



2020

# ITP Research Symposium

*Kotahitanga: He mahingā tahi – working in partnership  
to improve outcomes for learners and communities*

## Programme and Book of Abstracts

Online  
24 – 25 September 2020

**TOI-OHOMAI**  
Institute of Technology

## Conference Organisation

This conference is the result of the efforts of dedicated and hardworking people.

Thanks go to:

Conference Convenor: Heather Hamerton, Head of Research

Proceedings Editors: Heather Hamerton and Cath Fraser

Conference working group members:

Cath Fraser, Catherine de Monchy, David Bishop, Eru Biddle, Jennifer Eldring, Judith Honeyfield, Kate Shanaghan, Keith Gregor, Lisa Denmead, Melissa Preston, Naomi Hesselting-Green, Pavitra Dhamija, Peter Williams, Philippa Crombie, Rebecca Lausberg, Robyn Tucker, Suzanne Brotherton, Tepora Emery,

## General Information

The symposium is set up as a series of webinars. A Zoom Webinar is a view-only platform which allows attendees to view a presentation or event without having their camera or audio feeds being turned on. You can still interact with the speakers or presenters through the question and answer feature, for structured questions. There is also a chat feature which allows dialogue in a more relaxed environment.

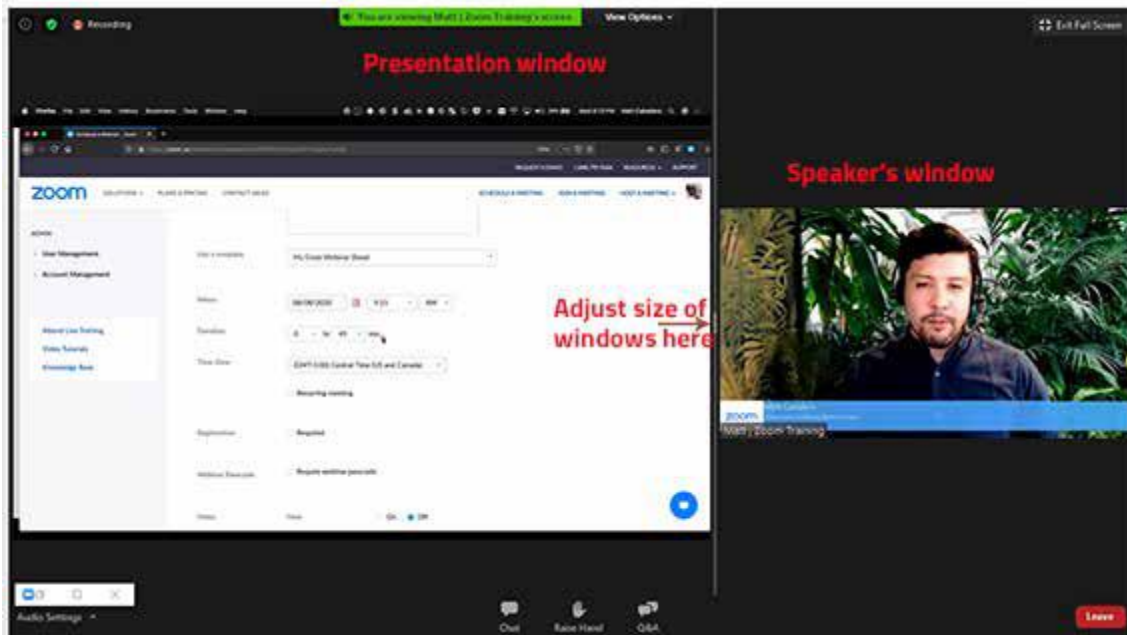
You can go from one room to another by clicking on the link of the rooms. Avoid clicking on the room links from two different devices - this often leads to being removed from the room.

Always enter the rooms with your full name - the one you registered with. Please set this up prior to entering the rooms. It's good manners and everyone will relax more if we know who is in the room, and who we are chatting with - or who you might want to initiate a conversation with.

Questions & Answers: Most of the presentations are presented in a webinar style (not interactive) - with the exceptions of two workshops. The presenters can't see or hear you. However, you can ask questions by using the Q & A (see the bottom of your screen). If you see a question that another attendee has asked and you would like this answered, please upvote it by clicking 'like'. The questions with the most likes have a better chance to be answered. It also means that if you see a question there already that is similar to yours, try not to submit another similar question - it splits the vote and may make it more unlikely to be answered. Instead, upvote the one similar to your own interests. Questions will be asked to the presenter at the end of their presentation. Because there are many attendees, it might not be possible to answer all questions. You can always follow-up with the speaker another time.

Chat: you can use the chat to 'talk' to other attendees.

Best viewing: When a presenter shares their screen, you as an attendee have different options to view this. Click at the top of your screen for Viewing Options, select: side by side viewing. You can then adjust the size of each window and have both the speaker and their presentation side by side. You can adjust the size of each window - see picture below



Recordings: the links to the recordings will be sent soon after conference finishes.

## Additional Activities

In addition to the programme below, there is creative exhibition and poster presentation as follows:

### 'Pōraruraru (Disequilibrium)'

**A link will be sent via email when available.**

*Nicol Sanders-O'Shea, Graeme Cornwell, Donna Dinsdale, Quinton Bidois, Kelcy Taratoa, Anne-Marie Simon, Darcell Apelu, Dale Sattler, Kyle Sattler, Karolina Bemova, Kereama Taipa, Helen Cooper, Riley Claxton, Joanne Donovan and Julia Cass-Janes*

### Poster Display

Link to the poster display is [here](#)

A judging panel will vote for the winner and this will be announced at the Plenary on Friday.

- Future nursing workforce: Student nurse intentions to work in aged care after registration: *Dr Samantha Heath, Pam Williams, Robina Mall, Shobha Johnson, Gil Graham*
- Implementation of employability skills and authentic learning approaches to improve industry and learner outcomes: *Sarla Kumari and Thilanga Ariyaratna*
- Learning to speak nursing: Using early adult literacy assessment and targeted intervention to promote student success on the Bachelor of Nursing programme: *Dr Samantha Heath, Victor Roux, Ruth Jackson, Pam Williams, Karen Haines, Treena Brand and Dr Dianne Roy*
- The academic two-body problem: *Barnaby Pace*
- Working across schools in an ITP - the benefits and challenges of teaching in more than one programme: *Richard Edwards*
- Making a case for upskilling the New Zealand workforce for offsite construction: *Rehan Masood*

<b>DAY 1 THURSDAY 24 SEPTEMBER</b>				
9.00	Click <a href="#">here</a> to join <b>Welcome and Mihi Whakatau:</b> Led by Eru Biddle <b>Welcome Address</b> from Toi Ohomai CEO, Dr Leon Fourie <b>Keynote:</b> Hemi Rolleston and Ramona Radford: Fit for a better world. My world, your world, our world? <b>Chair:</b> Heather Hamerton			
10.30 – 11.00	<b>Morning Tea</b>			
<ul style="list-style-type: none"> <li>• Presentations are streamed concurrently across different Zoom links. Presentations are 15 minutes with 5 minutes for questions.</li> <li>• Links are for attendees only. You will receive a separate link if you are a presenter in a particular session.</li> </ul>				
<b>SESSION 1</b>	<b>Click <a href="#">here</a> to join:</b>	<b>Click <a href="#">here</a> to join:</b>	<b>Click <a href="#">here</a> to join:</b>	<b>Click <a href="#">here</a> to join:</b>
11.00 – 11.20	Extending the wahakura programme: Te Whare Pora o Hine-te-iwaiwa <i>David Tipene-Leach</i>	The guide to teaching international students as a bridge between student and stakeholders <i>Heather Vail and Sue Werry</i>	Hand in hand: A new degree apprenticeship model for engineering education in New Zealand <i>Hana Cadzow</i>	Body composition in older Māori males in the Bay of Plenty region <i>Campbell Macgregor, Crawford Robb and Becky Martindale</i>
11.25 – 11.45	Te Manu Tu Tuia: A community-based intervention model for prevention of family harm <i>Raema Merchant and Charlotte Chisnell</i>	Supporting Generation Z: Insights for educators and employers <i>Dr Samira Kakh and Dr Roohollah Kalatehjari</i>	Interweaving cultural values and beliefs into Western social work practice <i>Lois Naera and Fuatino Petelo Leafa</i>	<b>STUDENT SNAPSHOT 10 mins</b> How might we create environments that enable aged persons to thrive? <i>Anneke Driessen and Shareen Hanif</i> <hr/> The lived experience of student representatives in a NZ Institute of Technology and Polytechnic: A critical examination <i>Daryl Parkin</i>
11.50 – 12.10		Strategies for teaching international students - a case study on culturally relevant pedagogy at an NZ ITP <i>Barbara Kneuer</i>	<b>STUDENT SNAPSHOT 10 mins</b> Seeking a contemporary textile making disequilibrium: Self-reliance as an intercessional agent for change <i>Joanne Donovan</i>	The influences of the Covid-19 pandemic on sleep among tertiary education staff. <i>Sally Baddock</i>

			Pedagogy of hopefulness: The challenges of social change and intergenerational disempowerment <i>Mawera Karetai and Samuel Mann</i>	
<b>12.10 – 1.00</b>	<b>Lunch</b>			
<b>1.00 - 1.45</b>	<b>Click <a href="#">here</a> to join</b> <b>Keynote Speaker:</b> Stephen Town, CE, NZIST <b>Chair:</b> Heather Hamerton			
<b>SESSION 2:</b>	<b>Click <a href="#">here</a> to join</b>	<b>Click <a href="#">here</a> to join</b>	<b>Click <a href="#">here</a> to join</b>	<b>Click <a href="#">here</a> to join</b>
<b>1.55 - 2.15</b>	Whakaora ngā whenua whāma: utilising mātauranga Māori and Western science to protect and restore the soil on rural farms in Tai Tokerau <i>Catherine Murupaenga-Ikenn, Marcus Williams, Peter Bruce-Iri, Dr Mere Kepa</i>	An invisible population-the experiences of young adult carers studying at the Eastern Institute of Technology <i>Mandy Pentecost and Charlotte Chisnell</i>	An education model for growing a regional/rural health workforce <i>Sally Baddock, Deborah Beatson and Emma Bilous</i>	<b>WORKSHOP</b> Masters Supervision <i>Kay Fielden</i>
<b>2.20 - 2.40</b>	Attachment to a heritage place: The Ōtātara case study <i>Dr Mazin Bahho</i>	ORCID – a researcher identifier <i>Jill Mellanby</i>	Innovative models and partnership contribution for sustainable economic growth <i>David Airehrour</i>	
<b>2.45 - 3.05</b>		Earning your place in the world: Social work students' perceptions of the positioning of social work in interdisciplinary teams <i>Karlin Austin and Mandy Pentecost</i>	The head, the heart and the hands: Holistic approaches to environmental problem solving <i>Catherine de Monchy</i>	
<b>3.10 - 3.35</b>	<b>Afternoon Tea</b>			

SESSION 3	Click <a href="#">here</a> to join	Click <a href="#">here</a> to join	Click <a href="#">here</a> to join	Click <a href="#">here</a> to join
3.35 – 3.55	'Set you up sista, set you up bro?' Setting up the whānau to score in the academic research game <i>Tepora Emery and Fiona Cram</i>	Collaborative research: A multi-level approach to a sensitive subject <i>Deanna Hollis</i>	Communities of Practice (CoP) in learning and teaching: How do we create a pan-institutional CoP in times of change? <i>Ana Terry and Amy Benians</i>	Group work to enhance student professional attitudes and employability <i>Alison Clear and Tony Clear</i>
4.00 – 4.20		Supporting learning in a holistic way: Exploring mental health issues of tertiary students <i>Melanie Wong, Kamaline Pomare, Mel Grey and Niukini Hendriske</i>	Features of future organisations and successful learning models in a climate of change <i>Marianne Cherrington</i>	Senses of hauora and well-being in early childhood initial teacher education <i>Pauline Bishop</i>

<b>DAY 2 FRIDAY 25 SEPTEMBER</b>				
<b>9.00 – 9.45</b>	<p><a href="#">Click here to join</a>  <b>Keynote:</b> Principles, aspirations or grounded realities? Jill Chrisp and Karen Johansen  <b>Chair:</b> Tepora Emery</p>			
<b>SESSION 4</b>	<a href="#">Click here to join</a>	<a href="#">Click here to join</a>	<a href="#">Click here to join</a>	<a href="#">Click here to join</a>
<b>9.55 – 10.15</b>	Barriers which limit effective partnership and research with victims of child sexual exploitation <i>Charlotte Chisnell and Sarah Elliott</i>	Community led project-based learning <i>Lee-Anne Taylor and Nikki Wawatai-Aldrich</i>	Towards a model of distinctiveness in vocational education <i>Samuel Mann and Hamish Smith</i>	How to assess the emotional engagement of an exhibition of environmental artworks <i>Lesley Brook</i>
<b>10.20 – 10.40</b>	Forces of success for wāhine Māori social workers during their degree study <i>Rehia Whaanga</i>	Customer service gaps: A case study of small automotive service centres in Auckland, New Zealand <i>Niranjan Singh</i>	The neuroscience of the young adolescent brain and its impact on making effective career decisions <i>Russell Booth</i>	NEST - the knowledge within: A pilot study for a decolonised flipped classroom <i>Kim Meredith</i>
<b>10.45 – 11.05</b>	A practice-education partnership in mental health nursing development and practice using feedback informed treatment <i>Judith Honeyfield, Joanna Price and Stephen Ward</i>	Integrating experiential learning and learner capability into the curriculum: Improving employability outcomes for Bachelor of Construction learners <i>Priyanka Raina, Don Samarashinghe</i>	Experiential learning as the new foundation of the vocational education sector <i>Rob Nelson and Samuel Mann</i>	Regression analysis of the feedback from various groups of students in a business simulation game <i>Dr Ram Roy</i>
<b>11.10 – 11.40</b>	<b>Morning Tea</b>			
<b>SESSION 5</b>	<a href="#">Click here to join</a>	<a href="#">Click here to join</a>	<a href="#">Click here to join</a>	<a href="#">Click here to join</a>
<b>11.40 – 12.00</b>	Strengthening palliative care services through a collaborative review and evaluation <i>Sue Matthews and Jonathon Haggar</i>	'Click here to...': Adapting to online teaching and learning for offshore international students <i>Elizabeth Youard</i>	<b>WORKSHOP</b> Pasifika cultural intelligence: Moving towards cultural competency <i>Aiono Manu Fa'aea, Edmondo Fehoko, Frederick Lōloa 'Alatini and Faith Faiai</i>	Learner capability research and implementation at Otago Polytechnic <i>Andy Kilsby, Amber Paterson, Michael Greaves and Leoni Schmidt</i>
<b>12.05 – 12.25</b>	Learning to mitigate emissions: Relevant Research with Māori hapū and iwi <i>Majka Cherrington</i>	Fieldwork placement experiences of students with disabilities in New Zealand <i>Mary Butler, Bailley Unahi and Victoria Baldwin</i>		Towards a model of capability construction: A landscape of practical perspective <i>Dr Behnam Soltan</i>

<b>12.30 - 12.50</b>	Tukutuku - Binding the whare and its people <i>Raewyn Paterson</i>	Developing connections in health community increases infection risk management education enabling employment <i>Pavitra Dhamija, Alison Stewart, Mary Cooper and Campbell Macgregor</i>		Designing global computing curricula to enhance industry and learner outcomes <i>Alison Clear</i>
<b>12.55 – 1.50</b>	<b>Lunch</b>			
<b>SESSION 6</b>	<b>Click <a href="#">here</a> to join</b>	<b>Click <a href="#">here</a> to join</b>	<b>Click <a href="#">here</a> to join</b>	<b>Click <a href="#">here</a> to join</b>
<b>1.50 – 2.10</b>	Factors affecting the learning of Māori and Pasifika students in the Graduate Diploma in NZ Immigration Advice <i>Viliame Bokini Naliva</i>	Engineering Research Showcase: Cross-disciplinary engineering projects for improving learners' capabilities and community <i>Chan Kim and Jai Khanna</i>	Mahi Tahi: Students and the Rotorua tourism industry working to achieve a shared purpose <i>Bronwyn Alton</i>	Facilitating the transition from engineering education into construction management diplomas <i>Sundeep Daggubati &amp; Kam Cheng</i>
<b>2.15 – 2.35</b>	Completing a comprehensive consultation process for a national research health project <i>Kylie Short</i>	Improving indoor air quality in a classroom using ultraviolet germicidal (UVGI) lights <i>Dr Mohammad Al-Rawi</i>	International stakeholder engagements through a research internship <i>Dr Pierson Rathinaraj</i>	Developing a student mentorship to support a young enterprise scheme and other community projects <i>Dr Daniel Dang and Dr Emre Erturk</i>
<b>2.40 – 3.00</b>	Effective teaching for Māori on the Cert4Fitness Programme at Toi Ohomai <i>Dr Kelly Pender</i>		A case study of work-integrated learning within Design Factory New Zealand  <i>Aidan Bigham and Sunitha Prabhu</i>	
<b>3.15 – 3.45</b>	<b>Click <a href="#">here</a> to join</b> <b>PLENARY AND POROPOROAKI</b> <b>Video presentation: Te Reo Tuatahi - Student Voice Symposium education (2 minutes)</b>			



## ITPNZ Research Symposium 2020 Conference Theme

### **“Kotahitanga: He mahingā tahi – working in partnership to improve outcomes for learners and communities”**

The conference theme encompasses the many, varied and mutually beneficial partnerships that exist between ITPs and our stakeholders and partners that lead to improved outcomes for learners and hapori (communities), including those yet to be realised with the establishment of NZIST.

