

HE ROUROU KŌRERO

EASTERN INSTITUTE OF TECHNOLOGY
Research Showcase
2020

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Nāu te rourou, nāku te rourou, ka ora te iwi

With your food basket and my food basket the people will flourish

He Rourou Kōrero

Research at EIT
Te Aho a Māui

2020



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Contents

Overview of the Research Year	5
Perspective on Research	9
Community Health and Wellbeing	28
Innovative Education	46
Creativity and Curation	57
Sustainable Futures	73
Student Research Projects	79
Listing of Research Outputs 2020	85

Overview of the research year

Nat Waran

A strong focus on research and researcher development has seen EIT get through a disrupted 2020 to emerge with a clear vision for the future. EIT's strength in research and postgraduate studies featured as a focus area in the NZQA Targeted Evaluation last year. We were proud to be able to showcase the growth and diverse array of postgraduate programmes we have at EIT, alongside the way in which we have developed significant research capability, and how our research connects us with our communities.

Moving into the new chapter of Te Pūkenga – New Zealand Institute of Skills and Technology is exciting and research and innovation at EIT have begun playing an important role in the ITP sector. EIT has also provided leadership in key areas.

I was extremely honoured to have been invited to be on Te Pūkenga's newly formed Academic Board, Poari Akoranga, and believe we have a valuable opportunity to learn together how we can harmonise academic policy and processes, flexible delivery, innovative education and training, and impactful applied research.

An example of this is the leadership shown by our Research and Innovation Centre last year in drafting and then coordinating the response to the recent PBRF



*Professor Natalie Waran, Executive Dean,
Faculty of Education, Humanities & Health
Science. Professor of One Welfare.*



Professor David Tipene-Leach, Professor of Māori & Indigenous Research.

review, sent to the Ministry of Education from all of the ITP's, through Te Pūkenga's CEO Stephen Town. EIT led the submission and with the support of the other ITPs, we were able to present a worthy proposal to Stephen. The reason that we were able to do that, was because we were encouraged to come together, because we have similar concerns and because those concerns relate specifically to the role that our sector plays, in relation to applied research. EIT was also able to offer leadership in specific areas relating to the future of Te Pūkenga.

Add to this, Māori and Indigenous Research Professor David Tipene-Leach began working with other Māori academics to formulate rangahau Māori. He has a very strong voice in this network as we try to understand what is required for ensuring that we are bicultural. After a strong year in 2019, which saw a record level of grants received, the expectation was to build on that last year. However, COVID-19 and the subsequent lockdowns meant priorities shifted.

Research was affected in three ways in 2020. Firstly, fieldwork could not proceed because of lockdown, secondly it reduced our ability to seek grant funding, and thirdly, quite simply, research took a backward step because staff had to focus on continuity in teaching. It was not a conscious thing. It's just there was an urgent need to keep teaching. This meant moving onto Zoom and getting the policy and new teaching in place with what was effectively 48-hours' notice. The consequence was that grant activity went down during COVID-19, but it did come back strongly at the end of the year.

Grant agencies made big efforts to keep grants going, but if you're swimming to try to stay afloat, then doing a grant proposal is just not your biggest priority. The drop in fieldwork also slowed down outputs for a while, which in turn had an effect on new research. With closed borders, it was also not possible to get new research students in. I was heartened that some research still continued with people doing what they could. When researchers returned to campus, the grant writing stepped up quickly. In the end we were pleasantly surprised that we actually had a record number of research outputs, because COVID-19 gave researchers time to finish existing projects. Lockdown and the subsequent focus on teaching meant the Research and Innovation Centre was not able to give staff who are early career researchers (ECRs) the support needed.

What happened after the lockdown, was that we worked with the Heads of School to make sure there was mentoring support, that school research committees were operating and that the heads focused on research. This had quite a significant degree of success, which has led to this year going well. The big focus this year has been on getting more grants for research, encouraging early career research and getting portfolios underway for the Performance-Based Research Fund (PBRF). A blessing in disguise from COVID-19 is that the PBRF requirements have been put back from 2024 to 2025. This effectively means that we have another year which is in our interest and we will be working to maximise the benefit. The focus on ECRs is required because they are critical for the future. Our organisation is primarily teaching-centred and therefore we tend to get larger numbers of staff who are inexperienced or younger researchers. If you just focus on the small group of people who are highly productive, you're not developing your cohort of researchers.

*Megan Allardice,
Research Operations Manager*



All academic staff who teach on degree programmes should be doing research and are encouraged to do research. Of 343 academic staff, between one third and a half of them are teaching on degree programmes. Of those about 70 per cent are now research active. We achieve an average annual output per staff member of over two quality assured outputs, which is high. Our job now is to make sure all of our staff teaching on degree programmes are active, and they're active to the point where they can submit a portfolio and get a rating." Most of the staff will be C-rated researchers with some Bs and a couple of As. And we need more C-rated researchers, and we need more new and emerging researchers. It is also important to foster experienced and productive researchers, so that they can work with early career researchers as well as getting research students involved in their projects. A conscious decision was made to make EIT's research community focused and while COVID-19 had an impact on this, the Research and Innovation Centre was restructured to prioritise this.

Research manager Pippa McKelvie-Sebileau reduced her hours to focus on her PhD but retained the role of grants manager. An upside has been the new opportunities for COVID research. I think in the long run, it'll probably be beneficial for EIT research, which is about what your community needs and that usually has a strong equity focus. What I'm seeing coming through now is more focused on empowering communities or working with vulnerable communities. With Pippa's focus changing, a new operations manager, Megan Allardice, was brought in from Wintec, while Dr Christine Cheyne from Massey University started as researcher development manager. After making a positive impact last year, Christine has since moved on to become faculty research manager at Toi Ohomai. She was replaced earlier this year by experienced researcher Dr Pii-Tuulia Nikula, who is keeping the focus on researcher development.

The restructure of RIC has brought an urgency to driving research and getting the structure, which has always been good, operating even more effectively and efficiently. Christine and now Pii-Tuulia's role has been mentoring and training individual researchers, as well as helping ECRs with their portfolios. Megan, who has a background in research administration and management, was brought in to put an

infrastructure in place. This has included getting a Research Output Management System (ROMS) up and running, negotiating access to an online research repository, working with the ethics committee and forging closer collaboration with the other ITPs going forward into Te Pūkenga.

I believe the change in the centre's structure has signalled EIT's intentions. We need to adapt to the change, because we are not interested in simply being swept away by it. We have been working since last year to position ourselves as strongly as possible in the areas in which we have existing strength and excellence. To do this, Megan and Christine resolved to find out what other ITPs were doing and also assess what researchers at EIT's three campuses required to undertake research.

One of the first trips Megan made was to Auckland, where she met with Associate Professor Marcus Williams, Unitec Institute of Technology's Dean of Research and Enterprise, and his staff to get an understanding of that institute's research structure. More specifically, she wanted to learn more about Unitec's Research Bank, an open access research repository that now includes research produced by students and staff affiliated with Unitec, EIT, Otago Polytechnic and Toi Ohomai. She and Christine also went to EIT's Auckland and Tairāwhiti campuses to meet with early career researchers there. Megan's connections across the ITP network are important, especially with Wintec, and Weltec/Whitireia, where she is on the ethics committee.

Part of Megan's role is to work with our ethics committee and to work with the other ITPs on harmonising what we do in terms of policy and procedures. Her job has been to build that platform with other ITPs so that we don't have a big jolt when we all become one. The focus is on us evolving, but keeping our research going and building it across the network.

Research in Te Pūkenga can be viewed as being vulnerable and this has been recognised by the ITP research directors, who began working together several years ago. There is a risk that the focus on research will diminish given the criticality of focusing on the restructuring of skills training in New Zealand. The issue is that research may not be the core function here. Because skills training is the core function in an ITP, research may become a nice to have. So, we've been working together to ensure that research is preserved. The key is the power that Te Pūkenga brings to being able to apply for larger grants. We have invested strongly in the future, as have other ITP research centres, and this will go a long way in setting up a strong research base in the new institute.

Perspective on Research

Evolving our Research Environment Nat Waran

Four years of developing the shape and impact of research at EIT Te Aho a Māui has resulted in a vibrant research culture supported by an effective research infrastructure across three campuses. This is complemented by an ambitious institute-wide research strategy supported by a Research and Innovation Centre and active Professoriate, overseen by the Academic Committee. The result is an established identity as a strong community focussed regionally based tertiary institute with active industry, social service and environmental partnerships in the Hawke's Bay region.

A good example of EIT's commitment to driving community centred initiatives is the Ōtātara Outdoor Learning Centre based on the Taradale campus, which is an innovative collaboration between EIT, local hapū (Ngāti Pārau), central and local government agencies (Te Papa Atawhai/Department of Conservation, Hawke's Bay Regional Council), and local environmental groups that include Predator Free HB, and EnviroSchools. The main funding for this development was provided by the Air New Zealand Environment Trust, with additional funding for education and research projects through Pan Pac Environmental Awards, University of Waikato and various environment trusts.



In 2020, EIT was a proud finalist in the Green Gown Awards that were established to recognise the exceptional sustainability initiatives being undertaken by universities and colleges across Australasia, with their project entitled 'Connecting our communities through learning in nature'. Considerable recognition must be given to Susan Jacobs, the former Dean of Education, Humanities and Health Science, who initiated the development of research capability at EIT and championed research. With the support of two research Professors, Prof Bob Marshall and Prof Kay Morris Matthews, who were recruited by Susan, research has been steadily developed at EIT for a number of years. Research subsequently became a strategic priority when Professor Natalie Waran was recruited as Executive Dean - Faculty of Education, Humanities and Health Sciences, and Professor of One Welfare late in 2016.

Nat brought internationally recognised academic and research depth and experience to the EIT role, having obtained a first-class zoology degree from Glasgow University, and a PhD from Cambridge University in the late 1980s. Since 1990, she has

been employed as a researcher and in education, working in many countries including the United Kingdom, China, India, Malaysia, Singapore, Hong Kong and New Zealand. Before joining EIT, Nat led several strategic projects as a Professor and Inaugural Director of the new International Centre for Animal Welfare Education at the University of Edinburgh, one of the world's leading universities.

Upon arriving in Hawke's Bay, Nat was given a clear mandate by EIT CEO Chris Collins to continue the growth of a strong research culture and infrastructure including developing greater research capability. "Being given responsibility for research at Executive level allowed us to ensure that research was high on the agenda for EIT. It was important to establish the research infrastructure needed to support the growth in activity and this included the establishment of School based research committees and the Research and Innovation Centre with a Research director and a Research manager."

Coordinating and managing postgraduate research administration through the Centre and redefining the EIT research strategy were priorities, along with raising the profile of the professoriate including inaugural lectures and a policy think tank series. "We didn't have an active Professoriate when I arrived and I felt it was really important to harness what should be the academic grunt within the organisation, to support our new strategy, as well as mentor less experienced researchers. We also needed our researchers within the Schools to be much better supported and so we have developed an infrastructure that means that there is good information flow up and down, between the Strategic Research Committee, and the actual disciplines within the Schools."

To achieve this the structure was changed so that research chairs from each School's committee were members of the central Strategic Research Committee. Nat says it boiled down to "thinking about what we were trying to achieve". A lot has been achieved since then and Nat believes the work done sets an important foundation to build on as Te Pūkenga progressively brings together the 16 Institutes of Technology and Polytechnics and the Industry Training Organisations into one impressively large tertiary organisation.

As with all big transitions, there are some challenges and opportunities, but Nat says planning is underway to ensure that through working together across the sector, researchers will enjoy many benefits including the support and possibilities provided by being part of large and dynamic organisation with a focus on excellence. "There are certainly many immediate and longer-term opportunities for the development of applied research and researchers as the regional ITPs come together under the Te Pūkenga umbrella. The first of which relates to critical mass, with Te Pūkenga being the largest tertiary education provider in New Zealand, and the 38th largest such organisation globally." Nat says that with good planning, including a clear vision for rangahau research and innovation across the sector, Te Pūkenga can have significant impact locally, nationally and in certain areas, internationally.

Each ITP is bringing solid relationships, sometimes forged over many years, with communities and iwi within their respective regions. "Our strength is in our greater ability to be responsive to the needs of our local industries and communities, and since no one institution can be an expert in all areas, the increased collaboration and

cooperation made possible within the new national tertiary organisation will provide many opportunities for applied research to take place.”

One of the groups that has flourished with the greater collaboration afforded through the ITP network has been the research directors’ group, which was formed in 2019. “The EIT Research and Innovation team has been actively engaged within the research directors’ network and there has been a desire to ensure that the processes and activities that support rangahau, research and postgraduate across Te Pūkenga are well planned”. It has been recognised that a key tenet of Te Pūkenga’s research going forward is rangahau Māori and EIT’s Professor of Māori and Indigenous Research David Tipene-Leach is one of a group of leading Māori academics mapping out how this will be supported in Te Pūkenga. “David is playing a key role in this significant work, which is central to the future of research with the Te Pūkenga network.”

As part of the work being done together by the research directors and rangahau Māori research group, and to increase collaboration for national benefit, 16 priority workstreams were agreed to in 2020. These included the establishment of national research groupings such as Health and Wellbeing, coordination of ethics processes and sharing research management processes. “This proactive approach to developing a shared understanding and approach to research and innovation within the research community of the new organisation has proven beneficial in ensuring that rangahau Māori and applied community focussed research work along with the infrastructure to support it within our sector, remains high on the agenda as Te Pūkenga takes shape,” says Nat.

An example of effective collaboration to ensure a united voice for influencing the future of research within New Zealand was a joint submission by Te Pūkenga last year on behalf of the ITP sector. This was in response to the Tertiary Education Commission’s review of the Performance-Based Research Fund (PBRF). EIT, particularly Research Director **Associate Professor Jonathan Sibley** and Nat, played an instrumental role in drafting an initial response, which once agreed to, was taken by Nat to Te Pūkenga’s newly formed Academic Board, Poari Akoranga, of which she is a member, where it was discussed and gained approval. “A key element of the submission brought together by ITP research directors was broadening the concept of research excellence to ensure the inclusion of research that addresses community needs. There is also a need to value different contributions to research that are tailored toward the unique and distinctive needs of different regions,” says Nat. Because Te Pūkenga’s contribution to research is distinctive, there is a belief that this should drive the thinking the Tertiary Education Commission (TEC) and PBRF have around rating researchers. “At the moment you’re rated as an A researcher if you are published in international journals and have many research collaborations and large funding. This is understandable in relation to the accepted practice within Universities, but it doesn’t always address the issues that actually matter to the peoples of Aotearoa and more importantly to tackling inequalities and other significant concerns within our communities.”

Moving forward the obvious question is: What is the future of research at EIT? Nat says EIT has reviewed its institutional research and innovation strategy and has agreed that going forward the focus remains on developing and supporting community-centred research. “This is where we engage in knowledge discovery with and for our



*Research Director, Associate Professor
Jonathan Sibley*

key communities ensuring that our research objectives are defined and developed in conjunction with our key communities and focussed on developing capability within and across our communities.”

EIT’s strength in research and postgraduate studies featured as a focus area in last year’s NZQA Targeted Evaluation. “The NZQA panel agreed that EIT shows significant strength in relation to research and postgraduate education within our sector. To this end we have some great examples of community driven and supported research work that we believe will not only make a real difference for communities within our region, but will contribute to, and inform national and international research objectives.” Nat says the focus has been on building “our strengths in key areas such as health and health inequalities” and the establishment of our Hauora research hub with key researchers such Associate Professor Rachael Walker, Associate Professor Rachel Forrest, Dr Anita Jagroop-Dearing, Dr Olivia Maclaren and others joining David Tipene-Leach working on regional health projects. “The significance of this is that issues affecting our communities can be addressed in a meaningful way.”

The Hauora research team has been busy with a unique project, Nourishing Hawke’s Bay: He wairua tō te kai. This has seen EIT work with the University of Auckland (UoA) on high-level collaborative research into food security and child nutrition in Hawke’s Bay.

EIT researchers Professor David Tipene-Leach and Pippa McKelvie-Sebileau, who is the Project Coordinator; are part of a team that includes Boyd Swinburn, Professor of Population Nutrition and Global Health, UoA. The Nourishing HB project, which is part of the National Science Challenge “A Better Start”, recognises the link between nutrition and overall wellbeing including children’s mental, physical and oral health. He wairua tō te kai – the guiding principle for this initiative – considers the wider values around food and eating, be they spiritual, cultural, relational or environmental. Nourishing Hawke’s Bay: He wairua tō te kai is focused on identifying innovative and sustainable opportunities to improve children’s hauora, with research recognising the link between nutrition and overall wellbeing, including mental, physical, and oral health.

Last year also saw the culmination of a three-year study led by EIT’s two research professors, David Tipene-Leach and Kay Morris-Matthews, which has evaluated, Ngātahi, a national pilot programme growing the skills of health professionals who work with vulnerable children and their families in Hawke’s Bay. The Hawke’s Bay District Health Board (HBDHB) awarded EIT the contract to assess the impact of Ngātahi for the 500 professionals who work with vulnerable children and their families. The third and final Ngātahi report was published in June 2020.

Another important research project involving EIT is with InternetNZ and is looking at the threat digital exclusion poses to small businesses in Hawke’s Bay. The study is called 21st Century Opportunities for Regional Small Businesses and is being conducted by Dr Emre Erturk, Principal Academic Staff Member at EIT’s School of Computing. It began in 2020 and is set to run until the middle of 2021. The objective of the project is to examine how the so-called digital divide is affecting small businesses and to offer these businesses guidance and online resources to enhance their operations.

Last year the Health Research Council (HRC) awarded a team of EIT researchers a post-COVID equity grant for rangahau Māori for a research project that is examining the impact a fitness pod called the DOMYNIS is having on the Maraenui community. The EIT team of Associate Professor Rachel Forrest, Maria Pearson, Dana Armstrong and Levi Armstrong, along with an external researcher, Dr Fiona Cram, began the study at the start of this year. It is the first time that EIT has been awarded a full grant as the host researcher by the HRC. “The future impact of this sort of applied community-centred research is significant,” says Nat. “It demonstrates the importance of supporting the development of both capacity and capability as we work towards building an effective, sustainable and diverse research informed workforce.”

Whilst much of the work at EIT is regionally focussed, there are a number of examples of research that spans across different countries. Aiding this approach is that many of EIT’s researchers come from different parts of the world to settle in communities like Hawke’s Bay and Tairāwhiti and they “bring a whole wealth of global experience with them. There are also Kiwis who have travelled far and wide, honed their discipline and their knowledge and on their return home they can apply a really smart, global, thinking structure to help with considering approaches to researching regional issues. While the research might be focused on a local business, or community issue, it’s actually being looked at through a world view lens and can introduce methods and thinking that borrows from international research projects.”

By way of example, Nat points to the Nourishing Hawke’s Bay project, which is funded through the NZ National Science Challenge, but is also contributing to the work being done by the World Health Organisation on issues like global obesity. “There is a link in that while the project is based here, it is part of a national study and will also be part of an international forum looking at obesity across the world. This shows what global research can actually do and it is good that this is our strength as EIT researchers.”

Nat herself has an international reputation as an animal health and welfare scientist and was invited to participate as a plenary speaker for a number of international conferences that due to the impact of COVID-19 were delivered online last year. This she says was particularly challenging because like many researchers, she missed the interaction and enriching discussion that occurs in face-to-face meetings. She wasn’t alone in being much in demand as a speaker during the past year, and many of EIT’s researchers were invited to present their work in different parts of the world without leaving the country. “We were particularly excited by the way in which our researchers rose to the challenges imposed by lockdown, with prestigious honours such as the Royal Society Te Apārangi’s inaugural Tahunui-a-Rangi award being presented to Professor David Tipene-Leach for his work on the wahakura - a flax woven bassinet-like device for babies, which resulted in a drop in the infant mortality rate caused by SUDI (Sudden Unexpected Death in Infancy). Another important accolade for rangahau Māori was awarded to Professor (Ahorangi) Sir Derek Lardelli, the founding principal tutor at Toi Houkura, who was knighted for his services to Māori art in the Queen’s Birthday Honours list last year. “



Sir Derek's Investiture Ceremony was held at Whāngārā Marae in May 2021. "They are researchers who have had well deserved national honours awarded to them for the significant impact their work has on their people."

Nat is clear that this type of regionally responsive glocal research, led by applied researchers who can think globally and are active locally, is where she believes Te Pūkenga will have the greatest impact on NZ society going forward. "Our sector has considerable talent and together we represent a significant research presence nationally and internationally. The challenge for Te Pūkenga is to develop supportive research structures that give effect to Te Tiriti o Waitangi and continue to support regional social, environmental, and economic development needs. I have no doubt that we can achieve this and that EIT researchers will increasingly play an important role in developing approaches that tackle problems that of concern for our communities, whilst contributing to national and international research knowledge." says Nat.



Developing Rangahau Māori

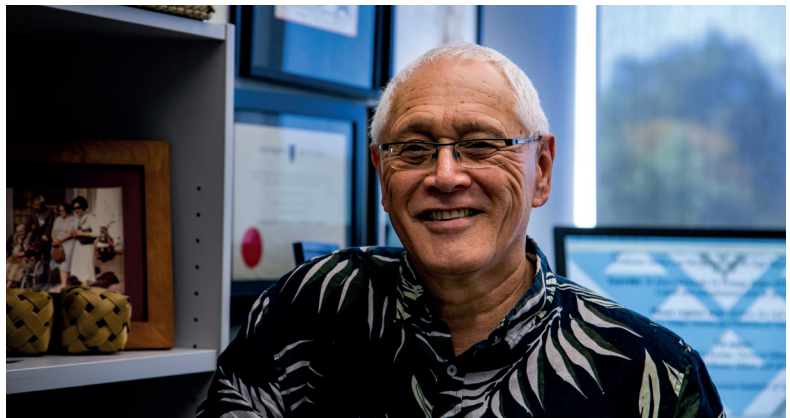
David Tipene-Leach

Faced with an inequitable society, there is a growing sense in academic circles of the importance of not only developing rangahau Māori (Māori research) but empowering indigenous researchers to develop a comprehensive strategy that leads to real change. The concept of Māori research has been around for decades and while some progress has been made, the focus on enhancing mātauranga and kaupapa Māori has often languished at well-meaning hui or been left to gather dust in academic journals. In some quarters, good ideas have not resulted in meaningful actions.

Ahead of the transition from 16 ITPs to the over-arching Te Pūkenga – New Zealand Institute of Skills and Technology, rangahau Māori has emerged as an important component going forward. EIT Te Aho a Māui has committed itself to actively pursuing and promoting this. For Te Aho a Māui Māori and Indigenous Research **Professor David Tipene-Leach**, it is a critical time to begin building a strong cohort of young Māori researchers applying rangahau across all spheres of society. “Rangahau is not just a ‘nice to have’, it is vital for the development of a strong research environment and as a means to effect real change in Aotearoa.”

Despite left and right leaning governments through the years claiming to have made addressing inequity a priority, David says there is little evidence anything has been achieved. “The stark reality is that the rich are getting richer, and the poor are getting poorer. I would add to that the rich are getting whiter, and the poor are getting browner. We are now the second most unequal society in the world behind the United States.” It may have had different names or have been done in his own particular style, but David has been doing rangahau Māori for decades. “I’m not primarily an intellectual or highly academic researcher but documented evidence was what was required to effect change – so I tried to do that.”

David has established a well-deserved reputation as a medical practitioner and health advocate. His contribution to health and social services is well documented. His invention of the wahakura, a flax woven bassinet-type device for babies, has played



*Professor David Tipene-Leach,
Research Professor.*

a major role in reducing the number of SUDI (Sudden Unexpected Death in Infancy). “But every step on the way required evidence” he says. For this work, Royal Society Te Apārangī last year awarded him their inaugural Tahunui-a-Rangi award for invention and creation.

Decades on, David is still fighting to right inequalities in society and is of the view that putting Māori needs first is a must and anything else smacks of racism. “The first type of racism is discriminating personally against people who are different, institutional racism includes factors that systematically disadvantage a whole ethnic group and the internalised racism is where a person/people believes that they are not up to much.” David hopes we have moved beyond the perception that changing things will give Māori an unfair advantage. By constructing a service or initiative that focuses on the most under-served group, the whole country benefits. “I’m a grandfather and I have been saying for a long time that if you make something good for Māori, you’re making it good for everybody. We don’t have a fair distribution of resources in our country, it is a simple case of the more you make for yourself and the less you contribute via taxes to the common good, the better.”

David supports taking a portion of the national resource and “absolutely devoting that to those who are under-served”. A large part of the under-served in Aotearoa are Māori, Pacific and disabled populations, with a significant portion of the disabled being Māori and Pacific. “All of them are poor, so what we need to develop is a redistributive economy.” However, as a key to moving forward with research that leads to meaningful change in society, it is important to delve into the origins of rangahau Māori and how it differs from western research.

Breaking the word down to its core takes David back centuries to the small Central Hawke’s Bay settlement of ‘Pōrangahau’, where he comes from. “We say that it was the ‘night of great thinking’. Rangahau means to seek and distil the essential parts of knowledge, to try to pull things together.” An original word, rangahau has become the te reo expression equivalent to the English term - research. To understand why and how rangahau Māori is unique is to drill down to the essence of what is being done. “Research is something we do in the scientific world - it is a pursuit or activity we undertake to find the answer to a question. Rangahau, on the other hand, is a set of activities that you are immersed in, and being immersed in those activities, a knowledge base becomes distilled.” David says rangahau Māori can be divided into three categories. The first is focused on culture and history, while the second is looking at equity and social justice. “The society that we’re in predetermines that you have more battles to fight in order to succeed if you are Māori. Your chance of poor beginnings, be they education, socio-economic or social, are the social determinants of wellbeing and they are often lousy.”

New Zealand, says David, is somewhat ‘ahead’ of other Western nations with Indigenous populations like Australia and the United States, but it is still not good enough. “We all think we’re getting better because we’ve got Treaty Settlements and bureaucratic Treaty partnerships. Everyone wants to consult with Māori, but in fact our levels of inequity in this country are getting larger because of our nation’s economics. One ‘rangahau’ area for Māori people to be in are professions that lift one up, make one more

stable, healthier, keep one out of jail and generally ensure one is well. Clearly these include health practitioners, social workers, teachers and lawyers but equally we need Māori in business, inventing things, in management, in communications.”

While strides have been made on the first two areas of rangahau Māori, the one that seems to be slipping away, or at least, not being taken advantage of, is the equally important area of innovation and economics. “In this sort of post-settlement era with a nearly \$70 billion Māori economy (Business and Economic Research, January 2021), it is important to establish how Māori people fit into the wider industry, and how do we make it all work.” David says there are examples of iwi corporations becoming very successful from Treaty settlements. “The challenge is in letting the money trickle down. Some are now wealthy corporations, and they are now becoming creative in distributing their resource. We’re very good at looking backwards, developing stories, art and creativity; we are also pretty accomplished at professional development, because so many Māori are in the helping professions. We now need to embrace the business world as individuals, groups and hapū bodies. I think rangahau has a spiritual quality, based on a sense of belonging, and a sense of wanting to contribute to the wider good where there is a huge need.”

David believes that connecting the future with the past is going to be fundamental in tying a path to meaningful future research with an understanding of rangahau Māori. “Storytelling is going to be important, and we’re going to have lots of that in the post-settlement time. That’s really important for the next generation of people who are growing up, who need to know that their tipuna and great-grandparents were pretty enterprising people who took on pretty harsh conditions and made a go of it. It’s a job that we need to complete.”

Acknowledging the equity issues that have been left behind by years of colonial government is important, but it is now also important for Māori to participate in economic opportunities. This includes adding a Māori flavour. This adds richness, beauty, meaning and economic viability to every pursuit. The three aspects of rangahau Māori are all connected and feed into each other. David points back to how his current role at EIT came about, with Natalie Waran determining that a full time Professor Māori and Indigenous was required to strengthen EIT’s commitment to the Māori community. The role is now increasingly at the heart of EIT’s approach to research.

Professor Roger Maaka brought in a body of knowledge, credibility and access to the Māori community which is still benefiting EIT today. Professor Nat Waran has significantly developed and focussed the role and employed David when Roger retired. David acknowledges that developing rangahau Māori at EIT has been difficult, not because of a lack of will or support, but rather because of the relatively small research pool. David has focused thus far on two tasks – doing his own research and finding a group of researchers to collaborate with. “What I have done is to develop it as a way for me to do the things that I know how to do. What we need to do yet is to develop it as a ‘way for EIT to do research.’”

David has, over recent years, worked closely with researchers like Associate Professor Rachael Walker, Dr Fiona Cram, Prof Boyd Swinburn (University of Auckland) and Pippa McKelvie-Sebileau, Dr Kirsten Coppell (University of Otago) and Dr Sally

Abel and archivist Waitangi Teepa. He has also collaborated with another senior colleague Research Professor Kay Morris Matthews on big projects, including the Te Kūwatawata and Ngātahi projects. Of the group only two are Māori. Rangahau Māori can clearly involve non-Māori as well. “They are established researchers and they are running most of the programme – I provide the oversight, the critique, the context – and often the access and the relationship building. But what we really need to do is to bring the next generation in.”

Looming over the ITPs in New Zealand is the move toward Te Pūkenga, which is attempting to achieve equity for Māori learners through Te Pae Tawhiti, Te Pūkenga’s new Te Tiriti o Waitangi excellence framework. David believes that Te Pūkenga’s focus is rightly on Māori, Pacific and community, but it now needs to follow this up with an organisational structure that reflects those principles. Te Pūkenga has emphasised that it is committed to promoting and enhancing rangahau Māori in the new structure. For that reason, a rangahau Māori forum has been set up to chart the way forward. “We need to set up a theoretical framework, from where we can work out what we need to do. At the core of this, we need to get a body of students with who we can get a number of projects up and running.”

A key to attracting the right students is to develop a Master’s course – potentially rangahau Māori. The main aim would be getting young Māori doing research. “It doesn’t matter what they do as long as they are researching.” David says there is talent out there – from archivists to singers to young winery managers – who need to be “plucked out” of their environments and enrolled in Master’s courses. “We need to create scholarships for these people. “We” includes EIT, Iwi, PSGEs, business and philanthropy. If we had a dozen young people who were coming in, starting research projects and getting Master’s degrees, and becoming researchers, then we would be doing something really useful. The key is that they will all be conducting this research across a wide range of subjects from wine to nursing to art and they all have a different way of engaging the world.”

For example, if a young winemaker gets good at making wine, they can tell their story and it will most likely be different from other stories. David says that COVID-19 has had an effect on rangahau because it has slowed it down. “I think that Māori research depends on being close to people, and being around people, and having interactions with people. We were not able to do much of that last year because of COVID-19. We need to re-establish that keep the research going.”

The broader issue of developing rangahau Māori remains a focus for David, especially bringing new people in. “It is exciting, but I also view it all with a bit of trepidation because I’m coming up retirement age, and I don’t need a new body of work to do. However, the part that excites me the most is bringing new and young people on, and spending the last part of my career, if you like, developing young people to be able to take the mantle, to take it all on.” David believes that Te Pūkenga will play an important role in the tertiary landscape of New Zealand going forward which is why it is important to have the right structure for rangahau Māori to succeed and flourish. “EIT has an important role to play in this and we are committed, especially in the group

I am working in, to seeing this through. Our target should be robust and effective rangahau Māori across culture and history, equity and social justice, and innovation and economics. By doing this, we can effect real change,” he says.

The Future of Education

EIT Heads of School

COVID-19 and the largest every restructure of the polytechnic (ITP) and workplace skills training (ITO) sectors have shone a spotlight on the shape of academic research going forward, as well as what degree and postgraduate education could look like. There is no question that 2020 was a year like no other for all. Normal was no longer normal and changes needed to be made ... quickly. For staff at EIT this meant moving from primarily classroom teaching to online within a couple of days. At the centre of the management of this logistical and organisational nightmare were EIT's Heads of School, who say there were challenges in moving over to an online learning environment, but there are also positives to be taken from the change.

Moving towards the new integrated structure of Te Pūkenga, the experience has put the focus on developing a teaching environment that not only keeps delivering a high-quality product, but also offers pastoral care to students and a flexibility that suits the individual rather than any academic timetable. With many students, either working or with busy family lives or both, the emphasis is now on providing a learning environment that encourages study and lifelong learning, rather than putting it in the too-hard basket. Heads of School have focused on ensuring it is the former not the latter. While various forms of online learning have been available for many years, COVID-19 and the March/April 2020 lockdown not only accelerated its importance but made it vital for EIT to be able to function as a broad-based educational hub.

