. Understanding the behavioural implications of gathering places, shade canopies, the structural concept of the apex heavily guided the design. Our post occupancy evaluation examines their impact on behaviour.

In 2014 the Carlaw Campus of The University of Auckland opened and picked up several Multi-Unit Residential awards. This 668-bed provides for a range of spaces across the public to private spectrum. It is also designed on a gradient from the urbane (one side of the site is a proposed central transport hub) to the natural (Auckland Domain on the other side). The planning has manifested a micro community due to the multiple experiences offered by the site. This is tested through the POE.

University Hall, also at The University of Auckland, was conceived as a 'home for learning' in 2012. Our POE explores

the effectiveness to living inside one of the 442 prefabricated bedrooms. We compare the experience of a factory finished interior with the typical interior construction methods, and what the cultural implications might be.

Our findings show a link between focusing on culture in the briefing stages with outcomes that more closely align to desired behaviours. The results can inform the design of future student accommodation projects.

G6: Internal reviews: a holistic approach to change

Megan Wilson, University of Otago

Biography: Megan Wilson is Reviews Manager at the University of Otago, a position she has held for eight years. She will share with session attendees key aspects of Otago's review system, its successes and lessons learnt. The presentation will draw on participant surveys and an independent report on the review system.

Abstract: What value do reviews bring to a University? They can be costly both in terms of time and money. However, the costs involved can be justified if the reviews contribute meaningfully

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to the university's strategic goals. The challenge is to put in place a review system that, more often than not, achieves this objective.

The University of Otago has run a systematic internal review system for over 15 years. It takes a holistic, all-encompassing approach to strategic planning and operational management, with a focus on the needs of all individual areas of the University, departments, programmes and administrative areas. This is unlike many tertiary institutions which primarily focus on reviewing academic programmes. In a world of competing pressures Otago's review system considers all aspects of operation, including the three tenets of academia, teaching, research and service, and also alignment to the strategic direction of the University and the expectations of staff, students, professional bodies and employers.

These matters are identified and considered by an independent panel with expert knowledge in a range of areas, with the expectation that enhancement, collaboration or change initiatives will be implemented, which support and sustain the future goals and activities of the area under review. The University of Otago sees this quality process as an opportunity to delve into its inner workings but, as with any review system, faces the challenge of offering a sense of ownership to the area under review that results in engagement and a willingness to change whilst also garnering a commitment from the higher level of the University to implement recommendations made.

G7: Reshaping building projects with a game changing delivery model

David Tweedie, Hayball and Richard Lindner, La Trobe University

Biography: A driving force in Hayball's Education portfolio, David Tweedie has a natural affinity for managing large multi-disciplinary consultant teams on challenging design projects involving complex stakeholder groups and governance structures. A design leader with a passion for unearthing innovative solutions, David also leads sustainability and construction innovation across Hayball's design platform.

Richard Lindner leads a team of internal and external project specialists at La Trobe University, responsible for the fast-track delivery of teaching and research projects with a portfolio budget exceeding \$150 million. He brings experience working as a construction contractor, a project management consultant, and an internal project client.

Abstract: The rapidly changing nature of learning environments compels the higher education sector to deliver building projects in shorter time frames, on-time, and to a high level of quality. How can we develop a highly collaborative process to reshape project delivery positively, while minimising impact on these factors?

A 'Deferred Let Lump Sum' (DLLS) delivery model can be a game changer. Acknowledged as a risk sharing and incentivisation model, the collaborative process between client, builder and designer inherent with DLLS challenges traditional Design & Construct models, which can be associated with lower quality design outcomes. The model acknowledges that for many university projects on tight timeframes, adaptability is critical.

The session will cover how this model allowed the flexibility of the building and design process to accommodate and implement meaningful stakeholder consultation, and begin on-site building work in parallel. This was achieved with a quality outcome, and within a tight timeframe – essentially not possible with traditional building and design contracts.

The session will reflect upon the application of the contractual model in the redevelopment of La Trobe University's Donald Whitehead Building. Key themes and lessons-learned across the life of the project will be discussed to identify the value of a highly collaborative approach within a nimble contractual framework, including how DLLS allowed us to respond effectively to significant constructional and design challenges, and how DLLS influenced the ability to control design outcomes.

The material will be presented in a conversational format between two of the project's key protagonists – architect and client: Hayball Director David Tweedie and La Trobe University's Director of Fast Track projects Richard Lindner – with the aim of highlighting each party's unique perspective on the project. It will include reflections on the architectural outcomes of the project, and the success of the model from a university perspective. The session will incorporate a structured Q and A component.

To be present, and to acknowledge future change, university-wide learning environments require the alignment of countless moving parts – time, money, quality, and cultural values, to say the least. However difficult this is, it is essential to share knowledge of devices that enable us to achieve our aspirational outcomes.

G8: CSI Waikato: Investigation into contract cheating

Renee Boyer, University of Waikato

Biography: Renée Boyer is the Director of the Academic Office at the University of Waikato. She has been a committee member for ATEM Aotearoa and a member of her University Council. Her work-related interests include academic quality, academic integrity, policy and regulations, curriculum development, equity, and student voice. Outside of work, Renée is an enthusiastic writer and is a member of the editorial board for Mayhem, Waikato's literary journal.

Abstract: Buying assignments is a big problem for universities all around the world, and there are myriad sites set up to facilitate this. Some have a genuine purpose such as Freelancer.com and Course Hero, but can also be exploited by students for assignment purchasing. Others, like UKEssays.com and rushtempapers.com, are clearly set up solely to facilitate assignment buying.

This presentation will tell the story of my investigation in to Waikato student cheating on one particular website, Course Hero.

The Academic Office had, for some time, been occasionally monitoring Course Hero in relation to copyright issues. In May 2016, a lecturer from Accounting alerted me to some new material that had been uploaded to Course Hero by someone who did not hold the copyright. I made a formal request to Course Hero to have these items removed. I also did a quick search for University of Waikato to see if there was other material which needed taking down, and I noticed a section called "Q+A". A quick scan of this section made it obvious that there was a bigger problem than copyright breach: students were uploading assignment instructions and paying a Course Hero "tutor" to complete work on their behalf.

Over the course of two weeks I identified 12 separate users who had used Course Hero to purchase work for University of Waikato papers. With the help of academic staff, department administrators, ITS and WCEL we were able to match nine of these users to individual students. The students were subsequently put through the academic integrity process, with all but one found guilty of serious academic misconduct.

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CONCURRENT H

H1: Is your university ready for The Wellness Revolution?

Jeff Robinson, Aurecon

Biography: Jeff is Aurecon’s Global Sustainable Buildings leader. He is a passionate advocate for the design and renovation of Sustainable Buildings and Communities. He has helped design many leading ESD buildings and Communities in Melbourne and overseas, including the Melbourne School of Design, RMIT’s Advanced Manufacturing Facility, the Melbourne Conservatorium of Music and Monash University’s TED building. Jeff is a Green Star AP, a LEED AP, a NABERS Assessor an IS AP, a member of the Property Council of Australia’s Victorian Sustainability Committee, A member of the Victorian Design Review Panel and an Alternate Member of the Victorian Heritage Council

Abstract: Imagine coming to University each day and feeling healthier at the end of the day than you were when you arrived in the morning. Wouldn’t that be a great place to work and learn?

People want to work in buildings which will help them to lead a healthy life at work and at home.

Universities have always been concerned with the health and wellbeing of their staff and students, but is your University ready for the groundswell of employee and student-led concern on health, wellbeing and ‘Wellness’?

The WELL Building Standard, established in the US by the International WELL Building Institute, uses evidence-based medical and scientific research to harness the built environment as a vehicle to support human health and wellbeing.

This paper will outline what’s in the WELL building Standard, what Wellness policies Universities are currently pursuing, and outline some of the research that demonstrates better learning outcomes and higher productivity from healthy buildings.

More than two million sqm of space has gained WELL certification in 12 countries with over 200 buildings registered for WELL worldwide. Universities like Harvard are considering using the WELL building standard for their new buildings

In Australia there has been a huge interest from the major property owners in seeking to have their buildings rated using WELL, with 24 buildings registered for WELL to date

WELL is all about people and their health and wellbeing focusing on the actual performance of the building rather than a design promise. WELL is an easy sell to employees and students once they understand it because it helps them get healthy and stay healthy every day they come to work and learn.

There are 102 items covered in the standard. Each has an “intention” that’s been developed under scrutiny with organisations such as the Mayo Clinic . Universities need to report each year on progress, staff and students are asked for their views on how their University complies with the standard and then every three years the tenancy needs to be re-certified

There is a strong alignment between Green Star and WELL. It is our experience from working on many University buildings that many of their policies align closely with those with the WELL building standard and that a WELL rating may be achieved without significant additional costs.

The presentation will be followed by a discussion with the attendees about Healthy Buildings and Wellness in the University Sector

H1: Designing our Infrastructure for a resilient future

David Jarratt, Aecom and Gerard Healey, University of Melbourne

Biography: Gerard’s role is to embed the University’s Sustainability Plan into its built environment, including: finalising a Green Star Communities rating, developing climate change adaptation plans, developing a sustainable transport strategy and facilitating the use of the University’s campuses as living laboratories for teaching and research.

David is the Practice lead for Sustainability within the ANZ. David’s primary focus is delivering a service dedicated to delivering a high performance buildings incorporating cutting edge strategies. David focuses on integrated design strategies which both respond to the pressures of today and can be resilient and have the flexibility to respond as needs change.

Abstract: No matter how much we try to predict what is around the corner, the only safe prediction is that there are challenging times ahead. While we expect more extreme weather with a changing climate - did anyone see the years major disaster - “thunderstorm asthma” coming?

Our built environment is being exposed to ever increasing disruption and demands – we are expecting more from our infrastructure and services, expecting them to function under pressure and deliver services that were not imagined when they were designed and built.