The conference subthemes are:

- **Co-creating research outcomes with hapū, iwi and hāpori**
- **Adaptive systems for enhanced industry and learner outcomes** (e.g. employability, internships and work-based learning)
- **Embracing disequilibrium** (e.g. innovative models and contributions to our future organisation and partnerships, including alternative ways of measuring learner success)

## Keynote Speakers

### **Jill Chrisp and Karen Johansen CJ Development Consultants, Te Tairāwhiti**

Karen and Jill are partners in life and in business, but also have whakapapa which intertwine in unexpected and challenging ways. Jill is a descendant of a Tairāwhiti settler family. Her great-great-grandfather and former Gisborne harbour master was responsible for having the iconic rock 'Te Toka a Taiau' destroyed to open shipping lanes. Karen belongs to Rongowhakaata, Te Aitanga-a Māhaki and Ngai Tāmanuhiri, three iwi significantly impacted by this event. They have spent a lifetime having awkward conversations and navigating the tricky realities of their respective families, histories and lived realities.



Karen, previous New Zealand Indigenous Rights Commissioner with the New Zealand Human Rights Commission and Gisborne Girls High School principal has spent her life championing indigenous rights at home and throughout Aotearoa. While her engagement with human rights issues for tangata whenua has been wide ranging, her main focus has been on the formal education sector. She is currently involved in advising the establishment of Tūranga Tangata Rite, an Iwi/Crown-owned school in Tūranganui-a-Kiwa.

Jill is an international, regional and community-led development specialist. She works in strategic leadership, capacity-building, project management and research roles with a focus on the promotion and protection of human rights and sustainable economic, social, cultural and environmental wellbeing. She is currently working on projects in Aotearoa, the Pacific and Asia.

### **Principles, aspirations or grounded realities?**

Bishop Manuhuia Bennett said that Te Tiriti o Waitangi/The Treaty of Waitangi is the promise of two peoples to take the best possible care of each other. In 2010, the Government announced its support for the United Nations Declaration on the Rights of Indigenous Peoples "in keeping with [its] strong commitment to human rights and indigenous rights in particular". The Declaration assists with the interpretation and application of the Treaty principles.

What does this really mean for us? How does Aotearoa New Zealand move its commitment to this promise from principle and aspiration to reality? How is this grounded in the histories, experiences and actualities of all who belong to this country, starting with the first arrivals, ngā tangata whenua?

Karen and Jill have a history that collides. That their outlook is so diverse is a realisation which sometimes strikes without warning. In this presentation they tell their individual and collective stories as they unpack what it means to be partners to the Treaty. They examine the complexities of living, working and playing in Aotearoa today as tangata whenua and tauwi. They reflect on what this may mean to the ITP research sector as it explores how best to work in partnership to improve outcomes for learners and communities.

## **Stephen Town**

### **Chief Executive, New Zealand Institute of Skills and Technology**

Stephen has held executive positions for over 20 years in tertiary education, local government, and transport. He is a former Chief Executive of Auckland Council.



Previous roles include leading the Franklin District and Tauranga City Councils, and Regional Director of the NZTA in Northland/Auckland.

His first chief executive role was at Wanganui Regional Community Polytechnic in 1994, making him the youngest CE in New Zealand at the time.

**Hemi Rolleston and Ramona Radford**  
**Scion (New Zealand Forest Research Institute), Rotorua**



For the past 18 months Hemi and Ramona have been developing the Māori Forestry Futures strategy at Scion. Working “for the benefit of Aotearoa” (the mandate for CRIs), often means fighting, winning, and losing battles for mātauranga Māori to be upheld in the world of research, science, and innovation. Their journey through this experience highlights the value of approaching the whare of partnership between Māori and the Crown, one step at a time.

Hemi, previous General Manager of Sectors and Māori at Callaghan Innovation and CEO at Te Awanui Huka Pak kiwifruit company in Tauranga, qualified as an accountant and has spent his life championing Māori commerce and new horizons. While his engagement with business has been wide ranging, his heart has always remained centred on the development of his Ngāti Whakaue and Ngai Te Rangi people. He is currently the General Manager of Māori Forestry Futures at Scion a Crown Research Institute based in Rotorua whose mission is to drive innovation and growth through the forestry, wood processing, and biomaterials manufacturing industry.

Ramona (Ngāi Tai, Te Whakatōhea and Ngāti Porou) has a background developing strategic relationships between Māori, the Crown, and the commercial and primary sectors and uses high-level collaboration to bring about positive change and shift the status quo. As Māori Partnership Advisor at Scion she works as a Vision Mātauranga and cross-cultural specialist to support scientist-researcher and Māori interests in native forest protection and restoration, plantation forestry, indigenous forestry (Sustainable Forestry Management), and tree-based innovation.

Hemi and Ramona are responsible for co-developing a space for Te Ao Māori (the Māori world) to endure inside research, science, and innovation work crucial to climate mitigation and tomorrow’s forests. By co-leading and co-facilitating Scion’s Māori Forestry Roadmap and partnerships with Māori/Moriori, Government and industry their work contributes to the future success of the Māori economy and Aotearoa’s emerging bio-economy, One Billion Trees planting programme, and low carbon future.

**Fit for a better world. My world, your world, our world?**

On 7<sup>th</sup> July 2020 the New Zealand Government released Fit for a Better World, its vision for a food and fibre primary sector to “embrace the Māori concept of Te Taiao, a deep relationship of respect and reciprocity with the natural world” to restore society and economy and to rebuild a better post-COVID world with iwi/Māori and industry.

Scion research has potential to contribute to defining and developing a Better World but the “world” they define and develop will depend on the institutional world view. Through which lens will iwi/Māori be viewed? Should New Zealand institutions develop enduring policies, strategies, systems, and protocols for Māori under a Treaty obligation, or because it’s the right thing to do?

Helping researchers in Scion to understand the boundaries between the Western world view and the Māori world view is a journey – the Māori Forestry Futures team are helping Scion to codesign welcoming spaces inside the institution where the unique contributions of Māori can flourish. Changing the Scion institution into a safe kāwanatanga space requires a strong vision defined by Māori and intense commitment, resilience, humour, storytelling, manaakitanga, tag-team strategy, hikoī, and courage. The story of one world view experiencing change to create a better world.

## Abstracts – alphabetically by title

### **A case study of work-integrated learning within Design Factory New Zealand**

*Aiden Bigham and Sunitha Prabhu*

Waikato Institute of Technology

Design Factory New Zealand (DFNZ) is a centre within the faculty of Waikato Institute of Technology and is a problem solving and learning space which brings together students, industry and community leaders who are facilitated as a team to co-create a solution to a complex challenge. Students working within DFNZ are placed into inter-disciplinary teams which will therefore have a diverse range of study backgrounds (such as engineering, business, information technology, media, arts, and sports science). Students are able to learn from each other, challenge each other and see the value of co-creating on challenges beyond their own disciplines and thought patterns. DFNZ provides students the opportunity to work in new ways; to develop creativity, empathy, and communication; which enables each participant to be more prepared for the workplace of the future. Work-integrated learning is the intentional integration of theory and practice to help prepare graduates in securing work within industry. Feedback from approximately 150 students and 10 industry partners has been collected on different aspects of the project journey for each semester since the inception of DFNZ in 2017. This presentation will focus on the deliberate interactions DFNZ has provided between industry and students that have been implemented to benefit both groups. We will share the key findings (anecdotal in some parts) from the parties involved and discuss where our main findings are leading us for next research stages.

*Aidan Bigham is a principal academic staff member who is a facilitator within Design Factory New Zealand. Aidan is an expert in facilitation of adult learners with a deep knowledge of curriculum design and mixed mode learning. He is an experienced trainer in design thinking and vocational engineering with an in-depth knowledge of human centred design. Sunitha Prabhu is a principal academic staff member in the Centre for Information Technology at Waikato Institute of Technology. She completed her Master in Computing and Mathematical Sciences, specialising in mathematics. Her research interests include tertiary education, behavioural science, and information security.*

[Aidan.Bigham@wintec.ac.nz](mailto:Aidan.Bigham@wintec.ac.nz)

### **A practice-education partnership in mental health nursing development and practice: utilising feedback informed treatment**

*Judith Honeyfield, Stephen Ward, Joanna Price*

Toi Ohomai Institute of Technology and Lakes District Health Board

The preparation of nursing students to maximise their learning in the mental health component of the Bachelor of Nursing (BN) curriculum requires stronger practice-education partnerships to improve experiences and profile the career opportunities in mental health nursing (MHN). This research set out to capture developments to ensure the key concepts that guide effective MHN practice will be well embedded in students' theoretical preparation to assist their practice in all health care settings. Lakes District Health Board has been successfully using an innovative methodology called *feedback informed treatment* (FIT) in their mental health service. FIT encourages the development of domain specific knowledge to improve MHN practice following three essential activities: determining baseline level of effectiveness; obtaining systematic ongoing consumer feedback; and engaging in deliberate practice. BN students must complete practice placements in mental health settings and need to be well prepared in such approaches to participate and improve client outcomes. This research reports

on the facilitation of the theoretical and practice preparation of year three BN students in FIT for their final 12-week transition placement, measuring a range of factors that impacted on their learning and experiences. Two BN students and three RN preceptors who supported students attended two focus groups/interviews. Experiences and observation of practice were captured. The key findings indicate students were able to identify key concepts and provided positive contributions to care planning and delivery. This presentation will share our experiences of this partnership development and detailed findings including recommendation for further research.

*Judith Honeyfield teaches across the Bachelor of Nursing programme at Toi Ohomai Institute of Technology and is currently 0.5 research co-ordinator Faculty of Health, Education and Environment. She holds a Bachelor and Master of Social Science – Health Development and Policy. Her PhD focused on the development of new models for tertiary teaching development. Her research interests and practice include teaching and learning, quality improvement and education service partnerships. Joanna Price is the Clinical Nurse Director and DAMHS at Lakes DHB mental health and addiction services. Joanna holds a Post Graduate Certificate in Health Science, a Post Graduate Diploma in Cognitive Behavioural Therapy, and a Master in Nursing. Joanna is the only nurse worldwide trained in the delivery and supervision of feedback informed treatment. Joanna has a strong interest and passion to continue to progress mental health nurses and to highlight mental health nursing as a positive and rewarding career path.*

[Judith.honeyfield@toiohoma.ac.nz](mailto:Judith.honeyfield@toiohoma.ac.nz)

## **An invisible population: The experiences of young adult carers studying at the Eastern Institute of Technology**

*Mandy Pentecost and Charlotte Chisnell*

Eastern Institute of Technology

Using focus group interviews and thematic analysis, this 2019/2020 research project explores the needs and challenges facing tertiary students at EIT who are or were previously young carers (under the age of 24 years), and the particular obstacles they faced in undertaking tertiary education. Young carers are 'a hard to reach group' who often experience social isolation and adverse outcomes due to their responsibilities to provide ongoing care and or emotional support to a relative. This form of caring is often hidden and covert; it can take place within family situations affected by addiction, ill health and violence. One of the further consequences of being a young carer is disruption to adolescence, including education. The vulnerability of young carers is exacerbated in New Zealand by the relative professional silence surrounding their status and circumstances. A preliminary thematic analysis identified a number of themes including loneliness, guilt and disruption to their personal lives, alongside determination and perseverance. Research of this nature, involving connections and collaboration between tertiary applied researchers and students is essential to raise awareness of this invisible population, to help remove barriers to tertiary education, improving outcomes for students who are young carers.

*Mandy Pentecost is assistant Head of School and a lecturer at EIT. She has a background in counselling and community education and development. Charlotte Chisnell is a lecturer in social work at EIT. She has been involved in social work education for the past 15 years. Before commencing her academic career, Charlotte was a social worker in the UK working in the practice area of child protection and youth justice. Her research interests include safeguarding children and raising awareness of child sexual exploitation and young carers.*

[mandyp@eit.ac.nz](mailto:mandyp@eit.ac.nz)

## **Attachment to a heritage place: The Ōtātara case study**

*Dr Mazin Bahho*

Eastern Institute of Technology

Heritage not only concerns old buildings, but also the layered quality of historic places. These are buildings or sites that help create a sense of value, discovery, and mystery that can lead to increased levels of place attachment. The Ōtātara (Hawke's Bay) site is one of the largest and oldest villages in New Zealand with strong historic, cultural, and spiritual associations with local Māori. In 1975, an arts programme was established in an attempt to connect modern knowledge with tradition. Although the arts programme has since moved away from this site, the cultural and social associations are still present, linked to the only building that remains - a log cabin that for some years housed an artist-in-residence. To save the building and maintain links with the past it has been refurbished to create a new layer of value by showcasing sustainable building design, and acting as an educational tool for promoting sustainable values. This presentation investigates the factors that explain people's attachment to a heritage place while engaging in designing a sustainable project that looks to the future. The presentation probes the psychological, cultural, and social influences in an explorative approach. This involved the engagement of student designer groups in creating a sustainable building. Interviews were conducted with those involved to understand the influence of the psychological and cultural dimensions of making sustainable places. The study found the student groups expressed strong attachment to nature and ecology through inspiration and vision influenced by the local historic and indigenous cultural dimension.

*Born in Iraq, Mazin worked as an architect in Iraq, Jordan, and the UK in fields of architectural design, site residency, and project supervision. He is a senior lecturer of design at Eastern Institute of Technology since 1996. In 2018 he completed his PhD studies at Victoria University of Wellington, School of Architecture, continuing his passion for sustainable architecture.*

[mazinis@eit.ac.nz](mailto:mazinis@eit.ac.nz)

## **Barriers which limit effective partnership and research with victims of child sexual exploitation**

*Charlotte Chisnell and Sarah Elliot*

Eastern Institute of Technology

Child sexual exploitation (CSE) is a term used to describe exploitative situations in which a young person engages in sexual activities in exchange for money or goods. CSE includes face-to-face grooming, online grooming and commercial trafficking. CSE is a form of child sexual and emotional abuse. However, because the exploitation occurs in situations where a young person enters into a transactional arrangement, there is an assumption that they are making informed choices with an equal bargaining power, rather than being controlled and victims of abuse. Through a critical review/analysis of current social work policy and practice documents in New Zealand and of relevant overseas jurisdictions, this research explores the need for policy and practice guidelines to recognise children and young people as victims of CSE. Preliminary analysis identified limited ways to engage with victims of CSE, and resistance to collaboration and partnership between professionals in New Zealand. This appears to be due to the 'hidden' nature of abuse, barriers to disclosure, New Zealand's lack of data collection systems, non-specific legislation and policy, a lack of effective multi-agency protocols, and negative professional attitudes toward victims of CSE. These significant issues make it extremely hard to hear the voices of these victims, which can lead to poor social work practice. Research of this nature, involving connections and collaboration between tertiary applied researchers



and professionals in the field is essential to enhance the effectiveness of policy and planning interventions.

*Charlotte Chisnell is a lecturer in social work at the Eastern Institute of Technology. She has been involved in social work education for the past 15 years. Before commencing her academic career, Charlotte was a social worker in the UK working in the practice area of child protection and youth justice. Her research interests include safeguarding children and raising awareness of child sexual exploitation and young carers. Sarah Elliott is a lecturer in social work at the Eastern Institute of Technology. Her key social work areas have been at Oranga Tamariki (practice leader), adult intellectual disabilities (manager), health social work and human rights. Sarah has her Master in Social Work and began her academic career in 2018. Her research interests are: bleeding disorders, child protection and child sexual exploitation.*

[selliott@eit.ac.nz](mailto:selliott@eit.ac.nz)

## **Body composition in older Māori males in the Bay of Plenty region**

*Campbell Macgregor, Crawford Robb and Becky Martindale*

Toi Ohomai Institute of Technology

This research investigated the body composition (BC) and bone health (BMD) of Māori males over the age of 50 years using dual energy X-ray absorptiometry (DEXA). DEXA is considered the 'gold standard' in BMD and BC and is indexed to a 'White American' population. When Māori are assessed using its parameters, DEXA may indicate that an individual has poor or good BC or BMD, when that is not the case, as they are not part of the reference population. This cross-sectional study involved two stages. Meaningful relationships with Bay of Plenty hauora were developed to engage with potential participants. Participants completed a questionnaire concerning their physical health, activity and diet. DEXA scans were then obtained to gather individuals' BMD, fat mass and total body composition. There were 100 Māori male participants, who overall were found to have higher BMD, lower fat mass and higher muscle mass ( $p > 0.001$ ) when compared to the reference database. Furthermore, individuals with a high body mass index (BMI), had a lower fat mass than the reference database ( $P > 0.05$ ). In addition, participants within our study were reporting a higher weight and therefore BMI before any poor health conditions were identified, compared to age-matched European males. Māori have a higher prevalence of obesity related conditions, for example Type 2 diabetes, stroke and cancer, compared to New Zealand Europeans. It appears that high obesity levels among Māori male individuals over the age of 50 years, identified using BMI, may not be the only factor leading to this higher prevalence in traditional weight-specific health conditions. Kotahitanga and the building of community relationships allowed us to conclude that using a population-based tool for a different population than the one it was designed for may place that population and individuals within it at a health disadvantage, as inappropriate or incorrect healthcare guidance may be provided based on the results reported by the tool. This presentation will explore how kotahitanga and the development of community relationships has allowed us to truly engage with our community, gain insights, and provide key understandings back to the individuals and communities, which over time may lead to better health outcomes for Māori males.

*Campbell Macgregor affiliates to three Ngāi Tahu Papatipu Rūnanga: Oraka Aparima, Te Taumutu and Waihōpai. He is a principal academic staff member at Toi Ohomai Institute of Technology. Campbell is a certified clinical densitometrist and is currently undertaking his PhD in bone health of older athletes. Crawford Robb is a lead strength and conditioning coach at The Athlete Factory NZ, and an avid amateur athlete. Crawford recently completed a Bachelor of Sport and Recreation whilst completing hours as a part-time tutor on the level 4 Certificate in Fitness programme. Crawford will look to begin*

*post graduate studies in the coming year. Rebecca Martindale is a former graduate of the AUT Bachelor of Sport and Recreation. Rebecca was invited to participate in the Summer Research Scholarship programme at Toi Ohomai Institute of Technology in which she was involved in bone density and body composition research in different populations.*

[campbell.macgregor@toiohomai.ac.nz](mailto:campbell.macgregor@toiohomai.ac.nz)

## **‘Click here to...’: Adapting to online teaching and learning for offshore international students**

*Elizabeth Youard*

Toi Ohomai Institute of Technology

With new international students being unable to enter New Zealand due to COVID-19 travel restrictions, educators are facing the challenge of rapidly adapting traditionally face-to-face programs to being fully online. This presentation will outline some of the learnings and opportunities this situation presents, based on my experience of having to develop and coordinate an online academic skills course for the first time for offshore health studies students in Semester 2, 2020. The presentation will cover the challenges and considerations educators may face when transitioning courses to online delivery, and the unexpected benefits of the process. This presentation will be of interest to those who are currently or planning to teach online, and will invite audience interaction to contribute their experiences of this evolving situation, so that we may learn from our shared ideas and improve online learning going forward.