Discussions with a wide range of management, staff and students at EIT indicate that the overwhelming experience of online learning in lockdown was positive, but there were major hurdles to overcome. The success is in large part due to the fact that the school leaders feel their teams overcame the obstacles put before them. Internet access issues, juggling classes with children at home from school, along with other stresses meant that there needed to be a rapid collective coming together to ensure that EIT fulfilled its mandate of educating students.

Against this backdrop is the merger of the 16 ITPs into a single institution catering for educational, vocational and training requirements. This has required all the ITPs, at the top level and in the Schools, to chart a way forward where unity is achieved, but also where the best and most effective attributes of each individual institution are allowed to flourish. A national standard across all programmes is something to strive for, but attention must be paid to the regional nuances which are each ITP's strength. A one-size-fits-all approach does seem to have its risks, but progress is being made, according to EIT's Heads of School, toward finding synergy across Aotearoa. There are also variables and industry-specific requirements across the different Schools to consider.



*Pareputiputi (Puti) Nuku, Pouarataki,
Te Ūranga Waka and Te Whatukura*

Research has been an important part of student and staff development at EIT. The Heads of School are committed to not only ensuring their degree students learn the fundamentals of research, but that their staff are given time to undertake quantitative and qualitative studies that benefit the local community and enhance the reputation of EIT. With 2020 changing tertiary education so dramatically, each School has to some degree found a new normal in everything it does – from research to teaching and to programmes.

Pareputiputi (Puti) Nuku, Pouarataki, Te Ūranga Waka and Te Whatukura, is extremely proud of all staff who quickly moved to online delivery at COVID-19 level 2. There were also opportunities to be gained from this experience – one of which led to the pilot blended delivery of one of last year's level two certificate cohorts. "We piloted it in the second half of 2020, delivering night classes through Zoom and bringing in students for their noho marae stayovers. So, there was a mix of both." During the lockdown period, with many students working as frontline workers or having to cope with work and whānau pressures, the challenge of online learning saw approximately 100 students withdraw from their courses across Levels 2 to 8. Those who needed the support, however, were couriered loan laptops by EIT and inexpensive Wi-Fi plans were organised by the School.

A common thread across EIT is the way staff stepped up to adapt to the dramatic changes that COVID thrust on the teaching programme. How they handled it is in the results, says **Gwenda Kevern**, Head of the School of Education and Social Science and the Centre for Veterinary Nursing. "From my perspective, I think they did an amazing job. The final year results show that our student achievement for the year is pretty much as per normal, even though we had COVID-19." The important thing is that not many students dropped out of their courses, despite having demanding family lives. Gwenda believes that there have been some learnings to come out of the year. "The teaching teams have made some changes to their assessments and they feel that they will follow through going forward. I think that it's opened the doors for some staff to online teaching, and they may have been resisting it in the past, but it was an opportunity to at least try it."



*Gwenda Kevern, Head of the School,
Education and Social Science and the
Centre for Veterinary Nursing*

The pathway ahead post-COVID-19 is clear for **Dr Sabine Hoffmann**, the Head of the Schools of Business and Computing. "I think COVID 19 has fast tracked the need for flexible and customised solution offerings on all levels. And COVID-19 has also shown that we are able to do it. The speed of moving from classrooms to online was so swift last year that it was a case of doing the best one could", said Sabine. It is now a case of learning from COVID-19. "Simply, the need or the recognition that digitalisation is not only part of the content of our programmes that we deliver, but also of how we deliver them. There is an increased need for flexibility, so being able to deliver part of our programmes online or in a blended version, accommodates this flexibility."

This new way of thinking has allowed her schools to reach learners that previously were not able to participate. "Now we can deliver postgraduate programmes to Tairāwhiti without them having to come here in a classroom every Tuesday at 10 o'clock," says Sabine. "We create workshops at times for everybody to come together, but there is such an incredible amount of flexibility in it. This means that working



*Sue Blackmore, Head of School,
Viticulture and Wine Science.*

professionals can continue working while studying.” After finishing work for the day, students can upload a lecture and follow it at their own speed. “We used instructional designers to transform our existing courses into truly self-paced online courses and we made no apologies for taking quite some time to do this. Everyone has recognised that the workplace of yesterday or today will not be the same as the one for tomorrow. The aftermath of COVID-19 has taught us that lifelong learning is something that people in businesses actually need to really embrace.”

A switch from lecture theatre to Zoom was not as simple a procedure for some Schools, especially those with significant practical components to their courses. **Sue Blackmore**, the Head of School of Viticulture and Wine Science, says what made things more difficult for staff and students was that the initial lockdown occurred during harvest. This is a busy time for the School as there is a lot of field work, samples are taken from vines and the laboratories are in high demand. “It certainly had an impact on the trials that were able to be fully harvested and in terms of data collection. We were very fortunate that we were able to actually continue to make the wine, because as part of the wine industry we were classed as an essential service. We had a staff member who was allowed to come in and look after the wines all through harvest. She was the only person that was allowed on campus to do that kind of work.”

But there was a definite impact on student research, with some not getting the data they required, or it being delayed. “Despite this, there was some quite good quality student research, presentations and data out of it, but I think it just made it tougher for them.” Unfortunately, the impact of moving online had a dramatic effect on the School’s international programme. “We were teaching 160 students in China in two cohorts from January last year and that had a big impact on the school. We would normally send 11 staff to China throughout the year, but we had to instantly go online.” However, it did give Sue and her team the impetus to develop online strategies to deal with large classes in China going forward.

For domestic students it meant a reshuffle of their courses, with theory being done online during lockdown. “We have always had our courses online, but we had to bulk this up to assist our on-campus students.” A big change was extending the three-week residential school period of practical winemaking and tasting to six weeks. “This was a massive amount of organisation for the management team, but also our lab team who had to cope with double the length of time and a lot of stressed students.”

The School of Viticulture and Wine Science has been offering online courses for 20 years and was one of the earliest degrees in New Zealand to be online, but Sue is cognisant of the fact that changes need to be made to the website. “We started to develop a new degree at the beginning of the year, which is very practical, so we were having to think about 21st century education, online activities and online interaction. This just gave us a further kind of information and a shot in the arm to actually go further and do a lot more research.”

Online learning has had its pros and cons for the School of Nursing, which has a number of postgraduate students who work fulltime and study part-time. With many of these students working on the frontline as essential workers, the added pressure on them saw some students deferring their studies to semester 2. “Our postgraduate



Clare Buckley, Head of School, Nursing

students are all nurses who are working and the impact on them in COVID was some of them deferring their studies,” says Head of School **Clare Buckley**.

She says her School's programmes have been either blended or fully online for many years, with only under-graduates having to adjust to online learning. “I think it's changed the way we think about the online space and it has opened up possibilities. Some of our students absolutely loved it because, I know one of EIT's marketing lines is ‘At your own pace, in your own place.’ And students finally understood what that meant. At 10pm when the kids have gone to bed, they could dial into EIT online. They could download the Zoom session that had been recorded earlier. They could listen to it or they could listen to the PowerPoint with the voiceover. And they could stop it and rewind it if they didn't catch something. And they could listen to it as many times as they liked. And they didn't have to do it at eight o'clock in the morning, they could do it whenever suited them.”

While there were disruptions, the School of Health and Sport Science was able to cope because of its existing online component. Head of School **Dr Ondene van Dulm**, who took over well after lockdown, says the strength was that the delivery mode for most of the programmes was already blended. “So, for most of the students it was just a change to more of that and less of the other.” Ondene says that pastoral care, which EIT is very good at, became more important because of the circumstances, which required students to do independent learning within their unique locked-down home situation. “The fact is that the whole country was in the same situation; so, each individual student had family members going through the same thing. This created an opportunity for slightly more independent learning. There was more pastoral care responsibility on the tutor, but different teaching responsibility in the sense that the student actually had to do some things independently.”

Professor Matthew Marshall, the Head of IDEAschool, says that while the lockdown did disrupt classes, being confined to their homes allowed staff and students to be creative and work on their research projects. The school does have a small number of international students, but they all arrived before lockdown so were able to continue the year with not much disruption. Dealing with COVID-19 and adapting teaching strategies to accommodate changes to the lives of students and staff has been a tough task for the Heads of School, but they have also been at the forefront, along with their counterparts at the other ITPS, of plotting a path towards a merged and integrated structure under Te Pūkenga. Working under the realisation that Te Pūkenga is the new normal, the focus from the EIT leaders has been positive. Rather than focussing on possible obstacles, there has been a desire to design a structure that brings about consistency, but also allows the individuality and flair of the different schools to shine. EIT heads believe that the operational structures they use can inform and shape the path forward.

Matthew is one who believes each grouping must be proactive in finding a strategy forward, because it is not going to be provided to them. “I'm part of a cluster of creative arts Heads of School who are formulating a research strategy before Te Pūkenga and we've had regular meetings to compare and contrast what we each do,



*Dr Ondene van Dulm, Head of School,
Health and Sport Science*



*Professor Matthew Marshall,
Head of IDEASchool*

our respective institutes and trying to find a collaborative strategy.” He advocates thinking outside the box and fitting the education and expertise to suit the students’ needs. “I think there’s also going to be the option of us sharing supervisors and teachers. So, a student, let’s say, comes in to do our Master’s degree and we don’t have all the expertise, but we know someone in Ara Institute of Canterbury in Christchurch, for example, that we could possibly have a co-supervision arrangement with.”

There are also opportunities in the creative Schools for staff to visit different campuses and add value. “Our staff would go down to Christchurch or Nelson or wherever, and give seminars, give performances and collaborate with the music staff in those institutes and vice-versa. So that will provide us with an opportunity to explore different research avenues for the creative and performing arts.”

Like Matthew, Puti Nuku believes the move towards Te Pūkenga will have benefits for her Schools and says as an example Te Ūranga Waka already has a good working relationship with Ara Institute of Canterbury. “We have an arrangement with Ara where we do moderation for each other, but it would be great to work with other institutes as well because we’ve all been working in our own little silos.” There is also an agreement with the Universal College of Learning (UCOL) in Palmerston North that allows Te Ūranga Waka to offer classes in Dannevirke. Puti is hopeful that collaboration will be the big gain in the new structure. “That would be really helpful because at the moment we have people who are working in isolation.”

Business is one faculty that all 16 ITPs have in some form or another and Sabine Hoffman says the key to making any business course collaboration work is to ensure that there is some consistency across the board and that there are not “hundreds of different degrees”. She says a national standard or national qualification is something to aim for, but also believes education providers should be able to modify it or to put it in a regional context because the “industries we are dealing with here are different in nature. It’s a fine balance because some of the programmes we offer focus on a particular industry that could limit the possibilities of a student getting work in Auckland for example. You want to give them an overview about everything, to enable them to move freely and to either join another institution or simply work somewhere else. If you teach them something that is only useful in this sector, you limit the learner’s chances of finding a job somewhere else.” Sabine says internationally the question of a national standard is often a topic of debate. “It’s always being discussed, to what extent to give flexibility to local education providers while at the same time maintaining a national standard to also give industry the confidence and the knowledge of the skills graduates will have.”

The biggest challenge for Te Pūkenga will be dealing with industry. “Seeing that there are so many qualifications around, we don’t know how one is different from another. What skills does that graduate have versus another? There is going to have to be a process to streamline what is on offer.” Sabine believes that at EIT, Business and Computing offer programmes, including the postgraduate programmes, that are at a very high level. “Our postgraduate programmes allow the flexibility to integrate regional characteristics and even within those programmes you can still innovate, specialise or

do your research on a particular industry.” She believes that this flexibility has a positive impact on research as it allows students to focus on one industry or business or even a person.

The research capabilities of her staff and students are of a high level says Sabine and she sees both Schools playing a leading role in initiating research collaborations with other ITPS. “We already see that the most successful research outputs are the ones that have been developed with collaboration. And for example, our Schools of Business and Computing are working very closely together on all levels. I think research benefits from collaboration and that is why I think EIT will have a significant role in leading research in Te Pūkenga.” Gwenda Kevern also says she has been working closely with her counterparts in other ITPS, with some of the programmes, like Social Work, working towards developing a national degree.

The Vet Nursing programmes are collaborating with nine other subsidiaries and the Bachelor of Teaching (Early Childhood Education) is working with UCOL on a review of the programme. “With Bachelor of Teaching (Primary), we are collaborating with the Open Polytech around a secondary programme that we hope to develop for delivery. It will be national, eventually, but the pilot is going to be in Hawke’s Bay and Tairāwhiti.” She says that every programme offered by her school will this year be collaborating with other subsidiaries. “We really are quite far along in what we are doing.”

Gwenda acknowledges that in some programmes, the ITPs offer very different courses, making the move towards a national standard more challenging. “Each regulatory authority has a different perspective. For example, the Social Work Registration Board would like to see a national qualification, but the Teaching Council is not driving it so hard.” She believes that research will benefit from the process of getting national qualifications up and running. “We’re developing relationships and getting to know one another more, so there’ll be more talking, and I think that will lead to more collaborative research. I think we’ll be less siloed from that perspective.”

Gwenda believes EIT has a reputation for being strong in research, which should stand it in good stead moving forward. “We’ve got some very experienced researchers and we also have others who are coming along nicely. We have a research mentor who works with our staff and I think similar things will happen between institutions with experienced researchers working with less experienced researchers.”

Across the ITPs’ Schools of Nursing, finding a way forward to a national standard qualification is proving to be tricky, with most ITPs having very entrenched ideas and quite different courses. Clare Buckley knows there will be challenges as 13 of the 16 ITPs offer a nursing degree, but she is secure in the knowledge that they have a good relationship in place, with ITPs and universities collaborating and working together under a national organisation called Nurse Education in the Tertiary Sector (NETS). “We meet three times a year formally and many more times than that informally over Zoom or whatever else. And we already collaborate with research projects. We are working on a project with Ara. We have recently finished one with Otago, and we have also done projects with Toi Ohomai, NorthTech and a few others. So, we do link quite well together already and Te Pūkenga will draw strength from that.”

Clare is clear there are issues to deal with, chiefly a national curriculum. She says the sector is divided on it, but the drive from Te Pūkenga is to have uniformity across the 16 ITPs, so the important thing is to continue to work together. “The Nursing Council, which is our regulatory authority, produces the standards for education providers, and we all have to show that we meet those. But they’re just overarching themes and in reality every school has their own curriculum and they’re all different. Mostly we’ve got the same elements in our curricula, but in different places. This means that if you’ve done your first two years in Toi Ohomai, and you decide to come to EIT for your final year, you’ll have to do at least 18 months, if not longer, because you haven’t done the right courses.”

Te Pūkenga wants to see a more student-centred focus that would allow students to transfer seamlessly between institutions during their degree with no time or academic penalties. Although students do not routinely transfer between institutions, it may be because they’ll have to repeat courses. However, for students to be able to transfer, a national curriculum would need to be implemented.

Clare believes there is a good argument for a national curriculum and has no doubt it will eventually happen but wants all Schools to take ownership of it from the very beginning. The less prescriptive the better is the way forward for her. “It will work if everyone is not having to do exactly the same thing at exactly the same time. It will be about meeting learning outcomes, having the same practicum experience within the same semesters, and doing the same topics, whilst allowing for regional variations and differences.” “A massive opportunity” is how Odene van Dulm describes Te Pūkenga. “For example, in the sport and exercise area, we’ve got an ITP group that was already established years ago, at the time when they were reviewing all the qualifications. They are used to working together and sharing things, which is why we’re already underway with shared programme development.”

She says progress is being made to create a framework that meets all educational needs throughout the country. “If you look at a degree structure, it’s a wonderful opportunity because it’s not like a Bachelor of Teaching (Primary) or Social Work, where you’re very constrained in what you offer by the registration body. In sport recreation, and exercise there’s great space to have a degree structure where there’s a certain core. Maybe a common first year or common papers across all three years, whatever it is, that’s the core structure. And then there are different pathways within it.”

For Ondene it is a case of the ITP group establishing what they have in common and then identifying what each one excels in. “You can then put those bits together into various pathways that students can choose from. It gives you a single programme with different options inside it. One of the aims of Te Pūkenga is to encourage student mobility and maximise student opportunity. This will mean that a student can start here and then pick up and move somewhere else. So that degree structure really lends itself to that as well, especially if you combine it with very good, blended learning with large online components.”

Ondene says all ITPs are in this together and it is up to them to make it work. “We’ve acknowledged that we’re not competing anymore, and we have to work

together. We're trying to do that as fluidly as possible." EIT has a leadership role to play, says Ondene. "Our industry projects work really well, and they have influence out in the community. They pave the way for students into jobs or into research. They give the student that work-integrated learning experience. We're probably able to do it well because we have smaller numbers. We're very in touch with our community. So, for example, that's something that the other subsidiaries can learn from and can adopt. And likewise, there'll be things that we can adopt."

Sue Blackmore is open to closer collaboration with other ITPs and believes there are natural synergies with Nelson Marlborough Institute of Technology and Otago Polytechnic, based largely on the programmes they offer and the wine regions they are in. "We are talking about meeting every month and then working out how we can share and build our capability. There will be some negotiation about the degrees we use, but I think the space will be sharing information and potentially growing into wine. There is also potential to offer each other's courses on different campuses." Sue has no doubt that there will be challenges. Being a veteran from the early days of Industry Training Organisations (ITOs) when each institute followed their own course, Sue is aware of the pitfalls. She is heartened by the fact that "Viticulture and Wine are a relatively small industry across the entire country. We've just got to be collaborative and think sensibly about using the resources that we've got, to be honest and realistic." She is also not averse to collaboration with universities and the Bragato Research Institute, a wholly owned subsidiary of New Zealand Winegrowers Incorporated.

For Matthew Marshall collaborative research is a driving force of his School and he believes Te Pūkenga creates opportunities to work with colleagues from other institutes. "It is also really quite exciting because we'll be able to see where we sit in the grand scheme of things and create some new projects."

Across the different disciplines in his School, Matthew has always encouraged collaboration and the future will see more emphasis being placed on this cross-pollination of ideas. IDEASchool has always delivered a mixture of performance or artistic research as well as the more traditional research of writing journal articles. With new staff in screen and music programmes, Matthew says this year is seeing more collaboration between the two. If for example, a student wanted to make a film, they would work with another student who would write the soundtrack. There is also scope for design and fashion students to work together on projects. "We've got two music students this year who are doing postgraduate study and have visual aspects to their music project, which requires them to work with visual arts students and be supervised by art staff as well as music staff."

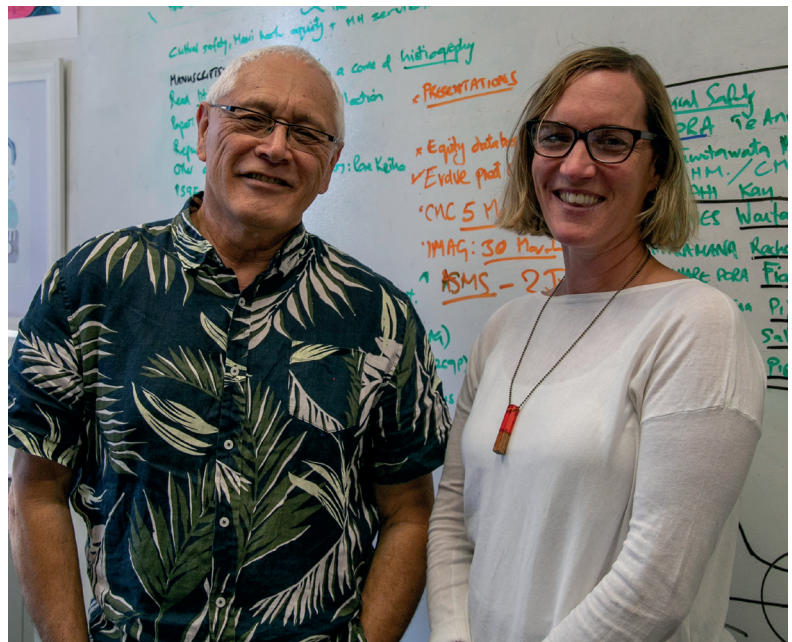
The Heads of School are all in agreement that while the initial lockdown was difficult for staff and students, the changes made have allowed them all to try new ways of doing things. There is generally a feeling of positivity as they all work to position their Schools within the Te Pūkenga structure and help grow EIT's reputation as a research institute. As the newest head of school, Odene van Dulm has used this year to adjust to a management role, but coming from an academic background, research is important. "For me, as Head of School, one of my really big priorities is to try to support research within the School in a way that the staff doing the research feel optimally supported."

Sue Blackmore is also adopting an optimistic approach, despite some real worries about international students. “We just have to hope that we are going to ride it out and the borders open and we are able to continue to grow with international and domestic students.” This attitude seems to be common among the Heads of School, who are determined to ensure their Schools are proactive in dealing with the changes happening under Te Pūkenga. It may be a big challenge, but they are up for the task.

Community Health and Wellbeing

A study into the wellbeing of staff members of ITPs under Te Pūkenga, including EIT, has shown the adjustment staff members went through last year during the COVID-19 lockdowns. The research was conducted by EIT researcher Pippa McKelvie-Sebileau and Research Professor David Tipene-Leach and forms part of a wider ITP Staff wellbeing collaboration study in conjunction with Otago Polytechnic, Wintec, Whitireia, Weltec and Unitec.

The survey was sent out to EIT staff four times from the first Level-3 lockdown in April 2020 and during subsequent lockdowns. The researchers received 164 responses from EIT staff, while across Te Pūkenga more than 600 people participated. Staff were asked how COVID-19 affected their professional life, personal life and what kind of adjustments they made. Pippa says, “enormous adjustments to daily life had to be made, for personal and social lives, but the biggest adjustments were for work.” This was particularly so during the initial lockdown with the move to teaching online at a time



*Professor David Tipene-Leach,
& Pippa McKelvie-Sebileau.*

where there was increased anxiety around health and increased demands for childcare and home schooling. Pippa says the biggest challenge for staff at the start of the lockdown period was moving to teaching online. “This was an enormous technology learning curve for some people. From one week to the next, people were having to manage a modality that some had never used as a participant before. Lecturers and tutors now had to deal with Zoom recordings and putting them online, how to mute people, whether to use cameras, the etiquette of Zoom and the beeps when you come in. All of the things that we’ve become kind of used to over the past year.”

Staff had to adjust to new physical working arrangements, lack of internet connectivity, computers that had to be shared among whānau members and the challenges of working from the kitchen table. “One of the key challenges was defining work time and personal time. People reported that the boundaries were blurred and since the computer was right in the middle of the lounge, they found themselves replying to emails at any time of the day or choosing to work once the children had gone to bed,” says Pippa. An interesting trend developed around how people responded to questions about their wellbeing over the survey period. While most people maintained good wellbeing, the proportion of people at risk of reduced wellbeing increased over time. The need for attention to wellbeing was most marked when lockdown was new and after four months, the survey found.

The survey also revealed different patterns based on age and gender of the staff members. For older staff members, who either lived alone or with a partner, some noted that a lot of social contact comes through colleagues at work and working from home made this challenging. “For staff with children at home it was more about the intensity of home schooling, working, moving to online delivery and having the kids there constantly – so quite different patterns based on age. There were also different patterns based on gender because women take on the household load a lot, so we saw women staff members dealing with childcaring while at the same time moving their work or teaching online.”

Another interesting finding was that staff members were empathetic to students’ situations and concerned for their wellbeing, engagement and achievement. “They spent a lot of time trying to create innovative ways to engage their students and they reported much more online communication from the students during lockdown,” says Pippa. The way EIT kept staff informed on matters concerning COVID-19 also came in for some praise when respondents were asked to rank the most common COVID-19 information sources. EIT institutional news came second behind television news and ahead of government websites, newspapers and Facebook. Asked to indicate their confidence in various information sources with a score out of 5, once again EIT institutional news came second with a score of 4.18, just behind Government websites (4.29). Other sources, including online (4.0), radio (3.87) and television news (3.85) all inspired less confidence that EIT did.

While the data analysis is still underway, Pippa says that the best part of this study has been to capture some of the innovative ways that EIT staff members adjusted to COVID-19 disruptions. Some staff reported that they appreciated elements of the lockdown which allowed more time for activities they enjoyed: more frequent

Dr Anita Jagroop-Dearing, Senior Academic, Postgraduate Programme Coordinator in Health Science



exercise, walking or biking with family, sharing kai together several times a day. “For social support many reported using technology to stay connected, family WhatsApp groups, Facebook groups, House Party chats, Zoom social gatherings and connecting via social media.” Pippa said staff also reported that the time saved in not travelling was enabling more sleep, more time to reflect, to innovate through trial and error or to take up hobbies, baking, home improvements or creative practices.

International Health Science postgraduate students at EIT experienced levels of stress during New Zealand’s first lockdown last year that would generally be considered suboptimal in terms of health and productivity, another study has found. The research established that the unique situation that the students found themselves in appears to have manifested itself in a variety of challenges, the combination of which are less common among New Zealand’s broader population.

Dr Anita Jagroop-Dearing, Senior Academic, Postgraduate Programme Coordinator in Health Science in EIT’s School of Health and Sport Science (SSHSc), is also an international student mentor and Chair of the Health Research Committee for her School. Anita was the study lead in this research, and the team also included **Dr Ondene Van Dulm** (Head of School), **Dr Syed Shahid** (Senior Lecturer, Auckland campus) and Cherie Freeman (Auckland Campus Director). The research was initiated after Anita became concerned about the impact that COVID-19 and the lockdown were having on the international students and had obtained ethics approval for the study.

The initial phase of the study focused on a cohort of 25 international Postgraduate Health Science (PGHSc) students in Hawke’s Bay, who were enrolled fulltime, but whose visas allowed them to work for up to 20 hours per week. Most of the students came from India, the Philippines and Sri Lanka. The second phase of the study included the PGHSc students on EIT’s Auckland campus. In total, Anita received 55 responses to a set of 33 questions in a cross-sectional survey. “What emerged in my initial focus sessions with the students is that they were dealing with challenges that other domestic students wouldn’t normally be dealing with. First of all, they’re international and most of them had arrived in the country at the start of semester one,

so they were already experiencing the culture shock of being in this new environment. In addition to this, during the lockdown, they were essential workers.” “They work in the hospitals, care homes and other frontline services. In their home countries, they are doctors, dentists, nurses, optometrists, lab technicians or allied health professionals.”

During the lockdown, NZ Immigration Services allowed the students to work longer than their usual 20 hours per week. “I was getting requests asking if they could work longer hours, and as an institution, we agreed that they could, as long as we provided extra support and always informed them that their studies were the priority, the reason they were here, and they needed to succeed.” The challenge for the students was to balance their study with their desire, as trained clinicians, to work on the frontline or in health services to do as much as they could to help. Added to that was the financial reward that might help with living expenses and the international fees they pay to study at postgraduate level in New Zealand. Some of these students take out huge student loans or sell family properties in their own countries to afford the cost of studying here. They were also without their families, who would have been with them if it had not been for border closures due to COVID-19. “They are here on their own, feeling isolated without the support of their family and having to deal with their postgraduate studies, COVID-19 and financial issues.”

The study found that about 89 per cent of respondents had left their family in their home country in order to study in New Zealand. Thus, many of them were coping with the challenges of the nation-wide lockdown without in-person familial support. Respondents were also restricted in how they could offer support to family members they had left behind. “Responses make clear that many respondents had left family with the intention of reuniting with them (usually in New Zealand). However, for many, border restrictions stemming from the pandemic had made this impossible. Usually, it was spouses or children who were being prevented from joining the survey respondents.”

Anita says she reached the conclusion that separation from family and working as an essential healthcare worker presented challenges to maintaining health and wellbeing during lockdowns. “Identifying key challenges and coping mechanisms, as we have here, offer insights for continuing to support international postgraduate health science students at EIT and elsewhere. Our data show that personal and academic support services offered by tertiary institutions make a substantial positive contribution to the student experience and should continue to be invested in. Employers should recognise the increased labour (often emotional) undertaken by essential workers. Key means of doing this are raising remuneration, where possible, and ensuring that workplace health and safety practices are fit for purpose.” One of the key findings of this study was that, although these students seemed stressed during the various levels of COVID-19 lockdown, they demonstrated great resilience, as was reflected by the successful completion of their courses for that semester.

In another study, high-level collaborative research between EIT and the University of Auckland is shining a spotlight on food security and child nutrition in Hawke’s Bay and finding that schools and students are embracing attempts to solve deep-seated issues. Nourishing Hawke’s Bay: He wairua tō te kai is a unique project, led by two renowned Professors, that combines mātauranga Māori and Systems approaches to



Some nutritious and delicious catering from local Mio catering for Nourishing HB community workshops

Above right: The team of Nourishing HB: He wairua to te kai research assistants outside their 43rd and final school



improve food environments for rangatahi and tamariki in Hawke's Bay. The key driver for the project was the sad reality that in a region known as the 'fruit bowl of the nation', there are Hawke's Bay children without sustained access to nutritional food. Dedicated community stakeholders and researchers came together to understand the cause of this systemic problem and develop a plan of action to improve access to nutritional kai across the region.

The Nourishing HB project recognises the link between nutrition and overall wellbeing including children's mental, physical and oral health. It is part of the National Science Challenge "A Better Start" one of the 11 Challenges funded by MBIE to tackle the biggest science-based issues and opportunities facing New Zealand.

He wairua tō te kai – the guiding principle for this initiative – considers the wider values around food and eating, be they spiritual, cultural, relational or environmental. These values may provide future guidance for the Hawke's Bay community around sustainable food-related behaviours. The research team consists of **David Tipene-Leach**, Professor of Māori and Indigenous Research, EIT; Boyd Swinburn, Professor of Population Nutrition and Global Health, University of Auckland and Erica D'Souza, Research Assistant, EIT and UoA. EIT researcher and UoA doctoral student **Pippa McKelvie-Sebileau** is the Project Coordinator.

Pippa says the goal of Nourishing Hawke's Bay is for communities to define the problem as well as ideas about how to take action. "This is a novel approach. The communities own this project, not the researchers," says Pippa. "The advent of COVID-19 last year exacerbated the vulnerability of our children and emphasised the need for greater food security. The 'Free and Healthy School Lunches' programme, launched by Prime Minister Jacinda Ardern in a handful of pilot Hawke's Bay schools in February 2020, has worked well, but the Level 4 lockdown earlier last year identified just how reliant many of our children were on it. For some, it is the only food they get during the day, but no school during lockdown meant no lunches. Principals tell us that

some students are getting 10 of their 21 meals from school each week, with big lunches being prepared on a Friday to sustain them until the next Monday,” Pippa says.

The study had an ambitious start with all Hawke’s Bay primary and secondary schools with more than 30 students in Year 5 and/or Year 9 being invited to participate. The project team has a group of research assistants who go into the schools to collect the data. At present, baseline monitoring is being done in schools, involving wellbeing surveys for year 5 and year 9 students. This is being done in conjunction with the Hawke’s Bay District Health Board. “The survey deals with how they’re feeling, how they spend their afternoons, if they walk to school, what they eat for breakfast and what they eat for lunch, if they are eating breakfast and lunch. We also do height and weight measurements because there’s no national measure of that for those ages,” says Pippa.

The hard work seems to be paying off with data collected from more than 1200 school children so far and new schools signing up daily. The schools that participate receive information in an accessible 2-page format on their students’ wellbeing, which is a priority for many schools at the moment. To aid the data collection, the research assistants distribute computer tablets among participating students, for them to record their daily activities, including nutritional intake and time spent on digital devices. Pippa says that data collected so far shows that time spent on devices is an area of concern, with three-quarters of the students spending more than two hours per day in front of a screen. This habit is also having an impact on sleeping patterns, with figures showing that one third of the 13-year-olds in the survey are going to bed after 10pm and about 10 per cent after 11pm. Pippa says this is electronic device-related, with the vast majority having either a television or some type of screen in their bedroom.

Interviews also showed that there were food security issues for the children, with many often feeling hungry and reporting that cupboards at home were running bare. The project is the first to have a Hawke’s Bay measure of food security for children. To measure food security in Hawke’s Bay is so small, that the research team is relying on information from a national survey. “We’re still working on it, but we don’t actually have a Hawke’s Bay measure of food security at this stage,” she says.

The free lunch in schools programme, now named the Ka Ora Ka Ako programme, has gone a long way to easing this problem. The research team is not evaluating the programme but has been capturing stories about how it was working for some students. Pippa says there were initial teething problems as is to be expected. “If a child walks in on the first day and doesn’t like the food that’s being served, they then might be hesitant to participate in the programme, so they’ll bring their own lunch.” “Caterers have also experienced issues with working within the nutritional guidelines, but also giving something that’s palatable or something that engages the student.”

The data collected shows that out of the 600 students surveyed so far, only 10 per cent met the national guidelines of three vegetables and two fruit per day. “Hawke’s Bay is well below the national average of vegetable intake,” says Pippa. “This creates issues with the lunches, because if a child is not eating vegetables at home, it’s easy to see how they might not want to eat them at school.” The Ka Ora Ka Ako programme is definitely a good start in addressing this, but it will take time.