Appreciating these longer term factors can enable our spaces to be smarter, more useable and more future proof.

Tertiary Education providers are in a unique position to show leadership in this area – as long term asset owners, operators and cutting edge researchers and innovators. Hear about how The University of Melbourne is implementing measures to improve their capacity to cope with greater uncertainty and embed resilience principals into their new and existing

infrastructure and collaborating with groups like the City of Melbourne and water catchment groups to ensure a stronger future.

H1: Applying Parametric Design on the University Scale, from Campus to Comfort

Richard Stokes, Arup

Biography: Richard has a wide ranging skillset including data analysis, energy modelling, report writing, detailed understanding of Australian and UK Building Regulations and environmental assessment methods including NABERS, Green Star and BREEAM.

He has previously presented at the GBCA Green Cities Conference in Melbourne, the NABERS Conference in Sydney and the AIRAH conference in Brisbane.

Richard works on the basis of clear communication, presentation and accuracy and is always seeking to improve the design process by applying the latest software, ideas and standards.

For examples of Richard's visual approach to data analysis and communication, see his data blog at: <https://public.tableau.com/profile/richardstokes88>

Abstract: Through the use of emerging open source parametric software design tools, it is possible to simultaneously analyse a multitude of sustainable building design features including daylight, thermal comfort, energy and glare.

These features can be measured across a whole campus on a precinct scale for better understanding of existing infrastructure or considered in detail for new buildings when trying to optimise designs and find suitable compromises.

Further, there has been a recent trend which places a renewed focus on the comfort of our building's occupants. This represents a challenge for building designers to better accommodate high levels of thermal comfort and daylight within our buildings.

With this focus on the indoor environment quality, we are increasingly finding there is a direct conflict with the established requirements for energy efficiency and reduced greenhouse gas emissions that are increasingly common place in University policies, so a careful balance is needed.

At Arup in Melbourne we have developed tools and processes for managing this workflow and have implemented it with broad success on a variety of University projects.

H2: Machine learning course planning engine

Sachith Thomas, The University of Melbourne

Biography: 10+ years of work experience in a variety of roles like Data modelling, consulting, Data Analysis, and Business Analytics.

Practicing Machine learning and Data modelling enthusiast with strong programming experience.

Masters in Statistics & Operations Research. Special focus on exploratory data analysis, generating insights from data, predictive data modelling and data visualization.

Abstract: Problem: For students admitted to a University course, Subject selection is one of the most important decision to make.

The Melbourne model adopted by University of Melbourne provides great flexibility to students in choosing their subjects to complete their courses. In 2007, the University of Melbourne introduced the Melbourne Model, making it mandatory for students to take subjects outside of the disciplinary. This flexibility has introduced very complex path ways for students to complete the course.

Course advice staff are limited in their course advising skills to the experience they have. This problem combined with course information and subject information existing in different data sources make it very difficult for them to give a comprehensive course advice to students. A lot of students also consult with students who have already completed the subjects for advice.

These information sources are very limited to human experience and subjected to human bias.

Solution: The solution to this problem is a data model built from past student enrollments patterns.

With rise of machine learning, Universities can leverage on the vast historic data collected on subjects and student performances to make better informed decision for students.

There are 2 approaches to this problem.

1. Subject recommendation model

The approach is similar to amazon shopping cart approach. That is, for example, students who chose Subject A also studied Subject B,D and E during the same time period. This information along with subject profile (Pass percentage, Student rating of the subject and other characteristics of the subject) would give a complete picture to the student to make informed choice.

2. Earliest intervention model

This approach combines the student profile along with the subject profile to recommend subjects to be taken.

ABSTRACTS

The engine would match the student's past performance with the subject that the student is most likely to complete successfully. For example, students who do well in hands on project type assessments would be mapped to do subjects that have a higher weight-age for such type of assessments.

Input:

The student enters different choices based on their preference to the engine; for example:

1. Complete the course in the shortest time frame.
2. Optimal time table
3. Major/ minor to complete

Output:

The engine combine the 2 models and Outputs the different paths along with subject choices the student can take in order to complete the course.

H2: Review of Academic Progress – The Mammoth Beast Tamed

Shellie O'Meara, Loretta Paine and Kim Broadley, The University of Newcastle

Biography: Shellie O'Meara, Kim Broadley and Loretta Paine have over 40 years of combined experience at the University of Newcastle. They have worked across many roles including program and student advice, admissions and enrolments, school administration and faculty administration.

Shellie has a Master of Business from the University of Newcastle, Kim holds a Bachelor of Management from the University of Newcastle and Loretta has a Primary Teaching degree from UNE. Loretta has also completed the Emerging Leadership and Management Program through the LH Martin Institute.

Shellie, Loretta and Kim are all proud ATEM members.

Abstract: "This has been a truly humiliating and degrading process"

(Quote from a student).

Have you ever:

- heard of an elusive task that everyone at your institution dreads?
- had that stomach churning moment when you realise the rumours were true and the elusive, mammoth task is in fact part of your new role, in other words, your worst nightmare?
- been given the opportunity to change the nightmare process and make improvements very early in your new role?

Most probably not.

As a result of a restructure of Student Services the Student Progress team at the University of Newcastle (UON) was given the opportunity to make much needed changes to very clunky, cumbersome and time-consuming processes that support Review of Academic Progress (RoP). Five duplicate processes were amalgamated into one by a group of staff committed to making positive changes and streamlining the process.

A Hackathon approach was used to map current work processes, question the reasons behind the current approach, and explore alternative options.

Within existing budget and with the support of management we were able to make a number of process improvements in collaboration with colleagues across organisational units. The agreed process enhancements were risky and time critical. The benefits we experienced, however, were well worth the risk, with the workload being reduced by several days and positive improvements to the student experience in what is a very difficult time.

'Equity of access to higher education is a fundamental part of the University of Newcastle's "DNA". This is reflected in our institutional values and demonstrated in our successful history of supporting students from a range of backgrounds to achieve a university education.' (UON Homepage) UON has a high proportion of low socioeconomic and first generation higher education students who sometimes struggle to effectively settle into University life. We need to manage the process of academic performance review efficiently, effectively and sensitively. With improved systems and analytics, we have become better equipped to explore the reasons for students failing to thrive and more sophisticated in supporting students for future success. We are better at identifying vulnerability triggers and providing useful data to inform retention strategies.

The session will look at the process as it used to be, where we are now and where we are heading in the future. Conference participants will have the opportunity to learn from our successes and failures when administering the ROP process.

H3: What if academics at your university interacted as much as the students?

Nathan Humphries, Hassell and Anne Hellstedt, The University of Melbourne

Biography: Nathan is a Senior Interior Designer at HASSELL with close to 15 years industry experience. He has worked across a number of high profile commercial & academic workplace projects, including the transformational corporate headquarters for Westpac. He specialises in creating innovative teaching & learning environments, applying a research based approach to design. By challenging traditional paradigms and engaging with problems on a deeper level, Nathan has the ability to create unique design solutions within the education sector.

Abstract: The academic workplace is evolving, but the challenges for academics of noise, confidentiality, security and status remain the same, and sit uncomfortably beside the desires of university management for a step change – to more collaborative, collegiate and space efficient workplaces.

Today more than ever, universities are competing on a global scale to attract & retain top academic talent to drive world leading research & educational excellence. State-of-the-art, innovative physical environments increasingly play a significant role in the pursuit of longer term strategic goals. Equally, operational factors put pressure on campus planning teams to consolidate existing building stock, demonstrate spatial efficiencies, improve operational costs and reduce capital expenditure.

Strong leadership & a commitment to different ways of thinking are key to big ideas being realised. We explore how our clients are leading change in the workplace, challenging the existing workplace paradigm & creating innovative spaces that redefine academic environments.

HASSELL has established itself as a global leader in workplace design, delivering some of the most significant transformational university projects in Australia. In 2016, we reviewed our recent academic workplace designs to determine how the higher education sector is responding to this challenge. We asked our clients:

1. What are the key drivers in academic workplace design?
2. Why is there resistance to that change?
3. What can designers and clients do to make the transition to a new workplace smoother and more successful?

Interviews with project stakeholders and analyses of the floor plans of seven recent projects uncovered a consistent pattern in the motivations and challenges for those trying to bring about change, but not in the built responses to those problems. Most importantly, the research challenges a common misconception – that more open workplaces are simply about saving space.

We will present the metrics from our case studies and explore in detail the recently completed, award winning Flinders at Tonsley, which showcases the collaboration of teaching, research & industry partnership. The case study review will actively engage the audience, using a live polling app to pose questions relating to the three key questions in our research. The session will provide audience participants such as facility managers, space planners, university executives and project managers with

- Thought leadership in the communication of how space prioritisation will benefit staff
- Strategies on user engagement within the design process
- Empathy for all sides of the workplace argument

H4: Working towards utopia: The journey of a university's planning cycle

Bridget Soulsby, LaTrobe University

Biography: Bridget Soulsby is the Senior Manager for Planning and Governance in the College of Arts, Social Sciences and Commerce at La Trobe University. Bridget has worked in the higher education sector for the past 18 years. Throughout her career, Bridget has gained extensive experience in research and business administration, higher education performance analytics, student load and business planning. She joined La Trobe University in September 2012 after working in institutional planning and performance at The University of Melbourne and running a successful research centre in neuropsychiatry.

Abstract: "If you actually succeed in creating a utopia, you've created a world without conflict, in which everything is perfect. And if there's no conflict, there are no stories worth telling - or reading!"

Veronica Roth, American Author, Born 1988

At La Trobe University between 2013 and 2017, we implemented an ambitious strategy to secure the University's position to invest in its future resources, including staffing and infrastructure. The organisation underwent a major restructure in 2014 in order to facilitate this agenda. It also recognized that it needed to adapt the strategic planning cycle to achieve its ambitions; including the student load, budget and business planning cycles.