*Elizabeth Youard is a senior academic staff member in the health department at Toi Ohomai Institute of Technology. She has a professional background in speech language therapy, and is studying towards a Master of Applied Professional Studies (Adult Teaching).*

[elizabeth.youard@toiohomai.ac.nz](mailto:elizabeth.youard@toiohomai.ac.nz)

## **Collaborative research: A multi-level approach to a sensitive subject**

*Deanna Hollis*

Eastern Institute of Technology

There is a paucity of social services in New Zealand that provide interventions for young people with harmful sexual behaviour. As a result, there is a lack of research on the effectiveness of interventions and a subsequent lack of empirical evidence to inform best practice. Research on harmful sexual behaviour by young people is largely based overseas, and not always applicable to New Zealand and more specifically to Māori. Designing research for the New Zealand context presents a number of challenges. This presentation outlines an innovative project that is being undertaken by ITP researchers in partnership with a service provider and a district health board public health service. It identifies and critically discusses the methodological and ethical challenges for ITP-based researchers when undertaking research with a highly stigmatised client group, and identifies the factors that underpin successful research collaboration with community-based research partners. Following a brief review of literature on social work interventions to address harmful sexual behaviour by young people, the proposed research methods and ethical considerations are critically discussed. The major focus of the presentation is the steps that were taken to address these challenges and ensure that research that explores this sensitive aspect of young people’s experience is culturally responsive. The research highlights the need for ITP researchers to be supported to maintain strong professional networks and ensure the necessary connections to form research partnerships with external organisations so that this valuable social research is able to be undertaken.

*Deanna Hollis is new to social work lecturing at Eastern Institute of Technology after 20 years of social work practice. Prior to coming to EIT she was the manager of WellStop Central Region for seven years, and it is this experience that has motivated the areas of research that she is focused on.*

[dhollis@eit.ac.nz](mailto:dhollis@eit.ac.nz)

## **Communities of practice (CoP) in learning and teaching: How do we create a pan-institutional CoP in a time of change?**

*Ana Terry and Amy Benians*

Otago Polytechnic

The Reform of Vocational Education (RoVE) is well underway, merging New Zealand's sixteen polytechnics into a single centralised institution with subsidiary campuses in regional centres. This process, with an emphasis on collaboration, networking and sharing of resources, offers rich territory for creating CoPs, bringing together good practice in various disciplines of expertise across Aotearoa New Zealand. This presentation will outline our proposed research project, in which we wish to address how best we can create a pan-institutional CoP. Our learning and teaching development team at Otago Polytechnic positions itself as a CoP, whereby we operate as a community with a common passion for learning and teaching, in support of and in collaboration with our teaching staff. Our operational domain involves programme/course design and development, and blended delivery using educational technologies such as Moodle. Our practice involves training resources, workshops and shared processes which are created as open education resources under Creative Commons licenses. We would like to extend an invitation to the wider tertiary sector of Aotearoa New Zealand to join our current CoP, with the proposition of co-constructing a pan-institutional community or hāpori. This will be followed with an opportunity for attendees to offer feedback and indicate if they are interested in future research collaboration. We hope the presentation will initiate a conversation with people at other institutions around co-creating a wider CoP, who may already be involved in a CoP in learning and teaching, or who have an interest in joining one.

*Ana Terry is a learning and teaching specialist at Otago Polytechnic and teaches communication design. She also facilitates online learning with Southern Institute of Technology. She has been teaching for over 20 years nationally and internationally, is a practising artist and designer and collaborates regularly. Amy Benians, also a learning and teaching specialist at Otago Polytechnic, has a background in pharmacological research, scientific writing and instructional design. She teaches on a course around teaching adult literacy and numeracy and loves to co-construct and share knowledge in caring communities.*

[amy.benians@op.ac.nz](mailto:amy.benians@op.ac.nz)

## **Community led project-based learning**

*Lee-Anne Taylor; Nikki Wawatai-Aldrich*

Eastern Institute of Technology

This presentation will explore the learnings from a staff and student perspective using a community led project-based teaching methodology. Eastern Institute of Technology (EIT) Bachelor of Sport and Exercise science students embarked on a community led coaching and leading programme in 2019. EIT students were assigned to one of two local primary schools in the region. Students then met with key stakeholders – the school principals, school teachers and year 5-8 primary school students - to

create a four-week sport and exercise programme based on their consultation. Twenty-six EIT students led 130 children through skill-based sessions focusing on leadership, collaboration and sport specific skill development to meet the stakeholder requirements. Ongoing feedback from EIT staff and reflective practices by the student groups refined the project activities over seven sessions. Through experiential learning the EIT students developed group management strategies and skills, established individual and group communication abilities, built relationships to support the programme delivery and expanded their practical coaching and leadership skills. Significant practical skill development outside of the classroom occurred and an introduction to real-world situations assisted students to meet the goal of developing students who are industry-ready on graduation.

*Lee-Anne Taylor and Nikki Wawatai-Aldrich work at the Eastern Institute of Technology lecturing in sport and exercise science for the School of Health and Sport Science. Lee-Anne is a qualified physiotherapist with a keen interest in fundamental movements, coaching and leading and injury prevention. Nikki is the school's Māori student mentor and has a background in community health, fitness and education. Both have been directly involved with the development of project-based learning within the Bachelor of Exercise and Sport Science qualification which involves the first-year degree students alongside the NZ Diploma in Sport, Recreation and Exercise students. They are both very passionate about providing students with practical opportunities to learn and develop skills.*

[ltaylor@eit.ac.nz](mailto:ltaylor@eit.ac.nz)

## **Completing a comprehensive consultation process for a national research health project. Kylie Short** Ara Institute of Canterbury

Obtaining ethics approval, locality agreements and iwi Māori support for a New Zealand wide doctoral project has required a lengthy and detailed consultation process across New Zealand. This presentation will offer insights into the consultation process from a PhD student's lens. It will discuss the procedures needing to be met by students in gaining ethics approval, locality agreements (within health research) and will discuss the experience of completing iwi Māori consultation. Although at times consultation can be difficult there are many positive outcomes for the research process: it can result in 'buy-in' from participating partners in the research process, can provide advice about strategies for improving response rates within population groups, helps to refine inclusion criteria and provides an opportunity to develop collegial connections. A consultation process may also highlight the lack of consistency across the country, both within locality agreement and Māori consultation processes. There can also be a sense of vulnerability towards completing consultation within different cultural environments.

*Kylie is a senior nursing lecturer at Ara Institute of Canterbury. She holds an adjunct fellowship with the University of Canterbury, and more than 22 years' experience in the field of nursing practice and education. Specialist areas of teaching include postgraduate education with a strong focus on advanced health assessment, diagnostic reasoning and acute care management. Kylie's clinical background includes intensive care nursing, most recently specialising in cardiothoracic ICU, acute medical admissions and general post-operative care. Her research interests include looking at how healthcare professionals assess patient's understanding of information, how understanding of information affects the legitimacy of providing 'informed consent' and why students transition to a nursing career via a fast track option. Kylie is currently completing a PhD and exploring the topic; 'What do patients understand following the delivery of 'hospital' cardiac health education/information? A New Zealand Study'. This is a national research project and will be the first of its kind in New Zealand.*

[kylie.short@ara.ac.nz](mailto:kylie.short@ara.ac.nz)

## **Customer service gaps: A case study of small automotive service centres in Auckland**

*Niranjan Singh*

Unitec

Auckland, New Zealand has 1,791 automotive repair workshops, of which the majority are owner-operated and employ few people. The presentation will describe a research project undertaken to investigate the gap between current customer service and good customer service practices which can lead to improved business outcomes. The research was initiated by the author in response to data collected by groups of students as part of their study in a level 6 course in a degree programme. Twenty-six reports from an eight-year period were used to extract data. Qualitative methodology was used to analyse data as the reports were diverse and complex, and often subjective. The research revealed gaps between customer expectations and the service that the workshops provided. Key findings included workshop employees having the dual role of technicians as well as customer care, and that most workshops studied did not have dedicated space for customers to wait in, therefore exposing them to the operation of the workshop. The exposure of the customers leaves the person conducting the business of the workshop open for litigation and penalties which may impact on the economic viability of the business. Recommendations for industry stakeholders include training of staff who face customers, creating a safe waiting area and keeping customers out of harm's way. A recommendation is also made that the Ministry of Business, Innovation, and Employment conduct regular compliance checks of these small service providers to eliminate malpractices and create a safe work environment. The presentation reflects on the nature of student research in the workplace, referencing the underpinning values of kaitiakitanga (guardianship of knowledge) and mahi kotahitanga (cooperation) which guided the project.

*Niranjan Singh is an experienced industry practitioner and lecturer in the transport sector for more than forty years. He holds a Bachelor of Applied Technology - Automotive Engineering and a Master of Educational Leadership and Management. He is current studying a Master degree in design. Niranjan has completed many research projects ranging from industry practice issues to core technical and design analysis.*

[nsingh@unitec.ac.nz](mailto:nsingh@unitec.ac.nz)

## **Designing global computing curricula to enhance industry and learner outcomes**

*Alison Clear*

Eastern Institute of Technology

A global initiative, Computing Curricula 2020 (CC2020), was established to review all computing curricula at baccalaureate level. The goal of the CC2020 project is to publish a report and a dynamic set of tools for exploring the competency space used to define computing and its disciplines. This action research project follows the "dual cycle" action research framework of McKay and Marshall (2001). It addresses two issues: the practitioner problem and the academic problem. The stakeholders include students and potential students, government and policy holders, important industry and employers, and the academic computing educators. To meet the needs of the industry and the learners, after outcomes were analysed it was decided all future computing curricula will focus on competency. The term competency generally refers to the performance standards associated with a profession or membership to a licensing organisation. Assessing some level of performance in the workplace is frequently used as a competency measure, which means measuring aspects of the job at

which a person is competent. “Competency = Knowledge + Skills + Dispositions in Context.” The concept of *knowledge* refers to a proficiency in core concepts and content of a discipline, and application of learning to new situations. *Skills* refer to capabilities and strategies that develop over time through practice and interactions with others. *Dispositions* refer to the socio-emotional skills, behaviors, and attitudes that characterize an inclination to carry out tasks and the sensitivity to know when and how to engage in those tasks. This presentation will describe how competency was decided upon for all future computing curricula at baccalaureate level, how the framework was developed and how it will enhance industry and learner outcomes. This framework can then also be applied to other disciplines.

*Alison Clear is an associate professor at the Auckland Campus of the Eastern Institute of Technology. She has an extensive academic and professional career in research, scholarship, teaching and curriculum development, and an extensive publication record in national and international conferences and journals in computing and information technology. Alison is an invited international keynote speaker, has been a member of the international ACM Educational Council, member and vice chair of the ACM Special Interest Group in Computer Science Education and Fellow of the Institute of Information Technology Professionals (IITP) and Fellow of the Computing and Information Technology Research and Education in New Zealand (CITREnz). She is currently co-leading the international research project CC2020 of 49 people from 20 countries to redefine all computing curricula for 2020 forward.*

[aclear@eit.ac.nz](mailto:aclear@eit.ac.nz)

## **Developing a student mentorship to support a young enterprise scheme and other community projects**

*Dr Daniel Dang, and Dr Emre Erturk*

Eastern Institute of Technology

Our communities (especially high schools) are constantly seeking mentors to help develop their digital and computing skills. Within this context, regional tertiary institutes can be ideal providers of both entrepreneurial and technical skills. Young Enterprise Scheme (YES) is a national programme in the form of a competition for senior high school students. Students set up and run a small business initiative with the support of their school, community, and the YES network. Initiatives such as YES have seen a marked increase in the number of students’ projects with a strong digital aspect. In Hawke’s Bay, many students receive help from the Eastern Institute of Technology (EIT) School of Computing, not only to mentor their early business ideas, but also to help them develop prototypes (web and mobile apps). Furthermore, some EIT lecturers are also invited to join YES judging panels to help the organisers evaluate and select good projects. This presentation includes two different perspectives of EIT’s involvement: judging and mentoring. The research question in the proposed study to be conducted in 2020 is to explore what can be learned from these experiences, what can be repeated and encouraged in the future. Therefore, this presentation aims to start a discussion around a new student mentorship model at EIT. In the future, EIT will also involve voluntary tertiary students who can provide mentorship for YES. This will supplement the work of staff in developing high school students’ and teachers’ skills. Another benefit for tertiary student mentors will be community work experience, which can in turn enhance their CVs and employability.

*Dr Daniel Dang is an ICT lecturer at Eastern Institute of Technology. He is currently teaching all papers related to software development, web and mobile app development. His research interests are energy efficiency in a digital world, emerging technologies in mobile and web applications. Dr Emre Erturk is a principal lecturer at Eastern Institute of Technology. He has held a number of leadership roles in*

community organisations, such as the Royal Society of New Zealand, and CITRENZ. His current research interests are agile web content management, cloud based blockchain/cryptocurrency applications for education, and the social aspects of this technology.

[ddang@eit.ac.nz](mailto:ddang@eit.ac.nz)

## **Developing connections in health community increases infection risk management education enabling employment**

*Pavitra Dhamija, Alison Stewart, Mary Cooper and Campbell Macgregor*  
Toi Ohomai Institute of Technology

Infection risk management (IRM) is an important health sector concern that has serious implications for patient health outcomes world-wide. All health professionals need to understand IRM and the important role of sterilisation technology (ST) to ensure optimum health outcomes. Research undertaken with the New Zealand Sterile Sciences Association executive and Southern Cross Hospitals' (SCH) management group led to the accreditation of a level 7 Graduate Diploma in IRM (GDIRM), creating a first integrated IRM/ST pathway for the New Zealand health sector. Using experience-based co-design with these health organisations provided a unique opportunity to develop a new career structure for sterilisation technologists, while increasing employment opportunities for international student IRM graduates. Research identified that a large component of international student learning when coming to New Zealand (especially at level 7 or above) was theoretical in nature. Furthermore, international students need hands-on experiences of the New Zealand health environment to gain employment. Sterilisation workshops being delivered by SCH in central sterile services departments (CSSD) were developed. This GDIRM will create viable career opportunities for international students within our health system that draws on their existing health background, skills and knowledge. With this identified gap to provide hands-on, real world health workforce experiences, connecting with a national provider of CSSD services will allow opportunities to grow as New Zealand Institute of Skills and Technology (NZIST) develops. In conclusion, these changes provide innovative employment pathways for international students, along with increasing skill of the current sterilisation sciences workforce. This unique programme of study will add a depth of knowledge and skill within the health sector. How we used experience-based co-design where both national and international students benefit, will be discussed.

*Pavitra Dhamija is a senior academic staff member at Toi Ohomai Institute of Technology. She teaches on the Graduate Diploma in Infection Risk Management and coordinates the infection risk management programme. Mary Cooper, after an extended career within the health sector in clinical practice and undertaking senior management roles, has been in tertiary education for the past ten years. She has been involved with teaching a range of health-related qualifications at Toi Ohomai across a range of infection, prevention and control courses. Alison Stewart, an academic staff member at Toi Ohomai, has helped redevelop New Zealand's sterilising technology qualifications, and is a tutor on the courses. Alison is a key person in the sterile sciences community as a participating member on the Australian Standards committee and treasurer for the national association. Campbell Macgregor is a principal academic staff member at Toi Ohomai, and has recently redeveloped the qualifications for sterilisation technology in association with the New Zealand Sterile Sciences Association.*

[campbell.macgregor@toiohomai.ac.nz](mailto:campbell.macgregor@toiohomai.ac.nz)

## **Earning your place in the world: Social work students' perceptions of the positioning of social work in interdisciplinary teams**

*Karlin Austin and Mandy Pentecost*

Eastern Institute of Technology

Working collaboratively and effectively with professionals across diverse disciplines is an integral part of social work practice, regardless of the organisational setting or field of practice. During fieldwork placements social work students are embedded in communities to observe practice in action. Integrating knowledge and skills into practice and learning new and innovative ways of engaging with others underpins their effectiveness in providing social work services. Interdisciplinary teams (IDTs) collocate a range of professional disciplines, aiming to balance the demand for quality service provision and patient-centred care against a burgeoning health budget deficit. This research focused on how social work students on fieldwork placement experienced the positioning of social work within a district health board interdisciplinary team. The qualitative study involved semi-structured interviews with eight students across years 3 and 4 of a Bachelor of Social Work. Thematic analysis generated broad themes that are supported by the international literature. The study's findings reveal that the IDT increases inter-professional collaboration and exposes other disciplines to the unique knowledge-base and skills that social work brings to complex patient-care. Further education is needed to promote the value of working to each profession's strengths within IDTs. This research highlights the importance of a social worker's ability to articulate and advocate for the contribution of social work to the healthcare of patients.

*Karlin Austin is a social work lecturer and fieldwork coordinator at Eastern Institute of Technology's Bachelor of Social Work. Her research interests include health social work, trauma and interdisciplinary teams. Mandy Pentecost is a counsellor and Assistant Head of School. Her research interests range from the poetic presentation of data to the evaluation of community programmes. Both Karlin and Mandy are interested in how professions collaborate, team dynamics, and the ways disciplines are positioned in various interactions.*

[mandyp@eit.ac.nz](mailto:mandyp@eit.ac.nz)

## **Effective teaching for Māori on the Cert4Fitness programme at Toi Ohomai**

*Dr Kelly Pender*

Toi Ohomai Institute of Technology

Disparity between Māori and non-Māori is evident when comparing tertiary qualification outcomes in Aotearoa. There have been numerous studies on what effective teaching for Māori looks like within the primary and secondary school context, but limited literature within the Institute of Technology and Polytechnic (ITP) sector in the tertiary realm. The purpose of this research was to understand teacher influence on qualification outcomes for Māori students within the Tauranga Certificate in Fitness (Cert4fitness) programme at Toi Ohomai Institute of Technology. What aspects of practice, pedagogy or other may be shared and applied by adult educators within the ITP environment to improve qualification outcomes for Māori? How can teachers and teaching do better for Māori students at tertiary level? Built around Kaupapa Māori and Pūrākau methodologies and values, this project draws on advice from Māori graduates over a nine-year timeframe of the Cert4fitness programme. This programme has demonstrated consistent qualification success for Māori within the mainstream tertiary sector since 2002. Findings will assist in better understanding of what constitutes as effective teaching processes and practices for Māori, positively influencing qualification outcomes. This is of significant value to learners, whānau, iwi, community and our national economy.