While Nourishing Hawke's Bay is not going into crèches and kindergartens, public health nurses do promote a survey when they visit these centres. Pippa says the partnership that Nourishing Hawke's Bay had formed with the Hawke's Bay District Health Board is proving to be a success, with full data sharing for this aspect of the initiative. "This has been a good collaboration with the DHB. We have a survey that they share with the early learning services which deals with the barriers they face and what it's like to provide or promote food. We also get a copy of their policies regarding food. Late last year the Ministry released guidelines on food-related choking which mean centres are having to revise their practices. This is unfortunately a really enormous barrier for providing nutritious, healthy food to kids because you can no longer serve cut-up apple. It must be cooked, which makes it more difficult in a centre. These guidelines exist for important reasons because there have been cases of kids choking, but unfortunately, it also means that raw fruit and vegetable pretty much can't be served or only under very strict supervisory conditions."

Pippa says that overall the interaction with education centres at all levels is good and the number of responses the Nourishing Hawke's Bay team had received was positive. She says Nourishing Hawke's Bay is keen to add value to initiatives that are already happening in the region as a collaborative approach often achieves better results. "We have a big problem with food security for our tamariki in this region and this research project is finally giving us the opportunity to document what we are facing and to establish strategies to deal with it."

EIT staff and students have conducted meaningful research at the EIT Institute of Sport and Health (EIT ISH) since it opened its doors in 2019 and the School of Health and Sport Science has made it a goal to increase the community projects undertaken there. The Institute has been built on the grounds of the Hawke's Bay Regional Sports Park in Hastings as a venture to enhance community participation in exercise and as a high-performance centre. Run by the Hawke's Bay Community Fitness Centre Trust, the Institute is used by different groups each week, while EIT also uses teaching facilities and conducts research projects there.



*Dr Ondene van Dulm, Head of School,
Health and Sport Science*

EIT signed a memorandum of understanding with the Trust to collaborate in research project opportunities that arose from their shared interests and areas of expertise. The purpose of this collaboration has been to optimise project outcomes that are meaningful for the region's communities. **Dr Ondene van Dulm**, who was appointed Head of School, Health and Sport Science in September last year, says there are opportunities for EIT, which is always looking to be involved in community-focused research. She says the Trust may share an interest in research data from projects being done by EIT's degree students and may contribute their own. "For example, our first-year students spend a number of weeks in primary schools doing programmes with the children. It may be teaching them new games, or fitness, but each project group comes up with their own proposal and study. It's the perfect opportunity to say: 'Okay, what data can we gather there?'"

Ondene says this could be simple things like asking participants questions about their attitudes and feelings about exercise, measuring their heart rate and other indicators and monitoring changes over time. "If we're doing it in our school-based projects, then the Trust could potentially do it in their school-based programmes as well, which means we get to increase our data. As soon as you're studying something in more than one context, then you've got that possibility of expanding it to include more things and make comparisons."

One such collaborative project is seeing EIT researchers Lee-Anne Taylor, Dr Patrick Lander and Dr Russell Rayner working with Hawke's Bay Community Fitness Centre Trust researchers Joshua Stewart and Kendall Malcolm on a study called Youth athlete and training workload. The project entails multi-phase research investigating youth athlete training loads. It will examine the knowledge of athletes, coaches, and parents regarding training loads, load management, and youth athletes' wellbeing. The intention of this project is to inform best practice with evidence-based information to enhance youth athlete development within the Hawke's Bay region and New Zealand.

Ondene says collaboration such as this with the community, students and other interested parties is important, but needs to be done in a way that maximises EIT's opportunities for external funding grants. Funding is always an issue as there is a lot of competition from other tertiary institutes and organisations. Ondene believes that while it is important for her School to continue with individual research projects focused on sport performance, community-centred studies like youth wellbeing or common issues like obesity, may offer greater opportunities for external funding. "The more people and parties you can involve in a project, and the more likely you are to achieve valuable community outcomes, the more likely you are to attract funding."

Meanwhile, Ondene says there are opportunities for postgraduate research at the ISH, with two Master of Health Science students, Liz McKay and Ormond Heather working on projects there.

Liz is examining the use of a Rock-it Board device (a wooden balance board) to improve strength and balance in older adults. This study will investigate the effectiveness of a Rock-it Board training programme for developing strength and balance to help prevent falls in an older population. Ormond is investigating the



*Dr Kay Morris Matthews,
Research Professor*

relationship between force-velocity profiles and exercise orientation with post-contact metres. This study will endeavour to identify the optimal training parameters to increase post-contact metres in semi-elite rugby players.

Apart from its involvement at the regional sports park EIT also has a relationship with Sport Hawke's Bay and the Pettigrew Green Arena (PGA), which is across the road from the Hawke's Bay campus in Taradale. Ondene admits that there is some crossover in facilities at the different venues, but this is an opportunity for further collaboration. "So, we'd like to keep both the Hawke's Bay Community Fitness Centre Trust and Sport Hawke's Bay involved in student projects and their industry projects, as well as our own research. There is a lot of scope that hasn't yet been tapped. For example, we have labs at PGA and the Sports Park with some equipment that is the same and some that is different."

A sport science services technician, Dr Philip Shambrook, has recently been hired to maximise the use of this range of equipment at the two labs, as well as using mobile equipment in the field. "Community research is what we do best, and we want to use everything at our disposal to carry out effective and meaningful research for our communities," says Ondene.

A comprehensive three-year study, led by EIT's two research professors, has evaluated a national pilot programme growing the skills of health professionals who work with vulnerable children and their families in Hawke's Bay. The research into the Ngātahi project ended in June 2020 and assessed how the project established a sustainable system for practitioners to identify the additional skills they believe they need, developed training programmes to address these needs and built relationships between workers in different organisations.

The Hawke's Bay District Health Board (HBDHB) awarded EIT the contract to assess the impact of Ngātahi for the 500 professionals who work with vulnerable children and their families. The third and final Ngātahi report was published in June 2020. EIT's research team was led by Research Professors **Kay Morris Matthews** and **David Tipene-Leach**. Other members of the multi-disciplinary team were health researcher **Dr Sally Abel**; **Dr Anne Hiha** from the School of Education and Social Science; **Chris Malcolm**, a Mental Health Lecturer in the School of Health Science; social work programme coordinator **Charlotte Chisnell** and social work lecturer **Karlin Austin**, both of the School of Education and Social Science; and EIT researcher **Pippa McKelvie-Sebileau**. Kay and David both also sat on the Ngātahi Board of Governance as critical friends. The sponsor of Ngātahi was former Children's Commissioner and local paediatrician, Dr Russell Wills, while Dr Bernice Gabriel, senior psychologist, was the project manager. Both are from the HBDHB.

Ngātahi came about in 2017 after workers in health, education and social services in Hawke's Bay reported increasing numbers of children with learning and behaviour issues. These children often live with parents and tamariki Māori were over-represented among these referrals. "There was a strong view among many workers that they needed additional skills to adequately assess and manage these issues and that there were few evidence-based interventions available," says Kay. "There was also concern across the sector that the government organisations, mainstream non-government organisations (NGOs) and kaupapa Māori NGOs involved worked in silos.

Families/whānau and children were often confused about the numbers of services involved and either disengaged or fell between the gaps.”

Ngātahi began by first developing a partnership with Māori via relationships with the Hawke’s Bay DHB’s Māori Relationship Board and mana whenua, Ngāti Kahungunu Iwi Incorporated. The DHB Māori Health team helped Ngātahi develop a Māori conceptual framework which came to be known as Ngā Pou. These Pou became a basis for the development of wānanga which were written and delivered together with experts in Ngāti Kahungunu tikanga. Ngātahi, which means together, had three broad objectives when it began three years ago. These were: to establish a sustainable system for practitioners to identify the additional competencies they believe they need; to develop training programmes to address these needs, both clinical and cultural competency; and to foster relationships between practitioners in different organisations that would facilitate intersectoral collaboration when working with complex families/whānau.

The first report in January 2018, of the three-year project called Towards Better Outcomes for Vulnerable Children and their Families: Ngātahi Working as One focused on the first phase of Ngātahi, that is, the core competency mapping process and development of specific skills training. Three priority training areas identified - Mental Health and Addictions, Trauma Informed Practice, and Engaging Effectively with Māori. The learning model developed for the planned training included three parts: online learning, skills-based wānanga, and ongoing small group ‘learning circles’ or wānanga ita which were established to embed learning and provide peer coaching.

This first report included an early evaluation of training provided for Child, Adolescent and Family Service (CAFS) practitioners from the HBDHB around Mental Health (but not Addictions) some of the behavioural therapies used in practice, and a cultural competency component for CAFS practitioners at HBDHB.

The second report of the evaluation looked at the planning and delivery of Mental Health training to the wider workforce, including a follow-up on progress with the staff of the CAFS service who went through the 2017 Mental Health training.

A Self-Care in Trauma Informed Organisations wānanga was also developed as a direct result of the first-year evaluation findings which highlighted the fact that practitioners were stressed and vicariously traumatised. The Trauma Informed Practice wānanga training was initiated much later in the pilot but cut short by the COVID-19 lockdown. The self-care wānanga have been very popular and the evaluation of this was presented in the third report alongside questions examining what did and did not work well in the wānanga training format developed. “A rich data base for analysis was produced because of the calibre and sheer honesty of the responses from the practitioners. They highlighted the dilemmas and stresses placed on the frontline workers across their different professional and occupational groups. I was impressed by how committed practitioners are to helping the vulnerable children they see. Even though many were stressed, burnt out and dealing with distressing situations, they remain determined to make a difference for these children,” says Kay.

She says it is encouraging that both practitioners and managers have unanimously endorsed the existing Ngātahi training, as well as welcoming future

training. “Many managers have also reported the positive steps made during the three years to increase communication between organisations. However, all reported that there is still work to be done, including in and around cultural competency. Overall, the goal is to ensure that our region’s vulnerable children are seen more quickly, referred appropriately, assessed more comprehensively, and provided with relevant and evidence-based therapies/solutions.”

Kay believes the Ngātahi Project has achieved a lot and can make further strides in future. “We have enough experts on the ground in Hawke’s Bay running these very sophisticated wānanga, which practitioners believe are making a difference. With funding now in place, Ngātahi can go from strength to strength. The focus will be on more training in areas like addictions and care and protection. More organisations will also be invited to join the project, which will add more diverse voices and perspectives from across the sector.” Kay says there has been interest from other District Health Boards to implement the project in their areas and she was hoping they would. “We have to do all we can because the welfare of our vulnerable children is at stake..”

It was a simple invention that gave mother and baby a safe-sleeping environment and began a programme credited with a drop in the infant mortality rate. The wahakura – a flax woven bassinet-like device for babies – was designed with Māori infants in mind, because of persistent six-fold Māori disparity in SUDI (Sudden Unexpected Death in Infancy).

Fifteen years after coming up with the idea by applying mātauranga Māori to the issue of SUDI risk – the ‘inventor’ of the wahakura, Professor David Tipene-Leach, was honoured by Royal Society Te Apārangi last year. David, who is EIT’s Professor of Māori and Indigenous Research, was presented with the Society’s inaugural Tahunui-a-Rangi award at a function in Wellington in November last year. He is the first recipient of the award, which is for invention and creation and is supported by Callaghan Innovation.

For David, the award was a chance to shine the spotlight on what the wahakura has achieved, the many weavers who have championed it, and the process of a complete reliance on mātauranga Māori to save babies’ lives. “There is something about the deployment of things Māori in everyday life that feeds the soul, one’s hauora, health and wellbeing. It has come through as a pathway in health endeavours – the whole idea that mātauranga Māori is not just something nice to have, but is actually something helpful, healthy and health-giving and has the potential to transform people’s wellbeing. Te Tahunui-a-Rangi is a fleeting flash of colour and light – a glimpse of beauty, mystery and discovery. So is the ingenuity of the wahakura and the use of tikanga Māori to mitigate SUDI risk by the creation of a safer sleep environment.”

He also acknowledges the role of health workers and weavers in working to find a solution to baby deaths. “I am personally grateful to have been involved with a myriad of health workers and weavers in three iterations of sudden infant death prevention. The Māori SIDS Prevention Programme took ‘control of the message’ in the 90s, the wahakura programme took ‘control of the intervention’ in the 2000s and the Te Whare Pora, a clinic where Mums learn to weave all the accoutrements of pregnancy, will ‘take control of the antenatal space’ in the next few years ahead of us.” He admits to “a little bit of satisfaction” at having the wahakura recognised as a major invention. “I read that

the award is given for inventions that made a change to people's behaviour. That fits. It's good for the wahakura to be recognised. It has changed things."

David, who says he is not an inventor by nature, claims it was a "lucky strike" when he revived the concept of the wahakura in 2005. The health message at the time was to advise mothers against bed-sharing with babies and although we had thought of a woven flax bassinet before as a sensible 'Māori way to sleep babies' – we hadn't quite recognised the 'safety factor' and we let it lie. "It was all about getting babies out of beds. It was just before bed-sharing and smoking had been linked. The message was: 'Get baby out of the bed and stop smoking.' "We had all this flying around and the Māori SIDS Prevention Team refused to counsel against bed-sharing, and we said smoking is not a modifiable risk factor – people smoke because they are in trouble, they are stressed, and they are addicted, and we don't have the power to change these things at the moment."

He says there was debate over what was safe and what was unsafe, but the consistent factor was always the separate sleeping space. "The idea for separate sleeping space had always been about a bassinet or a cot. Then I realised that our woven flax bassinet idea could easily go into the shared bed and the Māori safe sleep space was born. I knew it would be appealing to Māori mothers, but could we make such an item?"

He shared the idea with a patient of his, an older woman who was a master weaver, and Nanny Whaipooti's response was: "Yes dear, of course we can make them, we have been making them for years." Moses baskets had been imported in the eighties and kairaranga Māori developed their own pattern for them. They brought in some examples of their Moses-style baskets they made thirty years ago and away we went," David says. "The reason why the wahakura is so safe is that it is a demarcated area for the baby. It is an area you don't encroach on. It is a demarcated area with the parents on each side and the baby in the middle." He says SUDI is still an issue that needs attention, but some new ideas need to be tried.

For him it was not just about inventing the wahakura, but rather where the device fitted into the "whole scheme of things". "Have we just reached the low hanging fruit. Is it just about getting more wahakura out there? Maybe. That is part of the plan. Or is it time that we started doing the long-term planning and saying we need to get control of the whole pregnancy, not just the little bit after the baby is born. We need to look at the whole life of the mother."

David believes Te Whare Pora o Hineteiwaiva (House of Weaving), a clinic for pregnant women where they are taught to weave, is an important part of this. The idea of a clinic is to use the wahakura and weaving to attract pregnant women who might normally only be seen by health workers quite late in their pregnancies and to build networks that are easily accessed around the Whare Pora. "Māori women getting control of the bigger 'health and wellbeing destiny' is what the long-term Whare Pora story is about. For example, in five years' time what will be happening is that young Māori women will be able to drop into Te Whare Pora to say: 'Can you tell me about contraception'. Who do they ask now? Nobody. The aim is for it to become a women's health business centre of modern times."

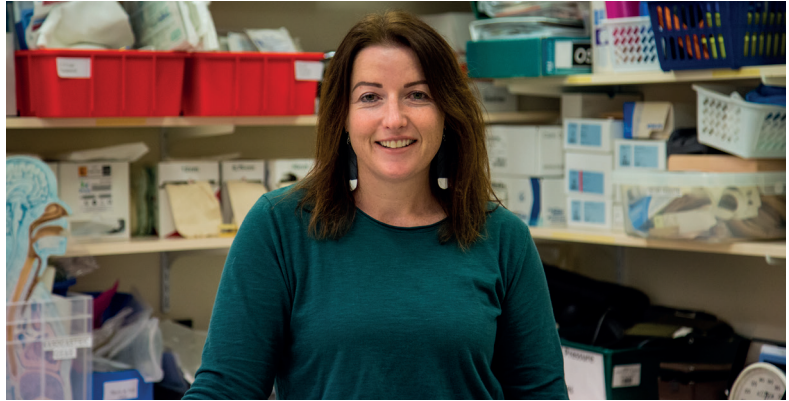
A Te Whare Pora opened in the Flaxmere Shopping Centre last year. It was the first of its kind in New Zealand and is a project of Te Taiwhenua o Heretaunga. It received funding from the Auahatanga Hauora Māori funding programme, Ministry of Health. COVID-19 and last year's lockdown did create some difficulties for the clinic, but since then it has proved to be popular with young people. David has been leading a team conducting both quantitative and qualitative research on this Te Whare Pora and analysing the results. He believes Te Whare Pora should be opened around the country as part of a wider strategy to deal with the issue.

A leading EIT researcher has been involved in a significant research project into remote monitoring of peritoneal dialysis patients across New Zealand.

Associate Professor Rachael Walker, a Senior Nursing Lecturer in EIT's School of Nursing, researched this topic, concluding with three articles, including two published online in leading academic journal, *Peritoneal Dialysis International*, last year. The findings of a study into patients' and caregivers' expectations and experiences of remote monitoring are also on the front cover of the latest edition of the print version of this journal. The research was undertaken because while peritoneal dialysis (PD) gave patients more flexibility and independence compared with haemodialysis, the uptake of PD remains low internationally and in previous studies patients have sought more support for home dialysis. Barriers to PD include the fear of dialysing without medical assistance and uncertainty about recognising and managing complications. "Over the last few years there is increasing use of remote monitoring internationally in automated peritoneal dialysis (APD), but little is known about its acceptability by patients and caregivers. We aimed to describe patients' and caregivers' expectations and experiences of remote monitoring for APD," says Rachael. "The dialysis information is transferred to the nurse's desk the next morning, so instead of waiting for the patients to detect problems or potential problems with their dialysis, the nurse can remotely monitor their dialysis and if there are any issues and better support patients and their caregivers."

Using a qualitative study design, the researchers carried out semi-structured face-to-face interviews of patients who either were receiving PD or were considered eligible for PD, and their caregivers. Transcripts were analysed using thematic analysis. Of the 34 participants, 27 were patients and the remainder caregivers. The study found that remote monitoring may increase patient knowledge about their kidney disease and its treatment, encourage shared decision-making with the clinical team, enhance partnerships with clinicians, and improve access to treatment and timely care.

Rachael says another key point was that patients did not want remote monitoring to replace face-to-face clinical contact with clinicians and saw the advantages of remote monitoring is it is complementary to usual care. This is particularly important in light of the challenges that COVID-19 has posed for people who are dialysing at home and trying to isolate. "The perceptions of remote monitoring from the patient and caregiver perspective in this study were predominantly positive and concluded that remote monitoring has a number of advantages to outcomes and feeling supported on home dialysis." Rachael says that while there were some issues with patients living rurally and not having good internet access, on the whole patients felt that they were



Associate Professor Rachael Walker, Senior Nursing Lecturer in EIT's School of Nursing

getting more attention. “Instead of waiting for their three-monthly visit – and a lot can happen in three months – they now have some peace of mind that their progress is being monitored.”

Another study aims to describe clinicians’ perspectives and experiences of remote monitoring in caring for patients on PD. “We conducted interviews with nephrologists and dialysis nurses across nine dialysis units in New Zealand who had experience using remote monitoring with patients on APD. Interviews were transcribed and analysed using thematic analysis,” Rachael says. Thirteen registered nurses and 12 nephrologists or nephrologists-in-training participated. The researchers found that remote monitoring was valued by clinicians in promoting and maintaining patients on PD and enabling data-driven decisions.

However, while the clinicians felt remote monitoring enhanced patient-focused care, they also emphasised the need to protect patient privacy and establish boundaries for use. “Remote monitoring that supports the clinicians’ role and adheres to principles of data security maintains patient privacy may enhance care and outcomes for patients on PD.”

Working with Rachael in this research group were Professor Allison Tong, Principal Research Fellow at the Sydney School of Public Health, the University of Sydney; Kirsten Howard, Professor of Health Economics in the School of Public Health at the University of Sydney; Professor Suetonia Palmer, a practising kidney specialist and Professor at the University of Otago, Christchurch; and Natasha Darby, a Clinical Nurse Specialist in kidney disease.

The published articles are Patients’ and caregivers’ expectations and experiences of remote monitoring for peritoneal dialysis: A qualitative interview study; and Clinicians’ experiences with remote patient monitoring in peritoneal dialysis: A semi-structured interview study.

A population-based study, assessing the prevalence and awareness of cardiovascular disease (CVD) among a tertiary education population is currently in progress at EIT. This is the ideal institution from which to run this project as the

student population in Hawke's Bay presents a unique, diverse student population encompassing a mix of ages, socio-economic backgrounds, ethnicities and nationalities. Self-identified Māori learners make up 72 per cent of EIT Tairāwhiti students, and 43 per cent of EIT Hawke's Bay students.

The research is being conducted by **Dr Anita Jagroop-Dearing**, Senior Academic, Postgraduate Programme Coordinator of Health Science, in EIT's School of Sport and Health Science. The study aims to ascertain the knowledge and attitudes regarding CVD risk factors among tertiary education students. "Young adulthood is a life phase where the opportunities for health are great, and future patterns of adult health are established".

This study proposes to identify any gaps in students' awareness by carrying out quantitative research (anthropometric measurements) supported by qualitative data (online questionnaire) collection to capture an overall understanding of why there continues to be an elevated level of cardiovascular disease in New Zealand. "While internationally there are some studies which determine the prevalence of CVD, others which assess the knowledge of CVD, and yet others which consider a lifestyle intervention on CVD risk factors, there are currently no New Zealand studies which investigate the prevalence and awareness of CVD concurrently in a tertiary education population as we are doing in this study. As opposed to children, young adults are able to make more independent and informed choices which may therefore be on a more permanent basis. That is to say that if a young adult makes the decision to improve on their lifestyle choices, this may have longer lasting positive health effects than if a child were 'told' to make the same choice."

Anita was mindful of ethical consideration and Māori consultation before data collection commenced. Aware of privacy requirements, Anita says that participants are volunteers recruited from EIT Hawke's Bay campuses and are advised of their rights to withdraw or decline at any point of the study. "Participants will be offered a copy of any information collected from them for their own records." The process for collecting data has been put into two categories. A self-administered questionnaire, available either in hard copy or online via SurveyMonkey, or anthropometric measurements, which are collected on set 'data collection' days. The qualitative data will undergo a thematic analysis by at least two independent researchers, and then the results will be collated to identify the major emergent themes and subthemes."

Anita is hoping to have the research completed this year. "We then intend to use this study to obtain external funding which will allow young adult participants to attend focus groups and workshops alongside health professionals to assist in designing tailored interventions that they feel would work best for them. This will allow participants to 'have a say' in their own health outcome, while educating and empowering them. We believe engaging New Zealand's young adults to make positive lifestyle choices with regards to heart health, healthy eating and an active lifestyle is crucial to the health and wellbeing of New Zealand at an individual, community and national level."

The Patu Story – Rachel Forrest, Levi Armstrong

Levi Armstrong might have been destined for a life in the Mongrel Mob after being born into a gang family, but instead he has become an inspirational community leader, an academic scholar, and a researcher of note.

He also is in the unique position of studying for his Master's at the same time as his wife, **Dana Armstrong**, who, until recently has been a fulltime secondary school teacher. This is no mean feat with a young family and early starts to run fitness classes for the community. "EIT has been a big part of our life and it is great that we are able to study together," says Levi. "We've got four kids now, so it is a case of trying to balance things out. For the past four or five years, I have been waking up at a quarter past three each morning and going to the gym at four to train a group of 10 'brothers' with similar goals, before training whānau in the 6 am session in the community."

Brought up in poverty and steeped in gang culture, Levi chose to educate himself and follow his passion – fitness. He saw getting fit and bettering himself as a means to improve his life and set himself on a path for success.

Little did he realise that he would not only achieve that but would also improve the health of countless hundreds, inspire communities to get off their couches and also propel himself into an academic research environment that he would never have dreamed was possible. "Even with the research I do, I am trying to encourage whānau that have come from similar backgrounds to say: 'Hey, you know, although we have been brought up in this environment, we can take a positive approach to the wellbeing of our whānau. I was doing weights since I was 10 years old, but it kind of keeps me sane and probably saved my life in a way.'"

Levi started his tertiary education at EIT with his younger brother Junior, who now works for Sport New Zealand. "We studied together through EIT and it's been a massive achievement for us. Studying was never an option in our whānau where the expectation was to jump on the benefit and patch up. Our old man has been in the gang for over 50 years, it's a vicious cycle". With an entrepreneurial bent and some genuinely unique products, Levi had all the makings of a successful businessman as well. The fact that he wanted to stay true to his academic roots and conduct meaningful research into a community that he has grown up in, is a testament to the paths EIT provides for its researchers, be they staff or students or both.

Levi began combining his heart for the people and love of fitness with business after graduating from EIT in 2011 by developing the PATU kaupapa. PATU Aotearoa, founded in 2012, is an award-winning social enterprise that provides sustainable healthy lifestyle programmes targeting Māori and Pasifika whānau in high deprivation communities across Aotearoa. PATU programmes promote whanaungatanga – a sense of family connection – and are primarily based around group exercise activities that are interwoven with tikanga Māori.

Levi's talent has not gone unnoticed at EIT as he has progressed through years of study and research. "He is a leader, there is no doubt," says EIT's Director of Research,



Levi Armstrong & Associate Professor
Rachel Forrest

Associate Professor Jonathan Sibley, who along with others has encouraged Levi to pursue research opportunities available to him. It is a sentiment echoed by **Dr Rachel Forrest**, who has for several years been Levi's research mentor. Rachel, Levi and Dana's Masterate supervisor, and an Associate Professor from EIT's School of Nursing, has worked actively with Levi on research projects, which as with most ITP research, is community-based.

It is a research relationship that began in 2014 when EIT staff who were passionate about work that Levi was doing in the community wanted to apply for a small Health Research Council (HRC) Māori Health Development Grant to support the PATU initiative but needed an established Māori researcher as the lead. With a light-hearted tone, Rachel says she was "coerced" into joining the team. "I have a PhD in Molecular Genetics actually, so social science was very far removed from the lab-based work I used to do." "The journey started there, and I've been working with Levi ever since. I have learned a lot about qualitative research since then because as a molecular geneticist I was very quantitative in my approach." Levi and Dana, along with Rachel and a team of EIT researchers also spent five years developing the MEKE METER, a quality-of-life self-assessment instrument. The tool gets people thinking about their physical, mental and social wellbeing and allows them to track any changes to their wellbeing. This in turn empowers them to set goals and make positive changes to improve their quality of life.

Levi says they have been in the social enterprise space for several years and understand and know that they are doing community good. "We thought how do we measure that and how do we build evidence around thatō And so that's how the MEKE METER came into being." "It is a good health indicator tool because as trainers, we are not just focused on weight loss, we focus on everything and have a holistic approach to health." The development of the MEKE METER and the research into it, has formed the basis of both Levi's and Dana's thesis for a Master of Health Science. Levi has a Bachelor of Recreation and Sport from EIT while Dana gained a Bachelor in Education, majoring in Physical Education and Health and a Diploma in Teaching (conjoint) from Massey University. The MEKE METER went online last year (www.mekemeter.org) allowing people who signed up to rate how they were feeling physically, mentally and socially based on specific key indicators. During COVID-19, more than 1,000 people were regularly submitting information. Levi was able to use this data for his thesis.

Levi said that this had been a good opportunity to understand the impact that COVID-19 had on the health and wellness of New Zealanders. Rachel said that EIT supported and encouraged the Master's research approach taken by Levi and Dana as it aligned well with kaupapa Māori and EIT was committed to working alongside and nurturing the growth of researchers within local communities. "As Master's students, they were able to take ownership of the MEKE METER research which is relevant to Māori both locally and nationally as well as being of benefit to all New Zealanders."

Another product that Levi developed in conjunction with his cousin, architect Whare Timu, was the 'DOMYNIS' – a gym in a container also known as the 'POD', which can be set up anywhere for groups to use. It has all the equipment one would find in a

normal gym (and wi-fi) for Levi and his team to run PATU programmes wherever the container is placed.

Last year, EIT was awarded a post-COVID equity grant for rangahau Māori for a research project examining the impact the POD has on the wellbeing of a high-deprivation community. The EIT team consists of Rachel, Levi, Dana and Maria Pearson, along with an external researcher, Dr Fiona Cram. The grant was awarded by the HRC and is believed to be the first time that EIT has been awarded a full project grant as the host researcher by the HRC.

The EIT grant is to evaluate the M.E.K.E. (motivate, engage, connect, evolve) Initiative: Taking health and fitness to whānau. Rachel says the initiative, which is supported by the Napier City Council, brings together three kaupapa - the DOMYNIS (or POD), PATU and the MEKE METER, which were all developed by Māori for Māori.

The research began at the start of this year when the POD was set up at the Maraenui shopping centre for a few months. Before that, it had been on the Marine Parade in Napier. "So, we are treating the POD as a henaki or crayfish pot, and we're putting it in the community, and we are getting all these crayfish, kaimoana, coming and we are feeding them the right stuff." Says Levi. The aim is to eventually roll PODs out across the country.

Rachel says the HRC research in Maraenui is about capturing the voice of the community about the impact the POD is having on the wellbeing of the community. "The community-Patu-EIT research partnership will be pivotal in the evolution of this initiative, capturing its successes, identifying improvements that can be made and facilitating continued growth to better serve a predominately Māori and Pacific community." As for Levi, when he is not trying to get the wider whānau, especially the rangatahi, fit and motivated, his eyes are fixed on more academic achievements. "It's an awesome journey that we've been on and we have got to keep going. Yeah, the PhD is the next one."

Innovative Education

International students coming to New Zealand are often shocked to realise that the local academic life and practices are very different to what they are used to, an EIT research project has found. Anyone who has ever travelled abroad knows that feeling of uncertainty, but if you add the purpose of study to the mix, it is not a stretch to imagine the anxiety levels increasing.

It is not too difficult for most to envisage life without family support, everyday comforts and the pressure of academic expectations. New Zealand may be a great place to study, but coming from abroad, often from a country where English is not the mother tongue, can leave a student struggling to keep up academically. EIT's leading researcher of international students, Dr Pii-Tuulia Nikula and EIT's Research Director Associate Professor Jonathan Sibley embarked on research called Supporting international students' academic acculturation and sense of academic self-efficacy, which was published last year in *Transitions: Journal of Transient Migration*.

The article evaluated the perceptions of international students, at graduate and postgraduate level, of their home and host environments. It also explored the benefits of international students being offered an academic preparation course to support their sense of academic self-efficacy. "Institutions have really focused on social support services, and helping international students to find an accommodation, or open a bank account, and so on. But there has been this thinking that the academic acculturation is



Dr Pii-Tuulia Nikula

the students' responsibility. This research is about how the acculturation can be more two-directional, where institutions also try to provide more support and demystify a lot of these academic practices," says Pii-Tuulia, who is also EIT's researcher development manager. She says the study used quantitative surveys, including a pre-post design with a control group, to collect data. It found that for many students, there were notable differences between the academic environment they came from in their own country and the one they came to in New Zealand. The students' sense of academic self-efficacy also tended to reduce when they began their academic journey in this country.

Pii-Tuulia and Jonathan wrote that this decline could be minimised if the students participated in an academic preparation course. "Hence, the academic adjustment of international students should be increasingly perceived as a joint responsibility of both students and education providers, highlighting the need for institutional adjustments in a form of relevant academic support services," they wrote. Pii-Tuulia says although the research was done pre-COVID-19, she did not believe the pandemic would have influenced the findings as the study was about academic acculturation.

However, with New Zealand's borders currently closed due to COVID-19, she believes that institutions could use the time to plan for when international students return. "It is time to have good think about what our academic support services should look like and how can we make sure that all the international students that come here have the opportunity to do as well as they can when they actually arrive." Last year also saw Pii-Tuulia continue her ongoing research into agent-based international student recruitment. An article she wrote, *Education agent standards in Australia and New Zealand – government's role in agent-based international student recruitment*, was published in the journal, *Studies in Higher Education*, in August.

The article was based on research that evaluated the longitudinal development of Australian and New Zealand education agent standards and other government regulation by analysing legislation, policy and other documents. "I looked at both governments' roles in regulating or directing the industry, since the very early days, in the 1990s, until now. Then, looking at how does it align with the industry best practices? What are some of the strengths and differences between Australia and New Zealand? As well as some of the limitations that exist."

The study found that both countries had, over time, adopted a more active principal role, seeking to steer and control education providers' engagement with education agents, predominantly through legislation. "It is quite clear that they have become much stricter in terms of content. The government is using a lot of legislation, but also information steering to try to drive institutions' behaviours. Because many of the agents are based offshore, the government has limited jurisdiction to actually do anything about the agents. Their legislation is for providers to follow." The current agent standards contain a wide array of requirements for education providers to fulfil. "However, there are a number of limitations that diminish a government's ability to mitigate providers' opportunistic behaviour and protect international students."