The University has made significant steps towards a more informed planning cycle and the alignment of many divisions and their expertise to connect the operational needs of the institution in line with its strategic vision. These include marketing, finance, planning, the international office, infrastructure and operations and the academic units of the organisation. What had been sequential planning has become more aligned reducing the time and resources required to plan the company's business as usual activities and strategic initiatives. Further alignment of the business and budget planning cycles occurred in 2016 and this has improved the quality of the planning outcomes.

This paper will share the lessons learned along this journey and how steps towards aligning these important processes in any company cycle have been achieved and what we are doing next. We explore the notion that working in-conjunction with each other would increase accuracy and reduce the amount of time and resources required to do so. We don't claim to have all the answers or a magic system. What we do have is some simple ideas and an awareness that all the processes and systems in the world can't beat knowledgeable people working together productively.

H6: Discover, dream, design and deliver your destiny! Appreciative advising and the student experience.

Dr Kristina McGuinness-King and Paul Edwards, Victoria University of Wellington

Biography: Kristina is the Manager, Student & Academic Services in the Faculty of Humanities and Social Sciences and an ATEM Corporate Member. With a background in Intercultural German Studies, Public Relations and tertiary education management, she is a staunch proponent of holistic advising in order to transform the student experience.

Paul is a Student Adviser, Student & Academic Services in the Faculty of Humanities and Social Sciences, and a Victoria graduate majoring in Psychology, Education and Māori Studies. He is responsible for the equity and engagement portfolio, leading the Appreciative Advising approach implementation and facilitating an array of diversity-related events.

Abstract: A recurring theme of Victoria University of Wellington's annual student experience survey has been the desire for transition, integration and connectedness, not just between students, but also within staff/student interactions. Another key theme has been the provision of clear and accurate information regarding programmes of study.

Anecdotally, a significant number of student interactions at the advising level involve failure to meet academic performance or other aspects of degree completion requirements. This deficit-centred and reactive "ambulance at the bottom of the cliff" approach runs counter to strengthening students' connectedness.

Academic advising is a key factor in enhancing student retention and success strategies, addressing the desire for transition, integration and connectedness. Studies have underlined the link between students' perceptions of high quality academic advising and retention, particularly for those in their first year. Proponents argue that effective advising helps to inhibit attrition by facilitating social and academic integration (Tinto 1993).

In response to these challenges – and building on the existing extensive calendar of engagement initiatives – we piloted an Appreciative Advising (AA) approach with a sample of first-year students in 2016. AA is a framework for collaborative inquiry adapted from organisational development theory (Cooperrider, 1986; Bloom, Hutson & He, 2008) involving an abbreviated four-step model: discover, dream, design and destiny/delivery.

Through student-centred discussion our Student Advisers encouraged self-reflection of personal goals and strengths, understanding of relevant pathways and the university system, planning for subjective success, and awareness of support services and enhancement opportunities to achieve that success.

For the wider implementation in 2017 and based on initial successes we developed workshops designed to be culturally-relevant for Māori and Pasifika students, aligning with Victoria's strategic goals of retention and achievement of these student cohorts.

This workshop reflects the journey to date, and invites participants to explore the possibilities for incorporating AA into their own service delivery. A brief introduction will challenge the 'normal' approach to academic advising, and outline the context of this project. This will be followed by an interactive exercise based on the approach used in the culturally-relevant workshops, stimulating (hopefully) lively discussion.

Although the full impact of this project is yet to be assessed, this holistic approach would appear to be an effective, preventative and potentially transformational method of advising, as compared with the 'transactional', purely administrative or 'band aid' approach.

CONCURRENT I

II: The business case for batteries

Andrew Wilson, University of Queensland

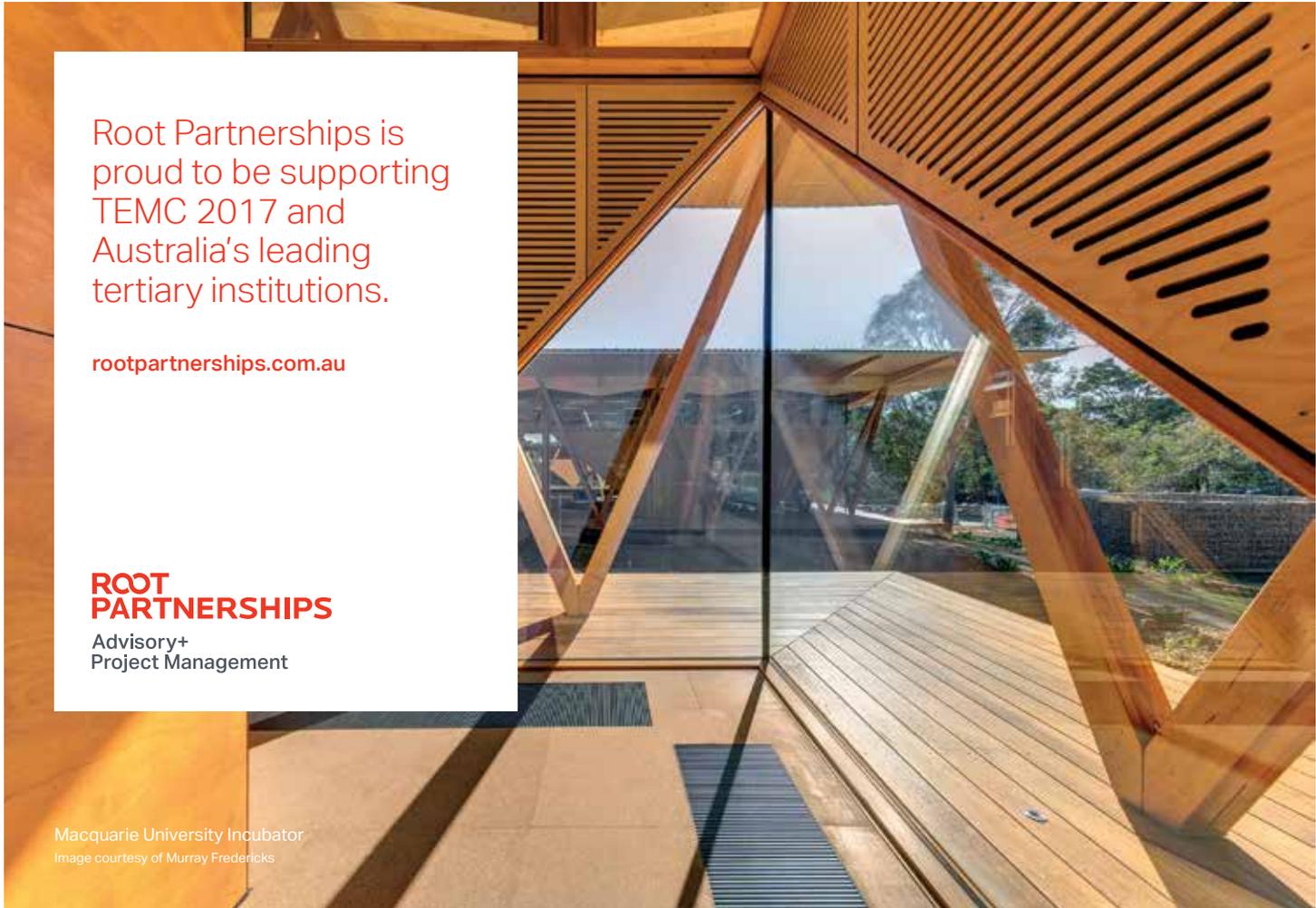
Biography: Andrew has worked in the field of energy management and sustainability for the past nine years. During this time he has held various roles within government and the private sector, working on projects across Australia as well as in Southern Africa, West Africa, Sri Lanka & Vietnam. He currently leads all aspects of the award winning Energy & Sustainability program within the Property & Facilities Division at the University of Queensland.

Abstract: With Elon Musk's tweets and the 2016 South Australian blackout, there's no denying that battery storage is a hot topic right now. The intention of my presentation is to explore both the theoretical business case of batteries, as well as, most importantly, UQ's real world experience with a commercial scale lithium ion battery system over the past 18 months.

It will begin with a discussion of the 760 kWh battery system installed at the Gatton campus alongside the 3.3MW solar array as part of a Solar Flagships research project. By the time

of the presentation, this battery will have been in operation for over 18 months. I will talk through the lessons learned from procuring and installing the battery, and findings on issues such as battery degradation. I will discuss the various modes of operation the battery has been used in (solar 'dip filling' during clouds, load shifting, site demand limiting etc.). This will also include discussion of some of the more novel applications of the technology, such as selling power back to the National Electricity spot market during high price events, and participation in the newly accessible Frequency Control Ancillary Services (FCAS) market. This section of the presentation will conclude with looking at the overall financial and technical benefits of this battery to date and the lessons they provide.

Despite the various and innovative ways a grid-connected, commercial scale battery can be used, it is unlikely we would invest in another at current price levels and with other, higher ROI projects competing for the same funding. The exception to this is off-grid applications. The second section of the presentation will discuss the scope and business case of a project that has been developed to provide almost 100% of energy to the Heron Island Research Station in the Great Barrier Reef by using solar energy and battery storage, offsetting the need for expensive and dirty diesel power. This project will be used as a case study to explore the business case of deciding whether or not battery storage is a worthwhile option for other organisations, and the kinds of applications that it may suit best.



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12: When Pam Met Kamal: Using data to improve inclusion & attract students

Stephen Minning, BrandCulture & Pam Wayfinding and Kamal Kopperapu, University of Canberra

Biography: Stephen is a wayfinding specialist with over 20 years’ international experience working with education and transport facilities, and public sector organisations. In 2016, he founded Pam Wayfinding – a cloud-based platform that collates data to create smarter spaces for people, which is transforming the way academics and students find their way around university campuses around the world.