*Ko Mataatua me Te Arawa ngā waka  
Ko Whakatōhea me Te Arawa ngā iwi  
Ko Ngāi Tamahaua me Ngāti Rangiwewehi ngā hapū  
Nō Tauranga tōku kainga inaianei, engari  
Ko Otanewainuku te maunga  
Ko Te Awanui te moana  
Ko Kelly Pender tōku ingoa*

*Dr Kelly Pender has been with Toi Ohomai for 24 years, teaching and learning on the fitness certificates for 19 years. His passion is assisting students to learn and develop self-confidence. Earlier this year he achieved his doctorate with Te Whare Wānanga o Awanuiārangi on how tertiary teachers can better support Māori learners to more positive qualification outcomes. Data was gathered from nine separate focus groups of Māori graduates between the years of 2010-2018 and provides clear themes of what effective teaching looks like to them.*

[kelly.pender@toiohomai.ac.nz](mailto:kelly.pender@toiohomai.ac.nz)

## **Engineering research showcase: Cross-disciplinary engineering projects for improving learners' capabilities and community**

*Dr Chan Kim and Jai Khanna*

Waikato Institute of Technology

For ITP research, working in collaboration or partnership plays a key role in improving learners' capabilities and community involvement. This presentation comprises two showcases presenting how engineering education helps learners and communities. The first showcase is a cross-disciplinary engineering project, which is a fully interactive model that has user input producing tangible output to help learners understand the concept of engineering principles. The 'Exercycle' is designed to charge a digital device. The user pedals at a uniform rate. Mechanical input from the exercycle is transferred to the pump, where the user input converts to the optimal pump operating speed. Water gets pumped from the lower reservoir to the upper reservoir gaining potential energy, then flows back to the lower reservoir via a micro-hydro generator. It results in electrical energy in the power bank which can be used to charge a digital device. The second showcase is to improve transport accessibility for the community, specifically those aged over 65 living in rural and small towns by proposing a user optimised public transport service. The students involved in this study investigated the choices of individual elderly citizens over various transport options, and the critical components of active transport service in Waikato. The results of this study provide valuable insight into a better understanding of the factors influencing NZ elderly's transport mode choice in a rural area. Such insight has increasingly become more important as a basis for developing transportation policies to promote more user-optimized transport alternatives.

*Dr Chan Kim and Jai Khana are lecturers at the Centre for Engineering and Industry Design at Waikato Institute of Technology. Chan received his PhD in Transport Engineering from the University of Canterbury and M.Sc. from the University of Utah, U.S.A. His research interests are sustainable transport, modelling travel behaviour, transport safety, and has completed research and publications using econometric methods. Jai is actively involved in developing innovative cross-disciplinary projects for learners' engagement, building adaptive connections between learners and industries and enhancing engineering education globally. His research interests are material science, manufacturing processes and design.*

[chan.kim@wintec.ac.nz](mailto:chan.kim@wintec.ac.nz)

## **Experiential learning as the new foundation of the vocational education sector**

*Rob Nelson and Samuel Mann*

Otago Polytechnic

A key driver in the reform of the Vocational Education and Training (VET) sector is the promotion of experiential learning and the workplace as a place of learning. However, there is little consensus as to what this means, especially when applied to different education levels and across the range of disciplines - both to those traditionally considered trades, and those considered professions. It is not clear how this relates to non-traditional workplaces such as communities. There is consensus that the old-style apprentice model of working Monday to Thursday and attending theory class on Friday is not the appropriate model for all, but this leaves open the question of what experiential and workplace learning means in practice. In this presentation we explore potential models for such learning. We examine two areas, the first being project-based learning as used in business (and IT) at all levels but particularly as a capstone that aims to simulate work through studio learning, often made authentic through direct connection to “clients”. We contrast this with the work-based approach of the independent learning pathway used for experienced practitioners. We expect this approach will provide understanding for both learning designers developing new programmes, and for people working on the strategic development of the new VET sector.

*Rob Nelson trained as a printer then worked his way into management, later qualifying in that as an adult student. He then embarked on a second career teaching management. Samuel Mann trained as a geographer, taught computing and now researches learning processes of professional practice. Together they are exploring how we can improve practice through experience and experiential learning.*

[rob.nelson001@gmail.com](mailto:rob.nelson001@gmail.com)

## **Extending the wahakura programme: Te Whare Pora o Hine-te-iwaiwa**

*David Tipene-Leach*

Eastern Institute of Technology

The ‘safe shared-sleeping environment’ to prevent sudden infant deaths in 2005 led to the development of the wahakura, and later, the pēpi-pod and the Safe Sleep programme. The latter has been credited with a 29% drop in infant mortality across the years 2009 – 2015 and the programme was subsequently adopted by the Ministry of Health. Cooperation between a Māori provider and a community of weavers has led to a new model of SUDI (sudden unexpected death in infancy) prevention that moves beyond ‘safe sleep’ into the facilitation of Māori-focused pregnancy care that revolves around an identifiably positive aspect in the antenatal period – the creation of one’s own wahakura. Te Whare Pora o Hine-te-iwaiwa has no health professionals – just weavers and the stories and traditions of Te Whare Pora of old. It weaves the various accoutrements of the Māori pregnancy and creates supportive relationships and pathways for pregnant Māori women to access more mainstream providers of SUDI prevention like midwives, smoking cessation and breastfeeding advice. The project is currently dealing with the inevitable struggle between Ministry of Health output/outcome evaluation and a more kaupapa Māori approach that will allow the voice of the participants to come through. This presentation seeks to contextualize SUDI prevention in the Māori community, describe this intervention and outline the investigative approach that might see it becoming a normal part of health protection/promotion in Aotearoa New Zealand.

*David Tipene-Leach comes from Pōrangahau and is of Ngāti Kere descent. A GP and public health physician, he presently works as professor of Māori and indigenous research at the Eastern Institute of Technology. David's research focus has been on the development of culturally resonant services for Māori in the prevention of SUDI deaths and of diabetes. In particular, he has pursued the development of the wahakura and the Safe Sleep programme and its extension into becoming the basis of a complete antenatal programme.*

[dtipene-leach@eit.ac.nz](mailto:dtipene-leach@eit.ac.nz)

## **Facilitating the transition from engineering education into construction management diplomas**

*Sundeep Daggubati and Kam Cheng*

Ara Institute of Canterbury

International students who graduate with an engineering degree are currently being accepted into construction management diplomas across the New Zealand polytechnics and institutes of technology. While a majority of them seem to be successfully completing the diplomas due to both personal attributes and institutional support systems, there are still some areas for improvement in graduate outcomes. Engineering degrees tend to inculcate knowledge and competencies related to the planning, design, and analysis of building and infrastructure projects. On the other hand, the construction management diplomas are primarily focused on the development of skills required for the effective implementation of the planned scope of works. Due to this stark difference in curriculum between the two programmes, the academic performance of an international student becomes unpredictable. Cognitive readiness seeks to integrate knowledge, skills, and attributes that lead to better outcomes in changing conditions. Existing cognitive readiness models for setting the readiness expectations and measuring are not suitable for the specific area being studied and are not comprehensive enough to investigate the interplay between engineering and management education. Therefore, the development of a framework that could establish and measure the cognitive readiness at the programme level for supporting international students transitioning from engineering background into construction management is required. The researchers aim to co-create it by engaging the students, advisors, and lecturers in the process. This framework could benefit all the key stakeholders of the ITP sector by enhancing learner experience and improving the graduate outcomes.

*Sundeep Daggubati is a lecturer of construction management and quantity surveying courses at Ara Institute of Canterbury. He teaches and supervises students doing industry projects. He also serves as a programme leader for the Graduate Diploma in Quantity Surveying. He holds a Master degree in civil engineering and is a PhD candidate at the University of Canterbury. His core research area is smart construction technologies. Kam Cheng is the programme manager for the construction management and quantity surveying programmes at Ara Institute of Canterbury. He teaches property development and estimation courses. He also acts a supervisor for Graduate Diploma in Quantity Surveying industry projects. He is a member of NZIOB and RICS. He holds a Master degree in building services and European law. Kam is currently pursuing a PhD in Construction Management from the University of Canterbury.*

[sundeep.daggubati@ara.ac.nz](mailto:sundeep.daggubati@ara.ac.nz)

## **Factors affecting the learning of Māori and Pasifika students in the Graduate Diploma in NZ Immigration Advice**

*Viliame Naliva*

Toi Ohomai Institute of Technology

This presentation will provide an overview of the findings from a research on the factors affecting the learning of Māori and Pasifika students in the Graduate Diploma in NZ Immigration Advice (GDNZIA). This qualification was developed with industry to provide a professional credential to practice as a licensed immigration adviser after successful completion. It is taught online via Moodle and uses Adobe Connect for online tutorials and drop-in sessions. In this environment, it has been found that Māori and Pasifika students generally do not perform as well as other groups. This research included a literature review and survey questionnaire with current and former Māori and Pasifika students of the GDNZIA. The questionnaire attempted to capture the various issues, problems, factors (cultural, social, etc) that they had or that they faced in their studies that may have been responsible for their success/failure/difficulties in progressing/completing/etc. Findings from this research may assist those teaching online programmes to consider the circumstances and preferences of Māori and Pasifika students and to re-position their delivery in a partnership approach to improve academic outcomes for these groups. Apart from difficulties and issues relating to technology, the need for more inclusion of family, church, peer and other groups which students identify with to address the isolation of learning in this environment was a major finding as well.

*Viliame Bokini Naliva is of Indigenous Fijian ethnicity, being born and educated in Fiji where he completed high school at Xavier College in his hometown of Ba on the Western side of the main island before going on to the University of the South Pacific (USP). After completing the Bachelor of Education (BED) in 1983 he taught at various high schools in Fiji before deciding to take up law studies at USP in 1997. After completing the Bachelor of Laws (LLB) at the USP School of Law at Emalus Campus, Port Vila, Vanuatu in 2000, he took up the role of Political Analyst at the Embassy of Japan in Suva before going on to the Fiji Human Rights Commission in 2004 as Senior Legal Advisor (Race Relations). He moved to New Zealand in 2005 to take up postgraduate law studies at Victoria University of Wellington. In 2018 he completed the Master of Laws (LLM) at the University of Waikato. Viliame has been tutoring the graduate certificate and diploma in immigration advice at Toi Ohomai Institute of Technology since 2012.*

[Viliame.naliva@toiohomai.ac.nz](mailto:Viliame.naliva@toiohomai.ac.nz)

## **Features of future organisations and successful learning models in a climate of change**

*Marianne Cherrington*

Otago Polytechnic

The New Zealand government is reforming the vocational education and training system; indeed, the entire tertiary sector is in a state of disequilibrium and upheaval. The success of our future organisation will depend on learning and promoting distinctive features that will set it apart in both domestic and international markets. Yet in a climate of change, embedding these key performance features into sustainable frameworks can be problematic. Furthermore, agility demands the ability to prioritise, learn and pivot, especially in environments in flux. Fortunately, emerging pragmatic innovation exists; future-forward organisations can use iterative learning models to create a place of distinction in international markets. This presentation showcases examples of good practice gleaned from sustainable industry/polytechnic partnerships, collegial collaboration into disruptive innovation

paradigms and relates our future organisation with cutting edge swarm behaviour research in New Zealand. It articulates how to close the gap between focusing decisive action from insights that are generated. Simplicity creates clarity. In our connected, technological world, organisations must thrive sustainably, with greater stability and performance. The research presented features successful learning models that harness disparate or under-productive capital within organisations, to generate stakeholder value in our future organisation in a climate of change. Like a flock of birds migrating through climate change, our future organisation can be a model of innovation that features on the world stage.

*Marianne Cherrington is a senior lecturer at Otago Polytechnic AIC, completing a Ph.D. in Computer Science and Analytics. As a lecturer in disruptive and technological innovation, she melds economic, environmental and Māori worldviews into feasible solutions. Her research into machine learning feature selection algorithms has application in many fields and produces interesting collaborations and projects with international partners.*

[marianne@op.ac.nz](mailto:marianne@op.ac.nz)

## **Fieldwork placement experiences of health and social services students with disabilities in New Zealand**

*Mary Butler, Bailey Unahi and Victoria Baldwin*  
Otago Polytechnic

This presentation will present data gathered from a small-scale qualitative study of eight students who identify with a disability and attend a New Zealand tertiary education provider. It provides the perspective of students with a range of disabilities and impairments about their experience of placement, in particular, the issue of disclosure for students with disability.

For students with a physical disability, disclosure is inevitable. However, students with a non-visible disability are faced with an ethical conundrum about whether to disclose or not. Some students were reluctant to disclose a disability due to perceived associated stigma and past negative experiences. Such choices can have significant implications on the support that they may or may not receive. Possible suggestions for circumventing these difficulties include modelling through peer support and invited lecturers. There is also a strong suggestion for work to be done on defining what is meant by reasonable accommodations. These suggestions can help to support effective fieldwork education experiences for current and future students with diverse requirements.

*Mary Butler is professor at the school of occupational therapy, Otago Polytechnic. Bailey Unahi and Victoria Baldwin are recent graduates of the occupational therapy programme.*

[mary.butler@op.ac.nz](mailto:mary.butler@op.ac.nz)

## **Forces of success for wāhine Māori social workers during their degree study**

*Rehia Whaanga*

Eastern Institute of Technology

Research on the experiences of wāhine Māori during social work education highlights the intertwining realities of personal and institutional forces as contributing factors to success. Qualitative research utilising Kaupapa Māori and Mana Wāhine theory, explored through the voice of wāhine Māori social workers - the forces they navigated and drew from in order to be successful. Wāhine Māori shared insights into forces which impacted upon them throughout three phases; (1) life before a degree; (2) life during their enrolment; and (3) life after their successful completion. This paper focuses on

presenting findings within the second phase - the forces operating within personal and institutional contexts for wāhine Māori during social work education. Institutional forces highlighted the significance of programme content which connected wāhine to who they are; the impact, influence and relationships with teaching staff emphasised respect and shared values; peer relationships signalled mutual goals, reciprocal support and shared learning journeys. Personal forces highlighted loss, separation, change and growth; and the motivation and commitment of and for children and whānau. Institutional and personal forces wove together to present unique experiences for wāhine Māori throughout their study in different social work programmes and shed light on the intertwined relationship and unity evident between life, learning and success. Findings highlight that when success forces are in place, success is attainable even when faced with ongoing change and challenging life events. These findings relate to the symposium theme of kotahitanga which encapsulates unity and togetherness and highlight that Māori potential and success in education, social work practice and social work outcomes can be supported further if collective action and collaboration is taken. These findings highlight the importance of acknowledging realities and ensuring the implementation and fostering of success forces within social work educational programmes, agencies and practice, within professional bodies, regulations and policy in partnership with Māori, whānau, hapū and iwi.

*Ko Moumoukai te maunga*

*Ko Waitirohia te awa*

*Ko Kahungunu te marae*

*Ko Ngāti Rakaipaaka te iwi*

*Ko Rehia Whaanga toku ingoa*

*Rehia Whaanga is a lecturer on the Bachelor of Social Work programme at Eastern Institute of Technology based in Te Tairāwhiti. She has been privileged to teach within this community for 10 years and has recently completed a Master of Social Work through Massey University. Rehia has many areas of interest including Māori social work and Māori development.*

[RWhaanga@eit.ac.nz](mailto:RWhaanga@eit.ac.nz)

## **Future nursing workforce: Student nurse intentions to work in aged care after registration (Poster)**

*Dr Samantha Heath, Pam Williams, Robina Mall, Shobha Johnson, Gil Graham*  
Unitec

By 2036 over one quarter of the population will be aged over 65. With demographic change will come the need to provide health services tailored to supporting people living with the normal effects of old age and the increasing morbidity of many diseases. The requirement for registered nurses to provide care in an aged care setting will increase commensurately. Yet, the number of registered nurses working in aged care is decreasing. The research team is interested in whether undergraduate nursing students at Unitec view the aged care speciality as a career option. Student nurses in all years of Unitec nursing programmes will be invited to complete an on-line questionnaire. The questions ask about student nurses' career impressions of and intentions to work in aged care. Our poster will share early survey results suggesting how our data might assist us to work with aged care providers to develop placements and career pathways for our students. The data will inform debate on the decline in numbers of nurses seeking work in the aged care setting. Furthermore, student insights into the desirability of working in aged care will be available to be shared with colleagues in the sector.

*The research team are all lecturers in the Department of Nursing at Unitec. We have a range of clinical backgrounds and teach into our Bachelor of Nursing programme and the competence assessment programme.*

[sheath@unitec.ac.nz](mailto:sheath@unitec.ac.nz)

## **Group work to enhance student professional attitudes and employability**

*Alison Clear, Eastern Institute of Technology*

*Tony Clear, Auckland University of Technology*

We now see many different aspects of group work included in many academic courses. As educators we use group work to prepare students better for their future careers and integrate teamwork across the curriculum as a method for learning and for professional development. But how many of us understand the complexities of choosing the groups, encouraging collaboration, monitoring the group process or using the appropriate assessment instruments? This research is mostly based on experiential reflective practitioner insights that have been drawn from the Auckland University of Technology, BCIS capstone projects and the Master of Information Technology coursework at Eastern Institute of Technology. Employers and industry tell us they really want students who can work in a team; it is essential to the student outcome that this expertise is developed within their degree programmes. This presentation will explore the intricacies and methods of choosing groups, monitoring their progress without micro management, causing demotivation, fostering individual and group autonomy and then fairly assessing each student's contribution while encouraging the group function and growth.