An ITP-wide peer-mentoring programme for international students has been expanded from a successful initiative by EIT at its Auckland campus. The original scheme was the brainchild of **Dr Dobrila Lopez**, Principal Lecturer, Information



Dr Dobrila Lopez, School of Computing.

Technology at EIT's Auckland campus. Concerned with the welfare of students from a range of countries, including India, China, Vietnam, Philippines, Russia and Ukraine, Dobrila started the programme in 2018 to help first year students settle into their new lives. It was an intuitive move that helped students at the time, but also resulted in a slew of research data that would lead to the Ministry of Education providing Dobrila and EIT a grant to develop a model for all ITPs to use. The seeds of a very good idea, which have provided support and comfort to many foreign students at the Auckland campus, are now sprouting into effective programmes to deal with international students across the ITP network.

To say that Dobrila is thrilled by the progress, despite COVID-19 challenges, is an understatement. Her commitment to helping students is now creating a template for other ITPs to ensure that students are able to be in an environment where they can concentrate on their studies and have a healthy social life. The EIT study found that studying in another country with the lack of an established support network and cultural differences in day-to-day life can leave a student feeling vulnerable. A significant key to the success of the project was to recruit successful candidates of the scheme to be mentors for new students. Not only were they in a more settled space, but they knew what the new students were going through and could provide comfort, guidance and advice on where to access support from EIT's structures.

The Ministry of Education project saw Dobrila and her research team invite all Institutes of Technology and Polytechnics (ITPs) to work collaboratively to develop this pilot initiative into a sector-wide programme, based on initial learnings, student initiatives and the experiences of other ITPs. The collaborative peer-mentoring group was established in June 2020 and included participants from NMIT, Unitec, MIT, UCOL, WITT, Ara, Toi Ohomai, SIT and EIT. Dobrila says she is proud that the model chosen by the ITPs is the one that has been such a success at EIT. Some changes will be made to the programme after feedback from participants. Industry mentors have been included and will be available for international students to answer questions relating to getting jobs and other information.

Another change is that students wanted to be given an introduction to New Zealand and, in particular, Māori, culture. "Overwhelmingly, the students wanted to learn more about te ao Māori. One student said that his child was getting an introduction to Māori culture in his school, but 'I know nothing about it'. These are two very important elements that we are going to add to the programme," She says.

All participants attended two official hui. One was online as result of COVID-19 lockdown in June and the other face-to-face in December 2020 at Auckland Campus. Dobrila says the first hui presented the model that has been used successfully at EIT and using this as a starting point, collaboratively developed a shared model based on further needs identified by participants. "After the initial face-to-face meeting, ongoing collaboration was established by email and regular weekly teleconferencing. A second face-to-face hui was held in Auckland." She says it presented the final model and established a plan to roll out the shared model in the first half of 2021 across multiple ITP campuses. In addition, this final hui identified the need for training of the participants in coordinating the peer-mentoring programme in their institution.

The model for evaluation has been implemented, in addition to EIT's Auckland and Hawke's Bay campuses, in Toi Ohomai and the Southern Institute of Technology. The evaluation uses a mixed method approach. Focus groups are used to collect perceptions of mentors from all subsidiaries and questionnaires to collect perceptions of mentees. The data collection was due to be finished by the end of this semester. The final report to the Ministry of Education is set to be submitted by the end of June 2021. This research has been already published in four peer-reviewed conferences and will be published in a book that will present case studies of mentoring programmes in NZ.

Dobrila says that as a result of COVID-19, some international students have been studying online and needed support. "We have 29 students online that are being supported and the mentors are in regular contact with them." The students come from all around the world, including United Arab Emirates, Brazil, India, China and the Philippines. Initially this did make it difficult for mentors to have group sessions with the mentees, so they were put into groups according to their time zones, which has worked very well. Dobrila says the sample is small, but she has found that if there is an issue, it will still come through in the data collection. A study into the strength and resilience of EIT's Social Work students in the face of the COVID-19 lockdown in March and April last year highlighted that the tauira (students) were grounded in aumangea (resilience). They were also more than willing to make changes to achieve their academic goals, despite existing life challenges.

Another study, written as a situation report, was conducted by Social Work lecturers **Raema Merchant**, who is based on the Hawke's Bay campus, and **Rehia Whaanga**, who teaches at Tairāwhiti. The project evolved as the COVID-19 Level 4 lockdown announced by the government, forced them, along with all other tertiary institutions, to move their teaching online.

The two lecturers taught several classes together online and the idea for the research came about after they had settled into teaching in the new way. "We focused a bit on one particular course and how we could maintain the relationship that we have with those students, but in the online space. Face-to-face (kanohi ki te kanohi) works



*Raema Merchant & Rehia Whaanga,
Social Work lecturers*

well with these students, so we tried to maintain that type of relationship via Zoom,” says Rehia. “It took a little bit of settling into, but the students did some really awesome mahi during that period of time.”

A focus of the situational report was the realities for the students of a move to online learning. It was important for the lecturers to assess that the students had what they needed to continue to study online. “If we look at the basic tools that we may have, not all the students had that – access to the internet, laptops to be able to do their work. Those were essential things that we needed to make sure that the students had,” Rehia said.

Raema says it was important to establish what the home environments of students were like. “We worked out that something like 73 per cent of them were in the fourth and fifth quintiles of the Social Deprivation Index, which means that they didn’t have access to computers, so didn’t have access to reliable internet. They were also more likely to be renting, more likely to be sole parents.”

Rehia says that even before COVID-19 struck, many of the students were used to dealing with multiple responsibilities and challenges every day. “Our taura capacity to cope with COVID was quite high and it almost became a strength in that situation. A lot of taura are used to not having a lot of resources, they are used to juggling a lot of different responsibilities with the whānau at home as well.” Both researchers say that the main characteristic that came through in themselves and their students was resilience. “It was definitely aumangea (resilience). We found these terms that expressed the qualities in the relationships. The reason we went down this pathway was because the particular course we were teaching on at the time was a Tiriti based course called Tiriti in Action,” said Rehia. “A lot of what we teach them and learn in that particular course explores different capacities, so it seemed to be the way to go.”

The course, says Raema, focused on the six capacities of whānau wellbeing developed by Professor Sir Mason Durie and they were able to use these principles as part of their research. “We were having discussions with them every week in the class about these concepts of wellbeing and they were relating it to themselves. And then we noticed that the resilience that they were showing came across in the ways that they were interacting within the class.” “For instance, a lot of them started off Zoom sessions without a camera and wouldn’t come anywhere near a camera. By the end, they were all participating and showing themselves,” said Raema.

Other observations were that classes were able to become more flexible to cater for very different contexts. Babies, children and pets appeared in Zoom classes. Some taura struggled to find a space in a crowded home to attend class, with one student solving the problem by setting up a small tent outside to sit in for classes.

The students also responded well to flexibility around assessments. “This included online presentations, and demonstrations of practice skills when the social worker is unable to be in the same room as the client. Deadlines could be flexible when appropriate to cater for individual circumstances. Whanaungatanga enabled us to build stronger and reciprocal relationships with taura across both campuses, supported by manaakitanga and kotahitanga,” the researchers say.

Another learning from the rāhui was an identified need for increased pastoral care and wellbeing support for tauira. Not all tauira were able to continue their study. Four Māori tauira withdrew from the degree during the rāhui. Two of these were in their final years of study. For these tauira this decision was not made lightly and was indicative of the multiple and complex life challenges faced by them at this time of uncertainty and change.”

The lecturers say that the COVID-19 pandemic has shown that there can be change and evolution in the teaching platform. “We have learned new ways to teach, communicate and function in a way that is transformative in the academic setting. A return to pre-COVID-19 academia may be a step backwards. In our experience, the pandemic has demonstrated that people can adjust and change. It is possible to redefine and re-prioritise what is important to teach, and how best this can be achieved. We need the team of institutional governance, fellow kaiako (lecturers), and tauira to fully focus on what is most important: to provide an ethically sound and robust learning experience to enable tauira to become resilient and strong social workers.” The situation report is set to be published in Mai Journal soon.

Meanwhile research is underway to understand how spending time in an outdoor learning space can lead to the development of positive attitudes toward, and knowledge of, nature-connectedness for students and teachers.

The collaborative research project, called ‘Learning in Nature’, began last year when EIT teamed up with University of Waikato researchers and La Trobe University, Melbourne, to actively explore education and nature connectivity.

The focus of the research is on how schools and the local community use the Ōtātara Outdoor Learning Centre, an active living outdoor laboratory on EIT’s Hawke’s Bay campus below the Ōtātara Pā and the meaning they bring to their experiences in the space.

The Ōtātara Outdoor Learning Centre is an innovative collaboration between EIT, local Indigenous hapū (Ngāti Parau), central and local government agencies (Te Papa Atawhai/Department of Conservation, Hawke’s Bay Regional Council), and local environmental groups that include Predator Free HB, and EnviroSchools. Funding for this initiative was provided by the Air New Zealand Environment Trust which remains a partner in the project.

Dr Emily Nelson, who is EIT’s Programme Coordinator of the Bachelor of Teaching (Primary), is co-leading the Learning in Nature project with Professor Bronwen Cowie, Associate Dean of Research at the University of Waikato. Associate Professor Craig Deed, from La Trobe University in Melbourne, is an international advisor to the project. “As researchers we are trying to get a sense of the diverse use of the outdoor space to help gain an understanding of the values prioritised by the different user groups,” says Emily. “The rationale for conducting this research is that if we are in the business of educating and developing new teachers through our early childhood and primary degree programmes, we want to ensure that we are aligning their learning with current thinking in relation to the context in which learning is taking place. The outdoor learning environment provides us with an opportunity to understand how this learning environment is used, barriers to use and what needs to be considered if these are to be overcome.”

*Dr Emily Nelson, Programme Coordinator,
Bachelor of Teaching Primary.*



The first phase of the research saw interviews being held with lecturers, management and anyone involved with the development of the outdoor space. “We questioned them on why they were interested in the space, why nature was important to them and how they saw it fitting in to their work.” The perceived benefits were that it was promoting eco-consciousness, place-based education was connecting with the space and student teachers were getting regular exposure to outdoor education, she said.

Phase two of the project has seen it move from the participants’ starting point to an investigation into how people are using the space, using a photo voice approach. Participants in the project in 2020 included staff and students from EIT’s Education and Primary Industries faculties as well as a local primary school supported in the space by Predator Free Hawke’s Bay. A new 2021 wave of data generation is planned to capture use of the space by a broader selection of EIT programmes and repeat visits by some of the 2020 user groups.

The user groups are invited to take photos that represent their valued experiences, learning and nature-connectedness with regards to their time at the centre. Each participant speaks about their photos, why they took them, what they mean and what it was like learning in nature. “The research is being done as a developmental evaluation and aims to show how the project to develop the Ōtātara Outdoor Learning Centre has taken life over time,” Emily says. “The research outcome is to document how the site is being used and to explore the benefits people gain from using the site in terms of nature-connectedness.” The work is scheduled to be showcased at an exhibition at the outdoor centre beginning on 19 August this year.

COVID-19 affected most people’s lives, but for the staff of EIT’s Te Ūranga Waka and Te Whatukura, it also gave them more time to immerse themselves in their research. **Pareputiputi (Puti) Nuku**, Pouarataki of Te Ūranga Waka and Te Whatukura says that despite 2020 being a disrupted year, some meaningful research was done by her staff. “One of the most exciting initiatives our staff was involved in was a research project with Radio Kahungunu. This involved researching the type of language used by people who have long passed away, using their archival recordings.”



*Pareputiputi (Puti) Nuku,
Pouarataki of Te Ūranga Waka &
Te Whatukura*

Puti says the focus of the research, which was funded by Ngā Pae o te Māramatanga (New Zealand's Māori Centre of Research Excellence) and was a collaboration between EIT and Radio Kahungunu, studied archival voice recordings of Kahungunu elders. The research was led by Dr Joe Te Rito, EIT's former Dean of the Faculty of Māori Studies, who was appointed Adjunct Associate Professor in 2019 so that he could undertake the study. Dr Te Rito is currently a Deputy Director for Ako Aotearoa (National Centre for Tertiary Teaching Excellence). Puti and senior lecturer Hiria Tumoana were also part of the research team along with other staff Pairama Wright and Jamie Nohokau.

EIT and Radio Kahungunu have a relationship that began about 32 years ago when Radio Kahungunu was a Māori student radio station at the then Hawke's Bay Polytechnic (now EIT). The aim of the research was to unlock the "vast potential" contained within the conversations of tribal elders. "We were looking for dialectal differences, common words that aren't used anymore and things like that." Puti says it was hoped that these recordings will strengthen the oral skills of people learning the language by providing concentrated "high-quality", spoken Māori on an ongoing basis.

Almost 60 recordings were listened to and were all transcribed and made into a talking book. The research has also been presented at a community hui and reporting back to Ngā Pae o te Māramatanga in November last year. Meanwhile another member of Puti's staff, Pētera Hakiwai, a kaiwhakaako at Te Ūranga Waka, was involved in the launch of a translated te reo Māori website and chatbox designed to help reduce the barriers Māori communities often face when accessing mental health services.

Clearhead, a Kiwi digital mental health company, worked in partnership with nib New Zealand and nib foundation to launch the services in Te Wiki o te Reo Māori (Māori Language Week) last year. Clearhead said that Māori populations are consistently over-represented in New Zealand's suicide statistics, are twice as likely to experience mental health issues compared to non-Māori, and 1.5 times as likely to report experiencing anxiety or depression.

In a press release announcing the launch last year, Pētera, who was integral in making the te reo Māori platform operational, said Māori are very private when it comes to their health and wellbeing. "It's critical that they have access to suitable support services and so having a digital, private and culturally appropriate offering available in te reo Māori is encouraging and can be really empowering," he says.

Pētera was also involved in another project with a fellow Kaiwhakaako at Te Ūranga Waka, Parekura Rohe-Belmont, where they were asked to teach at the Te Kura Reo ā-Iwi o Ngāti Kahungunu 2020, which was a week-long total immersion wānanga for speakers of medium to high levels of fluency. "This is a real honour as they were part of a team of six people chosen from experts of te reo Māori across the country," says Puti. The event, which was held at EIT in October last year was changed to accommodate social distancing as a result of COVID-19. Six teachers, including the two from EIT, were used and attendance was restricted to 100 people.

Another initiative that Pētera participated in was Reo Māori SongHubs, a collaborative songwriting wānanga, bringing together experts in music creation and waiata reo Māori to further the development of a bi-lingual music industry. The event

took place at Waimārama Marae from Monday 16 November to Friday 20 November 2020. The curator of the programme was producer/collaborator Joel Little, while pre-eminent mātanga reo/language specialist and songwriter Sir Timoti Kāretu was the reo curator. Pētera and four other mātanga reo/songwriters, Jeremy Tātere MacLeod, Leon Te Heketō Blake, Te Kuru o te Marama Dewes, and Ruth Smith guided and assisted with the sessions.

The songwriters present were Bic Runga, Diaz Grimm, Kings, Louis Baker, Maisey Rika, Matiu Walters, Reuben Fleetwood, Seth Haapu, Theia and Vayne, while the producers were Brandon Haru, Rory Noble, Liam Conrad aka Stuss, Te Whiti Warbrick aka SickDrumz and Sam Taylor.

Hiria Tumoana, a Senior Lecturer at Te Ūranga Waka, was also involved in a long-running research project for the Hawke's Bay Emergency Management Group. Rūaumoko's Walk was a dual language large format storybook for early childhood, to teach children about earthquake and tsunami, as told through traditional Māori oral narrative. Printed in 2014, the authors were Rawiri Andrews and James Graham, with Hiria as an additional content writer. In 2019, further design and development saw it become a fully animated and interactive digital book as part of a QuakeCoRE project. This was completed in September last year.

Profile of Kay Morris Matthews

Growing EIT's research output and establishing its reputation as a research institution has been a focus for Professor Kay Morris Matthews over the past 14 years. In relation to her own work, she has two passions – academic research and highlighting the achievements of extraordinary women through the ages.

The Research Professor will retire from EIT in July 2021 content with the high quality and wide-ranging research being produced by academic staff. An indication of the respect EIT's research has is the calibre of top researchers who work there now. "When I first arrived here, there were only two or three staff who had their doctorates, now every degree teaching school has a number of them," says Kay.

Research has been an important part of her career and part of her legacy at EIT where she was the inaugural Research Professor in what is now the Faculty of Education, Humanities and Social Sciences. Along with Professor Bob Marshall, then the Research Professor in the Faculty of Health Science, Kay has played a major role in mentoring staff members starting out on their research journey. "It was a big shift for quite a few of the academic staff because they'd been used to seeing teaching as their work life, but we came along and told them they were expected to produce some research outputs. My initial work was enabling colleagues to finish higher degrees and then to publish, which involved a lot of mentoring and encouraging. I was also actively recruiting researchers to join the staff as positions came up."

One of the biggest gains for EIT was Māori and Indigenous Research Professor David Tipene-Leach, who joined EIT in early 2017. Kay says leading international researchers like David have raised the profile of EIT. As importantly for the future, however, are the numbers of talented young researchers who have been hired.



Dr Kay Morris Matthews

She says it took about seven to eight years to grow a sufficient body of research-active staff across the schools. “We did a lot of establishment work by wrapping structures and support around them by instituting research grants, study leave for people to undertake research, induction sessions and workshops on all aspects of research.” Kay worked closely with Prof Marshall to establish EIT’s Research Centre in 2016.

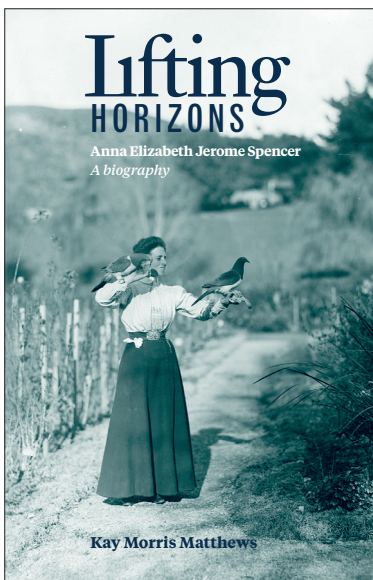
Current director of the centre Dr Jonathan Sibley says: “Kay was instrumental in the establishment and growth of our research capability and research governance at EIT. She has played a tremendous role in mentoring young researchers and this legacy will continue for a long time. Her experience and wisdom have been invaluable to the development of our research culture.”

Kay’s tenure at EIT is the longest at any of the New Zealand tertiary institutions she has worked at and it was family that brought her home in the first place. “I grew up in Hawke’s Bay and my parents were living in Napier at the time, but their health was failing. When I saw the job advertised, I thought ‘I wonder what a Research Professor at EIT will do?’” At that time Kay had a demanding job as Professor of Education and Head of the School of Education Studies at Victoria University of Wellington. “I had led the university side of the merger with the College of Education, and it was a very challenging process, but we did it. I began to think about what I could do next because I have not been a teacher educator and I could not see myself as a senior university administrator for the rest of my career.”

It was a conversation with Bob that clinched the deal for Kay. “Bob had come from the University of Auckland where he had been Head of School, so he was able to tell me how he made the transition. The key thing for him was that there was less stress, and the role here provided an opportunity to forge something new and creative. What he said that day was pivotal.” It was a good hire for EIT because Kay had by then built up quite a formidable CV. She achieved a Bachelor of Education from the University of Waikato in Hamilton in 1982, with a Master of Education (Honours) following in 1984 and then a doctorate in Education in 1993. She began her academic career in 1986 as a lecturer in Women’s Studies at the University of Waikato, where she remained for six years. After a four-year stint as a lecturer in Education at the University of Auckland, Kay moved to Victoria University of Wellington in 1998. But it is her research outputs and the many books, chapters and journal articles she has written that have given her international recognition as an expert in her fields, particularly history of education and education policy, over thirty years.

Since 2008 she has authored six books (one of these is a second edition) on topics ranging from a history of women’s higher education, to New Zealand women’s overseas service in World War One, to EIT’s forty years of higher education, and to childhoods in Hawke’s Bay Children’s Homes. A particular focus of hers has also been women and feminism— either studying the achievements of women or mentoring young academics and researchers.

Her latest book, which was published in February this year, is called *Lifting Horizons*: a biography of Anna Elizabeth Jerome Spencer. Jerome Spencer, known to friends and family as Bessie, was the founder of the New Zealand Women’s Institutes and a former Headmistress of Napier Girls’ High School. Kay also co-curated an exhibition “For Home



and Country: Women's Institutes in Hawke's Bay", which commemorates the 100th anniversary of the first meeting of a Women's Institute in Rissington. The exhibition will be on display at the MTG Hawke's Bay in Napier. A date for the exhibition will be announced once remedial work on the MTG building is completed.

Along with David Tipene-Leach, Kay co-led an EIT research team evaluating the Ngātahi Project, based at the Hawke's Bay District Health Board (HBDHB) and designed to grow the professional skills (competencies) of practitioners who work with children who have significant health, social and learning challenges. For Kay it has always been about the research, which is at the cutting edge of academic life for her. "It's about a passion for creating new knowledge and over the years I have done a lot of research, but what I always try to do is marry my own personal interests and philosophies around social justice, feminism and equity. I always used to say to my postgraduate students don't even start on a project unless you're passionate about it because you won't be able to sustain it for the length of time it will take you to generate the outputs at the end."

Her brief has been wide-ranging with EIT Chief Executive Chris Collins telling her when she began at EIT that research of use and of benefit to the community/region was paramount. "And that's where that philosophy comes from. All the external research grants won have been community-based. The research has mainly been around vulnerable children, education and health and wellbeing. Many of these community-based projects have also had national significance." She believes that the support from EIT has been crucial, where she says the strong message from the CEO and senior management is that research is valued. She says the Executive Dean Professor Natalie Waran has also accelerated the focus on research.

While she may be moving on from EIT, some may say that her retirement won't look much different from her career, with research still playing a major role. "I will be a volunteer at the MTG Hawke's Bay, where I will be researcher in residence. I will sit alongside them and help them with whatever I can."

Creativity and Curation

A prestigious Judith Binney Writing Award has ensured that a significant EIT research project seeking to preserve historical Hawke's Bay Māori manuscripts can continue. Research Professor David Tipene-Leach and Te Reo Māori researcher and Twist Library archivist, Waitangi Teepea, won the award, which is given by the Judith Binney Trust to support research and writing on New Zealand history. Judith Binney was a renowned New Zealand historian.

Made in December last year, the award will support the next phase of the project around the Henare Matua manuscripts collection of more than 1000 letters written between 1860 and 1890 in the Māori language of the mid-1800s. Work on it began in late 2019 and extended through 2020 with the archiving and cataloguing of the collection. The project has received a six-month extension of funding from Ngā Pae o Te Māramatanga. In July this year, the Judith Binney funding will see the emphasis move from the archiving of the collection to the collation of the collections data into a record of Repudiation Movement correspondence, a reconstruction of its activities in the face of the hardships of the times.



The documents in the collection represent a forgotten period in Hawke's Bay history. Henare Matua was the leader of the Hawke's Bay 'Komiti', which was based around several mid to late-19th century rangatira in the area who banded together to both prevent land sales and overturn land sales that were clandestine, fraudulent and damaging to local hapū. The group went to court to "repudiate" some of those land sales and as a result, local landowners called them the Repudiation Movement, says David. What sparked David's interest is a personal connection - Henare Matua was his great, great grandfather's oldest brother. "Our family has had these hundreds of letters written to our tipuna Henare, and they have been passed down through the generations since the 1860s. I have personally known about them for about 30 years."

He obtained various parts of the collection which includes whakapapa books, journals, newspapers and business records, from an aunt and two uncles who knew he had an interest in the family history. The letters in particular, spent some considerable time in what became known the 'black chest' in a spare room of his grandfather's and then aunt's home and are a part of the family legacy. Waitangi, with previous archival experience, has catalogued and transcribed over 800 letters written to this tipuna and others of the "Komiti".

This award will allow Waitangi and David to move to the next phase of the project – using these manuscripts to illustrate the challenges of the mid-1800s land grab by colonial authorities and local leaseholders. "Waitangi has all the qualifications of a marvellous archivist and reader-transcriber. I'm very much expecting similar levels of talent as we move to historical analysis and writing." The plan is to write a book on Henare Matua and the Repudiation Movement.

David's work to preserve the Repudiation Paper saw him approach local historian, Pat Parsons, who has been working on a collection with the Blake whānau, whose tipuna was John Thomas Blake. A Māori Land Court translator, Blake kept two records of the cases he translated – one for the judge and the other for his personal collection. The Hawke's Bay collection was split in three bits – some in the Hastings Library, some deposited with Pat by the Blake family – and many pieces are still in the wider Blake family. David said both he and Pat believe that collections of such historic importance could well be made more accessible and therefore useful to the wider community.

David felt it was important to start work on the Repudiation Papers translation project, while another short-term task was to get the Blake Collection back together. A longer-term project, which has not begun yet, is to set up an archive where historic documents like these can be preserved, stored and used by students and history scholars. "There were three things we have been trying to do - archive our collections, digitalise our collections and create a way for other whānau to be able to archive their own collections." David says the creation of an archive was facing some obstacles because of the costs involved. Significant funding is required for such a venture and David is hoping that there will be movement on the project next year. All eyes are presently focussed on the development of the Hawke's Bay Archives and the potential role of that development for Māori. In the meantime, the extra funding received will ensure a pivotal part of Hawke's Bay history is preserved and cherished.



*Professor Matthew Marshall,
Head of IDEASchool*

COVID-19 may have prevented classical guitarist **Professor Matthew Marshall** from performing concerts around the world, but it gave the head of EIT's IDEASchool time to produce two albums and publish five music books during lockdown.

Matthew performed in January 2020, but a festival planned in Serbia for July was postponed until this year and is likely to be put off again. Matthew says lockdown enabled him to add to his list of composers who publish with him and also to release two albums from previously recorded music. "It was a really productive time during lockdown because I was able to work on my music editing and published five edited music books, which featured music by New Zealand composers. And then we also edited and produced two albums, both of which were recorded in previous years, but we pulled them together in 2020."

The first album was *Fragments*, which saw Matthew selected as a finalist in the Best Classical Artist category in the 2020 Aotearoa Music Awards. The awards ceremony was held in Auckland in November last year and was an experience that he enjoyed. "It was really good. I had been surprised that it was nominated because it is music from the 90s, but I had such fun going up to Auckland for the awards." *Fragments* is, in Matthew's own words, 'slightly unusual' as it is music, he recorded for Radio New Zealand in their (now-demolished) studios in Wellington between 1993 and 1995. "Those recordings were just laying in the radio archives since then and occasionally they'd drag them out in a broadcast, but not very frequently. I negotiated with them to release those recordings to me and put them on this album through Rattle Records. It was really a celebration of Radio New Zealand's engineers and producers, because for each recording, I had a different producer or a different engineer."

Matthew says the timing of the album was very interesting because it came when Radio New Zealand courted controversy by threatening to take the popular Concert FM off air. A public revolt prevented this happening, but it did give Matthew some publicity for his album, which came out as the dust was settling. Matthew, who first began recording for Radio New Zealand when he was seventeen, is saddened that many recordings in the archive have gone, but he was grateful that Radio New Zealand agreed to give him the compositions featured on *Fragments*.

If he did not have enough on his plate, Matthew also released his second album, *Brighter than Blue*, at the end of the year. This album is a snapshot of Matthew's life before COVID-19 gripped the world, as it consists of music that he recorded in different places. "Some parts were recorded in New Jersey in America, some parts were recorded in Lismore, Australia and other parts were recorded in Dunedin." Based on studio recordings, the whole album features chamber music played by Matthew and other musicians. "The idea behind it was that I would learn this repertoire and play it with my friends and colleagues who lived in different places, in different recording studios with different recording engineers who recorded us in different places."

Matthew enlisted the help of Steve Garden, the owner of Rattle Records, to edit all the music into an album. It features Matthew on classical guitar with, for different recordings, a violin, a flute, a cello, or a guitar with narrators reading poetry by celebrated New Zealand poets Alistair Te Ariki Campbell and his wife Meg Campbell.



The narrators were Dame Kate Harcourt and Sir Jon Trimmer, with the music for those tracks by Christchurch composer Philip Norman. “The album is basically chamber music for guitar by three New Zealand composers, and none of it has been recorded before. Of the three composers, Philip Norman has the biggest contribution to what I think is a very nice album.”

After the disappointment of missing out on the festival in Serbia and other venues around the world, Matthew was finally able to get out on the road in December last year, performing three “gigs” at small venues in Picton, Blenheim and Nelson. “That was awesome. It was really great to be out on the road again.” While he had missed performing live because of the coronavirus, Matthew participated in online performances, which he enjoyed but admits is “not the same as being in a room of 300 people”. One of them was organised by the Hastings District Council and featured local artists and musicians. Each person recorded their portion in their own homes, and it was then edited together and broadcast online. “I also did a couple of online videos where I collaborated with other musicians who were in different cities. For one, my friend Heleen du Plessis from Otago University filmed herself playing one part of this piece and I did the same with another part of it. During lockdown I got one of our film students to edit it all together so that it made it look like we were all in the same room at the same time. I did another one of those with my friend Campbell Ross, who lives in Brisbane. So, the fun part of lockdown was doing those sorts of collaborations.”

As for the future, rest assured that Matthew already has a couple of albums in the pipeline and a twelve-concert solo tour of New Zealand planned for July called the ‘2021 Road Trip’.

Another EIT staff member, **Erena Koopu** has built up a well-deserved reputation as an outstanding artist in Tairāwhiti and now that talent has been immortalised in a book. The book idea arose from a very successful exhibition that Erena, who is Senior Lecturer - Māori Visual Arts at Toi Houkura, EIT Tairāwhiti, had at Tairāwhiti Museum in Gisborne in 2018. The exhibition, *Hei Ō Mō Apanui*, was based on the lyrics for kapa haka performances by composer Rikirangi Gage. She tried to portray the wairua (spirit)



Erena Koopu work entitled Korotangi

of the songs in her art works. “Rikirangi’s one of our main tohunga in our iwi and just the wealth of knowledge. He also composes songs for Te Whānau-a-Apanui kapa haka, who are one of the top Matatini teams.”

The book, with the same title, features 27 pieces of work from the exhibition, which are based on 27 songs by Gage. It was published in June last year. “So, I always knew I wanted something out of that show, because I think it was a really amazing show. I knew that it couldn’t just last six weeks on a wall in the museum in Gisborne. Not that that was a bad thing, it’s a beautiful museum. But I knew that it had to last longer than that, especially the kōrero, the content of the songs in the paintings. For me, it was really important to put something like that in print so that kids from our iwi can see because the songs are all based on kaupapa from our iwi.”

The feature of the book is the photographs, which were professionally taken of the exhibition in 2018. Each photo has a small explanation in both Māori and English. “All I really did was put it all together, but I knew that I needed to get it in print so that it lasts longer than the exhibition. I am very happy with the final product.” Erena received an internal grant from EIT to print the book.

Another project that “fell out of the sky” was the work that Erena did with her friend Maisey Rika, a renowned Māori singer/songwriter. “Maisey’s pretty much the Queen of Māori music at the moment and she is pretty amazing. We grew up together. I dropped the book off at her house and she rang me the next day and said, ‘I want a book. I want a book.’”

The reason for the book was the fact that Maisey had somehow managed to record a whole new album in her spare bedroom during lockdown. “She recorded this absolutely amazing album based on Matariki. Over the last five or 10 years, there’s been this huge kind of revival and revitalisation of the stories of Matariki. She started reading about it. Anyway, long story short, wrote an album inspired by Rangi Matamua who is the main Matariki astronomy modeler.”

Erena says Maisey told her that she wanted a book “exactly like yours”. This started the friends on a journey that ended up with a show at the Tairāwhiti Arts Festival in October last year. “One of our other good friends, Tama Waipara, who is also a singer/songwriter, is also the director of the Tairāwhiti Arts Festival. Anyway, he got a whiff of what we were doing and asked us if we wanted to open the show. We jumped at the idea even though we only had three months to prepare and Maisey hadn’t even released the album yet.”

Erena says they both got to work quickly, with Maisey finishing her album and Erena beginning the process of painting the album. “I gave myself about 10 weeks to paint her album - 10 songs in 10 weeks. I painted it in about five.” Before they knew it, they were opening the festival and exhibiting the works at the War Memorial Theatre. Maisey performed, surrounded by Erena’s work. “The big challenge for me was that the space we had did not have any walls near it. The works were not hung on walls but were suspended from the ceiling. It was just a challenge for me because my comfort zone is the walls and it just meant that I had to work with other people to help me figure out the technical aspects of hanging them from the ceiling.”