Abstract: Kamal is implementing a data-driven signage system that complements the university’s ‘Campus of the Future’ vision. The University of Canberra is one of the first Australian universities to develop a personal wayfinding app to create a more inclusive, safe and rewarding campus.

Much of what’s being said about big data & analytics doesn’t live up to the hype. Pam Wayfinding’s Stephen Minning together with Kamal Kopperapu of the University of Canberra will debunk a few of the biggest myths about using data to improve how people find their way around campus.

While faculty managers are interested in ‘big data’, many are either gathering the wrong data, don’t know how to utilise the data they do have, or aren’t gathering data at all. Instead of using data to identify opportunities, they’re using data to verify problems they already know exist.

Another data ‘black hole’ relates to student experiences. Currently, universities have very little intelligence to act on when it comes to understanding how students are utilising different spaces around campus.

Together, Stephen and Kamal will demonstrate a simple way of gathering data using a resource that already exists across campus: signage.

Context

By 2030, the University of Canberra campus will have transformed its physical surroundings to create an integrated learning community. As part of its transition to being a ‘Campus of the Future’, the university is partnering with Pam Wayfinding to experiment with digital wayfinding solutions.

University of Canberra believes data collated by Pam – including staff directories, floor plans, timetables and schedules – could play a vital role in designing a campus that meets the needs of millennials and future students. Understanding crowd behaviour is a key future goal.

Structure

- Stephen will share the steps University of Canberra is taking to create a campus that’s easy to navigate
- Kamal will explain why using big data is a journey that typically rolls out in stages

- To conclude, while it’s early days for big data, Kamal and Stephen will explain why they believe wayfinding could be part of the solution .

What delegates will learn

- Using big data to design better campus experiences is an incremental journey
- Getting started on this journey could be easier than faculty managers realise using signs around campus
- This session is an opportunity to debate the future of using data to design better student experiences
- Delegates will also have the opportunity to interact with the University of Canberra’s personal wayfinding app.

13: The view from the back row - a strategy for growing self directed innovative teams

Glenda Haines, University of Auckland

Biography: Glenda Haines is Student, Academic Services and Engagement Manager for the Faculty of Science at the University of Auckland. With nearly 20 years experience in the tertiary sector, Glenda has an understanding of both faculty and central administration perspectives. Her current team of 32 professional staff delivers academic administration services, pastoral care and student and community engagement activity to more than 7,600 Science students across 10 departments and schools. Glenda is a passionate advocate for professional staff development and wellbeing and actively promotes this within her team and the faculty.

Abstract:

- Does it feel like your day is spent solving all your team’s problems?
- How often do you wonder “Couldn’t they have worked this out for themselves?”

Encouraging staff to take real ownership of issues and be proactive about how they approach their work can be an uphill battle for managers especially when we can see the potential for our teams to be more engaged but can’t seem to make it happen. We find ourselves asking, “why aren’t my team more innovative?” without asking “how do I make it possible for them to innovate?”

The University of Auckland is tackling these concerns through the introduction of Service Essentials; a strategy which supports managers to plan, innovate, monitor performance and workflow and initiate improvements within an empowering framework of on-going conversations with those who have the best understanding of the job – their staff.

Using a Visual Display Board (VDB) aligned with the University’s Leadership Framework, teams engage in quick ‘stand-up’ meetings that encourage solutions focused conversations where they are able to own the planning of their work and test ideas for improvement and innovation.

ABSTRACTS

The impact of Service Essentials for the Student, Academic Services and Engagement team in the Faculty of Science has been profound with our VDB providing a space for ideas, questions, play, measurement, planning, testing and celebrating.

During this presentation participants will learn about innovative, solutions focused approaches taken by staff to

- suggest, test and implement process improvements
- challenge existing models and investigate best practice
- take control in workflow planning and measurement of key deliverables
- talk about, build and celebrate the work culture they value
- share ideas and drive projects that validate the relationship between what they do and the university's strategic objectives
- self-identify training needs and share expertise

Participants will be asked to consider the applicability of this model to their workplace, to reflect on their own practice as leaders and the extent to which this facilitates or hinders innovative thinking and performance by their teams.

Finally, thoughts will be shared on how, by using the principles of Service Essentials and the VDB, "the view from the back row" can afford a different perspective on the way we lead our teams, providing a framework that supports the achievement

of objectives, the enablement of people, the planning and organisation of work and improvement and innovation to support greater effectiveness.

I4: The importance of incremental innovation - Nurturing innovation inside bureaucratic organisations

Nik Linnell, Australian Catholic University

Biography: Nik Linnell came to the tertiary education sector after working for News Ltd, one of the world's largest media organisations. This experience has formed the basis for his roles at the University of Queensland and the Australian Catholic University.

Currently employed as the National Manager for Timetabling, Examinations and Results, Nik strives for continual improvement for all stakeholders within the Service Excellence Framework at ACU. Nik studied Education at the University of Tasmania where he received an Honours degree and has an MBA from the University of Queensland.

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Abstract: Increasingly work units within universities are expected to do more with less. Through the use of incremental innovation small yet meaningful improvements in process and services can be delivered to their stakeholders.

The tertiary education sector is rapidly coming to understand that to be competitive in a demand driven environment organization wide innovation is required. Creating innovation focused teams in what are traditionally bureaucratic organisations requires buy in from staff at all levels along with the development of a culture which nurtures ideas driven from the bottom up.

The use of the Three Levels of Innovations framework provides a scaffold upon which to build incremental innovation within a highly process driven work environment. If you are a manager looking to drive innovation from your existing staff understanding their DISC communication preferences can go a long way in achieving this goal.

Specific time is provided to staff within the ACU Timetabling, Examinations and Results (TE&R) team in which to innovate based upon a reflection of past practices. A number of case studies from TE&R will look at the successfully incremental innovation designed and implemented by the team.

By creating time in which to innovate and through a better understanding of communication preferences ACU's TE&R team have moved from an administrative mindset to an innovative mindset.

By attending this presentation I hope to provide you a number of tools which you can directly apply in your own team environment.

15: Reimagining the Faculty Workplace: What are the big questions we should be asking?

Susan Whitmer, Herman Miller, Inc. Florida, USA

Biography: Susan Whitmer combines her curious nature with her drive for creating great spaces to learn and work. Her research on the faculty workplace illuminates the importance of asking the right questions. She holds a degree in design from Ringling College of Art and Design, a MBA from Brenau University and a Msc in Inclusive Design from the University of Salford. Whitmer has written numerous peer-reviewed white papers, articles, and book chapters on learning spaces, including Open House International, National Collegiate Inventors and Innovators Alliance, International Perspectives on Higher Education Research (Vol. 12), and SCUP's Planning for Higher Education Journal.

Abstract: In 2013, nearly 50 percent of college professors held adjunct, part-time, and non-tenured positions in the U.S., a permanent trend. Beyond financial advantages, contingent

faculty, such as adjunct professors, offer value through the real-world experiences they bring to the classroom.

Architects have planned new models of faculty workspaces only to end up with the same twentieth century footprint in a twenty-first century workplace. Thus, we saw a need to rethink traditional approaches and introduce new ideas for faculty workplace design.

Using mixed methods, our research looked deeply at understanding the current state of faculty activities, where they take place, and new ways to support them.

The research illuminated the importance of workplaces that support a variety of activities. The manner and variety of faculty activities require a responsive workplace that supports creation and collaboration, leading and interacting, and scholarly contemplation and socializing, and fluid transitions among a diversity of engagements: private and public, faculty-to-student (individual and group), and faculty-to-faculty.

Past project experiences have shown us that creating a shift in mindset, particularly to an institutional stronghold like the faculty workplace, is unsuccessful if only addressed during the planning phase. It requires a shift in mindset in the planning to plan process, at the university leadership level. It requires asking big, bold questions of our leaders and planners.

During this 90-minute roundtable session, participants will be actively involved in a series of short engagements facilitated through polling software and table discussions. The output from the table discussions will be one to two big, bold questions that should be asked about planning to plan the twenty-first century faculty workplace. Learning outcomes include:

1. Participants will learn about the fast paced, competitive, and multi-faceted lives of faculty, both tenured and contingent.
2. Their engagement in participating in table discussions will illuminate the fact that current workspaces do not meet the requirements for secured and shared storage, technology, and communication tools, and that suit individual activities and needs, such as flexibility, agility, and focus.
3. Participants will be empowered to engage campus leaders in discussions about the big, bold questions that we should be asking about the faculty workplace.

Because of the interest in our research, we have facilitated this roundtable on multiple occasions where participants left excited and hopeful about the prospect of taking a new approach to planning the faculty workplace. A white paper will be available to participants of the roundtable.

16: Making good business sense: Supporting start-ups in the Tertiary Realm

Matthew Salier, Flinders University and David Homburg, Hassell

Biography: Matthew Salier is Director of the New Venture Institute at Flinders University which he founded in 2013. Matthew's role leading the New Venture Institute sees him drive the innovation and entrepreneurial focus for Flinders University, including helping students and the broader community develop new businesses through accelerator and incubator programs.

David Homburg is a Principal and co-leads the HASSELL Adelaide Studio. He is the Australian Institute of Architects (SA Chapter) immediate past President. David has a particular interest in higher education, most recently working on the HASSELL-led Research School of Social Sciences building at the Australian National University in Canberra.

Abstract: Utilising the resources of Flinders University, the New Venture Institute supports entrepreneurship and innovation for both startups and growing businesses. The Institute is accessible to both students and the wider community.

In 2015, the New Venture Institute established the incubator and co-working space 'eNVision' within Flinders University at Tonsley, a building which accommodates Flinders University's School of Computer Science, Engineering and Mathematics as well as industry facing groups from the Business, Health and Advanced Materials areas.