*Alison Clear is an associate professor at the Auckland campus of the Eastern Institute of Technology. She has an extensive academic and professional career that has involved academic leadership in research, scholarship, teaching and curriculum development nationally and internationally, and an extensive publication record in national and international conferences and journals in computing and information technology. Alison is an invited international keynote speaker, has been a member of the international ACM Educational Council, member and vice chair of the ACM Special Interest Group in Computer Science Education, fellow of Information Technology Professionals (ITPNZ) and fellow of the Computing and Information Technology Research and Education in New Zealand (CITRENZ). She is currently co-leading the international research project CC2020 of 49 people from 20 countries to redefine computing curricula for 2020 forward. Tony Clear is an associate professor within the software engineering research at Auckland University of Technology, and in the department of IT and Software Engineering. He holds positions as an associate editor for ACM Transactions on Computing Education (TOCE), for the journal Computer Science Education, and ACM Inroads for which he is also a regular columnist and editorial board member. He is active in research within the software engineering and computer science education communities. With Professor Daniela Damian of University of Victoria, Canada he is working on a Royal Society of New Zealand International Leaders Fellowship Grant titled - "Leading the Way in Software Ecosystems for NZ". Tony has chaired or served on the programme committee for conferences such as ICGSE, EASE, ITiCSE, ICER, ACE, FIE, CITRENZ, APRES, ECIS, SIESC, and reviewed for journals such as TSE, IST, JSEP, IJEE, CLEIej. He supervises and has examined doctoral students in global software engineering, CS education and interdisciplinary topics, and has chaired or participated in several doctoral consortia.*

[aclear@eit.ac.nz](mailto:aclear@eit.ac.nz)

## **Hand in hand: A new degree apprenticeship model for engineering education in New Zealand**

*Hana Cadzow*

*Otago Polytechnic*

Otago Polytechnic and Wellington Institute of Technology, in partnership with the TEC and asset management practitioners across the country, have spent the last three years developing New

Zealand's first degree-level apprenticeship programme. Prompted by industry needs, this pathway allows for the delivery of internationally recognised Bachelor of Engineering Technology (BEngTec) to learners while they are employed in industry. Degree apprenticeships are a well-established model overseas, including across the United Kingdom, but this project, beginning delivery in 2019, represents a considerable departure from business as usual for degree-level education in New Zealand. Traditional degree delivery has tended towards a classroom-heavy approach with students engaging in project work where possible. The successful completion of a degree apprenticeship relies instead on a well-managed partnership between apprentice, employer and polytechnic. Employers commit to providing a range of learning opportunities for apprentices within their workplaces and industry, and polytechnics take responsibility for overall learning management and delivery of outstanding content. In this model, students engage in real world project work as the foundation of their learning, with "classroom" learning supplementing as required. This presentation will outline the driving factors behind the creation of the BEngTec degree apprenticeship pathway and provide the audience with an understanding of how the key principles of partnership, responsiveness and robustness, have been built into the delivery model. The presentation will also reflect on the process of collaborating with partners and stakeholders to develop an ambitious new opportunity for learning and teaching, with potential applications for other industries.

*Hana Cadzow is a lecturer in the engineering technologies team at Otago Polytechnic. Her research work covers a range of issues including the experiences of women in the workplace, and innovative delivery opportunities for engineering education including micro-credentials and apprenticeship models.*

[hana.cadzow@op.ac.nz](mailto:hana.cadzow@op.ac.nz)

## **How might we create environments that enable aged persons to thrive? (Student Snapshot)**

*Anneke Driessen and Shareen Hanif*

Waikato Institute of Technology

The ITP conference call for 2020 invites potential contributors to 'embrace disequilibrium', to examine 'adaptive systems for enhanced industry and learner outcomes' and to 'work in partnership'. The College of Gerontology Nursing has partnered with students from the Master of Professional Practice, the Centre of Health and Social Practice and Design Factory New Zealand to co-create solutions to the challenge of how might we provide expert care for older persons in New Zealand. To help understand this challenge the design thinking process is applied. This process methodology is made up of five stages; 'empathise' (which includes secondary research and ethnographic interviews of health professionals and people over 65 within the Hamilton and Tauranga region), 'define' (primary and secondary research is clustered into key findings and insights are generated), 'ideate', 'prototype' and 'test'. This presentation will focus on the 'empathise' and the 'define' stage.

Studies disclose that we have an ageing population. By 2050 our population is expected to comprise 25% over the age of 65 years (Ministry of Health, 2019). Historically, Māori, have been under-represented in the older adult cohort. While 15% of the country's population in 2015 identified as Māori, this community constituted only 6% of older adults. Of significance for New Zealand, the proportion of those aged 65 and above who identify as Māori is projected to double to 12%, by 2038 (Statistics New Zealand, 2018). These rapidly changing and evolving demographics require responsive, innovative and person-centred approaches.



Themes and other findings will be discussed during the presentation.

*Anneke Driessen is a social worker with over 15 years working with clients in varying environments including child protection, palliative care, people affected by dementia and multiple sclerosis. She has been a supervisor for coaching and mentoring social work students and new graduates. She also presents as an associate tutor on the topic of supervision and self-care for workers in not-for-profit organisations that are working with children and their families in the community. Her work is underpinned by a Bachelor in Applied Social Science and a Postgraduate Diploma in Health and Social Practice (Professional Supervision). Anneke is working towards a Master in Professional Practice. After obtaining a TESOL certificate in teaching English to Adult Learners from Melbourne, Shareen Hanif spent the next two years working and teaching English in Tangerang, Indonesia. After moving back to New Zealand, she completed a Bachelor of Nursing at Wintec. Shareen has worked in both rural and urban aged care facilities before moving to the Waikato DHB as a registered Nurse in the older persons orthopaedic rehabilitation ward. Shareen is currently working as a nurse educator for the professional development unit at the Waikato DHB and is working towards completing her Master of Professional Practice.*

[dice@actrix.co.nz](mailto:dice@actrix.co.nz)

## **How to assess the emotional engagement of an exhibition of environmental artworks**

*Lesley Brook*

Otago Polytechnic

Giving people information about climate change and other environmental issues is not enough to change behaviour. There is increasing awareness that art may play an important role in engaging people's emotions and thus contributing to increased pro-environmental behaviour. On 26-27 September 2020 the Dunedin School of Art is hosting an exhibition, symposium and community event in partnership with local communities, which will explore climate change and other effects of human activity on the environment. It is hoped that the exhibited artworks improve outcomes for the communities of Ōtepoti/Dunedin by emotionally engaging viewers; helping people to make sense of their feelings about climate change and other effects of human activity on the world, and increasing people's feelings of connectedness to others who may have similar or different feelings. Assessing these emotional impacts is the purpose of this research project. This presentation will explain the researcher's choice of Q methodology, a qualitative method for gathering data about participants' personal viewpoints for statistical analysis to identify shared perspectives. Each participant's feelings will be captured in the unique way in which they sort a set of photographs of the exhibited artworks. Participants will then describe in their own words their emotional responses to the artworks. The study is novel in its use of photographs of artworks in Q methodology and in seeking to assess the emotional impact on viewers of a curated exhibition of environmental artworks by various artists rather than a single artwork.

*Lesley Brook is employed as Research Projects Coordinator in the Research and Postgraduate Directorate at Otago Polytechnic. This research project is for a Masters of Professional Practice and furthers her research interest in the impacts of art research.*

[lesley.brook@op.ac.nz](mailto:lesley.brook@op.ac.nz)

## **Implementation of employability skills and authentic learning approaches to improve industry and learner outcomes (Poster)**

*Sarla Kumari and Thilanga Ariyaratna*

Waikato Institute of Technology

Motivation and engagement in the classroom, and a balance in our teaching techniques are both important to facilitate strong learner outcomes. Self-determination can be extended to learners by implementing andragogy as the teacher identity, and this can be directed to create an opportunity for employability skills development. The purpose of this poster is to showcase project-based or authentic learning approaches to develop a work-based learning environment for students studying in electro-technology programmes. This study focused mainly on strategies to improve employability skills through activity-based learning approaches and methodologies. The poster provides transferable guidelines to build real-world techniques that will help learners to develop their skills. Key findings include: the value of authentic and work-based learning; Mahi tahi (working together); kia tupu and kia hua (improvement and opportunities); whakaaro whānui (problem solving); time management; the ability to face challenges; and te waatea me te maia (flexibility and confidence). We anticipate that applying more ako learning principles, including authentic learning approaches, will improve the enthusiasm and engagement of learners in this whole process of learning. Authentic learning is essential in the intellectual growth and motivation of learners.

*Sarla Kumari is an academic staff member at Waikato Institute of Technology. He completed a Master in Electronics and Communication Engineering in India, was an electrical tutor for four years, and presented many papers in national and international conferences and journals. On moving to New Zealand, Sarla worked in the electronics industry for over three years. A highlight was designing milk meter sensors with Tru-Test. Sarla enjoys supporting students to gain industry work experience while studying. He is currently doing research in medical science and engineering with Auckland University.*

[sarla.kumari@wintec.ac.nz](mailto:sarla.kumari@wintec.ac.nz)

## **Improving indoor air quality in a classroom using ultraviolet germicidal (UVGI) lights**

*Dr Mohammad Al-Rawi*

Waikato Institute of Technology

This presentation reports on the inclusion of service learning in a student project on class-room air quality improvement using UV lights. The students' projects contributed to a main research project which aims to address poor indoor environmental quality; specifically, dampness, mould and pathogen transfer, in New Zealand buildings. Substandard New Zealand buildings are the cause of respiratory ill-health in many New Zealand households and disproportionately impact on those with low income. The presentation will reflect on the service learning outcome of student work in their final year project paper. Such work enables students to participate in community service through designing, building and testing solutions to problems affecting their community.

*Dr Mohammad Al-Rawi is a principal lecturer at Waikato Institute of technology and an expert in computational fluid dynamics and finite element modelling. He is an executive member of the Australasian Association of Engineering Education. Mohammad's current research is on improving air quality in residential environments. He is working a project that will design and build a residential air quality improvement system in order to prevent the negative health consequences associated with*

*living in damp, overcrowded and low-quality housing. This project will address the reduction of airborne mould spores and pathogens linked to respiratory problems.*

[Muhammad.al-rawi@wintec.ac.nz](mailto:Muhammad.al-rawi@wintec.ac.nz)

## **Innovative models and partnership contribution for sustainable economic growth**

*David Airehrour*

Unitec

Unlocking the potential of New Zealand's knowledge base, its people and diverse resources will be vital in realising socio-economic benefits for Aotearoa, New Zealand. This small nation 'punches above its weight' in sporting arenas, and has further potential to be world-class in industries that use niche technologies and leverage partnerships. Some leading New Zealand firms are exemplary. They are also members of the Climate Leaders Coalition, promoting business leadership and collective action on climate change. This research uses a case study methodology and interviews with various industry stakeholders to highlight how these exemplary firms are leading action in emission mitigation and sustainability. The findings model the many ways our future organisation can leverage partnerships to intensify alignment with signals from government and industry. The synergistic model employs partnership contribution to propel growth, using knowledge, people and resources to drive organisational growth. For example, the fledgling Climate Leaders Coalition is generative, modelling leadership, skills development and visionary collaborative action. Understanding and adopting these successful learning paradigms can ease conditions of instability, especially in relation to supply, demand, and resource fluctuation. This novel, contemporary perspective emphasises a more assured and future-directed approach for industries facing strategic challenges in states of disequilibrium. The presentation concludes with an example from the construction industry, which will clearly resonate with our future organisation, and its mandate to create a vocational education system that is geared for the needs of the future.

*Dr David Airehrour is a lecturer in analytics at Unitec Institute of Technology and a PBRF-ranked researcher in computer and information sciences. He is active in many professional bodies, and has industry certifications in information systems, information technologies and information security. His research interests include big data analytics, green informatics, health informatics, internet of things, trust and reputation management systems.*

[david.airehrour@aut.ac.nz](mailto:david.airehrour@aut.ac.nz)

## **Integrating experiential learning and learner capability into the curriculum: Improving employability outcomes for Bachelor of Construction learners**

*Dr Priyanka Raina, Dr Don Samarainghe*

Otago Polytechnic

Modern educational practitioners have shown that demonstrating appropriate capabilities related to employability, communication, and familiarity in a range of social and cultural spaces enables fresh graduates to better secure employment in the current competitive job market. As a part of the Otago Polytechnic (OP) capability framework, we implemented a project to incorporate key learner capabilities into the construction curriculum. Our model embedded relevant learner capabilities into the graduate profile outcomes (GPOs) of the construction programme. Firstly, we co-created the key capabilities with construction industry practitioners. Our strong industry links were established with

the help of our employability department and our Permanent External Advisory Committee (PEAC). Secondly, we aligned the GPOs in the Bachelor of Construction programme to reflect the construction capabilities found. Thirdly, all the courses were explicitly aligned in terms of course aims and learning outcomes to help students to strengthen their key capabilities. Fourthly, assessments were aligned to measure the key capabilities embedded in the programme. Assessment tasks were outlined to assess the capabilities and help relevant skill acquisition. Finally, the indicative content of each course was aligned and the key concepts that enhance the selected capabilities were explicitly identified through a mapping exercise. In order to deliver the capability aligned courses, we introduced experiential activities in the learning and teaching environment. We believe the adoption of this model will help construction learners to improve their employability outcomes. This research was conducted as a part of the wider research undertaken at OP for the development of the I am Capable tool, and the effectiveness of the capabilities is expected to be validated through the tool. The aim of this presentation is to demonstrate the process followed towards the incorporation of learning capabilities into the Construction Technology Small Building course. The audience therefore will get a clear understanding about the ongoing capability development project undertaken at Otago Polytechnic.

*Dr Priyanka Raina (PhD Construction Management, Master of Construction Management, Bachelor of Architecture with honours) works as a senior lecturer with Otago Polytechnic at their Auckland International Campus. She teaches construction technology, social and legislative environment, construction law, property investment. Her research areas include construction law and contracts, learner capabilities and experiential learning.*

[praina@op.ac.nz](mailto:praina@op.ac.nz)

## **International stakeholder engagements through a research internship**

*Dr Pierson Rathinaraj*

Waikato Institute of Technology

Publication assisted research experience in New Zealand is a highlight for students from East Asia who undertake training at Wintec to complete a research internship. The novel internships cover a minimum four-month period. During the internship, the scholars focus on their research projects, and enhance their professional and cultural skills. The research internship is an important milestone in Wintec's relationship with reputed universities in Asia and recognition of deep collaboration and regard with stakeholders. The presentation mainly focuses on the importance and mutual benefits of research internships between Wintec and partnering institutions abroad. It also highlights a few experimental pieces of evidence from the internship outputs. For example, a team of Wintec research interns recently discovered an anti-cancer drug derived from the by-products of meat processing and published their study. Overall the internships provide "real-world experience" to explore a suitable career path for the intern scholars and innovative publications to the host institution researchers for the enhancement of PBRF portfolio.

*Dr Pierson Rathinaraj is currently employed at Wintec as the international business development manager. He has completed his doctoral study in organic chemistry in South Korea. Pierson Then completed postdoctoral research in biomedical engineering in South Korea and Auckland. Pierson holds unique integrated research in bio-nanotechnology for extensive preparation and characterisation of both gold nanoparticle and grapheme oxide in cancer cell targeting and drug delivery. Pierson has developed skills in biosensing materials conjugated nanoparticles for protein detection. He has vast experience in working with international exchange students, undertaking industrial projects and handling analytical tools for biomedical research with academic publications.*

[Pierson.rathinaraj@wintec.ac.nz](mailto:Pierson.rathinaraj@wintec.ac.nz)

## **Learner capability research and implementation at Otago Polytechnic**

*Andy Kilsby, Amber Paterson, Michael Greaves and Leoni Schmidt*

Otago Polytechnic

How can New Zealand teaching institutions equip learners to be more employment-ready for the fast-changing world of future work? Which capabilities or transferable skills are priorities for employers/stakeholders when they consider graduates as employees? These questions are central to the development of the Learner Capability Framework (LCF) at Otago Polytechnic. We believe the key to supporting learners in a changing environment is the development of capabilities or transferable skills, that can be applied in multiple and fluid work situations. The overall aim of this process is to best support learners into work, post qualification, with the capability and transferable skills necessary to be able to adapt to the changing nature of work. This research has already informed an online tool developed by Otago Polytechnic, that enables learners to collate their unique capability evidence into a shareable profile attesting to the value that our students will bring with them into the workforce post qualification. Using an action research methodology, the first phase connected 51 academic staff with 331 employers and stakeholders across fifteen identified clusters of programmes. One hundred and sixty-one unique interviews provided the basis of employer identified capabilities for consideration in mapping and implementation into current curriculum. The second phase focused on the experiences of alumni, both in the institution and their experience post-qualification in their current employment. We engaged 381 alumni from Otago Polytechnic online to reflect on their experience transferring to the workplace, and followed this up with 41 unique interviews to better understand the importance of capability development to that process. Our next stage of research will capture this learner experience, and how it has influenced their transition to the workplace. We will also investigate the process required to see successful embedding of capability into a learning context. This presentation will introduce the process, our findings and our trajectory towards the aspirational goal of equipping our learners with the capability to find their place in the world.