Buoyed by the success of the show, Erena and Maisey decided to take it on the road. The plan was to have a show in Whakatane in July this year to coincide with Matariki. The book was scheduled to be launched at the same time. “The Matariki book will have a little bit more content in it. It’ll probably have the lyrics to Maisey’s songs. It’ll have an explanation of each star and profiles on each song’s composer.”

Last year was not without its hiccups for Erena, COVID-19 caused the cancellation of an exhibition called He Kirimaaku, which was supposed to be held at Arts Post, Waikato Museum in late May. The inspiration for the show had been a renowned Waikato composer, Kirimaaku Kihi, who is well known in Māori creative and cultural circles but was also Erena’s teacher and an “inspirational woman”. Erena had taken Kirimaaku’s music and used it as an expression of art to create twelve pieces of work. But instead of being shown, the works sat in storage until a new date was set for February this year. “It was really frustrating too, because when I finish a show, I just want it to be exhibited, and my mind was set on when it was going to be exhibited. Then it was like all of a sudden I had a whole show going nowhere.”

In hindsight, that turned out to be a good thing as it gave Erena an opportunity to look at the work with a fresh eye. “I think that between lockdown and now, my style evolved, so I could see places where I could improve the works. When you’re actively creating all the time, you improve and you get better, and you change a little bit. The works would have been a year old, so I just got on to them and changed them a bit.” For Erena, the exhibition was important because it had allowed her the opportunity to present the exhibits to Kirimaaku and to the people in “celebration of her life”. With another successful exhibition under her belt, Erena has a new goal in mind – a PhD.

A painted mokomōkai depicting the preserved head of coloniser Governor George Grey wrapped in a tino rangatiratanga flag was part of a piece of artwork commissioned by the Turnbull Library to commemorate 100 years of the Turnbull Collection last year.

The artist who created the work is **Melanie Tangaere-Baldwin**, who until earlier this year was a lecturer at EIT Tairāwhiti’s Toi Houkura Māori Visual Art and Design School. Before that Melanie completed a Master of Professional Practice at EIT. Known for her anti-colonial artwork, Melanie was approached by the Turnbull Library to contribute a piece to an exhibition that eventually ran at the National Portrait Gallery in Wellington for four months. The exhibition’s aim was to highlight the contemporary relevance of the Alexander Turnbull Library, 100 years after it first opened. Called *Everything Old is New Again*, the exhibition saw selections from the library’s heritage collections placed alongside recent artworks – including newly commissioned pieces.

Melanie says she was asked to choose an item from the collection to form part of her work and selected a small painting of Governor George Grey, which was about an A5 size. The reason Grey was singled out was because his name had cropped up when Melanie was working through her adult teaching course during the COVID-19 lockdown last year. The first part of the course looked at adult education in a historical context. “The devastating part of that is understanding that Māori aren’t relevant in that conversation for about a hundred years. George Grey was the person who put forward the education reform ordinance, which made English the primary language of



education in New Zealand. This was the first phase of Te Reo Māori being eradicated as a common language for our people. So, the works that I did, the major research that I did last year, was just trying to understand that in the context of my family life.”

Melanie says that she comes from a well-educated Māori family and her grandparents were fluent in te reo, but her mother’s generation wasn’t. Her own generation is mixed with the older ones not fluent, but the younger members being fluent because they went to kohanga reo. “When you get to my children – well, their first language is Māori as is my niece’s. Part of this body of work was getting my niece to write a letter to George Grey in Māori about being his worst nightmare. Then I did a portrait of her and my daughter painted with the kind of stylized version of the face of the poutokomanawa from our marae.”

Melanie says the subject of this work and others she has done on colonisation is personal to her. The fact that the opportunity of having te reo as a first language was never afforded to her because of decisions made by Grey centuries before is heart-breaking for her. “I find it really frustrating that I’m always a step behind and my children have to dumb down their language in order for me to understand it. If I can barely understand them when they speak Māori, then I am taking it really personally. I have to try to find a way to get over it because it’s quite devastating. So, creating the artwork and then putting it on public display was important to show where we come from.”

The little painting of George Grey formed a small part of the piece. Next to the painting and completely dwarfing it was an older light box which portrayed her mother’s loss of her language, te reo Māori. There was also a very big portrait of her daughter and niece. Rounding off the exhibit was the head she had created of George Grey painted in the tino rangatiratanga flag. “It’s like his decayed head was in a case

because the whole point was that my works make his image look insignificant. The size, the scale, the colour, everything, you generally didn't look at the picture of him. He should become invisible eventually." She says that sometimes she finds a process like this cathartic, but other times she simply wonders "why do I have to do this?"

For her Master's in 2019, Melanie created an exhibit called 'Whakawhetai', part of which was a response to a portrait of early colonial soldier Horatio Robley, who had a collection of over 30 mummified Māori heads. Melanie created 31 mokomōkai based on the faces of real people of the colonial past or the colonial present. She then painted the faces of the colonisers with the flags of the Indigenous people they impacted. As part of the exhibition, a video portrayed her 3-year-old daughter wearing a colonial ruffled shirt and painted with a moko from Melanie's marae, empowered by knowing language and culture, dancing nonchalantly before the mokomōkai of colonisers. "So, all of the heads that I made a long time ago to talk about those stories, those heads still exist, and I don't like having them in my life. At the end of the year, I just painted over all of the portraits I'd made of the heads and that's the catharsis of it. To just paint some kind of joy over that."

Earlier this year, Melanie opened a new gallery HOEA! dedicated to more experimental toi Māori, in the centre of Gisborne with some ex-Toihoukura students. After the exhibition at the National Portrait Gallery finished, parts of Melanie's exhibit showed at HOEA! She said that the first thing she noticed was how the audience had changed. Those who viewed her work in Wellington responded with comments like "Oh, wow, I never considered that." The difference in Gisborne is that people immediately know what her work is about. "It has made me realise that there's protest and empowerment in the same work sometimes. I sometimes worry that people think everything I make is angry, but some people think they are beautiful. So, I'm starting to understand how different audiences see the works, and that both of them are okay."

Melanie has since left EIT and is based fulltime at the new gallery, HOEA! at 67 Gladstone Road in Gisborne.

Making a film is often an intensely personal experience, but when you add in the illness and subsequent death of a collaborator and dear friend, the project takes on a whole new meaning.

Dr Bridget Sutherland, who is a Senior Lecturer, Visual Art and Design at EIT's IDEASchool, has forged a reputation as a researcher who brings passion to her projects. However, even she was not prepared for the emotional rollercoaster of watching a close friend suffer while they were in the process of collaborating on a project to document his practice.

Peter Roche is one of New Zealand's foremost performance artists. He has also worked in painting and kinetic sculpture using light and movement as his dominant medium. Roche was born in 1957, studied at ELAM School of Fine Art and embarked on a performance-based practice which evolved from the early 1990s into a primary focus on light-based sculptural installations. His public neon sculpture Coral (2000), on the Vero building in downtown Auckland, has become a much-loved landmark and Saddleblaze (2008) an extensive neon installation lighting up 110 gum trees on Alan

Gibbs' sculpture farm at Kaipara Harbour is considered his most significant light work. Known for being controversial at times, Roche made headlines with some provocative art displays over the years.

Bridget says her friendship with Roche dates back many years to when he first approached her to write the catalogue for his nationally toured exhibition 'Trophies and Emblems'. "We have been friends for years and I have always admired the edgy nature of his work. Peter and I had been talking about some kind of project for a while. He wanted it to be an experimental project really but then he suddenly got very sick." This all happened during the height of COVID-19 last year and the subsequent lockdown made the project even more difficult to do. Funding for the initial archiving project came from Creative New Zealand and Peter was equipped with a camera and sound gear to do some self-filming in his home studio.

While he did this, Bridget began the task of digitalising Peter's archive of work. "It was stage one of a project that was primarily concerned with his archive and his reflections on some of his earlier work. Because he was sick, Peter didn't manage to film a lot, but what he did manage to film, was very moving. It was sort of like his last performance really." Bridget says that despite his illness, Roche's death came as a complete shock and is something that she is still coming to terms with. "I'm just taking it one step at a time. I was so emotionally traumatised".

Stage two of the project – making the actual film – has taken on new meaning. "Hopefully, it will be an experimental archive film because that's what Peter wanted. He always stressed he wanted it to be experimental. The original proposal before Peter got sick was that it was going to be Peter in his studio working on a new piece, but also revisiting some of his early archive work. "And now I've lost him, I've lost my subject. Peter was the movie. And now Peter is gone."

Bridget says the archiving project could not have been achieved without the help of Roche's long-term partner Natasha Francois, who allowed her access to his studio and archives after his death and her friend the renowned photographer, Stuart Page.

Years ago, Roche and Natasha had moved into the old Ambassador Theatre on Pt Chevalier's main street, using it not only as a home but a space for his art as well. His archives were scattered around the theatre. "We had to search his studio and boxes and I literally found three absolute pieces of gold. These old films of his early work were in this box full of old pens and other junk. He has got some wonderfully labelled files of his archive so that was a great find. They really captured a mood of an art school (ELAM) at that time."

A significant part of the archive is the correspondence between Roche and well-known poet and writer Wystan Curnow. "The correspondence between them is about the performances and reflections on the performances. It's a very particular form of writing, it's very descriptive and wonderfully evocative." With the archiving side of the project nearly completed, Bridget has not set a timeline for finishing the movie, but she does feel a sense of urgency as a result of Roche's passing.

Helping her with the project is a team of people all very close to Peter including Gregory Burke, Wystan Curnow, Tina Barton, Jane Sutherland, Ron Brownson, Paul



Dr Mandy Rudge,
Programme Coordinator IDEASchool

Judge and Stuart Page. "I am just taking stage two one step at a time. And we'll just see how it unfolds and let Peter sort of guide us from the spirit realm or whatever." Peter Roche died on 24 July 2020, aged 63.

Dr Mandy Rudge loves to travel. When she is not embedded in her role as Senior Lecturer and Programme Coordinator at EIT's IDEASchool, Mandy enjoys nothing more than boarding a flight, preferably overseas, to soak up different cultures. As a busy professional, these interludes are a means of relaxation, but, paradoxically, are important for her creativity.

In 2020, COVID-19 closed the borders and not only curbed overseas travel, but also made it difficult to explore our own country at times. For Mandy, being in lockdown in the early part of the year was an unsettling change in routine, but to cope she turned to something comfortable and inspiring – her creative practice. Mandy says that COVID and the imposed confinement of a lockdown in March and April 2020 gave her the chance to explore a number of opportunities "I shifted my work to an online mode and learned to live physically within my immediate community, but I also experienced moments of restlessness."

Mandy says that "itchy footedness" was not limited to her, but a sentiment expressed by family and friends. Her experience, combined with her extended bubble's reality, proved to be the inspiration for another research project. The experienced academic used auto-ethnography – a technique in which a researcher reflects on their own experiences to critique and describe cultural practices, highlight relationships, acknowledge emotions and to document the unity and the uncertainty (Adams, T. 2017).

With the actual act of travel out of the question, as well as all associated experiences, Mandy was forced to look closer to home – in her own closet, to be precise. The travel bag became her focus. For the average traveller, a rectangular black box on wheels with a handle works well, but when you have creative flair, the bag is an opportunity to express oneself. "Friends and family found themselves gazing fondly at their suitcases and backpacks, leafing through their passports to catch a glimpse of their last overseas trip, camping in their own backyard and even trying on their travel gear. Some even played music and cooked food from the countries they had visited – the stories are endless."

To cut a long story short, Mandy decided to use her creativity to express these personal and collective experiences. She quickly tapped into the Solzhenitsyn quote in *The Gulag Archipelago* (1974) "Let your memory be your travel bag." Soviet dissident Aleksandr Solzhenitsyn probably meant it literally, but Mandy turned into a physical and very artistic reality.

For her, a travel bag was an eight-litre pack and a small bag for day trips. Her focus for this exercise was the day-trip bags. "As any creative knows, the act of making involves entering a zone, a space in which you can temporarily leave your thoughts behind and mentally step away from your immediate surroundings. It is a liminal place which is neither 'here' nor 'there'."

Mandy says in creating the five bags, she was able to move, mentally and creatively, away from the confines of her lockdown home and to travel, imaginatively.



“As I made each bag, I re-lived my experiences of the places I had visited and longed to visit again.” But, if you thought Mandy went out, socially-distancing permitting, and bought luxury items to decorate her bags, you would be wrong. “I am very aware of the finite resources the planet has and the significant waste the fashion industry can generate.” She says a case of “design activism” insured she created a bag with an ethical stance that focused on quality, need, action and long-term care. “In becoming a ‘user maker’ we become more engaged with ourselves, each other and the material world.”

To honour this philosophy, Mandy used materials she sourced from opshops before lockdown. “Collectively, the five bags speak of my ethics and my own aesthetic, but also of the places I have been to and can’t travel to right now. In their shape and in some of their stitches, they speak of the circularity of travel - when you are physically back home, but mentally still there.” For Mandy, the whole experience is derived from a lifetime of travel, from the limitations of the materials she had on hand and the constraints off an enforced lockdown. So, does this mean that Mandy has found an alternative to travel? Don’t bet on it – when those borders open and she is vaccinated, she will be on the move. As for those travel bags, they will finally meet the destinations that inspired them.

An opportunity to create and bring artistic expression to Tukutuku (lattice) panels inside Te Ara o Tōwhaki (the whareniui at EIT) was too good for **Raewyn Tauria Paterson** to pass up - because after all it “is a high honour being asked to design in a whare”. Added to that was the opportunity to involve the whare’s whānau – EIT staff and students – in a project that needed aroha, enthusiasm and mahi.

Raewyn is one of the Programme Coordinators in Visual Arts and Design at EIT’s IDEAschool and in February 2019 she was tasked with creating an important part of the interior of the whareniui at EIT’s marae – the tukutuku panels.

The marae on EIT’s Hawke’s Bay campus was officially opened in 1994, with the intention of eventually completing the interior of the whareniui. This was commissioned in 2017 and a team of carvers, led by Te Rangi Robin, designed and worked on pou whakairo for the interior of the whareniui.

But there was one task for someone with artistic flair and dedication. Step up Raewyn, but she had a tight deadline before the pou, kōwhaiwhai and tukutuku for the whareniui were officially revealed and blessed on 12 February 2020. “I was brought on board a year before they were planning to have the whole thing finished. The carvers had started one-and-a-half years before, and the patterns had already been decided by Te Rangi” she says. “There are only two patterns in the Tukutuku – one is Poutama and the other is Pouhine. Poutama is a well-known staircase pattern to signify climbing to higher heights of education in this context. Pouhine still has the steps, but also has diamond shapes.”

Te Rangi explained that he chose Pouhine to balance the Poutama, to express the balance of male (tama) and female (hine) energies, and particularly acknowledging the revitalisation of mana wāhine which has been undermined by colonisation. The placement of these patterns within the whare is important too, and really emphasises balance. The incorporation of Pouhine in this context was completely new to Raewyn,



*Raewyn Tauria Paterson,
lecturer IDEAschool*



and she suspects this is the first time it has been used in this way. Raewyn was sent a photo of what the patterns look like in weaving, but it was left to her to decide how she created them.

A lot of planning went into deciding how she would create the panels. She was conscious that while carvers and artists were working on other projects on the marae, the tukutuku was something that EIT staff and students could help make, and therefore bind the whare with its people. Traditionally a tukutuku panel cannot be made by a single person, requiring pairs of people to work together. Keeping this and Te Rangi's concept at the forefront of her mind, guided her intuitive design process. "That was my biggest challenge – creating something that looked really good, but that everyone could come and help make. I actually spent three-quarters of the year trying to figure that one out."

She realised that she was over-thinking the Tukutuku project and simply needed to "go and make something". So, she took a brief break to do an artwork requested by artistic and painting legend, Sandy Adsett, and that focused her mind. This piece involved laser cutting a pattern from plywood which was stained in different colours, and then reassembling the pieces with the colours mixed up – like a giant jigsaw. "Even before I finished putting it together, I realised: 'Wow, this is how to do the panels.'"

Make no mistake, this was no small task – the wharenuī is big with rectangular panels on the side and triangular shapes on the ends – the panels cover over 60 square metres, and some panels were nearly five metres tall. But the size was not the only issue to deal with, there was some intricate work to be done to complete the project. "I did the easy bits first – the side panels. The end walls were harder, I had to split the five-metre height up into smaller manageable portions." The backing for the panel was mesh and thousands of pieces were laser cut and assembled on it. The assemblage was then attached to a frame so it could be lowered all at once onto the

MDF backing panel spread with glue. The glue only had a 20-minute window for any pieces to be adjusted before it set. Raewyn developed this unique process based on the way mosaic tiles are installed.

With the space in constant use during the academic year, Raewyn had a small window of opportunity for workshops between December 2019 and February 2020. “I put it out there to the EIT world that workshops were happening. Even if only one person had taken up this opportunity it would have been worth it, but thankfully many people came. Some stained boards, some cleaned and sanded the edges after laser cutting, others enjoyed the assembly of the pieces. Then the whole pattern was glued to a backing, and every panel was coated twice with oil/wax.”

How many hands did it take to make this? Many, says Raewyn, at least one hundred pairs. One helper even roped in whānau visiting from Australia to help. While there were many hands, only four were fulltime over the entire workshop period – those belonging to Raewyn and ace student Tim Whaitiri-Henderson. “He was my right-hand man. I brought him on board because I needed another me!” Raewyn says that at no stage did she wish she had started earlier. “If I’d started sooner, I would have done it completely differently. When I look back, there was no other way it could have been done anyway.”

The process had its challenges, with a lot of hard work and uncertainty about who would turn up each day to help. “The most amazing thing is that not only did I always have enough people, we always had the right people on the right days. There was a day when I was really struggling with working out the front wall, how to break it up into the 12 panels so that it would be manageable and all line up. That day someone came in who had an architectural background and was really good at math. So, I gave him the job of working out these measurements. There were many instances when a specific skill was needed, and the right person turned up.” They say it takes a village to raise a child – some may say it takes a sympathetic wider whānau to pull together an artistic piece like this.

One of the most satisfying parts of the research project was that there was no formal writing involved. “I didn’t have to write a thesis to go with it. I could just do it in my head and the research is there for all to see in the wharenui. I’ve done a few presentations about it. But to me that’s not the research. The research is the work.” Raewyn was awarded EIT’s Research Prize for 2020 for her work on the Tukutuku panels.



Steve Gibbs, Associate Professor,
Toi Houkura Māori Visual Art & Design
School, Tairāwhiti

Steve Gibbs PhD research on returned taonga

Steve Gibbs’ whakapapa is intertwined with his art and his art has been the catalyst to reach back into his ancestral past to plot the path forward to his greatest academic achievement – his PhD. It has been a six-year journey which has allowed Steve, who is Associate Professor at Tairāwhiti’s Toi Houkura Māori Visual Art and Design School, to not only achieve his academic dreams, but to also delve deep



Kowai by Steve Gibbs

into history to uncover a rich tapestry of taonga belonging to his whānau and his iwi. In the process he has also set off a chain of events that has brought healing and returned some rich taonga (even if it is briefly) to their rightful place.

His thesis has also traced the story of contemporary Māori art going back to the 1700s. To say that Steve, himself, has undertaken a remarkable journey academically, emotionally, culturally and historically is an understatement. “Initially I thought my PhD would take two, maybe three years, but life sometimes gets in the way. Not only was I doing my thesis, but I had a fulltime job and was developing a new postgraduate course, which I was very excited about. Added to that was that over this period I became a grandparent, and this added another dimension to the richness of my already busy life. I had to simply take it as it came, as this was an exciting part of this real life that I was living.”

The research process started slowly, with an interest in and some initial research of a meeting between British explorer Lieutenant James Cook and local Tūranga Māori in 1769. The meeting took place on board Cook’s ship, the HMS Endeavour, while it lay becalmed off Whareongaonga on the East Coast south of Gisborne. This encounter took place after a bloody three-day period where nine local Māori were killed by Cook’s men. The fourth day marked the first peaceful engagement with tangata whenua.

Of particular focus and fascination – as an artist – was a number of hoe waka (canoe paddles) with their intricate designs and painted patterns that had been taken from these shores, along with other taonga. Steve says they had known that there were initially at least three hoe, because these had featured in paintings of the 1769 exchange by the ship’s artist Sydney Parkinson, but there turned out to be many more.

In total 29 hoe, along with other taonga, were found in museums in Britain, Germany, Italy, Austria and the United States. Of the 29 hoe found, it is ascertained that 23 can be identified as belonging to and having their origins in Tūranga. The journey

of discovery has led Steve to many museums in Europe and also resulted in him designing and curating an iwi-based exhibition installation, at the National Maritime Museum in Greenwich, England. In response to an invitation, the exhibit was called “Rangiwaho - Ihu ki te Moana”, (to hongi the sea). It was the first contemporary show to address Pacific encounters with Cook.

The exhibition, opened by environmentalist Sir David Attenborough, featured contemporary works by Toi Houkura graduates and local iwi-based artists that revealed the tribal history pertaining to those early encounters in 1769. But for Steve and the tangata whenua of Tūranganui a Kiwa and Te Aitanga a Hauiti the most important task at hand was to bring the taonga home, even if it was temporarily. After lengthy negotiations five museums in Great Britain and Germany agreed to loan the taonga for an exhibition at Tairāwhiti Museum in Gisborne. The museums that agreed to the short-term loan are The British Museum; Pitt Rivers Museum, University of Oxford; University of Cambridge Museum of Archaeology and Anthropology and the Great North Museum in Newcastle.

The project to facilitate the loan was led by Hei Kanohi Ora, an Iwi Governance Group, consisting of tangata whenua of Tūranganui a Kiwa and Te Aitanga a Hauiti and was supported by Eastland Community Trust, Te Puna Tahua Lottery Grants Board and Air New Zealand. The taonga were accompanied on their journey back home to New Zealand by three curators from the British Museum; Pitt Rivers Museum University of Oxford; and the University of Cambridge Museum of Archaeology, who helped unpack and install them. To make things even more tricky, the return coincided with the 250th commemoration of Cook’s arrival in New Zealand, which became a political furore. The exhibition, Tō te Whaihanga – a recognition of creative genius, which was co-curated and designed by Steve, opened in October 2019 and was due to be on display until October 11 2020.

However, COVID-19 changed that, and the exhibition will remain in the museum for the foreseeable future. The exhibition forms the last part of Steve’s doctorate, but his thesis also encompasses so much more than that. He also did a painting last year called Tū Te Whaihanga Kaitiaki, which recognises the process for Steve’s iwi to become guardians of the returned taonga. “We had to bring it right through from transporting it from Europe to New Zealand, to bringing it home and engaging in the ritual of encounter that took place to actually acknowledge these taonga and the people who made them.” Steve believes his thesis has been caught between western academic practices and the more intuitive Māori method of research. “As Māori, we don’t use the word research to define how we do things. Research is a Eurocentric concept of understanding what we’re doing as artists. What we don’t really fully appreciate is that we are always in that space of research. We’re asking questions. And we don’t call it research, we actually call it wā kōrero. When we’re talking to people, getting information and translating it within a Māori context – that mechanism is called wānanga. The nature of wānanga means to share a space and listen and absorb information, as well as be able to engage in the process by offering your own knowledge. The irony is that we are still reliant on what our tipuna wrote down as a means to gain information. We do this knowing that the process of wā kōrero is still the very best way to gather and retain knowledge. As artists much

of our language and narratives live within our art. Carvings and paintings are a visual memory and a visual language. We have learned to translate that and use a Eurocentric thinking about it, and it's called rangahau - research."

The first term of this year saw Steve finally submit the written or theory part of his thesis. "My PhD is 70 per cent practical and 30 per cent theory. It doesn't feel like that. The theory seems to have taken over the whole damn thing," he says, adding that he ended up writing 90,000 words. "One of the interesting things about this process was looking at Māori methodologies in terms of how we view ourselves. What I found interesting was that the key writers of Māori methodologies have not been writing that information for Māori to analyse ourselves, it's been written for Pākehā people to understand Māori better. That's an anomaly if you like and I found that really interesting because the other day when I was having to write all this academic stuff about reference and contemporary academic theories about Māori, the whole focus is Eurocentric focused, because as Māori we live in this space. We are not on the outside looking in, we are on the inside looking out."

The main practical part of his PhD involved putting on an exhibition of everything he had worked on over the last 6 years. With COVID-19 creating uncertainty whether he could put on a show, Steve created a digital exhibition which is a summary of his work. This work had to be recreated this year with assessors being able to come and view the practical part of his work, having read my thesis. At the end of the day, Steve says he is happy with the work, it has been important for him as it has given him the opportunity to work closely with his Iwi relatives, but it is also not just a personal achievement, but an example of the place Toi Houkura has become. "Toi Houkura is a product as a school that's been created out of a desire, a want and a need that didn't exist prior. Twenty-six years ago, there were no other places in New Zealand you could go and study contemporary Māori visual arts. We had to create it, and that's one of the wonderful things about this school and working with my colleagues like Sir Derek Lardelli, Erena Koopu, Ngaire Tuhua, Mel Baldwin, Dr Brett Graham and others. So that's the legacy that I was a part of and it's a really proud place to be. A highlight for me as a person and as an Associate Professor at Toi Houkura has been my role as a tutor and to be involved in shaping the direction of the research produced by our postgrad students."

Sustainable Futures

Most New Zealand companies don't have any legal obligation to reduce their emissions, but there is a group of businesses taking proactive steps to decarbonise. New research is exploring why Kiwi companies adopt carbon neutral certification and other voluntary climate action – especially when there is no obligation for them to do so. Dr Pii-Tuulia Nikula, Senior Lecturer at the School of Business, embarked on the study last year, identifying a sample of New Zealand based companies across different industries to focus on.

Some of the initial findings were presented at the New Zealand Applied Business Conference in November last year, but Pii-Tuulia is also writing a paper on her research. "Many New Zealand firms don't have any legal obligations to do anything about their emissions, but there is a group of businesses that are very proactive and have actually decided to get the net carbon certification status. They're basically trying to manage or reduce their emissions, as well as then offset any remaining emissions."

The companies in Pii-Tuulia's study are seeking this certification through Toitū Enviro-Mark, a subsidiary of a Government-owned Crown Research Institute. "Obviously, New Zealand businesses have very different challenges because they come from different types of industries and their emissions are different. For some, it has been easier, while others have found it more challenging." The key for Pii-Tuulia was why the companies went to the effort of decarbonising when there were no legal obligations to do so. "What was very clear from the interviews is that it really came from the personal values held by the directors and owners. These people wanted their businesses to look like their own values."

Most of these businesses were small or medium sized, but there were some larger corporations in the study as well. "The incentive for a lot of these business owners and directors is that it is the right thing to do. They say that it doesn't matter how much it costs or the administration involved, they really have to do whatever they can. So, it was really clear that there was this value-based justification that was very important for those businesses."

Pii-Tuulia says that sometimes the views of customers propelled the owners to reduce emissions, but unfortunately a lot of the businesses hadn't actually seen a lot of customer demand or interest. "From a business and individual end user customer, there was still limited demand. They still thought it contributed to their own brand, but there wasn't really tangible business value in it." A quirk in the research, which surprised Pii-Tuulia, was the language that the company owners preferred to use. "Initially this



Dr Pii-Tuulia Nikula, School of Business.



Dr Emre Erturk, the Principal Academic Staff Member

research was called climate action, but a lot of the businesses said: 'Well, I'm not an activist.' So, I had to start talking about climate mitigation, which seemed to resonate more." She says that another interesting point is that these owners are not just focused on their own businesses, they are trying to push other businesses, especially their suppliers and distributors." Underpinning the research and the willingness of these companies to adhere to outside scrutiny of their decarbonisation strategy was that there was a senior manager in the business who was a true believer, someone who was committed to sustainable practice.

Digital exclusion is a very real threat to many Hawke's Bay businesses already battered by lockdowns and the effect of COVID-19 last year. The issue has been the focus of a research project by EIT and InternetNZ, which began last year and runs until the middle of this year. The study is called 21st Century Opportunities for Regional Small Businesses.

Conducting the research is **Dr Emre Erturk**, the Principal Academic Staff Member at EIT's School of Computing, who is examining how digital exclusion could affect the quality of life for local small business owners and managers and stymie the success of their businesses. Emre says that it is globally recognised that small businesses are at greater risk of digital exclusion than large companies. "Managers of these operations also form an at-risk group on a personal level, possibly due to a relative lack of skills and resources, in comparison with their larger business counterparts. This is not only a social challenge but also an economic setback since small and medium enterprises make up a significant portion of New Zealand's productive engine," he says.

There are areas in Hawke's Bay with lower digital inclusion because many small business owners and employees include seniors, immigrants, young students, and Māori, who may not yet be in possession of favourable computer skills and also face difficult socio-economic circumstances. Emre says this can be amplified depending on the rural or regional location of the business. The project is being funded by InternetNZ, the national custodian of the .nz internet domain.

The objective of the project is to examine how the so-called Digital Divide is affecting small businesses and to offer these businesses guidance and online resources to enhance their operations. "The drive for this research initiative was magnified through conversations with a variety of community stakeholders, including the Napier City Council, which is interested in the digital city, digital citizen concept. There is a recognition and realisation by some local small businesses that their digital capabilities play a role in their long-term survival and profitability. This was accelerated by the COVID-19 pandemic and subsequent lockdown, which made digital inclusion a day-to-day concern. Farmers and food producers are also affected by the digital divide through lower levels of access to broadband and computer equipment," Emre says.

The first round of the survey has been distributed in February 2021 to local business with the help of the Economic Development unit of the Napier City Council. About 20 small businesses from a cross-section of industry were approached to participate in the survey. They will be questioned on, among other things, their Internet and computer use as well as the specific components and tasks involved during use such as the website, social media, advertising, selling, storing, and sharing documents.



Pippa McKelvie-Sebileau of EIT's Research and Innovation Centre

"Typically, businesses experiencing digital inclusion will incrementally add new applications and functions while the digitally excluded ones may not use and abandon what they have. New Zealand is not the only developed country in the world where the digital divide is of concern and this makes it even more urgent for us to gather more data and continue the public and academic discussion." The initial focus of the project has been the greater Napier area, but it will be expanded to Hastings and more rural areas. A survey of landholder perceptions of predator control in the Cape to City Region in Hawke's Bay last year shows that the majority (87%) were supportive of control efforts. Landholders believed there were benefits to native biodiversity and economic benefits from reduction in toxoplasmosis from control of feral cats.

A report on the findings was prepared by **Pippa McKelvie-Sebileau** of EIT's Research and Innovation Centre (RIC) and released by the Hawke's Bay Regional Council late last year. The report is called the Landholder Perceptions of Predator Control in the Cape to City Region: Results from the Rural Survey (2020). Pippa wrote the report, based on the survey results and findings from interviews which were designed and conducted by Richard Edwards. The report was reviewed by **Dr Christine Cheyne**, formerly of the Research and Innovation Centre and a former Hawke's Bay Biodiversity Guardian. The project is a collaborative venture between Hawke's Bay Regional Council (HBRC), Department of Conservation (DoC), Cape Sanctuary, Manaaki Whenua – Landcare Research, EIT, landowners, and local businesses. The report was written for the Council and Manaaki Whenua.

Pippa says the survey and subsequent report gave a good understanding of how landholders viewed the issue of predator control. "From this, we were able to present some important findings that will help the control of predators going forward." In 2015 the five-year Cape to City project was set up in Te Matau a Māui/Hawke's Bay to examine whether efforts to control invasive predator species could be extended from areas of high biodiversity to surrounding private land, thereby enhancing the extent of biodiversity gains. An initial survey of perceptions of predator control and interviews with landowners was undertaken in 2015 to understand the impacts on landowners and the community, including what motivates them to become involved in pest control and conservation.

That first survey identified a willingness from landowners to be involved in the Cape to City initiative and to maintain a control programme on their land. Pippa says that the 2020 report provides unique additional insights from the follow-up survey and interviews exploring landowners' perceptions after five years of predator control on their land. Among the key findings of the survey are that rural landholders believe that conservation and predator control are important. The importance of these activities is often linked with normative values including the uniqueness of NZ's wildlife and the responsibility landholders have to following generations. The report says that despite not usually being a motivating factor, economic concerns can be a prohibitive factor, while the collective benefit of predator control is well understood by participants. "While recognising that collective action is important, participants' responses to this survey suggest that motivation impacts at an individual or personal level to participate in predator control and, what is more, are, for the most part, already doing so," the report says.