The incubator and co-working space enables members of eNVision to engage and collaborate with like-minded students, researchers and other businesses, whilst providing access to University equipment, meeting spaces and technology to develop their ideas.

As the eNVision community continues to grow, so do their workplace needs. Some businesses require work settings offering visual privacy, security and space delineation, other businesses need work settings that supports a collaborative approach and promotes group discussion.

More importantly, as businesses expand and move to larger more appropriate locations within the University or wider community, new start-ups take residency with new needs. The eNVision layout must be agile and flexible enough to adapt to meet the needs of a dynamic and growing membership.

This joint presentation by the New Ventures Institute and HASSELL will explore how eNVision is fostering collaboration and connection within businesses, with members and with University students, academics and researchers. The presentation will also investigate how the eNVision co-working model is influencing the areas beyond its walls; blurring boundaries with the academic workplace.

17: Bridging the Campus: The joining together of the Burwood Campus, bridging public land, engaging with the community and the culmination of more than a decade of planning

Yvonne Yip, Deakin University

17: Working Together to Realise Big ideas – creating a new environment for collaborative research

James Mooney, Architectus

Biography: James is a Principal at Architectus with over 20 years' experience working in New Zealand and Australia. He combines a broad range of experience in design and implementation of projects ranging from residential to infrastructure and urban design.

Whilst working with Architectus, James has been Project Architect on a number of institutional projects for a wide range of client and user groups including The University of Auckland, Waitakere City Council and Auckland Transport.

Through working with a number of large institutional clients James has gained extensive experience in briefing and design development, master planning, client group liaison and documentation.

Abstract: Working Together to Realise Big Ideas – creating a new environment for collaborative research

How can the physical environment be configured to respond to new and evolving approaches to collaborative research? How can the potential of the built environment be harnessed to facilitate unexpected encounters, and encourage cross-disciplinary research?

In 2009 The University of Auckland initiated a design competition for a new 23,000sqm Science Centre that would provide spaces for future research activities for a key group of Science faculties. The competition design brief identified the concept of 'multi-disciplinarily' as critical to successful contemporary scientific endeavour, and it articulated a desire to promote interaction between the various departments where they had previously been somewhat isolated from each other.

In discussions around the project design we were regularly reminded by the various researchers who would eventually inhabit the building that it is often the unexpected or chance encounters that lead to the greatest break throughs, and in this context architecture has a crucial responsibility to

design in possibilities for as many serendipitous encounters, conversations and opportunities to share work and ideas as possible.

The design offered by Architectus in response to the University brief was underpinned by a single key idea as to how a new building could be organised. This idea, captured in a simple diagram, was the deciding factor that led to Architectus being awarded the Science Centre project – for which construction was completed in 2016. As with many such ideas this simple diagram represented a culmination of many years of design work that has constantly explored the potential for social environments that invite – or even engineer – these sorts of chance encounters and related opportunities. This work has occurred across many project and building types – but in all these varied projects we have sought to realise the social potential inherent in the everyday use of the building.

Our presentation will discuss the design for the Science Centre, incorporating :

- Discussion around the initial 'Eureka' moment, with reflection on some of the work that preceded and informed the key idea.
- An outline of how the initial idea was developed throughout the various design stages, with a focus on how the initial idea has informed the design approach by the project team.
- A review of the outcomes for the new building's occupants, and how its design influences the way in which they work

Abstract: Swinburne had a "Eureka!" moment of clarity when it decided that complaints deeply mattered. That said, complaints had always been taken seriously on a case-by-case basis. But complaints REALLY mattered when Swinburne started pulling feedback together in one place - providing structure, consistency, support and insight.

Complaints Management forms one of the paths to improved university process and student experience. Without complaints, disgruntled and wronged students may simply leave a university. Lessons learnt at Swinburne include: the power of identifying complaint hot-spots and the necessary ingredients of sound resolution.

This presentation will delve into four areas that provide insight for individual complaint resolution and big picture complaint management:

- Inviting more complaints can lead to less complaints
- Embedding structure is gold
- Identifying hot-spots: smaller fires are easier to put out
- Oversight leads to accountability

The presenters will share:

- WHAT type of human resources and system works for Swinburne's complaint management
- HOW Swinburne engages with complainants in meaningful ways
- WHY complaints data is insightful and powerful – the Swinburne experience

I8: Complaints - what's not to love about them? Four positive reasons to welcome the negative

Karen Docking & Emma Lincoln, Swinburne University of Technology

Biography: Emma Lincoln qualified and practiced as a solicitor both in Australia and Hong Kong before moving into education. Since 2012, she has overseen Swinburne University's complaints, reviews, appeals and misconduct (CRAM) framework. She has expertise in the management of complaints, conduct and regulatory compliance.

Karen Docking has worked in tertiary education for 15 years, with her many varying roles leading to her current work in Process Improvement. Her efforts now converge on projects that seek to improve institutional functions and enhance student experience.

CONCURRENT J

J1: Understanding the Impact of Indoor Environment Quality (IEQ) on occupant wellbeing and productivity in universities

Ben Lindsay, Cetec Pty Ltd

Biography: Adam Garnys is CETEC's Senior Consultant and leading IEQ expert. Adam has over twelve years' of IEQ experience along with a BSc (Hons) degree and previous employment with Schering Plough Pharmaceuticals (UK). Adam has conducted over a hundred routine and highly specialised OH&S assessments, including dozens of IEQ assessments. At CETEC Adam also works with Federal and State Governments and large corporate and construction companies to assist them in controlling their OH&S, environmental and property risks. Adam is also a NABERS accredited assessor and has conducted NABERS IE assessment for some of Australia's most prestigious office buildings and tenancies.

Abstract: To further improve the wellbeing and productivity of building occupants including university research and teaching staff and students, we need to focus our efforts and knowledge in optimising the indoor environment.

This presentation will identify the key elements influencing Indoor Environment Quality (IEQ) that needs to be considered when designing, constructing or renovating educational facilities. In addition, operational building issues that are often neglected to the detriment of achieving a healthy indoor environment will be discussed. Furthermore, the specific challenges of how educational spaces including lecture theatres and libraries can be optimised for IEQ for occupant performance, wellbeing and productivity will be highlighted. This will include a discussion on the air quality, water quality, light and comfort features in the WELL Building Standard.

A focus will be placed on the NABERS Indoor Environment rating approach and how it can be used to measure the IEQ performance in an educational environment. This will include a case study of a 2017 project at the iconic Rose Bowl building at Leeds University, UK. Furthermore, this presentation presents the internationally accepted guidelines on what makes a comfortable indoor environment and how these guidelines, along with the NABERS IE rating tool, can be used to optimise the wellbeing and productivity of teaching staff, students, researchers and other university staff.

J2: E+M=POWER, combining Education and Mentoring to enhance women's leadership and career development

Kirrily Anderson and Kate Ramzan-Levy, The University of Newcastle

Biography: Kate Ramzan-Levy, Faculty Manager, Faculty of Business and Law at The University of Newcastle. Kate is a Chief Investigator for the Higher Education Partnerships Participation Program (HEPPP) research team delivering the EMPOWER Mentoring Program. Kate has been instrumental in increasing the faculty's external engagement activities to improve student learning and graduate outcomes.

Kirrily Anderson, HEPPP Project Officer - EMPOWER Mentoring program, Faculty of Business and Law at the University of Newcastle. For 8 years Kirrily has worked on Federal Government funded HEPPP projects, specifically in the project management of outreach activities to school-aged children and their families from disadvantaged communities.

Abstract: Adams defines Empowerment as 'the capacity of individuals, groups and/or communities to take control of their circumstances, exercise power and achieve their own goals, and the process by which, individually and collectively, they are able to help themselves and others to maximize the quality of their lives.' (2008, p.xvi)

The EMPOWER mentoring program from the Faculty of Business and Law at the University of Newcastle, recognises the need to work collectively, in communities, to support the development of individuals and their ability to create positive personal and professional outcomes.

Mentoring programs have been identified by the Affirmative action Agency (1999), as a means to facilitate women's career development by providing insight and information into organisational cultures at senior management levels and fostering network relationships.

Understanding this and acknowledging that the inequality of outcomes for women in the workplace still remain (ABS Workplace Gender Equality Agency, 2015), the Faculty has developed and refined an innovative leadership program that seeks to assist all participants in the process of becoming stronger and more confident in their career development.

For 10 years the faculty has provided the 'LUCY' Mentoring program to female university students, and now following a successful Higher Education Participation and Partnership Program (HEPPP) grant, is providing female high school students from regional communities to connect with university students and Industry professionals, at a pivotal time during the 'school to work' process.

The session, with the focus on the capacity of mentoring to influence/enhance empowerment, will explore the concepts of:

- Identity (professional and personal) development
- Invention (in youth) and reinvention (career longevity)
- Social process of learning and building social capital
- Mediating distance through the use of technology
- Owning and navigating career development planning

And through an open discussion of sharing what we have learnt, ideas and experiences, explore and develop benchmarks for mentoring program delivery;

- What makes an effective mentoring program?
- What makes a good mentor? And how can they be supported?
- Developing communities of practice
- What would be needed in an online resource to facilitate mentoring?
- Measuring/evaluating the program

Reference list

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J3: Why did we do this? Additional offerings of Engineering and Built Environment degrees over multiple campuses

Dr Kimberley Vincent and Michael Walsh, Western Sydney University

Biography: Michael Walsh is the School Manager of the School of Computing, Engineering and Mathematics at Western Sydney University. Michael has been involved Higher Education sector for 24 years. He has previously worked at Swinburne University, Kings College (London), Monash University, University of Technology Sydney in Administration, Technical and Management roles. Michael also worked for Technology One as a consultant in the Higher Education Systems area. Michael was awarded a Graduate Diploma in Business Administration at Swinburne University.