*Andy Kilsby, Amber Paterson and Michael Greaves are members of the Otago Polytechnic Learner Capability Research team. Andy is Director of Employability and has overall governance on the project, Amber leads the learner capability implementation team, whilst Michael has been a lead researcher on the project.*

[andyk@op.ac.nz](mailto:andyk@op.ac.nz)

## **Learning to mitigate emissions: Relevant Research with Māori hapū and iwi**

*Majka Cherrington*

University of Waikato

Currently, there is little scholarly research on how New Zealand can achieve environmental sustainability through Māori iwi (tribe) and hapū (subtribe) relationships with land and sea, through the lens of the Zero Carbon Act. Indeed, such processes need sustained enhancement, as it is now agreed that emissions from human activities are negatively impacting our atmosphere and climate with increasing frequency and ferocity. Applied research is urgently needed to hasten action towards emissions mitigation. The effects from industry are considerable, further accelerating climate change. In particular, the Greenhouse Gas Inventory estimates that the agriculture and energy sectors alone contribute almost 90% of New Zealand's gross emissions, contributing to global warming. The purpose of New Zealand's Climate Change Response (Zero Carbon) Amendment Act is to provide a climate change policy framework to mitigate greenhouse gas emissions under the Paris Agreement. The Bill is a 'first step' to carbon neutrality and nature restoration, but it will take concrete, urgent climate joint-action to achieve the zero carbon targets under the bill's mitigation framework. This

presentation endeavours to address this gap by considering specific beneficial partnerships that can be realised by co-creating research outcomes with hapū and iwi in Aotearoa, New Zealand. Also considered in this research is the cascading effect that the Act will have on other legislation, where mana whenua perspectives and implications are crucial considerations for the achievement of carbon mitigation targets. The importance of such a focus is in unlocking the potential of mātauranga (Māori knowledge), with relational co-creation through research in our re-envisioned tertiary sector.

*Majka Cherrington is a graduate from the University of Waikato and is a practicing lawyer in an Auckland law firm. She is experienced in civil, employment and family litigation. Majka is genuinely passionate in assisting her clients to achieve their desired outcomes. She has interests in sustainability and in environmental policy implications. She is from Northland and is of Ukrainian and Māori descent.*  
[m.cherrington@windowslive.com](mailto:m.cherrington@windowslive.com)

### **Learning to speak nursing: Using early adult literacy assessment and targeted intervention to promote student success on the Bachelor of Nursing programme (Poster)**

*Dr Samantha Heath, Victor Roux, Ruth Jackson, Pam Williams, Karen Haines, Treena Brand, Dr Dianne Roy, Evelyn Hikuroa and Jill Philips*  
Unitec

Student nurses are expected to develop multiple literacies during their Bachelor of Nursing degree. These literacies, like professional literacy and academic literacy, require high levels of foundation adult literacy to scaffold new learning. Our experience is that where students struggle with adult literacy, they often struggle with course demands even having met programme entry criteria. We want to know if early assessment of students' foundation adult literacy level coupled with targeted, follow-up interventions to address any difficulties identified impacts on student success in the first year of the Bachelor of Nursing programme. In a project newly underway, students who have achieved step 1-3 on the Literacy and Numeracy Adult Assessment Tool (LNAAT) will have an opportunity to develop a personalised support plan, have face to face support from the learning support team and use an on-line adaptive literacy development resource. The research team will review their progress throughout year one, recording academic progression and completed support opportunities. LNAAT re-testing will occur at the end of second semester for all students with scores compared to initial results. The follow-up LNAAT results and progression of students in the intervention group will be compared with the rest of the cohort.

*The research team are all lecturers in the Department of Nursing or Te Puna Ako at Unitec. We have a range of clinical backgrounds and teach on the first year of our Bachelor of Nursing Programme. We have worked together to develop the project and have been successful in securing a small grant from our Early Career Researcher Fund to support our research.*

[sheath@unitec.ac.nz](mailto:sheath@unitec.ac.nz)

## **Mahi tahi: Students and the Rotorua tourism industry working to achieve a shared purpose**

*Bronwyn Alton*

Toi Ohomai Institute of Technology

This presentation will outline the learnings gained by completing a research pilot project with students and a Rotorua industry partner. This project embraces the concept of kotahitanga, where all parties have been united in a shared purpose, in seeking positive outcomes for the Rotorua tourism industry. A pilot study was conducted in 2019, where it was found that information related to the visitor profile and purchase behaviour of visitors at the Rotorua i-SITE could provide valuable insights to support the enhancement of the visitor experience, and develop products to meet the needs of the Rotorua tourism industry. The Rotorua i-SITE is a leader in the national i-SITE network and the research findings will benefit other centres and their hāpori. Further investigation of visitor interaction with the Rotorua i-SITE will allow students the opportunity to 'learn while doing' in gaining relevant experience, skills and valuable knowledge while being given the opportunity to develop relationships within the Rotorua tourism industry. This project enables enhanced learner outcomes and supports students in developing employability skills. It also addresses the need for workers with a relevant skill set and training to meet the tourism and hospitality demand. The New Zealand tourism industry has recognised and forecast a shortage of skilled workers; this project, therefore, offers a good example of how education providers are meeting a regional and national need, building industry capability, and preparing students for the working world, not just of today, but for the future too.

*Bronwyn Alton is a tutor in the Tourism and Hospitality Management team at Toi Ohomai and was awarded the Toi Ohomai Teaching Excellence award in 2017 for her commitment to developing applied learning experiences and assessments that engage students in their learning journey. Bronwyn came to Toi Ohomai from the industry and has broad experience in the tourism sector. Her personal interest is looking at how the tourism industry can become leaders in sustainable business practice.*

[bronwyn.alton@toiohoma.ac.nz](mailto:bronwyn.alton@toiohoma.ac.nz)

## **Making a case for upskilling the New Zealand workforce for offsite construction (Poster)**

*Rehan Masood*

Southern Institute of Technology

Natural and man-made disasters are driving the construction industry to adopt modern methods of construction to achieve speed, affordability and quality goals. Offsite construction or prefabrication offers an innovative approach to achieve sustainability and is, by definition, the amalgamation of manufacturing and construction domains. The construction industry is still in a transition phase of learning the manufacturing practices applicable to their environment. This raises the concern of an experienced workforce shortage. Prefabricated house building companies are investing substantive funds on training related to design, manufacture and construction skills. There are very limited educational (formal) opportunities provided by tertiary or training institutes to prospective learners who intend to opt for offsite professions. A collaborative research project has been initiated at Southern Institute of Technology, for upskilling the New Zealand workforce for offsite construction. Other partners in this project are Otago Polytechnic and Unitec Institute of Technology. The present study focus is to investigate the need for offsite construction qualifications, propose suitable options and scope further research opportunities. In the consultation phase, a critical review of available sources (including journal articles, conference proceedings, and industry reports) was performed, and

interviews were conducted with prefab experts. Content analysis was performed to identify the key aspects to understand the need for offsite skills and relevant qualifications. Findings from this study are helpful to define the role of stakeholders, skills requirements for the prospective and current workforce to enhance employability, academia (NZIST) involvement for possible qualification offers and opportunities for industry-academia collaborative linkage. Our early conclusion is a strong signal that further investigation in this research domain for identification and validation of a skill-set suitable for an offsite construction workforce in New Zealand. This study is part of on-going research, and authors are willing to involve more ITPs based on mutual research interest and expertise in prefab domain.

*Rehan Masood is a tutor in construction and quantity surveying at Southern Institute of Technology. He has extensive experience of practice and teaching in civil engineering and construction. He has published in peer reviewed conference proceedings and journals with a focus on building information modelling, health and safety management, offsite construction and prefabrication, and construction technology.*

[rehan.masood@sit.ac.nz](mailto:rehan.masood@sit.ac.nz)

## **Master Supervision (Workshop)**

*Kay Fielden*

Eastern Institute of Technology

An important way in which postgraduate students and staff engage with industry is through applied research. Growing numbers of students are entering Master's research papers, which in turn requires more master level research supervisors. The quality of this applied research is maintained by a number of factors, including quality of the research supervision. Research supervision varies in many ways from classroom teaching, and many supervisors come to supervision with only their own experience of being supervised in either Master degree or PhD. Research supervision can be regarded as the pinnacle of academic learning and requires skills, techniques and experiences that are unique to supervision. Staff need to be well-prepared to supervise research projects as this strengthens the research-teaching nexus at all levels, provides a stimulus for community and industry engagement, and impetus to postgraduate programmes. The aim of this workshop is for participants to gain a deeper understanding of the postgraduate research culture, gain knowledge about supervisory practices, and an appreciation of relationship building between postgraduate students and supervisors. In this workshop these skills techniques and experiences will be actively explored with workshop participants.

*Kay Fielden has been an academic for more than 40 years. Kay has taught, supervised and researched across all sectors of tertiary education: polytechnic, university and private training. Kay has taught at all academic levels between 5 and 10. Kay is an active researcher and postgraduate supervisor, examiner and mentor for others new to supervision at a number of tertiary institutions, training staff to be postgraduate supervisors using a number of different training models. Kay's academic expertise spans a number of academic areas in business, information technology, leadership, health and education.*

[kfielden@eit.ac.nz](mailto:kfielden@eit.ac.nz)



## **NEST - the knowledge within: A pilot study for a decolonised flipped classroom**

*Kim Meredith*

Southern Institute of Technology

Investigating a new model for academic staff to familiarise and integrate with Māori and Pasifika learners' world view, NEST implements the Tuākana Teina model, whereby students teach academic staff conversational language in their heritage tongue. The aims of the research stemmed from the need to identify an effective interface between Pākehā educators and the world views of Māori and Pasifika learners, which are embedded in the language. Workshops were held with students assuming the teacher role and lecturers invited to attend as learners. Data was collected through semi-structured one-on-one interviews and researcher observations. Initial research findings show the experience enriched and enhanced educator-learner relationships. Academic staff experienced the challenges of learning a second language and students were able to value the knowledge of their first (and second) language. There was a high percentage of bi-lingual (and tri-lingual) speakers amongst the student body reflecting the school's 47% Māori and Pasifika learners whereas 90% of the academic staff are mono-lingual, reflective of the predominantly Pākehā staff. This presentation offers insight into strategies to address Māori and Pasifika learners who struggle in the tertiary environment, identifying underlying causes with a view to addressing barriers to learning for educators and learners alike.

*Kim Meredith is a lecturer at MAINZ, Auckland teaching a research paper to level 7 and contextual studies of contemporary music to level 5 and level 6 students. She holds a Master in Applied Social Work from Massey University, a Bachelor of Arts in Political Science from the University of Auckland, a Diploma in Journalism from MIT and a Certificate in Adult & Tertiary Teaching from the Open Polytechnic. She is also a writer, poet and performance artist. Meredith has a particular interest in indigenous knowledge frameworks.*

[kim@pacificechoes.com](mailto:kim@pacificechoes.com)

## **ORCID – a researcher identifier**

*Jill Mellanby*

Royal Society Te Apārangi

ORCID is an international, individual researcher identity provider that aims to solve the name disambiguation issue in the research environment. People use many variations of their names when producing research outputs, applying for funding, and in other research related activities. Sometimes people change their name part way through their research career. This makes it difficult to attribute a piece of research to the 'right' person. By using an identifier, all research can be properly attributed. In addition, a person's ORCID record can be populated, with the researcher's permission, by third parties such as their grant fund awarder, their publisher, or their employer. This saves the researcher time as they don't have to keep their record updated themselves, and the information in the record can be verified as being 'true' because it is written by a reliable source. ORCID can be integrated into other data systems in order for information to be shared. Instead of a researcher having to fill out multiple forms, multiple times a year with information on grants awarded, research outputs produced etc., they can simply supply their ORCID IDs and allow the information to be imported automatically into other data systems – saving both researchers and administrators time.

*Jill Mellanby is part of the ORCID team at Royal Society Te Apārangi which is the lead agency for the New Zealand ORCID consortium. She has a BSc and MLIS as well as postgraduate qualifications in*

*teaching and publishing. She worked in a CRI library before moving into the world of academic publishing and managed a portfolio of research journals for many years. She enjoys seeing the big picture of the research ecosystem and how all the parts fit together.*

[Orcid@royalsociety.org.nz](mailto:Orcid@royalsociety.org.nz)

## **Pasifika cultural intelligence – moving towards cultural competency (Workshop)**

*Aiono Manu Fa'aea, Edmond Fehoko, Frederick Lōloa 'Alatini and Faith Faiai*  
Manukau Institute of Technology

In the Pasifika Development Office at Manukau Institute of Technology, we have been working on providing strategic advice through the use of Pacific cultural intelligence workshops, which are underpinned by the four stages of the Cultural Intelligence (CQ) Framework by Dyne, Ang and Koh. We have adapted this framework by adding Pasifika academic worldviews that seek to contribute to what we call Pasifika cultural intelligence. As part of implementing Manukau Institute of Technology's Pasifika Strategic Plan 2018 - 2023, we are involved in several projects that focus on ways that foster academic learner success. We believe that by being able to articulate the 'domestic diversity' that exists within Pasifika cultural intelligence, our worldviews have helped Pacific peoples to learn how to sustain and promote kotahitanga/unity in and across the Moana Oceania. We have been able to do this through delivering workshops that have been customised and tailored to the capabilities and learning desires of academic staff responsible for Pacific learner success, by strengthening their own academic quality with "Pasifika applied research". This workshop will focus on how we have been able to foster and nurture Pacific cultural intelligence by expanding Pasifika culturally responsive curriculum and pedagogy across Manukau Institute of Technology and strengthening our Pasifika academic subcommittee that is made up of staff and lecturers with "Pacific hearts". Other areas include the design, development, delivery and evaluation of courses that focus on key areas with high participation by Pacific peoples. Immerse yourself in stories and strategies that we have seen as successful for our Pacific learners and useful learnings from our academic staff who have engaged in online programmes and professional learning that includes a tertiary adaptation of the Tapasā cultural competencies framework, released by the Ministry of Education and administered by the Education Council. Come prepared to take away practical steps to get your team activating their Pasifika cultural intelligence first, so they can move towards cultural competency.

*Aiono Manu Faaea-Semeatu uses her skills as a social anthropologist and ethnomusicologist to challenge educators and associated communities through thought leadership to consider multiculturalism and navigating spaces of ethnicity, identity, and diversity. Aiono Manu is currently completing her doctoral thesis with the University of Auckland on Pacific Islander learner success transforming education, following on from her Master in Professional Studies focused on connecting gifted Pasifika students with their musical talent. As a New Zealand-born and raised Tongan, Edmond Fehoko has always been fascinated by the cultural space and cultural identity of the Tongan diaspora community, particularly male Tongan culture. Edmond has a Bachelor of Arts in Criminology & Social Sciences, a Master of Arts in Social Sciences and is currently completing a PhD thesis in Public Health. Edmond's Master's research, Pukepuke Fonua: an exploratory study on the faikava as an identity marker for New Zealand-born Tongan males in Auckland, New Zealand, is based on kava drinking as a cultural space and identity marker for New Zealand-born Tongan males in Auckland.*

[aiono.manu@manukau.ac.nz](mailto:aiono.manu@manukau.ac.nz)

## **Pedagogy of hopefulness: The challenges of social change and intergenerational disempowerment (Student Snapshot)**

*Mawera Karetai and Samuel Mann*

Otago Polytechnic

As we move to an integrated Vocational Education & Training (VET) sector, we have to come to terms with a wider range of student backgrounds and the skills and values they bring to learning. Education is seen as a vehicle for both individual and social development but we have a disequilibrium between available options and the ability to make real choices. Options are things, choices are decisions; these decisions must be underpinned by hopefulness, the ability to see a positive future for yourself. This is a deliberate framing of a positive future against both negative and predictable outcomes. In this presentation we suggest that there is a looming crisis in our ability to make real choices, and that this in part comes from an absence of meaningful engagement that stimulates the imaginative ability to see a future, empathise and plan. In the education context, this absence of an envisioned future, especially in the early years of primary school gives little for education to build on. In order to create life-long learners who will engage with the VET sector, we must ensure that early education provides the foundation for choice-making. Recent reports on the Ministry of Education website and in the media indicate there is an increase in antisocial behaviour by children in school, with a reported 1100+ learners excluded from school in 2019 alone. While antisocial behaviour is increasing, school attendance is dropping, with 2019 statistics showing only 58 percent of students are regularly attending school, down from 64 percent in 2018. Our primary school learners may be the most vulnerable to a loss of hope and connection, and they also represent the largest declines in attendance. There are many aspects to this. We describe how one element - reading out loud to our children - could make a substantial improvement. While focus has been on technical reading skills, we believe that an overlooked value is in the conversation that naturally comes from the process of reading out loud. This discussion stimulates the imagination that helps to develop empathy and the ability to think beyond the moment. In this presentation, we will discuss the impact of a real choice-making, which is also part of Mawera's Doctorate of Professional Practice submission. We hope to contribute to a discussion of the future of the VET sector that takes seriously the challenges of social change and intergenerational disempowerment.

*Mawera Karetai (Kāi Tahu, Kāti Mamoe me Waitaha ki te Waipounamu) is a director, educator and community champion. She is a mentor and facilitator at Capable NZ - Otago Polytechnic's school of work-based learning and professional practice. Samuel Mann is a professor at Otago Polytechnic, specialising in sustainable practice and transformation.*

[mawera.karetai@op.ac.nz](mailto:mawera.karetai@op.ac.nz)

## **Pōraruraru (Disequilibrium)**

### **(Creative Exhibition)**

*Nicol Sanders-O'Shea, Darcell Apelu, Quinton Bidois, Donna Dinsdale, Anne-Marie Simon, Kelcy Taratoa, Helen Cooper, Graeme Cornwell, Dale Sattler, Kyle Sattler, Karolina Bemova, Riley Claxton, Joanne Donovan, Julia Cass-Janes, Kereama Taepa*  
Toi Ohomai Institute of Technology

'Pōraruraru' explores notions of symmetry, steadiness, equipoise, balance, stability: the relationships between balance - imbalance, equality - difference, likeness - dissimilarity, uniformity - inequality, sameness - divergence, and cohesion - disunity. The intention of 'Pōraruraru' is to raise questions concerning the liminal spaces which open up when concepts surrounding notions of disequilibrium are interrogated, in order to explore those territories, be they physical or conceptual, that are

conjured up. 'Pōraruraru' employs disjunction and disunity between object and concept; highlights individual difference between artists and practices to promulgate new as yet intangible concepts which lie on the border of conceptual horizons. Tāne and Tāwhaki remind us of these horizons and realms of untapped potential for if ngā kete e toru were not retrieved we would be still in a state of pōraruraru. Artists have been encouraged to collaborate on various levels to collide, merge, contest ideas, concepts, methods of working, disparate technologies, community environments - not in an attempt to homogenise practice, but to co-create, generate and celebrate innovative processes, ideas and concepts. The exhibited work presents wall-based artworks and temporary installations. This exhibition will be accompanied by a limited hardcopy catalogue publication and an online catalogue with essay.