Dr Rory Hill, Wine Business and Innovation

Pippa said that more communication, engagement and education was requested by landholders. They “sense a need to work smarter, not harder. Priorities must be set in terms of which predator species to reduce, and to identify what the ecological consequences of doing so would be, for example the potential flourishing of rabbits”. Pippa says EIT’s Research and Innovation Centre was pleased to be able to play a part in predator control measures by preparing this report. “It is good to see the community coming together like this to eradicate predators and protect our rich native biodiversity.”

Profile on Dr Rory Hill

Long boyhood summers spent in the Burgundy region of France were the catalyst for Dr Rory Hill to turn his passion for wine into a career. The new Master’s Programme Coordinator and Lecturer in Wine Business and Innovation at EIT’s School of Wine Science and Viticulture, grew up in the Channel Islands, but credits regular visits to France for igniting his love for wine. “My uncle Roy has been in Burgundy for 40 years. He loves wine and he’s passed some of that on to me. I used to spend every summer in Burgundy with him, so that’s where the interest in wine started.”

It is that same love that brought him to New Zealand in 2019 to become a postdoctoral researcher at Lincoln University in Canterbury. From there, he relocated to Napier in December to oversee the Master’s degree being offered for the first time at EIT this year. He has an impressive academic background, which surprisingly, is in geography. A BSc (Hons) in Geography, Environment and Society (First Class) from the University of Exeter was followed by an MA (with Distinction) in Geography (Research Methods) from Durham University. His doctorate – a DPhil in Geography and the Environment – was earned at Oxford University from 2011 to 2016, where he also served as a graduate teaching assistant.

The doctorate may have been in geography, but it was in large part about wine, with the subject of his thesis *‘Local, loyal and constant’? On the dynamism of terroir in sustainable agriculture*. “Translated terroir, means a sense of place. Terroir is a concept that is used in France, and increasingly elsewhere, to evoke character and quality in food and drink in relation to the place it comes from.” Rory says he investigated how terroir has attained its present-day economic value and cultural resonance; how it is subject to multiple forms of articulation across France; and how it is used as part of the philosophies and practices of environmentally sustainable modes of production. I used cultural and historical modes of enquiry and I drew upon interviews, participant observation, discourse and archive analysis carried out on fieldwork in three production chains in eastern France; being wine production in Burgundy, walnut production in the Isère valley, and Reblochon cheese production in the Alps.”

Rory says that nostalgia is a big part of terroir and people in France still talk about terroir in a very evocative way. “However, within wine science, terroir has also taken on a much more practical sense of soil conditions, climate and grape variety. So, now we have this tension between the evocative, emotive and mysterious part of terroir and the practical, down-to-earth, making-a-great-wine part.”

Rory was a member of the official Jersey delegation to the Salon International de l'Agriculture in Paris from 2016 to 2019. This is Europe's largest agricultural and culinary fair, consistently attracting well over 500,000 visitors each year. As a mixed government, tourism and agriculture team, they worked to promote local produce and the island as a destination to politicians, commercial contacts, the media and the public.

After his thesis, Rory returned to France to work as a researcher at the Sorbonne. This was followed by a role as a Fellow at the Rachel Carson Centre in Munich, where he continued researching and writing his book under the working title *The Storied Soil: Uncovering the Logic and Rhetoric of Terroir*. "While I was in Munich, I met some Kiwis on a delegation to Germany. Trevor Mallard and Anne Salmond were among them, with Anne doing a presentation on Polynesian navigators and Trevor being part of a discussion about why students should go to New Zealand. They really switched me on to New Zealand. It must have been fate because around that time Lincoln University advertised for someone to come and do work on terroir and sense of place in New Zealand, and particularly in the North Canterbury region, the wine region."

He applied for the job and after an early morning Skype call was offered a position. An added attraction to coming over was that his brother lives in Queenstown. Rory's terroir journey continued in the South Island, where his research involved him interviewing wine producers in North Canterbury about the sense of place in their wine. "We asked them was that meaningful to them, did that come through in the wine itself and what was the character of that region's wine." The researchers also looked at events and festivals in the area that included wine and how producers benefited from them.

Another project Rory was involved in was looking at how local wines got onto local menus or didn't. It compared Christchurch and Queenstown – Christchurch in regard to a North Canterbury wine region and Queenstown in regard to the Central Otago wine. He says the findings showed that Queenstown restaurants appeared to be more tightly linked with wineries in Central Otago. Rory is using his dedicated research time at EIT to write research articles on the studies with his former colleague at Lincoln, Joanna Fountain. The aim is to get these published in academic journals.

As for the School he works in, Rory is impressed with the depth of knowledge of the staff and is looking forward to the new course starting. "We've got a suite of four programmes starting in July. One is a postgraduate certificate, another a postgraduate diploma and then there are two Master's courses – one at 180 credits and the other at 240 credits. The course will examine technology and innovation in the wine industry, as well as sustainability and will see Rory bring in the research he did for his own thesis.

Global wine marketing, entrepreneurship in wine business, and some of the issues in the global wine industry today are also part of the programme, which will be supplemented with courses from the School of Business. "We think that some of the students that are coming into this school will want to move into management positions in the industry. So, as well as giving them a broad overview of subject matter, trends, and issues, and controversies in the wine industry, we also want to give them some business tools to help them make management decisions."

The School of Business will offer the students courses in leadership, financial management and supply chain management, among others. “They’ll come out of this knowing that they’ve done some professional development on the latest trends and technologies for the wine industry, but they’ve also got some business skills, some management skills to help their decision-making.” The tailoring of the course to make wine management a central part came about after feedback from the industry expressing a need for this.

With regards to local wines, Rory says that within New Zealand, Hawke’s Bay is building a reputation for its Shiraz and its Bordeaux blends and this could go some way to establishing the terroir of the region. “With Hawke’s Bay wine becoming increasingly known internationally, the sense of terroir will start building and this allows consumers to distinguish some of the wine’s characteristics from other areas. It is about identifying what the sense of place is in our Hawke’s Bay wines. This is a complex thing. How do we include Māori history and storytelling in that, for instance, as well as the importance of place within the Māori worldview?”

For now, he is simply enjoying getting to know the region and getting on with his job as a lecturer. He says the fact that New Zealand is relatively COVID-19 free is a bonus to living here and EIT’s online course offerings had been adapted so that students can participate remotely or do the work after a day in the vineyards. Rory lives in Napier with his Canadian partner, Madeleine, who works in cellar operations at Sacred Hill Winery. They have been together for several years and fittingly wine was a central part of their meeting. “We met in France over some wine and cheese.”

Student Research

Alex Peter

While many people find juggling work with studying a tough ask, Alex Peter finished two bachelor's degrees in Viticulture and Wine Science at EIT last year, while employed at a local wine company. "I was really happy with my results given the challenge of balancing work as a vineyard operator at Church Road while studying part-time through a pandemic," she says.

Alex's research project was on Copper residue levels in Hawke's Bay's viticultural soils and she collected samples from vineyards located in the Tukituki, Havelock Hills, Bridge Pa and Gimblett Gravels sub-regions of Hawke's Bay.

She says she chose this research because she wished to investigate modern-day versus historical copper fungicide inputs in New Zealand vineyards. She was also already aware that organically certified viticultural practices cannot involve the use of an array of synthetic fungicides unlike what is seen in conventional vineyard management. "I was interested in investigating the effect this near sole-reliance on copper-based fungicides was having on viticultural soils which (in turn) has various implications for soil microbial populations, waterways and vines themselves."

The project was not without its challenges and COVID-19 ensured there were a few. It meant she could only collect soil samples later in the year when the EIT laboratory was in high demand. This meant analysis had to take place within a really tight window and resulted in a number of experiments she had initially planned to include in her project being dropped. "I had to accept that my research would likely not be as conclusive as I'd imagined at an early stage which was pretty disheartening at times!" Growing up in the wine-producing region of Marlborough, like many Blenheim teenagers she found herself working in the vines during her summer holidays, which led to other roles. She went into the double degree having worked in the industry on and off for five years, so had a good idea of where the degree(s) could take her.

As for the present, Alex is the vintage assistant winemaker at Fraser Gallop Estate in Margaret River, Western Australia. "This was the winery I worked at most recently before commencing study in 2016. We produce award-winning Cabernet Sauvignon, Chardonnay and Rosé. I made the difficult (but completely worth it!) move across the ditch a couple of months ago which involved many flight cancellations, special entry permits and two weeks of quarantine upon arrival."



Bridget Stange

Bridget Stange

Bridget Stange was an early childhood educator in her native South Africa but immigrating to New Zealand nearly six years ago saw her embark on a totally new career path. Bridget enrolled in the Bachelor of Viticulture and Wine Science (concurrent degree) at EIT because, for her, “immigration has been about new beginnings and an opportunity to explore a new career”.

Currently in her fourth year, she was involved in a research project last year as part of her degree. Her topic was Investigation of leaf function and ripening characteristics of *Vitis vinifera* L. Syrah using a late season Magnesium foliar spray. A Magnesium foliar spray trial was set up across two vineyards located on the Gimblett Gravels, one conventionally managed and one organically managed. “From the results of the trial, there was evidence to suggest that foliar Magnesium fertilisation significantly increased leaf blade Magnesium in both treatment blocks. The final sampling date in the organic vineyard treatment blocks showed a significant increase in Brix and chlorophyll content. There were no significant changes in titratable acidity, pH and anthocyanins in either treatment block.”

Bridget says she had always wanted to do her research on a viticulture-based topic. “At the time I was considering my research topic, I was informed about an industry inspired research programme planned by a few vineyard managers and viticulturists within the Hawkes Bay.” She says she was interested in getting involved in this project and saw it as a good opportunity to increase her practical experience.

However, mainly due to COVID-19. Sample collection was affected, and some samples had to remain frozen at the EIT laboratories until she was able to access the labs again. “This research project was most certainly the biggest academic paper I have worked on during my studies so far. I felt an amazing sense of achievement when all the different components started to come together and reveal something that looked like a dissertation.”

Bridget still has some papers to finish for the concurrent degree next semester, but she has been doing her work experience in both the vineyard and winery at Craggy Range and will be looking for a fulltime position towards the end of the year.

Glenis Hiria Philip-Barbara

Whakamaumaharatanga: the art of remembering is an anti-colonial street side exhibition of lightworks that explored the role of the banal street sign in commemorating monolithic colonial narratives by illuminating multiple layers of kaupapa Māori analysis in light and story.

The exhibition formed the basis of a thesis for Glenis Hiria Philip-Barbara's Te Hono ki Toi (Poutiriao) Master of Professional Art Practice last year. Glenis, who is a former Chief Executive of the Māori Language Commission and is the current Assistant Māori Commissioner for Children based in Wellington, completed her postgraduate degree at Toi Houkura, the school of Māori Visual Arts at EIT Tairāwhiti in 2020. She says she has researched the impact of colonisation throughout her academic and artistic life, so the banality of the street sign as monument to colonisation was a new twist on a familiar topic.



“The various colonial characters memorialised in Gisborne street signs are of mostly dubious character even by western standards, and the decisions they made in their various roles left a legacy of death and despair for Tūranga iwi. Standing up an exhibition on the back of a COVID-19 level four lockdown was challenging indeed, making the various lightworks and praying that freight arrived became a familiar routine. Researching the historical characters was surprisingly easy with all sources readily available online,” Glenis says. “The most enjoyable bit was the exhibition itself and the opportunity to weave whānau, community and analysis together with a live performance by the phenomenal Mere Boynton.”

She says that she enjoyed her degree and always wanted to study in at an institution that focuses on Indigenous knowledge and analysis. Toi Houkura was the place for her as it is “locally loved and internationally regarded. I am pleased I had the opportunity to examine the history of Aotearoa in general and Tōranga in particular from a kaupapa Māori perspective in te reo Māori” Glenis has since moved on to great things in her role as Assistant Māori Commissioner for Children based in Wellington. She is working on a script for a play that follows the themes that emerged from her Master’s research.

Hannah Frater

Involving family in mental health care greatly improves long term outcomes for the person living with the illness as well as the wellbeing of the wider whānau, an EIT research project has found. Hannah Frater undertook the study as part of her Bachelor of Social Work (Honours) degree at EIT last year and achieved a first-class pass.

Hannah says the inquiry focused on family care for people living with a mental illness from a Hawkes Bay mental health social worker perspective. “Through contrast and comparison with available literature, this study considered a social work perspective on the experience of informal care within the New Zealand mental health system. Literature narratives report that family carers of people living with a mental illness are marginalised and experience significant stress due to a lack of support.”

The purpose of her research was to explore a frontline social worker’s perspective of the ongoing experience of informal care for families in the system. Hannah says she chose this project because she had observed, both personally and professionally, that there is a high need for support and services for whānau of those managing a mental illness. “This is a significant passion for me. Furthermore, throughout my studies it became more apparent to me the importance of involving family in mental health care as it greatly improves long term outcomes for the person living with the illness as well as the wellbeing of the wider whānau as a whole.”

Undertaking the study was not without its challenges, as Hannah had to juggle a young family alongside research. However, she did enjoy hearing from social workers within the community and “having the privilege of honouring their perspectives through this research”. For Hannah, it was important her inquiry recognised the hidden nature of family care in mental health in New Zealand. “Due to the historically clinical nature of mental health services family continue to be excluded from the support of their loved ones. A social work perspective has identified the systemic inequities that



Jaikaran Narula

are failing families.” Hannah, who now works as a social worker in Oranga Tamariki’s Youth Justice Team, studied law and public policy for a year, but her passion for people and communities and a strong sense of social justice saw her switch to social work.

Jaikaran Narula

Gaining an understanding of how a region can best fulfil its skills needs is part of a Master’s research project being conducted by an EIT student. Jaikaran Narula, who completed his Postgraduate Diploma in Applied Management last year, is now working on a Master’s in Applied Management by research.

Jaikaran, who is currently a research assistant at the Research and Innovation Centre, says his thesis is an exploratory study of factors influencing the attraction and retention of highly skilled employees in digital industries in Hawke’s Bay. “I chose this topic as it relates to the Hawke’s Bay Growth Study, a project to understand the skill requirements across various sectors in the region. My current research interest is also around skill requirements and understanding how a region can best fulfil its skill needs.”

He says he chose the degree as it gave him the opportunity to pursue research first-hand, undertaking a project on his own. “Being solely responsible for each part of the project not only helped in gaining experience as a researcher but also contributed to informed decision making for local authorities in regional communities. I enjoyed working on the project as a whole, with data collection and analysis being two parts that were quite exciting. The toughest part was making sure the scope was large enough to make a difference and small enough to be able to meet the course requirements.”

Jaikaran believes that EIT’s degrees offer a competitive advantage to graduates and are comparable with universities. His role as a research assistant includes a wide variety of tasks, including data entry for a food industry-related project and data analysis for a health sciences project. “I feel very fortunate to have the opportunity to be part of this project. I get to work with experienced researchers and industry members, making my small contribution to the world of research, and in turn, the local community.”

Lizzy Mackenzie

A Master of Nursing Science degree, passed with distinction in 2020, has set up Lizzy Mackenzie for her career as a nursing lecturer at EIT. Lizzy, who has been teaching at EIT for almost two years, currently works with third year nursing students in the Primary Healthcare and Contemporary Issues paper and the Research paper.

This year she is also helping in a postgraduate paper (Advanced assessment and diagnostic reasoning) and coordinates the Cervical Screening course. She had a long career in nursing and allied health before becoming a lecturer. For her Master’s programme, Lizzy had to do a research project (integrative literature review) and she chose Factors that influence registered nurses to work in Primary Healthcare (PHC). The aim of the research was to identify and critically appraise published literature to highlight factors that encourage or discourage nurses to enter PHC. An integrative literature review and thematic analysis identified two main themes: support



Lizzy Mackenzie

and job satisfaction. Orientation, nurse entry to practice programme, exposure and communication contributed to the first theme. Workplace culture, Registered Nurse roles, and a postgraduate pathway underpinned the second theme. Recommendations were made for future action and research within Aotearoa's PHC nursing sector.

Lizzy, who graduated with her Bachelor of Nursing from EIT Tairāwhiti in 2012, says she enjoyed most of the postgrad degree, especially the feeling of accomplishment. "I enjoyed identifying future opportunities for further research. There were two things that I found hard, the first was having to say no to family and friends, having to be selfish and focus on my study. Pressing the 'submit button' was also difficult, it felt so final after so much mahi was put into my Master's."

Lizzy says she chose nursing as a career because she likes people and diversity, but also because the profession provides a constantly evolving career that offers many opportunities. "For me nursing is not solely about health and a hospital, it is about wellness, social justice, support and building people's capabilities, it's about communities, experiences, continuous learning and I find it rewarding and meaningful." She says she may be biased but she believes EIT offers a supportive environment that "encourages people who have different life stories to strive to be and achieve the best they can".

Tyler Roberts

Tyler Roberts grew up in a low socio-economic area, was raised by a solo mother, was excluded from school at 15 and became a mother herself at 16. She is also a survivor of domestic violence, has experienced gang life first-hand, and has had numerous encounters with grief, loss, and trauma.

A Bachelor of Social Work (Honours) can now be added to that list – a feat she achieved with first-class honours last year and attended the graduation ceremony for earlier this year. "All of these experiences encouraged me to learn more about how I can give back using my life experience alongside theory learnt through the degree." Tyler has a passion for working with rangatahi, in particular youth offenders, and the topic of her thesis was Young offending: The Importance of Culture. "I wanted to understand why rangatahi Māori are always disproportionately represented in offending statistics and why they often replace their Māori culture with other cultures such as gangs."

The research focused on young offending and the role that culture plays for rangatahi Māori who offend. It explores the perspectives of professionals working within the youth justice sector, to gain insight into potential reasons why rangatahi Māori are disproportionately represented in offending statistics and if the loss of culture influences the likelihood for rangatahi to offend. "Furthermore, it evaluated the current cultural practices social workers undertake and explored further recommendations to ensure those working with rangatahi Māori who offend are practicing in a culturally effective way that aims to reduce the disparity Māori currently face," Tyler says. Being able to choose a topic that resonated with her and that created insight into practice as an emerging practitioner were highlights of her degree. The toughest part of the degree was trying to complete assignments under COVID restrictions, especially without face-to-face interactions with tutors and peers.



Tyler Roberts

Tyler believes the learning she gained from EIT has had an “immense impact on my ability to practice confidently and competently”. Having graduated earlier this year, Tyler is now working in Oranga Tamariki’s Engaging Challenging Youth team in Napier. “This team allows me to carry out my passion of working with rangatahi and focuses on both care and protection and youth justice. “

2020 Research Outputs

Book

- Chisnell, C., & Kelly, C. (2019). *Safeguarding in social work practice: A lifespan approach (2nd ed.)*. SAGE.
- Erturk, E. (Ed.). (2020). *Proceedings of the 10th Annual Conference of Computing and Information Technology Education and Research in New Zealand incorporating the 33rd Annual Conference of the National Advisory Committee on Computing Qualifications Wellington, New Zealand 7th - 8th October 2020*. CITRENZ. <https://www.citrenz.ac.nz/2020-proceedings/>
- Marshall, M. (Ed.). (2020). *Album leaves by John Ritchie* [Music score]. Hatchet Music.
- Marshall, M. (Ed.). (2020). *Morning song for two guitars by Louise E Matthews* [Music score]. Hatchet Music.
- Marshall, M. (Ed.). (2020). *Two's company for two guitars, harp & strings by John Ritchie* [Music score]. Hatchet Music.
- Marshall, M. (Ed.). (2020). *Whirlwind by Louise E Matthews* [Music score]. Hatchet Music.
- Rudoff, M., Skelton, D., & Stewart, D. (Eds.). (2020). *Te Pae Tawhiti 2020: Conference booklet; 17-18 September 2020, Eastern Institute of Technology, Napier*. <https://www.eit.ac.nz/wp-content/uploads/2020/11/Te-Pae-Tawhiti-2020-Conference-Booklet.pdf>

Book Chapter

- Aliyu, O. A., Arasanmi, C. N., & Ekundayo, S. M. (2020). Using electronic payment programs as an anti-corruption strategy in Africa. In T. Z. Opati & M. K. Gachukia (Eds.), *Impact of mobile payment applications and transfers on business* (pp. 153-172). IGI Global. <https://doi.org/10.4018/978-1-7998-2398-8.ch007>
- Charteris, J., Smardon, D., & Nelson, E. (2020). Innovative learning environments and new materialism: A conjunctural analysis of pedagogic spaces. In L. Benade & M. Jackson (Eds.), *Design, education & pedagogy* (pp. 28-41). Routledge. (Original work published 2017)
- Chisnell, C., & Kelly, C. (2020). Safeguarding children and adults. In D. Edwards & S. Best (Eds.), *The textbook of health and social care* (pp. 151-169). SAGE.

- Erturk, E. (2019). Cloud computing and cybersecurity issues facing local enterprises. In Information Resources Management Association (Ed.), *Cyber law, privacy, and security: Concepts, methodologies, tools, and applications* (pp. 1777-1799). IGI Global. <https://doi.org/10.4018/978-1-5225-8897-9.ch087>
- Hollis, D. (2020). Hurt people hurt people. In R. Salisbury (Ed.), *Free to be Children: Preventing child sexual abuse in Aotearoa New Zealand* (pp. 180-192). Massey University Press.
- Morris Matthews, K. (2020). Florence Ella Morris. In C. Macdonald, M. Penfold, & B. Williams (Eds.), *The book of New Zealand women/Ko kui ma te kaupapa*. Bridget Williams Books. <https://doi.org/10.7810/9780908912049> (Original work published 1991)
- Oudshoorn, M. J., Clear, A., Carter, J., Hitchcock, L., Pearce, J. L., & Abandoh-Sam, J. A. (2019). Exploring challenges faced by international students in computer science programs: Towards understanding the student perspective. In M. Allison (Ed.), *Exploring the opportunities and challenges of international students* (pp. 125-182). Nova Science.

Journal Article

Refereed

- Amani-Shalamzari, S., Sarikhani, A., Paton, C., Rajabi, H., Bayati, M., Nikolaidis, P. T., & Knechtle, B. (2020). Occlusion training during specific futsal training improves aspects of physiological and physical performance. *Journal of Sports Science and Medicine*, 19(2), 374-382. <https://www.jssm.org/hf.php?id=jssm-19-374.xml#>
- Bahho, M., & Vale, B. (2020). A demonstration building project: Promoting sustainability values. *Journal of Green Building*, 15(2), 91-112. <https://doi.org/10.3992/1943-4618.15.2.91>
- Byrne, A.-L., Hegney, D., Harvey, C., Baldwin, A., Willis, E., Heard, D., Judd, J., Palmer, J., Brown, J., Heritage, B., Thompson, S., & Ferguson, B. (2020). Exploring the nurse navigator role: A thematic analysis. *Journal of Nursing Management*, 28(4), 814-821. <https://doi.org/10.1111/jonm.12997>
- Chen, J. H., Johnson, D. W., Wong, G., Boudville, N., Borlace, M., Walker, R., Hawley, C., McDonald, S., & Lim, W. H. (2020). Associations between diabetes and sex with peritoneal dialysis technique and patient survival: Results from the Australia and New Zealand Dialysis and Transplant Registry cohort study. *Peritoneal Dialysis International*. Advance online publication. <https://doi.org/10.1177/0896860820918708>
- Chisnell, C., Peter, S., Merchant, R., Luscombe, T., & Tua, J. (2019). Couples based approach to prevention of domestic violence: An innovative initiative in Aotearoa New Zealand. *Social Work and Policy Studies: Social Justice, Practice and Theory*, 2(1). <https://openjournals.library.sydney.edu.au/index.php/SWPS/article/view/13091>

- Chittenden, R., & King, P. (2020). No plunging and cold maceration followed by no plunging as alternative winemaking techniques: Tannin extraction and pigment composition of Syrah and Pinot Noir wines. *South African Journal of Enology and Viticulture*, 41(1), 90-98. <https://doi.org/10.21548/41-1-3541>
- Erturk, E., & Ekundayo, S. (2020). Designing the emergency online study bubble. *International Journal of Inspired Education, Science and Technology (IJIEST)*, 2(1), 54-58. http://www.stsir.org/Journals/IJIEST/archive_card.php?id=55
- Gilpin, B. J., Walker, T., Paine, S., Sherwood, J., Mackereth, G., Wood, T., Hambling, T., Hewison, C., Brounts, A., Wilson, M., Scholes, P., Robson, B., Lin, S., Cornelius, A., Rivas, L., Hayman, D. T. S., French, N. P., Zhang, J., Wilkinson, D. A., Midwinter, A. C., Biggs, P. J., Jagroop, A., Eyre, R., Baker, M. G., & Jones, N. (2020). A large scale waterborne Campylobacteriosis outbreak, Havelock North, New Zealand. *Journal of Infection*, 81(3), 390-395. <https://doi.org/10.1016/j.jinf.2020.06.065>
- Harvey, C., Baldwin, A., Thompson, S., Willis, E., Meyer, A., Pearson, M., & Otis, E. (2020). Balancing the scales—Nurses' attempts at meeting family and employer needs in a work-intensified environment. *Journal of Nursing Management*, 28(8), 1873-1880. <https://doi.org/10.1111/jonm.12913>
- Harvey, C., Thompson, S., Otis, E., & Willis, E. (2020). Nurses' views on workload, care rationing and work environments. *Journal of Nursing Management*, 28(4), 912-918. <https://doi.org/10.1111/jonm.13019>
- Hole, B., Hemmelgarn, B., Brown, E., Brown, M., McCulloch, M. I., Zuniga, C., Andreoli, S. P., Blake, P. G., Couchoud, C., Cueto-Manzano, A. M., Dreyer, G., Garcia Garcia, G., Jager, K. J., McKnight, M., Morton, R. L., Murtagh, F. E. M., Naicker, S., Obrador, G. T., Perl, J., Rahman, M., Shah, K. D., Van Biesen, W., Walker, R. C., Yeates, K., Zemchenkov, A., Zhao, M.-H., Davies, S. J., & Caskey, F. J. (2020). Supportive care for end-stage kidney disease: An integral part of kidney services across a range of income settings around the world. *Kidney International Supplements*, 10(1), e86-e94. <https://doi.org/10.1016/j.kisu.2019.11.008>
- Jamieson, I., Norris, K., Short, K., Papps, E., & Dixon, A. (2020). Graduate entry to nursing: An exploration of the demographic characteristics of New Zealand students. *Nurse Education in Practice*, 48, Article 102855. <https://doi.org/10.1016/j.nepr.2020.102855>
- John, S. P., & De Villiers, R. (2020, May). Elaboration of marketing communication through visual media: An empirical analysis. *Journal of Retailing and Consumer Services*, 54, Article 102052. <https://doi.org/10.1016/j.jretconser.2020.102052>
- Low, T., Scott-Chapman, S., & Forrest, R. (2020). Patient experiences of pictogram use during nurse-led rapid-access chest pain clinic consultations in regional Aotearoa New Zealand. *Nursing Praxis in Aotearoa New Zealand*, 36(2), 31-40. <https://doi.org/10.36951/27034542.2020.009>
- Manera, K. E., Ju, A., Baumgart, A., Hannan, E., Qiao, W., Howell, M., Nataatmadja, M., Wilkie, M., Loud, F., Schwartz, D., Hurst, H., Jassal, S. V., Figueiredo, A., Mehrotra, R., Shen, J., Morton, R. L., Moraes, T., Walker, R., Cheung, C., Farragher, J. F., Craig, J., Johnson, D. W., & Tong, A. (2020). Patient-reported outcome measures for life participation in peritoneal dialysis: A systematic review. *Nephrology Dialysis Transplantation*. Advance online publication. <https://doi.org/10.1093/ndt/gfaa244>

- Nelson, E., & Charteris, J. (2020). Student voice research as a technology of reform in neoliberal times. *Pedagogy, Culture & Society*. Advance online publication. <https://doi.org/10.1080/14681366.2020.1713867>
- Nikula, P.-T. (2020). Education agent standards in Australia and New Zealand—Government's role in agent-based international student recruitment. *Studies in Higher Education*. Advance online publication. <https://doi.org/10.1080/03075079.2020.1811219>
- Nikula, P.-T., & Sibley, J. (2020). Supporting international students' academic acculturation and sense of academic self-efficacy. *Transitions: Journal of Transient Migration*, 4(2), 137-149. https://doi.org/10.1386/tjtm_00018_1
- Olejar, K. J., Vasconcelos, M. C., King, P. D., Smart, R. E., Ball, K., & Field, S. K. (2020). Herbicide reduction through the use of weedmat undervine treatment and the lack of impact on the aromatic profile and volatile composition of Malbec wines. *Food Chemistry*, 343. Advance online publication. <https://doi.org/10.1016/j.foodchem.2020.128474>
- Pearson, G., Connor, M., Keen, J., Reardon, R., & Waran, N. (2020). Incorporation of equine learning theory into the undergraduate curriculum. *Journal of Veterinary Medical Education*. Advance online publication. <https://doi.org/10.3138/jvme-2019-0078>
- Pearson, G., Reardon, R., Keen, J., & Waran, N. (2020). Difficult horses—Prevalence, approaches to management of and understanding of how they develop by equine veterinarians. *Equine Veterinary Education*. Advance online publication. <https://doi.org/10.1111/eve.13354>
- Pearson, M., Papps, E., & Walker, R. C. (2020). Experiences of registered nurse prescribers: A qualitative study. *Contemporary Nurse*. Advance online publication. <https://doi.org/10.1080/10376178.2020.1813044>
- Pecoits-Filho, R., Okpechi, I. G., Donner, J.-A., Harris, D. C. H., Aljubori, H. M., Bello, A. K., Bellorin-Font, E., Caskey, F. J., Collins, A., Cueto-Manzano, A. M., Feehally, J., Goh, B. L., Jager, K. J., Nangaku, M., Rahman, M., Sahay, M., Saleh, A., Sola, L., Turan Kazancioglu, R., Walker, R. C., Walker, R., Yao, Q., Yu, X., Zhao, M.-H., & Johnson, D. W. (2020). Capturing and monitoring global differences in untreated and treated end-stage kidney disease, kidney replacement therapy modality, and outcomes. *Kidney International Supplements*, 10(1), e3-e9. <https://doi.org/10.1016/j.kisu.2019.11.001>
- Pierard, T. (2020). The divergence of drumset function in popular music, and how DAWs can bridge the divide between drummers and beatmakers. *International Journal of Music Science, Technology and Art (IJMSTA)*, 2(2), 1-7.
- Reid, C., Hantler, A., & Thompson, S. (2020). What registered nurses consider important when educating and supporting patients receiving oral capecitabine for cancer. *Australian Journal of Cancer Nursing*, 21(2), 2-7. <https://doi.org/10.33235/ajcn.21.2.2-7>
- Roy, R. N. (2020). Implementing just-in-time-based supply chain for the bulk items in an integrated steel plant. *International Journal of Intelligent Enterprise*, 7(4), 405-422. <https://doi.org/10.1504/ijie.2020.110762>

- Shambrook, P., Kingsley, M. I., Taylor, N. F., Wundersitz, D. W., Wundersitz, C. E., Paton, C. D., & Gordon, B. A. (2020). A comparison of acute glycaemic responses to accumulated or single bout walking exercise in apparently healthy, insufficiently active adults. *Journal of Science and Medicine in Sport*, 23(10), 902-907. <https://doi.org/10.1016/j.jsams.2020.02.015>
- Smith, M., Tharakan, T., Stroud, T., Goh, E. T., Figueiredo, M., Joannou, L., Dearing, C., Vyas, L., Jayasena, C., Ramsay, J., & Minhas, S. (2020). Assessing the impact of male cancers on total motile sperm count [Conference abstract]. *European Urology Open Science*, 19(Suppl. 2), e534-e535. [https://doi.org/10.1016/S2666-1683\(20\)32922-0](https://doi.org/10.1016/S2666-1683(20)32922-0)
- Smith, M., Tharakan, T., Stroud, T., Goh, E. T., Figueiredo, M., Joannou, L., Dearing, C., Vyas, L., Jayasena, C., Ramsay, J., & Minhas, S. (2020). Assessing trends in sperm cryopreservation at a tertiary referral centre over 25-years [Conference abstract]. *European Urology Open Science*, 19(Suppl. 2), e674. [https://doi.org/10.1016/S2666-1683\(20\)33025-1](https://doi.org/10.1016/S2666-1683(20)33025-1)
- Taylor, L., Forrest, R., Yoder, H., & Lander, P. (2020). The effects of Netball specific preseason programme on adolescent athletic performance and injury reduction: A pilot study. *Journal of Sport and Exercise Science*, 4(1), 53-62. <https://doi.org/10.36905/jses.2020.01.08>
- Thakur, P., Alshamsi, F., Jagroop, A., & Shahid, S. (2020). Improving mental health in Māori children witnessing family violence in New Zealand. *Health Science Journal*, 14(7), Article 772. <https://doi.org/10.36648/1791-809X.14.7.772>
- Vangsoe, M. T., Nielsen, J. K., & Paton, C. D. (2020). A comparison of different prerace warm-up strategies on 1-km cycling time-trial performance. *International Journal of Sports Physiology and Performance*, 15(8), 1109-1116. <https://doi.org/10.1123/ijssp.2019-0557>
- Walker, R. C., Tong, A., Howard, K., Darby, N., & Palmer, S. C. (2020). Patients' and caregivers' expectations and experiences of remote monitoring for peritoneal dialysis: A qualitative interview study. *Peritoneal Dialysis International*, 40(6), 540-547. <https://doi.org/10.1177/0896860820927528>
- Walker, R. C., Tong, A., Howard, K., & Palmer, S. C. (2020). Clinicians' experiences with remote patient monitoring in peritoneal dialysis: A semi-structured interview study. *Peritoneal Dialysis International*, 40(2), 202-208. <https://doi.org/10.1177/0896860819887638>
- Whalley, P., Paton, C., & Dearing, C. G. (2020). Caffeine metabolites are associated with different forms of caffeine supplementation and with perceived exertion during endurance exercise. *Biology of Sport*. Advance online publication. <https://doi.org/10.5114/biolSport.2020.98455>

Non-refereed

- Walker, R. C., & Bennett, P. N. (2020). The International Society of Nephrology and the Renal Society of Australasia: Towards a global impact [Letter to the Editor]. *Renal Society of Australasia Journal*, 16(1), 6-7. <https://doi.org/10.33235/rsaj.16.1.6-7>
- Walker, R. C., & Palmer, S. C. (2020, August). Supporting PD patient care at home in a viral pandemic through remote dialysis monitoring. *ISPD Asia-Pacific Chapter Newsletter*, 18(2), 15-17.