Kim Vincent is a Blended Learning Advisor in the School of Computing, Engineering and Mathematics at Western Sydney University. She enables and inspires academics in creating flexible and engaging learning opportunities with the help of

technology. Kim has been involved in teaching, administration and research at numerous Universities and private colleges for over thirteen years. She holds a PhD in Biochemistry and is currently studying a Master of Education majoring in ICT in Education and Training.

Abstract: Engineering roles are expected to rise by almost 20% in the next five years according to the Australian Government's Industry Employment Predictions 2015 Report. In the near future Western Sydney will see a large engineering and construction boom with the creation of the Badgerys Creek Airport, the Science Corridor and focus of Parramatta as a second CBD. Additionally, federal government funding for infrastructure to the area is 2.9 million over 10 years. To take advantage of the industry demand and to increase the market share of perspective students, Western Sydney University has increased offerings for these degrees over multiple campuses. Previously only on Penrith campus, Construction Management is now also offered at Parramatta campus, and Engineering degrees at both Parramatta and the new Sydney City campus in 2017.

Multi-campus delivery provides greater flexibility for students and is an attractive characteristic that the current and future students demand. However, technical subjects like engineering are more difficult to establish due to the equipment and spaces required for practical laboratories and technical staffing requirements. As engineering degrees are expensive to set up and operate, most universities will run these degrees on one campus only. Increasing these offerings has created some problems including increased workload of academic staff, equipment costs and availability, accreditation considerations and cannibalisation of existing offerings. We have examined solutions to these problems such as using webinars, flipped classroom strategies, streaming lectures and virtual laboratories.

From an economic rationalist point of view, this costly endeavour would probably not pass a cost-benefit analysis in the first two of years of delivery. However, with expected population growth to reach 3 million by 2036, as well as growth of peri-urban spaces in the Greater Western Sydney region, placing these degrees in Parramatta is a strategically important decision both financially and socially.

J4: Working together to realise big ideas: World Café: a simple technique for solving complicated problems

Laurie Ransom, LaTrobe University

Biography: Laurie Ransom is well known in higher education for her work in student services, in particular developing students' tertiary academic and language skills. As the General Manager, Academic Skills at the University of Melbourne, Laurie won the prestigious Gerry Barretto Award for Outstanding Student Services, and the inaugural IEAA Excellence Award for the

Diagnostic English Language Assessment. In her current role at La Trobe University, Laurie manages a portfolio of services to support academics and students, most notably the STAR team. Laurie wrote the Retention Plan for CSHE.

Abstract: Australia's Widening Participation agenda has significantly increased the number of non-traditional students in higher education. Universities, in their quest to meet both access and revenue targets, have opened their doors to students who may not initially have the cultural capital to sustain their studies. For some universities, this has led to unsatisfactory higher levels of attrition. In La Trobe University's College of Science, Health and Engineering (CSHE), attrition has doubled in the last eight years to 28%. Recognising both the moral as well as financial imperative to improve retention, CSHE desired a swift and measurable change. The College knew that to affect change, it would have to empower academics to take responsibility and, critically, give them the 'tools' to become change agents. Also recognised was the need to partner with another university division to leverage of its expertise and develop an integrated solution. The method CSHE employed will be of interest to other faculties who wish to change culture and innovate without spending a lot of money. Our strategy was simple: we hosted a 'world café' and invited subject coordinators from the most underperforming courses. Organised and implemented in less than four weeks, one key to our success was the championing of the APVC, who was not only armed with evidence – critical to any argument with academics – but also with the unpalatable future of our courses if we did not stem the flow of attriting students. Another key to our success was our collaboration with Learning Futures, responsible for curriculum reform and student support. We introduced our café with the premise that retention was not just our problem, but also our problem to solve. A series of short presentations about innovative interventions followed, each designed to inspire and empower participants to take action. Participants were then asked to create an intervention and commit to implementing it. The result was 12 action plans, each with an assigned 'liaison' from the STAR (Student Transition, Achievement and Retention) team to support implementation. Action plans are now in progress, and data will be captured to track their effectiveness. Our participants left the world café with tools, a plan and support. Equally important, they left with a clearer understanding of their role as agents of change. If your faculty is interested in fostering a change environment on a shoestring, you will be interested in learning more about CSHE world café.

J4: The quiet revolution: boosting international enrolments and internationalising research training in engineering

Natalie Downing & Jo Midwinter, The University of Newcastle

Biography: Natalie Downing's experience at the University of Newcastle is extensive spanning more than 20 years in various positions including Associate Director – Faculty of Engineering and Built Environment, General Manager Campus Life, Manager - Residential Life, Head of College and Assistant Academic Registrar in a number of faculties. Natalie has a particular interest in student and staff engagement and student recruitment.

Jo Midwinter is the Senior Research and Research Training Officer for the Faculty of Engineering and Built Environment, University of Newcastle. Jo has worked at the University since 2012 in a variety of roles from student advising to researcher support. She has a special interest in the provision of quality support and advice to students and academic staff engaged in research and in working to ensure an excellent experience for all students.

Abstract: To combat a shortage of domestic research candidates in engineering, the Faculty of Engineering and Built Environment (FEBE) introduced a number of successful strategies to increase international enrolments. One such strategy was the establishment of a quiet revolution to increase international enrolments through the implementation of Dual Award Doctoral Degrees (DADD) with targeted international institutions.

Alongside increased higher degree research (HDR) enrolments, FEBE experienced a corresponding increase in inbound international interns. International interns are treated in the same way as enrolled HDR students and are allocated a desk in a shared office, granted access to University resources and facilities such as internet, library, printing and laboratory space. The interns also receive supervision in the same way as an enrolled HDR students. However, the cost of hosting interns is not offset by funding for completions through the Research Training Program (RTP).

The introduction of DADDs has enabled a number of international interns to enrol as HDR students which will result in increased revenue through completions. It is also anticipated that these agreements will increase staff and student mobility with the partner institutions as well as strengthening research collaboration and articulation opportunities.

There are considerable benefits to hosting international interns beyond the clear financial gain, once students complete their HDR programs. The speakers will present qualitative data from recent surveys of both domestic and international students highlighting the internationalisation of research

training in Engineering at UON. Some of the intangible benefits identified through the surveys include: greater cultural diversity in campus life, the opportunity to interact with others who share different values and customs, to develop friendships, improve cross-cultural communication and break down cultural barriers. An increased number of international interns also means an exchange of ideas resulting in new ways of thinking that challenge assumptions and that contributes to a rich and stimulating research environment. These exchanges provide an opportunity for international learning resulting in a truly global citizenship, as well as enhanced employability.

The quiet revolution continues.....

J5: Millennials, Food & Shopping

Suzee Brain, Brain & Poulter

Biography: Suzee Brain is the Director of Brain & Poulter, Australia's No.1 University Retail Planners.

Brain&Poulter provides government & industry with global retail planning advice in masterplanning, concept development, feasibility studies, operational reviews and retailer training and development.

With the removal of compulsory student union membership in 2006, Brain & Poulter's expertise has proven to be advantageous to University campus retail food planning having developed successful retail masterplans for 22 Australasian University campuses including 7 of the Go8.

Suzee has a passion for food and is a member of the PCA, TEFMA, ISPA and a regular guest speaker at industry events.

Abstract: Every campus would love the chance for an iconic new building project that could incorporate a stunning new retail offering. Yet great improvements to student satisfaction, commercial returns and retail dynamics are also being achieved by passionate University staff committed to a solid retail strategy and thinking outside the box when there are no new buildings to work with.

In this abstract, Brain&Poulter will showcase the results achieved in upgrading the retail experience at The University of Newcastle, University of Western Australia and The University of The Sunshine Coast when there was no specific building development or campus transformation project in place.

Specifically, the abstract will highlight:

1. The previous levels of student engagement and retail performance with retail offers that identified how much potential upside was available if the retail offer could be improved
2. New methods for sourcing local operators to come to campus in rural or remote areas
3. Communication strategies for gaining buy in from existing operators to embrace change

Three Universities Achieve Incredible Results With Little Capital Investment

Following the commissioning of campus wide commercial strategies, these 3 Universities have been chipping away at adopting the recommendations within the framework of using existing operators and buildings to incorporate the opportunities identified in each campus retail strategy such as:

USC

Where local operators popular off campus with students have been targeted to takeover existing tenancies on lease expiry.

Re-location of some non retail campus offices to re-purpose space to retail to increase critical mass of retail within zones

UWA

Providing operators with data and evidence from the retail strategy to create a compelling case for change within tenant controlled retail predicts such as Guild Village

Providing operators with external retail expertise to finesse their re-development plans

UoN

Spending wisely - looking for low cost ways to improve common area amenity

Re-formatting retail leases to include performance standards and KPI's to drive retailer improvement

KEY TAKEAWAYS

Delegates will return to their workplace with strengthened knowledge and understanding in:

1. Avenues to attract high street operators to campus
2. The importance of using a retail planning roadmap
3. The benefits of including retailers in the retail strategy development & adoption process

J5: How to deliver retail choice, competition, and campus culture on a shoestring

Kate Robertson and Iona Bealy, University of The Sunshine Coast

Biography: Kate Robertson has been with USC for 10 years and, as Communications and Project Officer, is an integral member of the Capital & Commercial team. Her responsibilities include all departmental administration and communications; management of retail operations; supervision of venues and catering services; and the delivery of capital works projects. Kate has a degree in Social Anthropology from the London School of Economics & Political Science, a diploma in Project Management, and has just completed a Masters in Communications.

Iona Beaully is a facilities management professional with extensive experience of working in planning and design in the tertiary education sector, both in Australia and the UK.

Her areas of professional interest include: strategic space and asset management; campus master planning; flexible workplace design; and new initiatives in teaching and learning space design.

Iona holds the position of Director, Asset Management Services at the University of the Sunshine Coast and is a Director for TEFMA.