*The Art & Design teaching staff from Toi Ohomai. Staff represent a range of cultural backgrounds and ethnicities, dealing with a wide variety of contemporary issues, concerns and perspectives. They are specialists in graphic design, fashion design, interior design, textile design, visual arts, photography and music production.*

[nicol.sanders-oshea@toiohomai.ac.nz](mailto:nicol.sanders-oshea@toiohomai.ac.nz)

## **Regression analysis of the feedback from various groups of students in a business simulation game**

*Dr Ram Roy*

Eastern Institute of Technology

This presentation relates to a graduate-level course named Strategic Management with two types of assessments: 'individual-based' and 'group-based'. The purpose of this multiple regression analysis is to (a) understand the performance of students when they work individually and when they work in groups, (b) compare their experiences with the business simulation games during the two years. The presentation is based on the students' evaluation data of two group assessments of the course during two different years. The number of students in the classes during the two years were slightly different. The classes were quite diverse in terms of nationalities (domestic and international), age, and gender. The classes were delivered in on-campus mode, in the form of two three-hour sessions per week. The groups in each year consisted of students with various academic backgrounds including business, commerce, science, and engineering. Some of the domestic students were in paid employment while studying, and they worked in various settings. Students identified many challenges in group-work including communication, language barriers, time management, differing levels of expertise/knowledge. The presentation demonstrates interesting feedback from pedagogical perspectives that can be very helpful in the design/delivery of this course in the future.

*Dr Ram Roy is employed by Eastern Institute of Technology, Hawke's Bay as a senior lecturer to teach operations management, supply chain management, strategic management, advanced operations management (BBS level); and lean management, decision making (Masters level). Ram has done his PhD in supply chain management, and has a teaching experience of over 27 years. His research profile spans across a range of engineering and management topics including inventory modelling, JIT procurement, TQM, lean management, value stream mapping, etc. He also has five years of industrial experience as a mechanical design engineer in one of the leading international companies.*

[rroy@eit.ac.nz](mailto:rroy@eit.ac.nz)

## **Seeking a contemporary textile making disequilibrium: Self-reliance as an intercessional agent for change (Student Snapshot)**

*Joanne Donovan*

Toi Ohomai Institute of Technology

This practice-led project provides a foundation for an exploration into hybrid craft in textile design. The study is positioned to query the notion that the way things are produced can change how we consume 'stuff', when we see ourselves connected, physically and locally, to the things we use. To this end the study focuses on using existing materials that are 'near-by', invoking a connection to whenua and community that is usually missing in textiles produced for product lines sold in large chain stores. The methods used to produce the textiles are deliberately within the scale of the human body and its intrinsic expressions of sensory/haptic impulse, such as needle felting, stitch and dyeing. The study draws heavily on local cultural values, of frugality and kiwi cargo culture that grew out of the domestic sphere in post-colonial New Zealand. Through an exploration and resurgence of cultural norms; frugality, mindful making, and self-reliance, the project seeks to form a paradigm of emancipatory values. This research searches for textile outcomes that disrupt the status quo paradigm of repetition on a mass scale offering instead, the prospect wherein we as New Zealand designers may employ our creative force to serve a textile culture that is local and beyond industrial commercialism.

*Joanne Donovan is a New Zealand born artist and designer, and is a senior lecture in art and design at Toi Ohomai Institute of Technology. Her background is in printmaking and her design work extends to a mixed media approach in textile design using digital print, felt, stitch, dyeing and techniques often inspired by vernacular craft. Joanne completed a master's degree with first class honours in 2015, exploring digital print textiles mutated through craft-like interventions and outcomes. She is currently working on her doctoral thesis under scholarship, investigating self-reliance idioms in textile design through felt, locally sourced materials and re-use.*

[joanne.donovan@toiohomai.ac.nz](mailto:joanne.donovan@toiohomai.ac.nz)

## **Senses of hauora and well-being in early childhood initial teacher education**

*Pauline Bishop and Assoc. Prof. Andrew Gibbons*

Unitec

The experience of teacher education was identified as a key element and influence in the Healthy Families Waitakere work with early childhood teachers. One theme that emerged was the potential benefit of more focused discussions about teacher hauora and well-being during teacher education. With this observation as an impetus, we put together a team to investigate student teacher experiences of hauora and well-being across four teacher education providers. In this research we aim to explore the experiences of ECE student-teachers progressing towards their teaching qualification. The study will focus on their experiences of hauora and well-being during study for their professional teaching practice. The research will include analysis of the role and the impact of teacher education for student-teacher knowledge in this area, as well as the views and experiences of teacher educators and allied/professional staff involved in ECE teacher education. In this presentation, we outline the proposed research partnership with the professional early childhood community of learners, and explore the audience's ideas about hauora and well-being.

*Pauline has been in teaching in the early childhood profession for 35 years. She is currently working at Unitec Te whare wananga o Wairaka where she is involved in student research and field-based work experience. Pauline's areas of interest are responding to cultural diversity, supporting children's behaviour, children's rights, teacher's conditions of service and courageous professional conversations.*

[pbishop@unitec.ac.nz](mailto:pbishop@unitec.ac.nz)

## **‘Set you up sista, set you up bro?’ Setting up the whānau to score in the academic research game**

*Fiona Cram and Tepora Emery*

Toi Ohomai Institute of Technology

Kaupapa Māori research may have been 'born' in the academy but its roots are in the local Kaupapa Māori practices of communities striving to retain and regain control over education, health and other initiatives. These are the "noisy communities", described by Kaupapa Māori research trail-blazer Linda Smith, who continue to exert self-determination because the wellbeing and survival of Māori depends on it. These communities have also demanded authentic engagement and collaborations with researchers so that research agendas - kaupapa - are responsive to community priorities. The insights into community expertise that these collaborations have showcased, have been teasers for what might be anticipated if Māori communities undertook research that was by them, with them, and for themselves. 'Poipoia te kākano, kia puāwai' is a Kāinga Tahī Kāinga Rua research programme that is fostering such research. With two lead researchers as 'playmakers' - positioning the team to 'score' - four kāinga tahī 'ihu oneone' whānau from Te Whānau a Apanui, Ngāti Kahungunu and Rongomaiwahine are undertaking research and developing mātauranga Māori informed housing solutions that work for them. In this interactive session, we will discuss the pros, cons and realities of getting research into communities - and the taking on of a playmaker role in the research team. Setting up the whānau to score in the academic research game.

*Fiona Cram is a Māori (indigenous) woman from Aotearoa New Zealand. Her tribal affiliations are to Ngāti Pahauwera on the east coast of Aotearoa. Fiona has a PhD in social and developmental psychology from the University of Otago. She has lectured in social psychology and has also been a senior research fellow within the International Research Institute of Māori and Indigenous Education at the University of Auckland. Fiona established Katoa Ltd in 2003. Fiona's research interests are wide-ranging including Māori health, justice, and education. The over-riding theme of Fiona's work is Kaupapa Māori (by Māori, for Māori). Tepora Emery is from Te Arawa and Ngāti Unu ki Maniapoto. She has had a connection with Toi Ohomai's different legacy organisations, and has been a champion of research and higher education for more than 22 years. She was the programme leader for staff development programmes, has been an academic advisor, and was the academic lead for the Master of Applied Professional Studies, teaching in adult teaching and mentoring and leadership. Tepora has been in her current role as Kaupapa Māori Research Advisor and researcher since the inception of Toi Ohomai two years ago.*

[tepora.emery@toiohoma.ac.nz](mailto:tepora.emery@toiohoma.ac.nz)

## **Strategies for teaching international students - a case study on culturally relevant pedagogy at a New Zealand ITP**

*Barbara Kneuer*

Eastern Institute of Technology

This research aims to contribute to the growing dialogue amongst academics about effective strategies around culturally relevant pedagogy and teaching resources for international students at New Zealand tertiary education institutions. The presentation will report on an interview-based study with senior academics at a New Zealand ITP. Respondents are teaching classes of all international students across four disciplines – management, computing, English language and health science. Teaching classes with diverse student groups including international students is a reality for most academics in New Zealand. In 2018, 89,120 international students were enrolled in formal tertiary

study programmes in New Zealand. Of those, 18,730 were studying at polytechnics. A wide and varied literature exists, investigating many aspects of internationalisation, including the experiences of international students. Some of this is from New Zealand. However, less attention has been paid to teachers' roles within the process, especially in New Zealand. Little is known about how lecturers in New Zealand address the needs of international students. The presentation will discuss practical approaches to teaching, learning, assessment, and course design. We will share successes and failures in using these approaches with diverse student cohorts in the New Zealand context and provide ideas for experimentation and exploration.

*Barbara Kneuer is a senior postgraduate business lecturer at the Eastern Institute of Technology. She has gained strong business acumen in communications, market research and SME management over the last twenty years in New Zealand and overseas. Her current research interest covers the following two main areas: effective communication with customers of sustainable/ethical businesses, and uncovering and implementing further strategies to overcome communication barriers experienced by international postgraduate students.*

[bkneuer@eit.ac.nz](mailto:bkneuer@eit.ac.nz)

## **Strengthening palliative care services through a collaborative review and evaluation**

*Sue Matthews, Toi Ohomai Institute of Technology*

*Jonathon Haggar, Rotorua Community Hospice*

Palliative care is a highly complex and very emotional health care service, with a philosophy of community-based provision. The key service practice is to deliver client-centric care on a 'needs' basis rather than by diagnosis or prognosis, to help people make the most of their lives, and live every moment in whatever way is important to them, within a culturally safe environment. This research is a collaborative, multidisciplinary review between Rotorua Community Hospice (RCH) and an education provider to analyse current practice and support strategic development within RCH. Data was collected across RCH to include governance (board members), staff (managers, registered nurses and health care assistants) and volunteers. The research tools consisted of self-evaluation questionnaires, interviews and focus groups which measured perceived current service effectiveness against the proposed new Hospice NZ Standards for Palliative Care 2019. Eighteen responses provided a reference point for a gap analysis and identified areas of good practice, in addition to opportunities for responsive practice development. This presentation will share how data collection and analysis enabled transformative development across the groups of staff and within practice. Findings have also assisted RCH's strategic and operational review of goals, mission, values and Treaty of Waitangi statements. The presentation also emphasises the importance of participants' voices from across all stakeholder groups in providing insights that add value to their clients and families, as well as to Bachelor of Nursing students on clinical practicums within RCH.

*Sue Matthews has had a wide and varied nursing career. Nursing education has been a priority for Sue in all aspects of her nursing from a national PTE and polytechnics and within clinical nurse leadership roles including primary health settings. She has nursed across the lifespan from maternity and plunket through to aged residential care. Sue enjoyed nine years as a district Councillor. Sue holds a Queen's Birthday honour - Member of the New Zealand Order of Merit for her contribution to community health – including Māori. Jonathon Haggar is the CEO of Rotorua Community Hospice. Jonathon comes from a background in management experience in tertiary education and the health care sector.*

[sue.matthews@toiohomai.ac.nz](mailto:sue.matthews@toiohomai.ac.nz)

## **Supporting Generation Z: Insights for educators and employers**

*Dr Samira Kakh and Dr Roohollah Kalatehjari*

ATMC New Zealand

Born between 1996 and 2010, Generation Z (Gen-Z) learners and employees are bringing new values, priorities, needs and diversity to educational contexts and workplaces. Educating and managing Gen-Z learners and employees are turning into hot topics of discussion that question current expected graduate profiles, workplace motivation and work output. Some educators have started questioning Bloom's taxonomy and its relevance to Gen-Z and human resource experts are systematically seeking data on Gen-Z's mindset to update their workplace productivity formulas. This presentation is an attempt to participate in these discussions by bringing some insights on Gen-Z's values, priorities, and needs to the table. The presentation reports on a comparative study that interviewed four postgraduate students registered at a major ITP in Auckland who were born before 1996 (millennials) and four final year undergraduate AUT students who were born between 1996 and 2010 (Gen-Zs). At the time of collecting data for this study, all eight participants were conducting their research/industrial projects to fulfil the requirements of the degrees they were pursuing. The findings of this comparative qualitative study confirm that while Bloom's taxonomy can still be relevant to many learners, Gen-Z learners also increase their knowledge and skills in the process of experiencing and experimenting. This presentation proposes a new structure to Bloom's taxonomy for Gen-Z learners based on the participants' reflective comments on their experiential learning activities. The findings of this study may be of interest to both educators and employers.

*Dr Samira Kakh is a senior lecturer and researcher in the fields of education, business, and management. Samira sees herself as a facilitator who has the superpowers to socialise students into the academic community; a world that must be recognised critically, comparatively, and with a constant sense of possibilities for identity building. The activities that Samira uses in her classes have roots in Taonga Tuku Iho. Hence, students' learning experiences and their learning and teaching philosophy are integrated into her teaching and research philosophy.*

[samira.kakh@atmc.ac.nz](mailto:samira.kakh@atmc.ac.nz)

## **Supporting learning in a holistic way: Exploring mental health issues of tertiary students**

*Melanie Wong, Kamaline Pomare, Mel Grey and Niukini Hendrikse*

Manukau Institute of Technology

This presentation draws from a funded research project investigating mental health issues of tertiary students in South Auckland, New Zealand. In 2018, there were 396,220 students enrolled with either public or private training establishment providers in New Zealand (Education Counts, 2019). Anxiety from studying can affect a student's mental health and emotional well-being. In addition, many students have other commitments on top of their study and these, along with the pressure of fulfilling the expectations of their roles and other unexpected matters, can also create tension. A qualitative research project associated with the *kaupapa* of *kotahitanga*, this research is informed by the voices of different people, such as academic and support staff, practicum supervisors and students. The targeted students were undertaking an undergraduate social work degree programme at Manukau Institute of Technology. Data was collected through staff interviews and student questionnaires. The interviews were used to identify factors associated with students' mental health needs and how staff responded to these needs, while the open-ended questionnaires were designed to capture the voice of students. This presentation will discuss some research findings which will inform strategies to



address the mental health needs of undergraduate students in the social work undergraduate programme.

*Dr Melanie Wong is a senior lecturer and academic lead in the School of Social Work and Sport at Manukau Institute of Technology. She completed her PhD in Education at The University of Canterbury, and trained as an interactive drawing therapist. Mel's research interests include emotional needs of giftedness, supporting students' learning in a holistic way and using social constructionism in social science research. Kamaline Pomare is a senior lecturer, and quality and student lead on the Bachelor of Applied Social Work programme at Manukau Institute of Technology. She is a second-year PhD candidate at Te Whare Wānanga O Awanuiārangi. Kamaline's drive is to be a voice for Māori, her whānau, hapū and iwi in the pursuit of Mauri Ora. Mel Grey has been lecturing at MIT for two years on the Bachelor of Applied Counselling and before then at a wānanga. She has 20 years' experience in counselling and practices as a Clinical Supervisor. Mel hopes to finish her PhD in New Zealand bicultural counselling in 2020. Niukini Hendrikse is senior lecturer and fieldwork practicum coordinator on the Bachelor of Applied Social Work degree at Manukau Institute of Technology. She has a Master in Social Work (Applied), and comes from many years working in different fields of social work in the South Auckland area. Niukini is passionate about developing students to become strong advocates and social work practitioners in the community. Niukini is Samoan and has an interest in all fields of professional practice, fieldwork practice, and equipping the next generation of social work practitioners.*

[melanie.wong@manukau.ac.nz](mailto:melanie.wong@manukau.ac.nz)

## **Te Manu Tu Tuia: A community-based intervention model for prevention of family harm**

*Raema Merchant and Charlotte Chisnell*

Eastern Institute of Technology

This presentation demonstrates an innovative model for community development interventions for the prevention of family harm and locates social change within neoliberal social, economic, ideological and political contexts. A first-of-its-kind couples-based whānau-centric (family-centred) harm reduction programme titled Te Manu Tu Tuia (The Bird that Brings the Message) was implemented in the Hawke's Bay region of Aotearoa New Zealand. At the centre of the programme were couples experiencing family violence and abuse, with their families attending in support. The programme targeted 37 couples with a combined history of 1092 family harm reports. A mixed methods evaluation study conducted in 2017 collected quantitative secondary data from the local police and qualitative primary data from semi-structured face-to-face interviews with couples, staff, and local stakeholders, and from observation of couples-based weekend sessions. Data analysis was done using thematic analysis. Findings revealed a significant reduction in reoffending and subsequent police callouts, with an overall reduction of 57 per cent in callouts, a 46 per cent increase in participants entering employment, and 8 per cent entering further education. Based on these findings, this presentation aims to begin a discussion on the need for making a paradigmatic shift towards a constructive nexus of collaborative relationships involving the whānau, hāpori and police for addressing family harm. The paper highlights the significance of this approach for understanding and addressing the dynamics of violence and coercive control and existing barriers for effective engagement.

*Raema Merchant is a lecturer in social work at the Eastern Institute of Technology. Prior to becoming a social work educator, she was a front-line social worker for thirty years in the area of child protection, youth justice and caregiving, both in government agencies and NGOs. Her research interests include media responses to child abuse and the development of transformative learning for students. Charlotte Chisnell is a lecturer in social work at the Eastern Institute of Technology. She has been involved in*

*social work education for the past 15 years. Before commencing her academic career, Charlotte was a social worker in the United Kingdom working in the practice area of child protection and youth justice. Her research interests include safeguarding children and raising awareness of child sexual exploitation and young carers.*

[rmerchant@eit.ac.nz](mailto:rmerchant@eit.ac.nz)

## **The academic two-body problem (Poster)**

*Barnaby Pace*

Otago Polytechnic

In classical mechanics the two-body problem refers to the prediction for the motion of two objects which interact with one another. During the mid-1990s the problem was adapted as a means of examining the dilemma which occurs for partners (spouses or any other couples) working in academia (or other professional fields). The premise in this dilemma is as follows: that it is difficult for both spouses to obtain academic roles at the same university or polytechnic, or within a reasonable commuting distance from each other. The central dilemma is stated as there is a no-win situation: if the couple wishes to stay together one of them will need to abandon an academic career, or if they both wish to pursue a career path then their relationship may fail due to constant separation. Over the past four years more than 100 articles have been published on the topic suggesting that this problem still relevant today. This presentation reports on the findings of a systematic literature review used to formulate the problem within the current educational employment climate, and determine potential solutions. The systematic review uncovered an array of solutions; however, consideration does not appear to have been given to the underlying premise of proximity, nor the advances in technology and 'flexible' work arrangements; both of which warrant further investigation. In this presentation consideration will be given to the role technology and contractual arrangements can play as potential solutions to the academic two-body problem.