Conference Contribution

Published conference proceedings—refereed

- Austin, K., & Pentecost, M. (2020, September). "What was it you do again?" [Abstract]. In M. Rudoff, D. Skelton, & D. Stewart (Eds.), *Te Pae Tawhiti 2020: Conference booklet; 17-18 September 2020, Eastern Institute of Technology, Napier* (p. 21). Eastern Institute of Technology. <https://www.eit.ac.nz/wp-content/uploads/2020/11/Te-Pae-Tawhiti-2020-Conference-Booklet.pdf>
- Bakker-Reynolds, G., Erturk, E., & Lengyel, I. (2020). Traffic management prototype based on computer vision for vehicle detection [Abstract]. In E. Erturk (Ed.), *Proceedings of the 10th Annual Conference of Computing and Information Technology Education and Research in New Zealand incorporating the 33rd Annual Conference of the National Advisory Committee on Computing Qualifications Wellington, New Zealand 7th - 8th October 2020* (p. 37). CITREnz. <https://www.citrenz.ac.nz/2020-proceedings/>
- Booth, R. (2020, September). Why young people find it hard to make career decisions [Abstract]. In M. Rudoff, D. Skelton, & D. Stewart (Eds.), *Te Pae Tawhiti 2020: Conference booklet; 17-18 September 2020, Eastern Institute of Technology, Napier* (p. 6). Eastern Institute of Technology. <https://www.eit.ac.nz/wp-content/uploads/2020/11/Te-Pae-Tawhiti-2020-Conference-Booklet.pdf>
- Cheyne, C., Fussell, E., & Henry, G. (2020, September). Building back better: Learning from lockdown how to strengthen learning communities [Abstract]. In M. Rudoff, D. Skelton, & D. Stewart (Eds.), *Te Pae Tawhiti 2020: Conference booklet; 17-18 September 2020, Eastern Institute of Technology, Napier* (p. 7). Eastern Institute of Technology. <https://www.eit.ac.nz/wp-content/uploads/2020/11/Te-Pae-Tawhiti-2020-Conference-Booklet.pdf>
- Chisnell, C., & Pentecost, M. (2020, September). The hidden burden of family responsibility—Implications for education [Abstract]. In M. Rudoff, D. Skelton, & D. Stewart (Eds.), *Te Pae Tawhiti 2020: Conference booklet; 17-18 September 2020, Eastern Institute of Technology, Napier* (p. 8). Eastern Institute of Technology. <https://www.eit.ac.nz/wp-content/uploads/2020/11/Te-Pae-Tawhiti-2020-Conference-Booklet.pdf>

- Clear, A. (2020, September). Strategies to support the Auckland campus international students during the COVID-19 pandemic Level 4 lockdown [Abstract]. In M. Rudoff, D. Skelton, & D. Stewart (Eds.), *Te Pae Tawhiti 2020: Conference booklet; 17-18 September 2020, Eastern Institute of Technology, Napier* (p. 9). Eastern Institute of Technology.
<https://www.eit.ac.nz/wp-content/uploads/2020/11/Te-Pae-Tawhiti-2020-Conference-Booklet.pdf>
- Clear, A., Clear, T., Vichare, A., Charles, T., Frezza, S., Gutica, M., Lunt, B., Maiorana, F., Pears, A., Pitt, F., Reidesel, C., & Szykiewicz, J. (2020). Developing competency statements for computer science curricula: The way ahead. In *ITiCSE '20: Proceedings of the 2020 ACM Conference on Innovation and Technology in Computer Science Education* (pp. 515–516). Association for Computing Machinery.
<https://doi.org/10.1145/3341525.3394995>
- Clear, A., Clear, T., Impagliazzo, J., & Wang, P. (2020). From knowledge-based to competency-based computing education: Future directions. In *2020 IEEE Frontiers in Education Conference (FIE)* (pp. 1-7). IEEE.
<https://doi.org/10.1109/FIE44824.2020.9274288>
- Clear, A., Clear, T., Vichare, A., Charles, T., Frezza, S., Gutica, M., Lunt, B., Maiorana, F., Pears, A., Pitt, F., Riedesel, C., & Szykiewicz, J. (2020). Designing computer science competency statements: A process and curriculum model for the 21st century. In *Proceedings of the Working Group Reports on Innovation and Technology in Computer Science Education* (pp. 211–246). Association for Computing Machinery.
<https://doi.org/10.1145/3437800.3439208>
- Clear, A., Impagliazzo, J., & Zhang, M. (2019). Computing competencies and the CC2020 project [Abstract]. In *Proceedings of the 50th ACM Technical Symposium on Computer Science Education* (pp. 1245–1246). Association for Computing Machinery.
<https://doi.org/10.1145/3287324.3293724>
- Clear, A., Takada, S., & Vargas, E. C. (2020). CC2020—Visualization tool preview and review. In *Proceedings of the 51st ACM Technical Symposium on Computer Science Education* (pp. 169–170). Association for Computing Machinery.
<https://doi.org/10.1145/3328778.3366998>
- Cotter, R., Skelton, D., Hartley, T., Floyd, S., Sajan, J., & Barr, D. (2020, September). Scaffolding work integrated learning [Abstract]. In M. Rudoff, D. Skelton, & D. Stewart (Eds.), *Te Pae Tawhiti 2020: Conference booklet; 17-18 September 2020, Eastern Institute of Technology, Napier* (pp. 10-11). Eastern Institute of Technology.
<https://www.eit.ac.nz/wp-content/uploads/2020/11/Te-Pae-Tawhiti-2020-Conference-Booklet.pdf>

- Dang, D. (2020). Case study of using SCRUM Framework to teach OOP concepts [Abstract]. In E. Erturk (Ed.), *Proceedings of the 10th Annual Conference of Computing and Information Technology Education and Research in New Zealand incorporating the 33rd Annual Conference of the National Advisory Committee on Computing Qualifications Wellington, New Zealand 7th - 8th October 2020* (p. 11). CITRENZ.
<https://www.citrenz.ac.nz/2020-proceedings/>
- Dang, D. (2020). Implementation of a Mini MVC-based framework to teach web app development [Abstract]. In E. Erturk (Ed.), *Proceedings of the 10th Annual Conference of Computing and Information Technology Education and Research in New Zealand incorporating the 33rd Annual Conference of the National Advisory Committee on Computing Qualifications Wellington, New Zealand 7th - 8th October 2020* (p. 22). CITRENZ.
<https://www.citrenz.ac.nz/2020-proceedings/>
- Dearing, C. (2020). Google forms as learning aids for tertiary students [Abstract; poster session]. In M. Rudoff, D. Skelton, & D. Stewart (Eds.), *Te Pae Tawhiti 2020: Conference booklet; 17-18 September 2020, Eastern Institute of Technology, Napier* (p. 41). Eastern Institute of Technology.
<https://www.eit.ac.nz/wp-content/uploads/2020/11/Te-Pae-Tawhiti-2020-Conference-Booklet.pdf>
- Dearing, C. G., & Paton, C. (2020). Hawke's Bay tertiary students have high stress levels: Young students are most at risk [Abstract; poster session]. In M. Rudoff, D. Skelton, & D. Stewart (Eds.), *Te Pae Tawhiti 2020: Conference booklet; 17-18 September 2020, Eastern Institute of Technology, Napier* (p. 40). Eastern Institute of Technology.
<https://www.eit.ac.nz/wp-content/uploads/2020/11/Te-Pae-Tawhiti-2020-Conference-Booklet.pdf>
- Edwards, R. (2020, September). So that's what blended teaching and learning looks like—Lessons catalysed by lockdown [Abstract]. In M. Rudoff, D. Skelton, & D. Stewart (Eds.), *Te Pae Tawhiti 2020: Conference booklet; 17-18 September 2020, Eastern Institute of Technology, Napier* (p. 12). Eastern Institute of Technology.
<https://www.eit.ac.nz/wp-content/uploads/2020/11/Te-Pae-Tawhiti-2020-Conference-Booklet.pdf>
- Ekundayo, S., Baker, O., & Zhou, J. (2020, November). QR code and NFC-based information system for Southland tourism industry-New Zealand. In *Proceedings: 2020 IEEE 10th International Conference on System Engineering and Technology (ICSET)* (pp. 161-166). IEEE.
<https://doi.org/10.1109/ICSET51301.2020.9265394>
- Erturk, E., & Hagen-Hall, K. (2020, September). Agile approaches to course development and building connections through course design [Abstract]. In M. Rudoff, D. Skelton, & D. Stewart (Eds.), *Te Pae Tawhiti 2020: Conference booklet; 17-18 September 2020, Eastern Institute of Technology, Napier* (p. 13). Eastern Institute of Technology. <https://www.eit.ac.nz/wp-content/uploads/2020/11/Te-Pae-Tawhiti-2020-Conference-Booklet.pdf>

- Erturk, E., (with Tan, G.). (2020). Using blockchain and tokens for education: Fad or here to stay? [Abstract]. In E. Erturk (Ed.), *Proceedings of the 10th Annual Conference of Computing and Information Technology Education and Research in New Zealand incorporating the 33rd Annual Conference of the National Advisory Committee on Computing Qualifications Wellington, New Zealand 7th - 8th October 2020* (p. 38). CITRENZ. <https://www.citrenz.ac.nz/2020-proceedings/>
- Frezza, S., Clear, T., & Clear, A. (2020). Unpacking dispositions in the CC2020 Computing Curriculum Overview Report. In *2020 IEEE Frontiers in Education Conference (FIE)* (pp. 1-8). IEEE. <https://doi.org/10.1109/FIE44824.2020.9273973>
- Goldweber, M., Kaczmarczyk, L., Blumenthal, R., & Clear, A. (2020). A hands-on tutorial on how to incorporate computing for social good in the introductory course sequence. In *Proceedings of the 51st ACM Technical Symposium on Computer Science Education* (pp. 954–955). Association for Computing Machinery. <https://doi.org/10.1145/3328778.3366992>
- Gray, R., Manhire, K., & McCrory, K. (2020). Primary health simulation in real spaces [Abstract; poster session]. In M. Rudoff, D. Skelton & D. Stewart (Eds.), *Te Pae Tawhiti 2020: Conference booklet; 17-18 September 2020, Eastern Institute of Technology, Napier* (p. 44). Napier, New Zealand: Eastern Institute of Technology.
- Hall, C., Kay, R., Randle, H., Preshaw, L., Pearson, G., & Waran, N. (2019). Indicators on the outside: Behaviour and equine quality of life [Abstract]. In C. DuBois, K. Merries, T. Widowski, & C. Wentworth-Stanley (Eds.), *Proceedings of the 15th International Equitation Science Conference: Bringing Science to the Stable, August 19th-21st, 2019, University of Guelph, Guelph, Ontario, Canada* (p. 54). International Society for Equitation Science. https://equitationscience.com/file_download/255/ISES_Proceedings_15th_International_Conference_Guelph_2019.pdf
- Hamm, P., & Hagen-Hall, K. (2020). Applying the International Project Management Association Baseline [Abstract]. In E. Erturk (Ed.), *Proceedings of the 10th Annual Conference of Computing and Information Technology Education and Research in New Zealand incorporating the 33rd Annual Conference of the National Advisory Committee on Computing Qualifications Wellington, New Zealand 7th - 8th October 2020* (p. 9). CITRENZ. <https://www.citrenz.ac.nz/2020-proceedings/>
- Honeth, C. (2020). Is there a bright side to the COVID-19 lockdown?—A review on online learning [Abstract; poster session]. In M. Rudoff, D. Skelton, & D. Stewart (Eds.), *Te Pae Tawhiti 2020: Conference booklet; 17-18 September 2020, Eastern Institute of Technology, Napier* (p. 42). Eastern Institute of Technology. <https://www.eit.ac.nz/wp-content/uploads/2020/11/Te-Pae-Tawhiti-2020-Conference-Booklet.pdf>

- Jagroop-Dearing, A. (2020, September). Covid-19 Impact: International postgraduate health science & nursing students demonstrate their resilience [Abstract]. In M. Rudoff, D. Skelton, & D. Stewart (Eds.), *Te Pae Tawhiti 2020: Conference booklet; 17-18 September 2020, Eastern Institute of Technology, Napier* (p. 15). Eastern Institute of Technology.
<https://www.eit.ac.nz/wp-content/uploads/2020/11/Te-Pae-Tawhiti-2020-Conference-Booklet.pdf>
- John, S. P. (2020). Digital marketing strategies in educational tourism: A social media perspective. In F. J. Martínez-López & S. D'Alessandro (Eds.), *Advances in digital marketing and eCommerce: First International Conference, 2020* (pp. 114-121). Springer International Publishing.
https://doi.org/10.1007/978-3-030-47595-6_15
- John, S. P. (2020). Role of digital relationships in the marketing of higher education: An exploratory analysis from New Zealand. In F. J. Martínez-López & S. D'Alessandro (Eds.), *Advances in digital marketing and eCommerce: First International Conference, 2020* (pp. 106-113). Springer International Publishing.
https://doi.org/10.1007/978-3-030-47595-6_14
- John, S. P., & Walford, R. (2020). Determinants of tertiary level student satisfaction in New Zealand. In A. Lye (Ed.), *Resilience and innovation: Proceedings of the Annual Conference of the New Zealand Applied Business Forum; Hosted by Northtec, Whangarei, November 19, 2020* (pp. 52-55). NZABEF.
<https://www.northtec.ac.nz/getattachment/Events/2020/NZABE-2020-Online-Conference/Proceedings-2020-NZABC-Resilience-and-Innovation.pdf?lang=en-NZ>
- Kneuer, B., Ikarath, S., & Yang, A. (2020, September). Strategies for teaching international students [Abstract]. In M. Rudoff, D. Skelton, & D. Stewart (Eds.), *Te Pae Tawhiti 2020: Conference booklet; 17-18 September 2020, Eastern Institute of Technology, Napier* (p. 14). Eastern Institute of Technology.
<https://www.eit.ac.nz/wp-content/uploads/2020/11/Te-Pae-Tawhiti-2020-Conference-Booklet.pdf>
- Lopez, D. (2020). Designing the peer mentoring model for international students [Workshop and presentation; abstract]. In E. Erturk (Ed.), *Proceedings of the 10th Annual Conference of Computing and Information Technology Education and Research in New Zealand incorporating the 33rd Annual Conference of the National Advisory Committee on Computing Qualifications Wellington, New Zealand 7th - 8th October 2020* (p. 40). CITRENZ.
<https://www.citrenz.ac.nz/2020-proceedings/>
- MacKenzie, L. (2020). New Zealand secondary schools: Financial internal controls. In A. Lye (Ed.), *Resilience and innovation: Proceedings of the Annual Conference of the New Zealand Applied Business Forum; Hosted by Northtec, Whangarei, November 19, 2020* (pp. 28-31). NZABEF.
<https://www.northtec.ac.nz/getattachment/Events/2020/NZABE-2020-Online-Conference/Proceedings-2020-NZABC-Resilience-and-Innovation.pdf?lang=en-NZ>

- Masangkay, J., & Hagen-Hall, K. (2020). Evaluating Scrum for managing vote-counting system implementation [Abstract]. In E. Erturk (Ed.), *Proceedings of the 10th Annual Conference of Computing and Information Technology Education and Research in New Zealand incorporating the 33rd Annual Conference of the National Advisory Committee on Computing Qualifications Wellington, New Zealand 7th - 8th October 2020* (p. 16). CITRENZ.
<https://www.citrenz.ac.nz/2020-proceedings/>
- MacKenzie, L. (2020). The “chocolate fish method” that hooked students into online learning [Abstract]. In M. Rudoff, D. Skelton, & D. Stewart (Eds.), *Te Pae Tawhiti 2020: Conference booklet; 17-18 September 2020, Eastern Institute of Technology, Napier* (p. 16). Eastern Institute of Technology.
<https://www.eit.ac.nz/wp-content/uploads/2020/11/Te-Pae-Tawhiti-2020-Conference-Booklet.pdf>
- Merchant, R., & Whaanga, R. (2020, September). Kanohi ki te kanohi in the face of Covid-19 [Abstract]. In M. Rudoff, D. Skelton, & D. Stewart (Eds.), *Te Pae Tawhiti 2020: Conference booklet; 17-18 September 2020, Eastern Institute of Technology, Napier* (p. 17). Eastern Institute of Technology.
<https://www.eit.ac.nz/wp-content/uploads/2020/11/Te-Pae-Tawhiti-2020-Conference-Booklet.pdf>
- Morris-Matthews, K., Austin, K., Malcolm, C., & (2020, September). Building resilience: Working together to tackle life challenges [Abstract]. In M. Rudoff, D. Skelton, & D. Stewart (Eds.), *Te Pae Tawhiti 2020: Conference booklet; 17-18 September 2020, Eastern Institute of Technology, Napier* (pp. 18-19). Eastern Institute of Technology.
<https://www.eit.ac.nz/wp-content/uploads/2020/11/Te-Pae-Tawhiti-2020-Conference-Booklet.pdf>
- Munday, K. (2020). Factors that influence student nurses’ attitudes towards older adults [Abstract; poster session]. In M. Rudoff, D. Skelton, & D. Stewart (Eds.), *Te Pae Tawhiti 2020: Conference booklet; 17-18 September 2020, Eastern Institute of Technology, Napier* (p. 43). Eastern Institute of Technology.
<https://www.eit.ac.nz/wp-content/uploads/2020/11/Te-Pae-Tawhiti-2020-Conference-Booklet.pdf>
- Nelson, E., & Johnson, L. (2020). ILEs as social assemblages: Implications for initial teacher education. In W. Imms & M. Mahat (Eds.), *What is involved in making the journey from traditional to innovative learning environments? Proceedings of international symposium Transitions19: One Journey, Many Pathways* (pp. 89-97). Innovative Learning Environments and Teacher Change (ILETC).
<http://www.iletc.com.au/publications/proceedings/>
- Nikula, P.-T. (2020). Beyond compliance—New Zealand firms and climate action [Abstract]. In A. Lye (Ed.), *Resilience and innovation: Proceedings of the Annual Conference of the New Zealand Applied Business Forum; Hosted by Northtec, Whangarei, November 19, 2020* (p. 60). NZABEF.

- Nikula, P.-T., Roy, R., Stokes, B., & Weihana, C. (2020). Staff and student panel: Online simulations in teaching and learning [Abstract]. In M. Rudoff, D. Skelton, & D. Stewart (Eds.), *Te Pae Tawhiti 2020: Conference booklet; 17-18 September 2020, Eastern Institute of Technology, Napier* (p. 20). Eastern Institute of Technology. <https://www.eit.ac.nz/wp-content/uploads/2020/11/Te-Pae-Tawhiti-2020-Conference-Booklet.pdf>
- Randle, H., Henshall, C., Hall, C., Pearson, G., Preshaw, L., & Waran, N. (2019). Indicators on the inside: Physiology and equine quality of life [Abstract]. In C. DuBois, K. Merckies, T. Widowski, & C. Wentworth-Stanley (Eds.), *Proceedings of the 15th International Equitation Science Conference: Bringing Science to the Stable, August 19th-21st, 2019, University of Guelph, Guelph, Ontario, Canada* (p. 55). International Society for Equitation Science. https://equitationscience.com/file_download/255/ISES_Proceedings_15th_International_Conference_Guelph_2019.pdf
- Roy, R. (2020). Sentiments analysis of the feedback from a business simulation game [Abstract]. In E. Erturk (Ed.), *Proceedings of the 10th Annual Conference of Computing and Information Technology Education and Research in New Zealand incorporating the 33rd Annual Conference of the National Advisory Committee on Computing Qualifications Wellington, New Zealand 7th - 8th October 2020* (p. 30). CITRENZ. <https://www.citrenz.ac.nz/2020-proceedings/>
- Schumacher, C. (2020). Covid-19 lockdown effect on pass rates. In A. Lye (Ed.), *Resilience and innovation: Proceedings of the Annual Conference of the New Zealand Applied Business Forum; Hosted by Northtec, Whangarei, November 19, 2020* (pp. 42-47). NZABEF. <https://www.northtec.ac.nz/getattachment/Events/2020/NZABE-2020-Online-Conference/Proceedings-2020-NZABC-Resilience-and-Innovation.pdf?lang=en-NZ>
- Stokes, B. (2020, September). Using online activities to increase student engagement and improve results [Abstract]. In M. Rudoff, D. Skelton, & D. Stewart (Eds.), *Te Pae Tawhiti 2020: Conference booklet; 17-18 September 2020, Eastern Institute of Technology, Napier* (p. 22). Eastern Institute of Technology. <https://www.eit.ac.nz/wp-content/uploads/2020/11/Te-Pae-Tawhiti-2020-Conference-Booklet.pdf>
- Teepa, W. (2020, September). *Stories from the Archives—Connecting past, present, and future* [Abstract]. In M. Rudoff, D. Skelton, & D. Stewart (Eds.), *Te Pae Tawhiti 2020: Conference booklet; 17-18 September 2020, Eastern Institute of Technology, Napier* (p. 24). Eastern Institute of Technology. <https://www.eit.ac.nz/wp-content/uploads/2020/11/Te-Pae-Tawhiti-2020-Conference-Booklet.pdf>

- van Dulm, O., Taylor, L.-A., & Wawatai-Aldrich, N. (2020, September). Te Aranga Ake—Connecting with community through project-based learning [Abstract]. In M. Rudoff, D. Skelton, & D. Stewart (Eds.), *Te Pae Tawhiti 2020: Conference booklet; 17-18 September 2020, Eastern Institute of Technology, Napier* (p. 23). Eastern Institute of Technology.
<https://www.eit.ac.nz/wp-content/uploads/2020/11/Te-Pae-Tawhiti-2020-Conference-Booklet.pdf>
- Whyte, J. (2020, September). *Relationships count: Students plus maths do not need to equal anxiety* [Abstract]. In M. Rudoff, D. Skelton, & D. Stewart (Eds.), *Te Pae Tawhiti 2020: Conference booklet; 17-18 September 2020, Eastern Institute of Technology, Napier* (p. 23). Eastern Institute of Technology.
<https://www.eit.ac.nz/wp-content/uploads/2020/11/Te-Pae-Tawhiti-2020-Conference-Booklet.pdf>

Published conference proceedings—non-refereed

- Arora, D., & Lopez, D. (2020). Identifying the factors that influence adoption of augmented reality in retail industry [Poster paper]. In E. Erturk (Ed.), *Proceedings of the 10th Annual Conference of Computing and Information Technology Education and Research in New Zealand incorporating the 33rd Annual Conference of the National Advisory Committee on Computing Qualifications Wellington, New Zealand 7th - 8th October 2020* (p. 44). CITRENZ.
https://www.citrenz.ac.nz/conferences/2020/pdf/2020CITRENZ_Posters.pdf
- Arora, K., & Lopez, D. (2020). Fake news detection methods [Poster paper]. In E. Erturk (Ed.), *Proceedings of the 10th Annual Conference of Computing and Information Technology Education and Research in New Zealand incorporating the 33rd Annual Conference of the National Advisory Committee on Computing Qualifications Wellington, New Zealand 7th - 8th October 2020* (p. 48). CITRENZ.
https://www.citrenz.ac.nz/conferences/2020/pdf/2020CITRENZ_Posters.pdf
- Bhat, B. S. K., & Erturk, E. (2020). Blockchain Incubator, Hawke's Bay, NZ [Poster paper]. In E. Erturk (Ed.), *Proceedings of the 10th Annual Conference of Computing and Information Technology Education and Research in New Zealand incorporating the 33rd Annual Conference of the National Advisory Committee on Computing Qualifications Wellington, New Zealand 7th - 8th October 2020* (p. 57). CITRENZ.
https://www.citrenz.ac.nz/conferences/2020/pdf/2020CITRENZ_Posters.pdf
- Casley, S., MacKenzie, L., Roy, R., & Schumacher, C. (2020, September). Staff panel: Zoom Room class-to-class video conferencing upgrade project [Abstract]. In M. Rudoff, D. Skelton, & D. Stewart (Eds.), *Te Pae Tawhiti 2020: Conference booklet; 17-18 September 2020, Eastern Institute of Technology, Napier* (p. 34). Eastern Institute of Technology.
<https://www.eit.ac.nz/wp-content/uploads/2020/11/Te-Pae-Tawhiti-2020-Conference-Booklet.pdf>

- Clear, A. (2020). Selected insights gathered for computer science educators [Abstract; keynote presentation]. In *Proceedings of the 51st ACM Technical Symposium on Computer Science Education* (pp. 177). Association for Computing Machinery. <https://doi.org/10.1145/3328778.3372551>
- Dizon, J. P., & Lopez, D. (2020). Smart city adoption [Poster paper]. In E. Erturk (Ed.), *Proceedings of the 10th Annual Conference of Computing and Information Technology Education and Research in New Zealand incorporating the 33rd Annual Conference of the National Advisory Committee on Computing Qualifications Wellington, New Zealand 7th - 8th October 2020* (p. 46). CITRENZ. https://www.citrenz.ac.nz/conferences/2020/pdf/2020CITRENZ_Posters.pdf
- Gaur, P., & Erturk, E. (2020). Building an IoT data hub on Azure [Poster paper]. In E. Erturk (Ed.), *Proceedings of the 10th Annual Conference of Computing and Information Technology Education and Research in New Zealand incorporating the 33rd Annual Conference of the National Advisory Committee on Computing Qualifications Wellington, New Zealand 7th - 8th October 2020* (p. 54). CITRENZ. https://www.citrenz.ac.nz/conferences/2020/pdf/2020CITRENZ_Posters.pdf
- Graham, T., & Erturk, E. (2020). Microsoft Power Automate for Te Taiwhenua o Heretaunga [Poster paper]. In E. Erturk (Ed.), *Proceedings of the 10th Annual Conference of Computing and Information Technology Education and Research in New Zealand incorporating the 33rd Annual Conference of the National Advisory Committee on Computing Qualifications Wellington, New Zealand 7th - 8th October 2020* (p. 58). CITRENZ. https://www.citrenz.ac.nz/conferences/2020/pdf/2020CITRENZ_Posters.pdf
- Khodabacchus, N., & Erturk, E. (2020). Blockchain & Fintech Incubator Hawke's Bay Group [Poster paper]. In E. Erturk (Ed.), *Proceedings of the 10th Annual Conference of Computing and Information Technology Education and Research in New Zealand incorporating the 33rd Annual Conference of the National Advisory Committee on Computing Qualifications Wellington, New Zealand 7th - 8th October 2020* (p. 56). CITRENZ. https://www.citrenz.ac.nz/conferences/2020/pdf/2020CITRENZ_Posters.pdf
- Lingaraja, R., & Lopez, D. (2020). Methods to approach cybersecurity threats in cloud computing [Poster paper]. In E. Erturk (Ed.), *Proceedings of the 10th Annual Conference of Computing and Information Technology Education and Research in New Zealand incorporating the 33rd Annual Conference of the National Advisory Committee on Computing Qualifications Wellington, New Zealand 7th - 8th October 2020* (p. 49). CITRENZ. https://www.citrenz.ac.nz/conferences/2020/pdf/2020CITRENZ_Posters.pdf
- Matthew, B., & Erturk, E. (2020). Case study on Microsoft Azure BaaS [Poster paper]. In E. Erturk (Ed.), *Proceedings of the 10th Annual Conference of Computing and Information Technology Education and Research in New Zealand incorporating the 33rd Annual Conference of the National Advisory Committee on Computing Qualifications Wellington, New Zealand 7th - 8th October 2020* (p. 55). CITRENZ. https://www.citrenz.ac.nz/conferences/2020/pdf/2020CITRENZ_Posters.pdf

- Sharma, A., & Lopez, D. (2020). The security issues of digital contact tracing applications [Poster paper]. In E. Erturk (Ed.), *Proceedings of the 10th Annual Conference of Computing and Information Technology Education and Research in New Zealand incorporating the 33rd Annual Conference of the National Advisory Committee on Computing Qualifications Wellington, New Zealand 7th - 8th October 2020* (p. 47). CITRENZ.
https://www.citrenz.ac.nz/conferences/2020/pdf/2020CITRENZ_Posters.pdf
- Shen, X., & Lopez, D. (2020). Factors influencing students' choice of online education and teaching strategies [Poster paper]. In E. Erturk (Ed.), *Proceedings of the 10th Annual Conference of Computing and Information Technology Education and Research in New Zealand incorporating the 33rd Annual Conference of the National Advisory Committee on Computing Qualifications Wellington, New Zealand 7th - 8th October 2020* (p. 45). CITRENZ.
https://www.citrenz.ac.nz/conferences/2020/pdf/2020CITRENZ_Posters.pdf
- Tang, C., & Lopez, D. (2020). Analysing the technological factors that determine a successful mobile food and grocery ordering application [Poster paper]. In E. Erturk (Ed.), *Proceedings of the 10th Annual Conference of Computing and Information Technology Education and Research in New Zealand incorporating the 33rd Annual Conference of the National Advisory Committee on Computing Qualifications Wellington, New Zealand 7th - 8th October 2020* (p. 42). CITRENZ.
https://www.citrenz.ac.nz/conferences/2020/pdf/2020CITRENZ_Posters.pdf
- Thangaraj, A., & Lopez, D. (2020). Challenges in agile distributed software development [Poster paper]. Erturk, E (ed.), In *Proceedings of the 10th Annual Conference of Computing and Information Technology Education and Research in New Zealand incorporating the 33rd Annual Conference of the National Advisory Committee on Computing Qualifications Wellington, New Zealand 7th - 8th October 2020* (p. 43). CITRENZ.
https://www.citrenz.ac.nz/conferences/2020/pdf/2020CITRENZ_Posters.pdf
- Zhigalov, I., Kersley, A., Hartley, T., & Lengyel, I. (2020). Autonomous vehicles mission planner [Poster paper]. In E. Erturk (Ed.), *Proceedings of the 10th Annual Conference of Computing and Information Technology Education and Research in New Zealand incorporating the 33rd Annual Conference of the National Advisory Committee on Computing Qualifications Wellington, New Zealand 7th - 8th October 2020* (p. 52). CITRENZ. https://www.citrenz.ac.nz/conferences/2020/pdf/2020CITRENZ_Posters.pdf