Abstract: In 2014 USC embarked on a retail revolution, going from a completely USC-run catered campus to one that is now 70% serviced by external retailers. This process didn't just involve outsourcing premises to the highest-bidding chain stores however, but rather saw the implementation of a multi-faceted approach that considered what was right for our particular student cohort and go some way to transforming the previously 'unsticky' campus culture. Three years down the track and USC now has a new entertainment hub that hosts markets, music and events; a combination of locally-owned businesses and USC outlets providing a selection of quality healthy food options; and a masterplanned retail strategy that will guide the campus's development for years to come. Still this is not to say the road was an easy one. The total project received only about a tenth of the required budget, the loss of institutional management of such important services was controversial, and the specific university environment was a shock to retailers unaccustomed to the semester fluctuations. Nevertheless, USC has managed to change the face of its campus retail by taking a considered and resourceful attitude to its community's demands for choice, competition, and a more vibrant campus culture.

J6: Brand new day: the revolutionary ideas transforming student experience

Matt Dailey, Monash University and Mark Gandolfo, GRIT

Biography: Matt has a unique and broad background with experience and transferable skills across multiple sectors. He has managed retail stores, facilitated and led the process of large scale retail fit outs, overseen and driven large scale recruitment processes and led many change management projects in various organisations. The last eight years have been spent working in Higher Education in a variety of roles. Matt is currently the Operations and Business Manager on a Commonwealth Funded Project led by Monash University, part of his role involves overseeing the Communications function of the project.

Abstract: How does the notion of brand transform student experience? In this panel discussion, we will explore the growth of branding as higher education institutions move beyond traditional marketing and advertising campaigns. Increasingly, institutions are seeking to craft and present a unified brand message, creating an experience and environment to recruit and retain students. Supported through technological advances, we are now seeing full scale brand focussed advertising and communications campaigns using branded content, informed by digital strategies.

The method of delivery has shifted in recent years and is now more focussed on demonstrating value through telling stories and showing real life impact. Historically the focus was more geared towards demonstrating a point of difference which was very broad. Now it's about telling a unique brand story which involves the target audience and helps take them on a special journey.

In exploring this topic, we will bring together a panel of experts from across the sector – leaders from Marketing and Student Administration as well as a Director of a boutique Digital Communications agency. The panel will start with a facilitated discussion but broaden out to include discussion points and questions from the audience.

Whilst the panel will explore the here and now and discuss some recent examples of work in the sector, they will also look to the revolutionary ideas which are currently being tested and will impact the sector in years to come. And what must institutions do to walk the talk, ensuring that their brand messages reflect the experience of students once enrolled when they become part of a campus community.

Learning outcomes:

- The importance that Marketing campaigns play in our institutions
- The value in telling stories and not selling a point of difference
- Highlight revolutionary ideas that are being tested and explored

Monday 18 September 2017

MORNING TEA

11.00- 11.30 am

Innovative Universities embracing the power of mobility and BI

Jane Herring, Zuuse

Biography: Malcolm is Zuuse's Innovation Director, responsible for overall ownership of product design and bringing innovation and a fresh perspective to product development and project delivery.

Malcolm is an experienced General Manager and Product Manager with over twenty five years' experience in the software industry, including a solid background in software development with leading organisations in Europe and Australia, ranging from small, private companies to ASX listed national corporations.

Abstract: Zuuse's software is used and relied upon by many of the largest Universities across Australia and New Zealand. We will show you a variety of easy-to-use mobile applications and Business Intelligence tools that support everyday applications and empower FM teams.

In this session, you will learn how:

- To throw away paper and complete work orders quickly and effectively in the field.
- Configurable mobile apps can be used to complete condition assessments and other on-site applications.
- Monash University have deployed a smartphone app across their entire campus to report issues quickly.
- Flinders University are using 3D BIM mobile apps to access detailed information in the field.
- Business Intelligence dashboards are providing real time monitoring of KPIs at UTS University.
- Paperless workflows and mobility can save time and keep teams in the field.

Who is Zuuse?

Zuuse asset lifecycle solutions blend 3D BIM capabilities, mobility, lifecycle management and information management. They help asset owners and operators of complex buildings and infrastructure reduce costs, drive greater control and enable better decision making.

Zuuse currently manages over \$50B worth of assets for hundreds of Healthcare facilities, Universities and Commercial operations in Australia, New Zealand and the Middle East.

For further information www.zuuse.com



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Changing the Leadership Conversation using the new University of Southern Queensland People Capability Framework

Brett Johnson

Biography: Brett Johnson is the Organisational Strategy and Capability Manager within the HR Department at the University of Southern Queensland. Having worked within the public sector in Australia and Canada, Brett has an interest in developing leaders, and providing tools to support supervisors to create engaging work environments where people can grow, excel and deliver results. Brett is a practicing certified executive coach and holds an ACC credential from the International Coach Federation. His education includes a Master of Leadership (Monash), Graduate Certificate in Executive Coaching (Royal Roads), Graduate Certificate in Business (Monash), and a Bachelor of Science with Distinction (USQ).

Abstract: The University of Southern Queensland (USQ) has implemented a new People Capability Framework. Created in response to the current pressures on the University and Higher Education Sector in general, and with a focus on supporting the strategic objectives of the University, the Framework describes the six key capabilities required to be developed by all employees (professional and academic) in support of outstanding performance.

For example, in response to the globalisation of people and access to information in addition to changing student demographics and expectations, the University has highlighted the need to optimise the use of digital technology in the capability "Leverage Emerging Technologies".

The Framework has three components. The University's core values of Respect, Integrity, and Excellence form the foundation of the Framework. Building out the Framework are four leadership levels: Leading Self; Leading Others; Leading Leaders; and Leading Organisation. These leadership levels were chosen, as opposed to strict hierarchical levels, in order to embed the notion that every employee at USQ is a leader and that one's leadership is commensurate with the scope, complexity, influence, and intent of one's position in the University.

The third component of the Framework are the key capabilities. The six capabilities are: Think Strategically; Engage People to Build Positive Relationships; Strive for Performance Excellence; Show Courage, Resilience, and Adaptability; Leverage Emerging Technologies; and Shape the Future. Each capability is described across each leadership level using behavioural examples of what the capability does and does not look like in the workplace.

A range of tools and resources have been created to support implementation, contextualization, and use of the framework across the University. Some of the resources include: academic theory and intent document; pre-canned overview PowerPoint for supervisors; self-assessments and reflection documents for all leadership levels; team profile and snapshot templates; and self-service introduction and overview videos.

The aim of the e-display is to focus on and highlight the way the Framework is facilitating a different leadership development conversation at the University. As such, the e-display fits the conference themes of Leadership and/or Adaptation.

Using an in-house, custom animated video, the e-display uses a story narrative interwoven with elements of gamification, to provide an engaging experience for the viewer. The short story follows a person's quest for leadership in a fictitious adventure-type setting. The leadership elements of the Framework are introduced as part of the narrative as the person completes the quest.

More power to the students!

Ms Michaela Sheahan, HASSELL, Melbourne, Australia

Biography: Michaela has worked in the design industry for 20 years in design, research, and management.

In her current role as researcher in practice, Michaela produces evidence to inform project work across a number of sectors, with a focus on health, education, and urban design. This broad spectrum of work enables Michaela to bring a holistic outlook to the research, analysis and benchmarking exercises that large and dynamic projects require.

Abstract: This short film is a snapshot of the thoughts and ideas of current Australian and Singaporean students about when, how and why they use informal learning spaces on campus, and what's needed to make those spaces more effective.

This short film is a snapshot of the thoughts and ideas of current Australian and Singaporean students about when, how and why they use informal learning spaces on campus, and what's needed to make those spaces more effective.

'Social Glue' - A Market Place for Learning

Ms Georgia Singleton, Woods Bagot, Sydney, Australia

Biography: As Director and Global Health and Science sector leader, Georgia continues to demonstrate a strong commitment to the sector's ongoing development across the world.

Having worked on a diverse range and scale of architectural and interiors focused projects, Georgia seeks to push traditional building and fit-out typologies with dynamic, highly integrated and research-driven solutions.

Georgia's key projects include the University of Sydney's Business School, Australian National University's JCSMR Redevelopment, University of Sydney's TLC Masterplan, University of New South Wales Engineering Masterplan and Solar Research Facility and the University of Technology in Sydney's Teaching and Learning Space.

Abstract:

'Social Glue' - A Market Place for Learning
One of the main objectives of the University of Sydney Business School was to reshape the conventional higher education triptych of teaching, learning and research. Drawing on this goal, the vision for the project was to create a 21st century learning environment that fosters productive interactions with the business community while responding to the needs of students.

In a strategic move to consolidate its facilities across nine buildings on the Camperdown/Darlington campuses, Woods Bagot designed the flagship home for the new University of Sydney Business School. Catering to over 6,000 students, the project includes three 550-seat lecture theatres, eight 100-seat study rooms, 40 seminar rooms, a learning hub and 1,500 sqm of informal learning space.

Presenting a new iteration of a university community, the campus design created 'social glue' for interactive learning, facilitating a collegiate and collaborative learning and research environment for the next generation of global business leaders.

This paper explores University of Sydney's new Abercrombie Business School building as a case study - designed by Woods Bagot.

Redesigning Futures

The functional floor plates provide a spectrum of learning environments positioned around a centrally-located social spine, encouraging collaboration and visual accessibility. Providing transparency and a sense of dynamism from the street to informal learning environments, the building is activated via the use of exposed stairs which link the various floors.

The design offers an architectural solution in the form of a series of boxes clustered around social, collaborative, 'sticky' spaces. The 'social glue' spaces provide transparency from the street to the informal internal learning environments and external learning spaces.