*Barnaby Pace is a senior lecturer at Otago Polytechnic Auckland international campus and is an active researcher in the fields of physics and applied mathematics, primarily investigating how physics theories and principles can be applied to everyday situations. This work has previously demonstrated the place of theoretical physics in innovation and product development, through to the use of numerical modelling for the detection of malicious behaviour in computer networks.*

[barnaby.pace@op.ac.nz](mailto:barnaby.pace@op.ac.nz)

## **The guide to teaching international students as a bridge between student and stakeholders**

*Heather Vail and Sue Werry*

Toi Ohomai Institute of Technology

For those teachers who teach international students, a continuing story is the gap between these students' prior educational experience and the expectations of New Zealand tertiary education classes. Our research aims to hear the voices of international students and their teachers to redevelop an existing guide to teaching international students into a more accessible, interactive tool that moves tertiary teachers from deficit theorising to a pedagogy that creates the relationships and space to grow international students' academic and soft skills while they learn content. Feedback gathered from an electronic qualitative survey for teachers and student focus groups on the educational gap and the current guide has been thematically analysed. The research has indicated ways in which each

educational participant impacts the next, from student to teacher to student to stakeholders outside of the academic institute. We have found that understanding issues around such factors as language use, communication, and cultural perceptions are key to building compassion and success in any of these relationships. This presentation will highlight the common educational concerns our international students have around their success in the classroom and give some exploratory ideas around how their learning in the classroom can create transferable outcomes. We will also include videos of local businesses and students on stage speaking to the importance of these points. We intend to locate the research data's value in real time through the engagement of those in attendance.

*Heather Vail has been a communication tutor at Toi Ohomai for the past 12 years. As a community-minded, creative, positive individual, she strives to bring out the best in her students. Her research interests are effective teaching and international students. To ensure that her students understand how relevant communication techniques are she seeks to link the classroom to real world experiences. Her research interests are effective teaching and international students, and this has led to her developing a guide to teaching international students.*

[heather.vail@toiohomai.ac.nz](mailto:heather.vail@toiohomai.ac.nz)

## **The head, the heart and the hands: Holistic approaches to environmental problem solving**

*Catherine de Monchy*

Toi Ohomai Institute of Technology

Weed control contractors in Tauranga have access to a restricted range of agrichemicals; restricted by a local government policy on vegetation management. Despite this, and policy wording that mandates reducing Council's (contractor) use of toxic agrichemicals over time, application rates for toxic agrichemicals have shown no significant reduction over ten years. A volunteer group of advisers (TAAF) works alongside Tauranga City Council (TCC), investigating how the agrichemical policy is implemented, exploring weed control alternatives, and making recommendations to Council on strategies that might see a reduction in our agrichemical exposure. Despite their knowledge of this specialised area, TAAF have no resourcing to take on large projects. This study harnesses citizen science action, weaving together the knowledge, interests and capabilities of TCC, TAAF, Toi Ohomai researchers and a dozen local schools to trial a lower toxicity weed control product. The project is run by Toi Ohomai, advice about the problem provided by TAAF, field work is carried out by our school partners, and the findings will be reported to TCC and inform changes to local policy. This presentation shares our experiences conducting research with multiple stakeholders, including members of the public. We offer some strategies for project management that others engaging in community collaborative research may find helpful.

*Senior academic staff member at Toi Ohomai, Catherine's teaching area is immigration law, however her interest in social and environmental justice led to her involvement in a varied range of research, community and business projects. Catherine recently finished her Master of Management Studies, majoring in social enterprise, with a renewed interest in weaving together the wisdom, passions and capabilities of hāpori to pursue sustainability solutions.*

[Catherine.demonchy@toiohomai.ac.nz](mailto:Catherine.demonchy@toiohomai.ac.nz)

## **The influences of the Covid-19 pandemic on sleep among tertiary education staff**

*Sally Baddock, Suzanne Miller, Kelli Te Maihāroa, Griffin Leonard: Otago Polytechnic*

*David Tipene-Leach, Pippa McKelvie-Sebileau: Eastern Institute of Technology*

*Carmel Haggerty, Lee Smith: Whitireia/WelTec*

*Sharon Brownie, Patrea Andersen: Waikato Institute of Technology*

*Lian Wu: Unitec Institute of Technology*

Alert level four lockdown in response to Covid19 began in New Zealand on 25 March resulting in a requirement to work from home. On 22 April and 13 May the country moved to less restrictive levels three and then two, allowing a return to work. Five ITPs collaborated to conduct a longitudinal observational study, using an online survey of 35 questions, seven of which related to sleep. The aim was to identify the impact of alert levels on well-being among staff. One institution started data collection in level four with other institutions joining later. A subset analysis of sleep data from this ITP compared sleep in level four and two. Participants rated sleep quality and quantity on a four-point scale, and reported sleep latency and number of wakes. Sleep duration was calculated from bedtime to final awake time. Wilcoxon Signed Rank Tests and a paired t-test compared differences between alert levels. Sleep data was available for both time points for 75 participants. Their perception of sleep quantity was greater ( $p = 0.03$ ) at alert level four than level two, supported by sleep duration, later bedtime, and wake-up time. Perceived sleep quality, sleep latency and number of wakings were not different between alert levels. These preliminary results suggest that living under the restricted conditions of alert level four favoured participants' sleep duration when working from home. Without the need to commute to work people may have had improved sleep with more weekend-like sleep patterns.

*Professor Sally Baddock has extensive experience as a bioscience educator and researcher, contributing to both undergraduate and postgraduate programmes, including supervision of Master projects. She is research coordinator for the School of Midwifery and her research includes education topics as well as extensive publications on her specialist area of behaviour and physiology of infant sleep. She is a member of the Professoriate, Academic Board and the Research and Postgraduates committees of Otago Polytechnic. Sally is the lead researcher for the COVID19 behaviour and wellbeing collaboration.*

[sally.baddock@op.ac.nz](mailto:sally.baddock@op.ac.nz)

## **The lived experiences of student representatives in a New Zealand Institute of Technology and Polytechnic: A critical examination (Student Snapshot)**

*Daryl Parkin*

Manukau Institute of Technology

There has been much written about student representation and student participation in university governance, however, there are limited accounts of how student representatives experience this role, and little relevant literature relating specifically to the Institute of Technology and Polytechnic (ITP) sector, which provides applied and specific, vocational training up to degree level in New Zealand. A common form of student voice within higher education is democratically elected student representation, where students represent the voices of their peers, and participate in institutional decision making. This study sets out to understand the experiences of student representatives within an ITP and to identify barriers and enablers that influence their engagement with this role. An

interpretive phenomenological methodology was used. Data was collected through semi-structured interviewing, which involved six student representatives from an ITP in New Zealand. This study found that the experience of student representation is multifaceted, occurring within complex, conflicting and changing environments, and revealed not only why students chose to be representatives, but why they chose to remain in this role. Although most participants saw the role as being a voice for other students, the findings indicated that participants also viewed the role as more than student advocacy, which may have further implications. The findings also suggested that the student representative experience is influenced by 'people' and 'structural' barriers and enablers, which may impact their engagement with this role.

*Daryl Parkin has been teaching in tertiary education for 17 years and is currently a programme leader at the School of Sport, Manukau Institute of Technology. At the end of 2019, he graduated with his Masters in Educational Leadership (AUT), where he researched "The lived experiences of student representatives in a New Zealand institute of technology and polytechnic: A critical examination", as a dissertation. His areas of interest include, outdoor education, student voice and leadership development.*

[daryl.parkin@manukau.ac.nz](mailto:daryl.parkin@manukau.ac.nz)

## **The neuroscience of the young adolescent brain and its impact on making effective career decisions**

*Russell Booth*

Eastern Institute of Technology

In over 25 years of undertaking career interviews with young people at the point of transitioning from school the worst question you can ask them is "What do you want to do when you leave school?" They say they hate the question because it fills them with uncertainty, confusion and anxiety. Neuroscience tells us that the brain takes much longer to mature than we first thought; for many this is the mid-20s or older. So neurologically what is happening at age 16-18 and how does this impact on a young person's ability to make 'good' career decisions? Through understanding the literature of this emerging science, I have changed my approach and techniques in career interviews. Now, after two years of 'field testing' my new approach I have a clearer understanding about why many teenagers are uncertain and confused when making career decisions. As educators we also need to consider the impact of what the neuroscience literature is telling us about the young brain to ensure our systems and policies are effective around this important transition point. More so from a moral and ethical duty but also to ensure the systems, processes and Government policy are appropriate and adaptive. The presentation will outline what is happening in a young person's brain at the ages of 16-18 and outline possible solutions and changes to systems and policies to ensure the transition from school to tertiary is an adaptive system which will enhance industry and learner outcomes. It will also outline what ongoing research and collaboration is possible to investigate my own observations.

*Russell Booth has had over 25 years' experience in the careers industry in New Zealand. He is a past president and current fellow of CDANZ. He works at Eastern Institute of Technology as the programme co-ordinator for the BBS and graduate diploma, and runs his own business 'Career Change Ltd' working with clients young and old.*

[rbooth@eit.ac.nz](mailto:rbooth@eit.ac.nz)

## **Towards a model of capability construction: A landscape of practice perspective**

*Dr Behnam Soltan*

Eastern Institute of Technology

Producing employable graduates is a main concern for higher education worldwide. In recent years tertiary institutes in many developed countries have claimed employability attributes, generic attributes and competencies, learning outcomes, for their graduates as a key aspect of their contribution to the workforce. The common denominator among all these efforts is a strong focus on employability skills and devising strategies to incorporate and embed them in the curriculum as a means of producing employable and work ready graduates. Within the higher education sector, there are skills which are widely accepted to foster graduate employability; these include communication, team working and initiative and enterprise. This presentation, using a landscape of practice perspective, and narrative and focus group interviews, presents data from a study of a group of students in a Master of Professional Practice programme. The analysis of the data shows that students develop capabilities and enhance their transferable skills through mutual engagement in the practices of their communities of practice in relation to other community members. The paper then re-examines Stephenson and York's definition of capability and argues that capability should be understood as a social construct through which individuals participate in the practices of their communities of practice and express their knowledgeability of their community norms, rules, and expectations. The paper concludes that individuals build professional futures and capabilities through a process that involves problem solving, negotiation and learning, resilience, and reflection on one's own and other members' performance as they engage in practices of their relevant communities of practice. Implications of the study are discussed.

*Dr Behnam Soltani is a senior lecturer on the postgraduate programme at Eastern Institute of Technology. He was formerly a senior research fellow and senior researcher on graduate employability projects at Otago Polytechnic.*

[behnam.soltani14@gmail.com](mailto:behnam.soltani14@gmail.com)

## **Towards a model of distinctiveness in vocational education**

*Samuel Mann and Hamish Smith*

Otago Polytechnic

Understanding regional distinctiveness is a crucial part of developing a collaborative national system of delivery within the vocational education sector. Decisions need to be made as to how to collaborate, what to share, and what local variations should be celebrated or improved. But other than a somewhat vague notion that regional differences are important, the concept is ill-defined and poorly understood. While some disciplines such as computing, have a long history of collaboration, the variations in teaching approach, curricula, industry and community context, and historical accidents such as preferences of previous teaching staff, have meant a wide range of seemingly unique instances across the country. There are many case studies of individual offerings, but no previous attempts to describe the whole in terms of difference and distinctiveness. In this presentation we introduce a model of distinctiveness. We describe research underway to combine summative data with interpretation from each regional provider to generate an integrated model of the things that are special. We expect this approach to provide a basis for describing the features of provision, and to inform decisions that both support collaboration and enhance those things that are valued in vocational education. This research is being conducted in association with the South Island forum of CITREnz.

*Professor Samuel Mann teaches in Capable NZ, Otago Polytechnic's (OP) school of work-based learning and professional practice. He has worked at OP since 1997, mostly teaching software engineering, including a long stint as head of school of IT. He is a fellow of CITRENZ, the collaborative grouping of ITP computing schools. Hamish Smith has been teaching computing since 1994 and teaching at OP since 2007. Since 2009, his roles have been split between programme manager/team leader and teaching in the fields of software packages, computer networking, hardware, operating systems and project development. He has a passion for supporting his local communities and is Deputy Chair of CITRENZ.*

[samuel.mann@op.ac.nz](mailto:samuel.mann@op.ac.nz)

## **Tukutuku - Binding the whare and its people**

*Raewyn Paterson*

Eastern Institute of Technology

After two and a half years of designing, painting and carving the new pou, kōwhaiwhai and tukutuku for Eastern Institute of Technology's (EIT) wharenuī - Te Ara o Tāwhaki; these were officially revealed and blessed on 12 February 2020, 26 years after its initial opening. My role in this project was the design of the tukutuku panels. My highest priority was that the design must be able to involve the EIT community; tukutuku binds not only the whare itself, but it also binds its people. I invited EIT staff and Te Uranga Waka students to join in the creation of the poutama and pouhine panels over a six-week period. The contemporary design required thousands of laser-cut pieces of plywood to be stained, cleaned, sanded, assembled, glued and oiled by the EIT whanau. It has been a massive challenge to work with an unknown number of helpers with different skill sets. However, the rewards have been amazing - the people I have met, the constant visitors to the IDEAschool workshops from around EIT, seeing people find their strengths, and for Te Uranga Waka students and the EIT community to have had that chance to contribute to their own Wharenuī. Designing and facilitating this mahi tukutuku has humbled me as an artist ... no panel could have been completed by one person alone... it took a community to create them. And this community is very proud to have been involved. With images and korero, this presentation will share the process of making the panels from the design through to the completion.

*Raewyn is multimedia artist who works with themes of ecology, whakapapa and community. Recently completing her master's degree, she has presented public gallery exhibitions, dealer gallery works, and community projects. She has worked at EIT for 10 years, her passion for multimedia, youth, and education leading her to her current role of programme co-ordinator for the IDEAschool certificate courses.*

[rpaterson@eit.ac.nz](mailto:rpaterson@eit.ac.nz)

## **Whakaora ngā whenua whāma: Utilising mātauranga Māori and Western science to protect and restore the soil on rural farms in Tai Tokerau**

*Catherine Murupaenga-Ikenn and Peter Bruce-Iri: NorthTec*

*Marcus Williams, Unitec*

*Dr Mere Kēpa, Takahiwai, Tai Tokerau*

This presentation reports on progress of a project which had its genesis at the 2019 ITP Symposium in Hastings. Following a presentation of his long-term research into regenerative farming, Marcus Williams approached Peter Bruce-Iri about a potential collaboration. Together with Catherine Murupaenga-Ikenn, they successfully bid for \$40,000 of funding from UNESCO. A team involving kaumātua and landowners from the Takahiwai kāinga in Tai Tokerau, scientists, educators and regulators, are collaborating to use te reo Māori me ngā tikanga (Māori language and culture) and Western science methodologies to produce narrative and evidence that supports the emerging concept of regenerative farming with the purpose to diminish and transform the adverse impacts of current industrial farming production on the land, air, and water. In partnership with Northland District Council and Brett Clothier of Plant and Food, soil is being tested from an orthodox and a regenerative/organic dairy farm, both owned and operated by local Māori. In conjunction with this mahi, semi-structured interviews of kaumātua are being conducted by Catherine, with mentorship of Takahiwai Kāinga members Dr Mere Kēpa (Ngāti Whātua, Te Whakatōhea, Te Whānau ā Rūtaia, Ngāpuhi, & Ngāi Tūhoe) and Dr Benjamin Pittman (Ngāpuhi: Ngāti Hao – Te Popoto; Te Parawhau; Ngāti Hau). Training two Takahiwai rangatahi in photography, Marcus will facilitate an exhibition of their work to give back to the community, where a report on the findings will be presented.

*Peter Bruce-Iri teaches business at NorthTec. His research interest is in regenerative food systems and climate change. Catherine Murupaenga-Ikenn (Ngāti Kurī and Te Rarawa) has a background in climate, indigenous human rights and environmental policy and advocacy. She currently teaches business at NorthTec. Marcus Williams is the Director of Research at Unitec whose own research engages the visual arts as a communications and community building mechanism in social and environmental enterprise projects.*

[pbruce@northtec.ac.nz](mailto:pbruce@northtec.ac.nz)

## **Working across schools in an ITP - the benefits and challenges of teaching in more than one programme (Poster)**

*Richard Edwards*

Eastern Institute of Technology

In the environment ITPs are moving into where working together in partnership is going to have to be more prominent, teachers are going to have to work together in diverse and novel ways. This poster presents the experiences of an ITP teacher who became involved in teaching in two programmes in different schools, and reflects on the associated challenges and benefits and on the forms of support that will be needed in the new NZIST environment. Challenges included needing to become familiar with the systems, processes and unwritten conventions of another school; learning how to apply existing expertise in a new context; and managing different and at times competing expectations. Benefits included gaining a greater appreciation of institutional processes through seeing them enacted in different ways; significant embedded professional development; developing an expanded network of professional colleagues; and opportunities to be involved in new challenges. The willingness of programme coordinators and senior managers to support the best interests of both programmes was key to success. Clear, timely, and open communication was essential as was a



creative and flexible approach. Keeping a balance between meeting diverse programme needs and maintaining a holistic view of the staff involved is also important.

*Richard Edwards teaches the Bachelor of Teaching Primary programme at EIT and has been involved in teacher education in a range of roles and locations. He has particular interests in science education, technology education, and environmental education. These have led to involvement in a range of interesting research projects.*

[redwards@eit.ac.nz](mailto:redwards@eit.ac.nz)