A dynamic double-skin façade system is intelligently designed to react to both the interior and exterior building adjacencies, with density and rotation of blades responding to desirable sightlines, privacy concerns and daylight penetration to study areas. In a contemporary reinterpretation of historic local sandstone, the stratification of terracotta baguettes integrates the architecture firmly within the campus aesthetic.

The building celebrates the presence of the existing Sydney Blue Gum on the site by establishing the hardwood tree as a central feature around which the building wraps. This strong entry statement also acts as a bold visual and physical link reaching out to the community and main campus. The spatial and material resolution of the integrated landscape design maximises accessibility and ease of movement while contributing positively to public domain.

Pop-Up Hospitality: Minimising disruption during redevelopment works

Mr Richard Kendall, Murdoch University, Perth, Australia

Biography: Richard is the Property Portfolio Manager at Murdoch University. His responsibilities include management of the University's varied lease portfolio, including retail, hospitality, research and commercial tenants. He also manages a number of commercial contracts and outsourced management agreements for student and retirement living accommodation providers. Prior to joining the tertiary education sector, Richard worked as a commercial real estate solicitor in the UK. His clients included a number of schools and universities, religious institutions, not-for-profit organisations, superannuation funds, retail chains and health sector bodies. Richard's research interests include campus-based retail and hospitality provision and commercial development.

Abstract: During redevelopment of campus-based food, beverage and hospitality facilities, it is important to minimise disruption to the university community who rely upon it on a daily basis.

Murdoch University is currently redeveloping its outmoded Refectory into an expanded, contemporary Student Hub, designed to meet modern campus expectations around hospitality, community engagement and co-work spaces. During the closure for redevelopment, the University has shifted its primary food and beverage operation to a temporary facility, known as the Pop-Up Ref.

Delivered by a combination of sea container kitchens and Perth's growing number of Food Trucks, the temporary facility has proved popular with staff and students alike. This digital poster highlights the key issues faced in the design, operation, activation and legacy planning of the Pop-Up Ref. Using video content, short vox-pops, photographs and plans, this poster will provide TEMC attendees with an insight into a range of issues such as:

- Planning the location, service, facilities management and infrastructure needs;
- Balancing the temporary nature of the facility against cost and experiential requirements;
- Managing expectations of the campus community;
- Adapting to unanticipated changes in user behaviour once in operation;
- Matching supply with population and fluctuating demand;
- Managing tenant behaviour;
- Leveraging campus-activation opportunities;
- Considering possible legacy opportunities once the facility is no longer required; and
- Winding down the facility.

Using Murdoch University's Pop-Up Ref as just one example, TEMC attendees will be able to apply the lessons learnt towards their own temporary service delivery requirements in a range of situations.

During redevelopment of campus-based food, beverage and hospitality facilities, it is important to minimise disruption to the university community who rely upon it on a daily basis.

Choosing the Future: Data as a transformative lever in tertiary admissions

Dr John Griffiths, QTAC, , Australia

Biography: John Griffiths is the CEO of QTAC, the predominant service provider for prospective university and TAFE applicants in Queensland and northern New South Wales. He was previously Assistant Vice-Chancellor at Massey University.

John has transformed QTAC by introducing the standards that offers are made according to institution need and applicant readiness, rather than artificial offer round schedules. He was a member of the Queensland Ministerial Taskforce on Senior Secondary Education and Tertiary Entrance and continues to lead Queensland's transition from the Overall Position to the ATAR.

John holds a PhD from Monash University.

Abstract: Using data to predict the future has become something of a leitmotif in the education sector: data, particularly 'big data', holds out the tantalising promise of control in a sector shaken by seismic change.

Even as data is being used by universities in sophisticated ways to predict performance and attrition, these institutions continue to use data bluntly in admissions. Universities tend to look solely at previous year admissions data to predict how many students they will admit in courses in future years: as a result, they are often dismayed by a sudden drop in student demand for one course, just as they are delighted by sudden surges in interest in another. In either case, the university will face administrative and structural challenges, for by their nature most universities require extensive lead times to adapt well to changes in student demand.

In 2017 QTAC will complete a project using data to predict what courses will be in demand 2, 5, and 10 years from now. This predictive modelling goes well beyond using the past as a predictor of the future: instead it combines data sets from multiple sources to track the relationships between social changes, student sentiment and community profile to determine which courses will rise and which will fall in student demand in the near and not so near future. This knowledge will enable QTAC's institutions to make data-driven decisions about significant investments in course and facilities development.

QTAC would welcome the opportunity to show off this exciting new initiative in a short video.

The video will establish the problem (how do educators plan for student demand?), identify the available data sets, compare the options for analysis, and preview some of the outcomes that QTAC has reached through this analysis.

About QTAC

For 40 years, QTAC has been helping universities select students for courses. As a leading tertiary admissions centre, QTAC has a unique insight into the tertiary sector.

Using data to predict the future has become something of a leitmotif in the education sector: data, particularly 'big data', holds out the tantalising promise of control in a sector shaken by seismic change.

University of Melbourne's Arts West Redevelopment - AV technology in modern learning & teaching environments

Mr Simon Umow, Umow Lai, Australia

Biography: For more than 15 years, Simon has applied his expert knowledge of the many facets of information and communications technologies (ICT), providing advice and solutions for a wide range of commercial, government, residential, hospitality and educational projects. Complex audio visual facilities and system design, collaborative and conferencing technologies, building and system integration and the user experience are the areas Simon has focused his skills on and finds the most rewarding.

Landmark tertiary education projects Simon has provided consultancy services for include the University of Melbourne Arts West Redevelopment, Monash University New Horizons Centre and Australian National University's Colleges of Science.

Abstract: Providing the audio visual consultancy and designing the solution for one of the University of Melbourne's most significant building projects in recent years was an interesting challenge, and one that has successfully delivered dynamic learning & teaching spaces.

The recently completed redevelopment of the Arts West building is the new home for the University's Bachelor of Arts. It aims to provide undergraduates access to world-class spaces, and support knowledge access and sharing.

The opportunity to provide the audio visual design tailored for the needs of both students and staff was an exciting one for Umow Lai, a member of the project team that included architects ARM and Architectus and the University.

All members of the User Groups and the Design Team had very strong ideas about functional and aspiration goals for the project. Umow Lai's early engagement with the team ensured these were captured and incorporated into the design and delivery of the audio visual systems, meeting and exceeding expectations of all involved.

Lecture theatres are generally non-traditional in shape, with several of these round or horseshoe-shaped as a means to promote cross-room interaction among the students, as well as providing flexibility.

State-of-the art audio visual systems have been introduced into teaching spaces, inclusive of:

- Discursive spaces that encourage cross-room discussion while allowing students to maintain eye contact with others in the class, and a comfortable view of projected images.
- Interactive Cinema Room with cinema quality projection and surround-sound audio system to replicate a cinema like environment for viewing, studying and discussing movies, video

and soundtracks.

- Edge blended, geometrically corrected projection systems to curved walls creating an immersive viewing experience.
- Media Lab which allows users to display multiple video sources simultaneously on a large video wall, each video source sized on the video wall to suit the requirements of the particular users of the space.
- Collaborative spaces allowing small groups of students to work together, share video content with each other and with other small groups located in the same room.
- Specialised teaching rooms to combine the great potential for object-based learning presented by staff from Cultural Collections, who are responsible for the care and conservation of precious objects.

From the outset, the University was keen to provide facilities that respond to the rapidly changing nature of delivering first-class learning, as well spaces that can allow students to expand their learning experience.

Mentoring Matters: Building a Positive Relationship (Based on an Individual Case Study)

Mrs Kelli O'Hern, Deakin University, Burwood, Australia, Mrs Julie McCusker, ATEM

Biography: Julie McCusker: Manager, Deakin Portfolio Office, ATEM Member

Biography: Kelli O'Hern: Project Coordinator, Deakin ATEM Institutional Coordinator

Abstract:

Mentoring Matters: Building a Positive Relationship (Based on an individual case study)

Abstract Submission Themes & Alignment

1. Transforming Experience

Mentoring can be a transforming experience. It aims to support and encourage all those involved, with mentors offering guidance and advice generally to less experienced colleagues. The arrangement results in shared learning by both parties in an effort to achieve specified goals and progress careers.

2. Working Together to Realise Big Ideas

Mentors and mentees often work in different areas of the organisation; it is good practice to find a mentor outside of your direct reporting line (Management Mentors, 2013). This encourages networking, sharing of knowledge, and allows for cross-collaboration across the University. Deakin University's formal Mentoring Partnership Program (MPP) can assist in

matching mentors and mentees, or allows the mentee to approach a preferred mentor. The authors participated in MPP before continuing the relationship informally after its conclusion.

Aims of Presentation & Proposed Learning Outcomes

The authors will share their personal experiences and learnings as to what aids the building of a positive relationship, which is very important to the mentoring experience (UC Berkeley, HR, 2017), (CHLP, 2003), (APA, 2006). This will be based on their individual case study participation in both informal and formal mentoring. Tips to construct a positive mentoring relationship include establishing trust (CHLP, 2003), communication (Byington, 2010) and commitment (UC, 2009).

1. Establish Trust

- Be open to the experience (APA, 2006)
- Learn about each other including goals, interests, and priorities (Byington, 2010).
- Keep information confidential (CHLP, 2003).
- Establish safe, respectful environment where both parties feel comfortable (Management Mentors, 2013)

2. Have Good Communication

- Actively listen (CHLP, 2003).
- Check for understanding to avoid miscommunications.
- Consider a personality test to determine preferred communication styles (PRISM, Myers - Briggs)

- Establish agreed roles and expectations (Byington, 2010).
- Clearly articulate goals which are SMART
- Give and receive feedback

3. Demonstrate Commitment

- Attend and prepare for scheduled meetings (UC, 2009).
- Make time to work towards goals.
- Incorporate advice and suggestions.

Please also refer to our supporting video.

References

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