Conference oral presentation—refereed

- Abraham, A., & Roy, R. (2020, April). *What the hack- 'defect-free' method to make work instructions and robotic process automation readiness* [Paper presentation]. POMS 31st Annual Conference, Minneapolis, MN. (Conference cancelled)
- Austin, K., & Pentecost, M. (2020, September). *Earning your place in the world: Social work students' perceptions of the positioning of social work in interdisciplinary teams* [Paper presentation]. 2020 ITP Research Symposium, Rotorua, New Zealand. <https://youtu.be/YQxurjmxhLo>
- Bahho, M. (2020, September). *Attachment to a heritage place: The Ōtātara case study* [Paper presentation]. 2020 ITP Research Symposium, Rotorua, New Zealand. <https://youtu.be/OaVZoYZBivY>
- Booth, R. (2020, September). *The neuroscience of the young adolescent brain and its impact on making effective career decisions* [Paper presentation]. 2020 ITP Research Symposium, Rotorua, New Zealand. <https://youtu.be/HC6kZjNL2DY>
- Bishop, P. A., & Nelson, E. J. (2020, April). *The Global Listening Project: What 2,000 Young adolescents across the world wish their teachers knew* [Paper session]. AERA (American Educational Research Association) Annual Meeting, San Francisco, CA. <http://tinyurl.com/szj5rpk> (Conference cancelled)
- Bishop, P. A., & Nelson, E. J. (2020, October). *The Global Listening Project: What 2,000 Young adolescents across the world wish their teachers knew* [Roundtable session]. #AMLE20 (Association for Middle Level Education) Virtual.
- Chisnell, C., & Elliott, S. (2020, September). *Barriers which limit effective partnership and research with victims of child sexual exploitation* [Paper presentation]. 2020 ITP Research Symposium, Rotorua, New Zealand. <https://youtu.be/HifqpljhrTM>
- Chisnell, C., & Elliott, S. (2019, December). *Changing the narrative: Why are we still referring to victims of child sexual exploitation as child prostitutes?* [Paper presentation]. SAANZ Conference, Auckland, New Zealand.
- Chisnell, C., & Merchant, R. (2020, September). *Te Manu Tu Tuia: A community-based intervention model for prevention of family harm* [Paper presentation]. 2020 ITP Research Symposium, Rotorua, New Zealand.
- Chisnell, C., & Pentecost, M. (2020, September). *An invisible population: The experiences of young adult carers studying at the Eastern Institute of Technology* [Paper presentation]. 2020 ITP Research Symposium, Rotorua, New Zealand. <https://youtu.be/YQxurjmxhLo>
- Clear, A. (2020, September). *Designing global computing curricula to enhance industry and learner outcomes* [Paper presentation]. 2020 ITP Research Symposium, Rotorua, New Zealand.
- Clear, A., & Clear, T. (2020, September). *Group work to enhance student professional attitudes and employability* [Paper presentation]. 2020 ITP Research Symposium, Rotorua, New Zealand. <https://youtu.be/F2rkbBA1zEg>

- Clear, A., Clear, T., Impagliazzo, J., & Wang, P. (2020, October). *From knowledge-based to competency-based computing education: Future directions* [Paper presentation]. Frontiers in Education (FIE) 2020 Conference, Uppsala, Sweden.
- Dang, D., & Erturk, E. (2020, September). *Developing a student mentorship to support a young enterprise scheme and other community projects* [Paper presentation]. 2020 ITP Research Symposium, Rotorua, New Zealand.
<https://youtu.be/pgZo7B6wYcw>
- Dearing, C. (2020, July). *The protective benefits of physical exercise for perceived stress in a Hawkes Bay population* [Conference presentation]. Exercise and Mental Health Symposium 2020 (Online). <https://vimeo.com/436286939/c1b7f31117>
- Erturk, E. (2020, June). *Using research and industry-based concepts to fuel online teaching* [Paper presentation]. IISES 9th Teaching and Education Conference, Prague, Czech Republic.
- Erturk, E. (2020, July). *Online study bubble* [Paper presentation]. International and Interdisciplinary Virtual Conference on Digital Environments for Learning (VCDEL).
- Erturk, E., & Reynold, G.-B. (2020, July). *The expanding role of immersive media in education* [Paper presentation]. International Conference on e-Learning (part of Multi Conference on Computer Science and Information Systems), Zagreb, Croatia.
- Fagan, K. (2019, November). *Social identity, wellbeing, belonging and tattoos* [Conference presentation]. TASA (The Australian Sociological Association) 2019 Conference, Paramatta, NSW, Australia.
- Fielden, K. (2020, September). *Masters supervision* [Conference workshop]. 2020 ITP Research Symposium, Rotorua, New Zealand.
- Frezza, S., Clear, A., & Clear, T. (2020, October). *Unpacking dispositions as a critical component of competency* [Paper presentation]. Frontiers in Education (FIE) 2020 Conference, Uppsala, Sweden.
- Hollis, D. (2020, September). *Collaborative research: A multi-level approach to a sensitive subject* [Paper presentation]. 2020 ITP Research Symposium, Rotorua, New Zealand. <https://youtu.be/R28FvdpydQ0>
- Jagroop-Dearing, A., Walker, T., Sherwood, J., Newbern, C., Adnan, M., Marshall, J., Wilson, B., Frendin, T., Jones, N., Baker, M. G., & Gilpin, B. J. (2020, May). *The largest campylobacter waterborne outbreak ever recorded: A programme of research from Hawkes Bay New Zealand* [Oral presentation]. ICWPT 2020: XIV. International Conference on Water Pollution and Treatment, London, England.
- Kneuer, B. (2020, September). *Strategies for teaching international students—A case study on culturally relevant pedagogy at an NZ ITP* [Paper presentation]. 2020 ITP Research Symposium, Rotorua, New Zealand.
<https://youtu.be/YfhODkQs7EU>
- Lopez, D., & Clear, A. (2020, December). *A systematic approach to peer mentoring in a postgraduate school for international students* [Paper presentation]. Seventh International Conference on Learning and Teaching in Computing and Engineering (LaTiCE2020), Ho Chi Minh City, Vietnam.

- Nikula, P.-T. (2020, August). *Kansainvälisten tutkinto-opiskelijoiden akateeminen minäpystyvyys Uudessa-Seelannissa [Academic self-efficacy of international students in New Zealand]* [Paper presentation]. Pedaforum 2020, Oulu, Finland.
- Nikula, P.-T. (2020, August). *Simulaatiopelin käytön hyödyt korkeakouluopetuksessa [The benefits of simulation games in higher education teaching]* [Paper presentation]. Pedaforum 2020, Oulu, Finland.
- Nikula, P.-T. (2020, December). *Kolmekymmentä vuotta lukausmaksujen ja -maksuttomuuden politiikkaa Suomessa ja Uudessa-Seelannissa [30 years of politics of tuition fees and zero-fees in Finland and New Zealand]* [Paper presentation]. XIV Symposium of Higher Education.
- Nikula, P.-T. (2020, December). *Korkeakoulutuksen tasa-arvon painotukset ja edistäminen Suomessa ja Uudessa-Seelannissa [Higher education equality and its advancement in Finland and New Zealand]* [Paper presentation]. Kasvatustieteen Päivät [FERA Conference on Education], Helsinki, Finland.
- Nikula, P.-T. (2020, December). *Koulutusviennin motiivit, eettiset kysymykset ja poliittinen ohjaus [Export education and its motives, ethical questions and political coordination]* [Paper presentation]. XIV Symposium of Higher Education.
- Nikula, P.-T. (2020, December). *Koulutusviennin näkökulmia Australiasta ja Uudesta-Seelannista [Export education perspectives from Australia and New Zealand]* [Paper presentation]. Kasvatustieteen Päivät [FERA Conference on Education], Helsinki, Finland.
- Paterson, R. (2020, September). *Tukutuku—Binding the whare and its people* [Paper presentation]. 2020 ITP Research Symposium, Rotorua, New Zealand.
<https://youtu.be/LpCPOdf1miQ>
- Pentecost, M. (2020, March). *Using visual resources in SF practice* [Conference workshop]. Solution Focused Practice Aotearoa Conference, Wellington, New Zealand.
- Pierard, T. (2020, July). *Exploring integration of DAW processes for effective instrumental practise* [Paper presentation]. Australasian Computer Music Conference, Melbourne, Australia.
- Pierard, T. (2020, June). *War of the beatmakers: How non-drummers redefined the function of drums in popular music* [Paper presentation]. International Conference of New Music Concepts, Treviso, Italy.
- Roy, R. (2020, April). *Examining the operational and sustainable supply chain issues of a New Zealand based apple-producing company* [Paper presentation]. POMS 31st Annual Conference, Minneapolis, MN. (Conference cancelled)
- Roy, R. (2020, April). *Exploring operational sustainability and marketing strategy of a New Zealand based fruit exporting company* [Paper presentation]. POMS 31st Annual Conference, Minneapolis, MN. (Conference cancelled)
- Roy, R. (2020, September). *Regression analysis of the feedback from various groups of students in a business simulation game* [Paper presentation]. 2020 ITP Research Symposium, Rotorua, New Zealand.
<https://youtu.be/KBefmK8vrYM>

- Roy, R. (2020, December). *Sustainable packaging practices in the horticulture sector: Some innovative companies' initiatives under the spotlight* [Paper presentation]. 10th International Conference on Operations and Supply Chain Management (OSCM), Wellington, New Zealand.
<https://www.youtube.com/watch?v=-gZGHjWLve4&feature=youtu.be>
- Shaw, S., Leberman, S., & Pearson, M. (2020, May). *Examining moral jeopardy: Accepting betting industry funding to investigate sport gambling behaviours* [Conference session cancelled]. North American Society for Sport Management Conference (NASSM 2020), San Diego, CA, United States.
- Soltani, B. (2020, September). *Toward a model of capability construction: A landscape of practical perspective* [Paper presentation]. 2020 ITP Research Symposium, Rotorua, New Zealand.
<https://youtu.be/fZqdOmRokks>
- Tabatabaee, S. M., Ekundayo, S., Thakur, L., & Sun, L. (2020, October). *ICT for sustainable development: A human capital narrative of South Africa* [Paper presentation]. Global Research Conference (GRaCe 2020), Virtual conference. https://terengganu.uitm.edu.my/grace2020/images/SlideVC/GRaCe_2020_slidepresentation_164.pdf
- Taylor, L.-A., & Wawatai-Aldrich, N. (2020, September). *Community led project-based learning* [Paper presentation]. 2020 ITP Research Symposium, Rotorua, New Zealand.
<https://youtu.be/v7N9FgEaKTW>
- Tipene-Leach, D. (2020, September). *Extending the wahakura programme: Te Whare Pora o Hine-te-Iwaiwa* [Paper presentation]. 2020 ITP Research Symposium, Rotorua, New Zealand.
- Unac, F., Lo, A., Dearing, C., & Foo, E. (2020, February). *Vascular surgeon and nurse practitioner FSA outcomes for intermittent claudication* [Conference presentation]. 2020 Vascular Society of New Zealand Conference, Queenstown, New Zealand.
- van Dulm, O., Cotter, R., Skelton, D., & Dipper, M. (2020, November). *Work-integrated learning at the Eastern Institute of Technology: From snapshots to a model* [Paper presentation]. 16th New Zealand Vocational Education and Training Research Forum.
- Waran, N. (2020, April). *Looking on the bright side of life—Developing indicators of positive emotions in horses* [Conference session]. World Veterinary Association Congress (Virtual).
- Waran, N. (2020, April). *One Welfare—Reducing equine stress and safeguarding veterinary safety* [Conference session]. World Veterinary Association Congress (Virtual).
- Waran, N. (2020, April). *Utilising a 'One Welfare' approach for advancing animal welfare* [Conference session]. World Veterinary Association Congress (Virtual).
- Waran, N. (2020, August). *A good life for horses—Challenges and opportunities* [Keynote presentation]. ISES (International Society for Equitation Science) Virtual Summer Meeting.

- Waran, N. (2020, September). *Assessing quality of life in equids: A One Welfare approach* [Keynote presentation]. European Veterinary College Animal Welfare Science, Ethics and Law (AWSEL) Virtual Meeting.
- Waran, N. (2020, December). *One Health, One Welfare and zoonotic disease prevention and control* [Key note presentation on behalf of OIE]. International Forum on Animal Welfare and Public Health, Beijing, China.
- Whaanga, R. (2020, September). *Forces of success for wāhine Māori social workers during their degree study* [Paper presentation]. 2020 ITP Research Symposium, Rotorua, New Zealand. <https://youtu.be/HifqpljhrTM>

Conference oral presentation—non-refereed

- Casley, S. (2020, September). *The other side of online learning* [Panel session]. Te Pae Tawhiti 2020, Napier, New Zealand.
- Clear, A. (2020, February). *Computing Curricula 2020: The overview report and tool* [Lightning talk and poster presentation]. 2020 Australian Computer Science Week (ACSW), Melbourne, Australia.
- Clear, A. (2019, October). *CC2020: The future of computing education* [Keynote presentation]. COMPUTE 2019, Goa, India.
- Clear, A., & Clear, T. (2020, February). *CC2020: Envisioning future computing curricula* [Invited talk]. Australasian Computing Education Conference (ACE 2020), Melbourne, Australia.
- Cooper, G., & McConnell, C. (with Postlewaigh, G., & Stewart-MacKenzie, H.L.G.). (2020, November). *Examining collaborative relationships between mentor teachers, degree students and the Bachelor of Teaching (Early Childhood Education) teaching team at EIT Te Aho Maui* [Conference presentation]. TEFANZ Research Hui Online.
- Erturk, E. (2020, November). *Team teaching and guest lectures in technical online education* [Paper presentation]. 8th Sino-New Zealand Higher Vocational Education Conference.
- Erturk, E. (2020, November). *The role of big (green) data and data analytics in environmental sustainability* [Paper presentation]. Sustainable Futures Symposium, Wintec, Hamilton, New Zealand.
- Henry, G. (2020, September). *Connect and reflect* [Conference workshop]. Te Pae Tawhiti 2020, Napier, New Zealand.
- Ikarath, S., & Kneuer, B. (2020, November). *From blended to online delivery: Challenges faced in learning design, learner engagement and some practical solutions* [Paper presentation]. 8th Sino-New Zealand Higher Vocational Education Conference.
- Ikarath, S., & McCaffrey, O. (2020, September). *Using Moodle “lessons” to scaffold online learning* [Conference workshop]. Te Pae Tawhiti 2020, Napier, New Zealand.
- Keepa, T. (2020, September). *Tour of wharehenui* [Conference session]. Te Pae Tawhiti 2020, Napier, Zealand.

- MacKenzie, L. (2020, October). *Financial internal controls within Hawke's Bay secondary schools. Presentation of model: Drivers of susceptibility to fraudulent behaviour within schools* [Conference presentation]. Unitec Research Symposium 2020, Auckland, New Zealand.
- McKelvie-Sebileau, P. (2020, September). *Understanding and improving student engagement at EIT (Part 1)* [Conference workshop]. Te Pae Tawhiti 2020, Napier, New Zealand.
- McKelvie-Sebileau, P. (2020, September). *Understanding and improving student engagement at EIT (Part 2)* [Conference workshop]. Te Pae Tawhiti 2020, Napier, New Zealand.
- Narula, J. (2020, November). *The potential to enhance the use of public transport by tertiary institutes to support climate change mitigation* [Paper presentation]. Sustainable Futures Symposium, Wintec, Hamilton, New Zealand.
- Nelson, E. (2020, November). *ILes: Perspectives, opportunities & implications for initial teacher education* [Conference presentation]. TEFANZ Research Hui Online.
- Nelson, E., & Rehu, M. (2020, October). *The potential of ILE for Māori student success* [Conference presentation]. NZARE (New Zealand Association for Research in Education) Learning Environment Webinar.
- Nikula, P.-T. (2020, September). *International students' academic self-efficacy* [Conference workshop]. Te Pae Tawhiti 2020, Napier, New Zealand.
- Otis, E. (2020, October). *The abstraction of physical health in the workplace* [Keynote presentation]. Hawke's Bay Chamber of Commerce Workplace Wellness Conference, Napier, New Zealand.
- Otis, E., & Malcolm, C. (2020, September). *Better rapport, better connections* [Conference workshop]. Te Pae Tawhiti 2020, Napier, New Zealand.
- Postlewaite, G. (2020, November). *A nature space: Opportunities for play in ECE* [Conference presentation]. TEFANZ Research Hui Online.
- Rayner, R. (2020, September). *The game as the teacher* [Conference workshop]. Te Pae Tawhiti 2020, Napier, New Zealand.
- Rudge, M. (2020, October). *Picking up the threads: An auto-ethnography of the process and practice of remaking silk kimono* [Conference presentation]. UNITEC Research Symposium, Auckland, New Zealand.
- Stewart, D., Hau, T., Johnston, C., Opperman, J., & Whaanga, R. (2020). *Resilience—Your gift to a thriving community* [Panel session]. Te Pae Tawhiti 2020, Napier, New Zealand.
- Stewart-MacKenzie, H. L. G. (2020, October). *Professional love in ECE—Can we define it? Initial findings* [Conference presentation]. UNITEC Research Symposium 2020, Auckland, New Zealand.
- Stewart-MacKenzie, H. L. G. (2020, November). *Professional love in ECE—What do teachers think?* [Conference presentation]. TEFANZ Research Hui Online.
- Taylor, L. (2020, November). *Basketball Smart* [Conference workshop]. Physiotherapy New Zealand Annual Hawke's Bay Branch Symposium: Dynamic Wellness, Napier, New Zealand.

- Waran, N., & Passey, E. (2020, November). *Developing an Outdoor Learning Centre at EIT* [Paper presentation]. Sustainable Futures Symposium, Hamilton, New Zealand.
- Waran, N., Passey, E., Bahho, M., Henry, G., Nuku, P., & Tareha, C. (2020, September). *Developing nature literacy at the Ōtātara Outdoor Learning Centre* [Conference presentation]. Te Pae Tawhiti 2020, Napier, New Zealand.
- Williams, K., Williams, T., & Stewart, J. (2020, September). *Weaving whanaungatanga into teaching & learning* [Conference workshop]. Te Pae Tawhiti 2020, Napier, New Zealand.

Report

- Adcock, A., & Tipene-Leach, D. (2020). *Choosing Wisely means choosing equity*. Choosing Wisely Aotearoa New Zealand. <https://choosingwisely.org.nz/choosing-wisely-means-choosing-equity-research-report/>
- Harvey, C., Baldwin, A., Brown, J., Willis, E., Byrne, A.-L. J., Hegney, D., Heritage, B., Palmer, J., Thompson, S., Mclellan, S., Heard, D., Judd, J., Ferguson, B., & Forrest, R. (2020). *Queensland Health nurse navigator evaluation: Progress report*; February 2020. Central Queensland University.
- Harvey, C., Baldwin, A., Hears, D., Byrne, A.-L., Willis, E., Brown, J., Hegney, D., Forrest, R., Heritage, B., & Baldwin, G. (2020). *Gold Coast Primary Health Network evaluation of the health navigators: Interim report*; April 2020. Central Queensland University.
- Harvey, C., Heritage, B., Forrest, R., Hegney, D., Willis, E., Byrne, A.-L., Baldwin, A., Brown, J., Heard, D., Palmer, J., Brain, D., Judd, J., Mclellan, S., Ferguson, B., & Thompson, S. (2020). *Queensland Health nurse navigator evaluation: Interim report*; October 2020. Central Queensland University.
- Harvey, C., Otis, E., Forrest, R., Osseiran-Moisson, R., & Knight, B. (2020). *Resilience: Thriving in the face of change, challenge and stress; Report on the New Zealand schools Resilience Project supported by Health Hawke's Bay*. Central Queensland University.
- Hinge, S. (2020). *Teaching strategies for professional teaching praxis in an online experiential learning context*. Eastern Institute of Technology.
- Lopez, D. (2020). *Developing a collaborative peer-mentoring model for international student support: Interim report 2020*. Report prepared for Ministry of Education, New Zealand.
- McKelvie-Sebileau, P. (2020). *Landholder perceptions of predator control in the cape to city region: Results from the Rural Survey (2020)*; October 2020. Report prepared for Manaaki Whenua and Hawke's Bay Regional Council. Research and Innovation Centre, Eastern Institute of Technology.
- Morris Matthews, K., Tipene-Leach, D., Hiha, A., McKelvie-Sebileau, P., Abel, S., Chisnell, C., Malcolm, C., & Austin, K. (2020). *Report on the evaluation of the Ngātahi Project in Year Three (June 2019-June 2020)*. Report commissioned by Hawke's Bay District Health Board.

Exhibition

Refereed

- Baker, P. (2020). Back to pack [Mixed media sculpture]. In *EAST 2020* [Group exhibition]. Hastings City Art Gallery, Hastings, New Zealand, November 21, 2020-February 28, 2021.
- Binding, W. (2020). Three studies for the island (Red poles), Studies for the island [Painted artworks, acrylic and pencil and colour pencil on canvas]. In *EAST 2020* [Group exhibition]. Hastings City Art Gallery, Hastings, New Zealand, November 21, 2020-February 28, 2021.
- Bruce, L. (2020). Colony I (3 pieces) [Clay, glazes, slips]. In *EAST 2020* [Group exhibition]. Hastings City Art Gallery, Hastings, New Zealand, November 21, 2020-February, 28, 2021.
- Gibbs, S. (2019). Te Waka o Rangi [Painting]. In *Puhoro a mua, Puhoro ki tua* [Group exhibition]. Waikato Museum, Hamilton, New Zealand, November 23, 2019-February 23, 2020
- Paterson, R. (2020). Tāwhirimātea (2019) [Plywood]. In *Tika Tonu: 30 Kahungunu Artists* [Group exhibition]. Hastings City Art Gallery, Hastings, New Zealand, August 8-November 1, 2020.

Non-refereed

- Bahho, M. (2020). A sustainable house [Architectural model scale 1:100]. In *Feast for the eyes #1* [Group exhibition]. Vent Gallery, Eastern Institute of Technology, Hawke's Bay, New Zealand, February 18-March 6, 2020.
- Baker, P. (2020). Back to pack—Points of departure (2019) [Mixed media with florescent lights]. In *Feast for the eyes #1* [Group exhibition]. Vent Gallery, Eastern Institute of Technology, Hawke's Bay, New Zealand, February 18-March 6, 2020.
- Baker, P. (2020, September). Double cross [Mixed media sculpture]. In *Pōraruru (Disequilibrium)* [Group exhibition]. 2020 ITP Research Symposium, Rotorua, New Zealand. <https://app.lapentor.com/sphere/itp-gallery-2020-1600383919>
- Baker, P. (2020). *Intermission* [Mixed media sculpture]. Aroha & Friends, Napier, New Zealand, January-May 2020.
- Binding, W. (2020). 12 new works [Painted artworks, acrylic and pencil on canvas]. In *Manual of dexterities* [Solo exhibition]. Muse Gallery, Havelock North, New Zealand, January 26-February 22, 2020.
- Binding, W. (2020). Man lake hill somewhere plan thing [Painted artwork, acrylic and pencil on three mdf tondos]. In *Playtime 2020* [Group exhibition]. Muse Gallery, Havelock North, New Zealand, November 29-December 13, 2020.
- Binding, W. (2020). Reboot HQ; Edge of somewhere [Painted artworks, acrylic and pencil on mdf tondos]. In *Local lockdown* [Group exhibition]. Waipawa Art Gallery, Waipawa, New Zealand, August 1-September 30, 2020.

- Binding, W. (2020). Reboot HQ; Edge of somewhere. [Painted artworks, acrylic and pencil on mdf tondos]. In *Local lockdown* [Group exhibition]. Hastings City Art Gallery, Hastings, New Zealand, June 13- July 19, 2020.
- Binding, W. (2020). Studies for a bad ekstasis [Acrylic, pencil and charcoal on unstretched canvas]. In *Feast for the eyes #1* [Group exhibition]. Vent Gallery, Eastern Institute of Technology, Hawke's Bay, New Zealand, February 18-March 6, 2020.
- Binding, W. (2020, September). Studies for the plaza [Painted artwork, acrylic, charcoal, pencil and colour pencil on canvas]. In *Potraruru* [Online group exhibition]. ITP Research Symposium, Rotorua, New Zealand, September 24-26, 2020.
- Binding, W. (2020). Study for the transformation of El Geco's View of Toledo into HN [Painted artwork, acrylic, charcoal and pencil on canvas]. In *CAN-did 50* [Group exhibition]. Community Arts Napier, Napier, New Zealand, October 9-29, 2020.
- Bruce, L. (2020). Bound IV (2005) [Ceramic with glaze]. In *Feast for the eyes #2* [Group exhibition]. Vent Gallery, Eastern Institute of Technology, Hawke's Bay, New Zealand, March 12-June 23, 2020.
- Bruce, L. (2020). Pork & puha (2010) [Clay, glazes]; Puha & Pakeha (2010) [Clay, glazes]. In *Te Taiao: Art inspired by nature* [Group exhibition]. Hastings, New Zealand, February 3-15, 2020.
- Bruce, L. (2020). Sprig vases IV-VIII [Clay, stains, glazes]. In *UKU Clay Hawke's Bay 2020* [Group exhibition]. Hastings Community Arts Centre, Hastings, New Zealand, October 3-20, 2020.
- Chiappin, A. (2020). Brand wayfinding signage, Tararua District (2019-2020) [Digital print]. In *Feast for the eyes #2* [Group exhibition]. Vent Gallery, Eastern Institute of Technology, Hawke's Bay, New Zealand, March 12-June 23, 2020.
- Downie, C., & Taaffe, P. (2020). Hybrid. In *Pōraruru* (Disequilibrium) [Group exhibition]. 2020 ITP Research Symposium, Rotorua, New Zealand. <https://app.lapentor.com/sphere/itp-gallery-2020-1600383919>
- Gibbs, S. (2020). Tū te Whaihanga – Kaitieki [Painting]. In *Tokorau* [Group exhibition]. Tairāwhiti Museum, Gisborne, New Zealand, November 28, 2020-January 31, 2021.
- Gibbs, S. (2020). *Waiwhakaora* (to reveal) [Acrylic on archival paper]. In *Wharehou* [Group exhibition]. Toi Matarau Gallery, Maoriland, Otaki, New Zealand, July 29-September 30, 2020.
- Hawksworth, M. (2020). Event horizon (2019) [Inkjet prints, found frames, pins and spraypaint]. In *Feast for the eyes #1* [Group exhibition]. Vent Gallery, Eastern Institute of Technology, Hawke's Bay, New Zealand, February 18-March 6, 2020.
- Kelly, R. (2020). Note to self (2019) [Digital print]. In *Feast for the eyes #2* [Group exhibition]. Vent Gallery, Eastern Institute of Technology, Hawke's Bay, New Zealand, March 12-June 23, 2020.
- Koopu, E. (2020). Ara Kowatawata [Neon light]. In *Te Ara i Whiti* [Group exhibition]. Te Tairāwhiti Arts Festival, Gisborne, New Zealand, September 28-October 12, 2020.
- Koopu, E. (2020). He Kawa tō Kawa [Painting]. In *Wharehou* [Group exhibition]. Toi Matarau Gallery, Maoriland, Otaki, New Zealand, July 29-September 30, 2020.

- Koopu, E. (2020). *Kainga* [Solo exhibition, body of retrospective works, painting]. Te Kaha Resort, Te Kaha, East Coast, New Zealand, February 28-current, 2020.
- Koopu, E. (2020). *Mahi tahi* [Solo exhibition, body of retrospective works, painting]. Mahi Tahi Media, Auckland, New Zealand, July 10, 2020-current.
- Koopu, E. (2020). *Ngā Mata o te Ariki Tāwhirimātea* [Solo exhibition, painting installation]. Te Tairāwhiti Arts Festival, Gisborne, New Zealand, September 28-October 12, 2020.
- Koopu, E. (2020). Pātikitiki [Neon light installation]. In *Te Ara i Whiti* [Group exhibition, in collaboration with artist Angus Muir]. Te Tairāwhiti Arts Festival, Gisborne, New Zealand, September 28-October 12, 2020.
- Olsen, L. (2020). A hui of Hue [Woven with harakeke and hue]. In *Te Taiao: Art inspired by nature* [Group exhibition]. Hastings Community Arts Centre, Hastings, New Zealand, February 3-15, 2020.
- Olsen, L. (2020). Tu [Woven with harakeke, muka and feathers]. In *Te Taiao: Art inspired by nature* [Group exhibition]. Hastings Community Arts Centre, Hastings, New Zealand, February 3-15, 2020.
- Olsen, L. (2020). Tui [Woven with harakeke and muka]. In *Te Taiao: Art inspired by nature* [Group exhibition]. Hastings Community Arts Centre, Hastings, New Zealand, February 3-15, 2020.
- Paterson, R. (2020). Tauira āhuahanga I [Plywood]. In *Te Kāhui o Matariki* [Group exhibition]. Toi Matarau Gallery, Maoriland Hub, Otaki, New Zealand, June 12-July 12, 2020.
- Paterson, R. (2020). Tauira āhuahanga II [Plywood]. In *Te Ao Hou* [Group exhibition]. Hastings Community Arts Centre, Hastings, New Zealand, July 6-18, 2020.
- Paterson, R. (2020). Tukutuku panels (2019-2020) [Digital print and mixed media]. In *Feast for the eyes #2* [Group exhibition]. Vent Gallery, Eastern Institute of Technology, Hawke's Bay, New Zealand, March 12-June 23, 2020.
- Paterson, R. (2020). Whetu I [Plywood]. In *We CAN Celebrate* [Group exhibition]. Creative Arts Napier, Napier, New Zealand, June 19-July 2, 2020.
- Pemberton, E. (2020). 11 Bags (1994-2020) [Mixed media with hand dyed raw linen]. In *Feast for the eyes #2* [Group exhibition]. Vent Gallery, Eastern Institute of Technology, Hawke's Bay, New Zealand, March 12-June 23, 2020.
- Pemberton, E. (2020). These things take time (2019) [Process film of Estelle of Brighton by Hector Hazard]. In *Feast for the eyes #2* [Group exhibition]. Vent Gallery, Eastern Institute of Technology, Hawke's Bay, New Zealand, March 12-June 23, 2020.
- Quinn, K. (2020). Illustrations for Pets and their famous humans. In *Feast for the eyes #1* [Group exhibition]. Vent Gallery, Eastern Institute of Technology, Hawke's Bay, New Zealand, February 18-March 6, 2020.
- Roberts, N. (2020). Discrepancy [25 frame GIF]. In *Pōraruraru (Disequilibrium)* [Group exhibition]. 2020 ITP Research Symposium, Rotorua, New Zealand. <https://app.lapentor.com/sphere/itp-gallery-2020-1600383919>

- Roberts, N. (2020). This is a material exploration (2019-2020) [Metal, plastic, wood, found objects]. In *Feast for the eyes #2* [Group exhibition]. Vent Gallery, Eastern Institute of Technology, Hawke's Bay, New Zealand, March 12-June 23, 2020.
- Solomon, M. (2020). Blue moon [Painting]. In *Wharehou*. [Group exhibition]. Toi Matarau Gallery, Maoriland, Otaki, New Zealand, July 29-September 30, 2020.
- Solomon, M. (2020). Paddle [Carved totara]. In *Toi Ake* [Group exhibition]. Toi Ake Gallery, Gisborne, New Zealand, August 15, 2020.
- Solomon, M. (2020). Pitau Muck-Naia series [Relief]. In *Wharehou* [Group exhibition]. Toi Matarau Gallery, Maoriland, Otaki, New Zealand, July 29-September 30, 2020.
- Solomon, M. (2020). Pitau Muck-Naia series [Relief]. In *Toi Ake* [Group exhibition]. Toi Ake Gallery, Gisborne, New Zealand, August 15, 2020.
- Solomon, M. (2020). Waka series [Carving and painting]. In *Toi Ake* [Group exhibition]. Toi Ake Gallery, Gisborne, New Zealand, August 15, 2020.
- Sutherland, B. (2020). Storyboard for a painted film 1 [Hand painted 35mm film, photo, acrylic on board]. In *Pōraruru (Disequilibrium)* [Group exhibition]. 2020 ITP Research Symposium, Rotorua, New Zealand.
<https://app.lapentor.com/sphere/itp-gallery-2020-1600383919>
- Taaffe, P., & Downie, C. (2020). Exotic hybrid collection (2019-2020) [Mixed media]. In *Feast for the eyes #2* [Group exhibition]. Vent Gallery, Eastern Institute of Technology, Hawke's Bay, New Zealand, March 12-June 23, 2020.
- Tangaere Baldwin, M. (2020). The condition of women in a nation is the real measure of its progress [Painting]. In *Wharehou* [Group exhibition]. Toi Matarau Gallery, Maoriland, Otaki, New Zealand, July 29-September 30, 2020.
- Tangaere Baldwin, M. (2020). Ngā ahoreinga o te papakoihi [Sculpture with elements of moving image, neon light and mirrored perspex]. In *Te Ara i Whiti* [Group exhibition]. Te Tairāwhiti Arts Festival, Gisborne, New Zealand, September 28-October 12, 2020.
- Tangaere Baldwin, M. (2020). *Porourangi Poutama* [Painted wall mural for hapu based community hub]. The Bank, Waiomatatini Rd, Ruatōrea, July 2020-current.
- Tangaere Baldwin, M. (2020). Rauru [Sound, light and painting installation]. In *Noise vacancy* [Group exhibition]. Te Tairāwhiti Arts Festival, Gisborne, New Zealand, October 7, 2020.
- Webster, J. (2020). Contagion – test plates (2019) [Etched aluminum]. In *Feast for the eyes #1* [Group exhibition]. Vent Gallery, Eastern Institute of Technology, Hawke's Bay, New Zealand, February 18-March 6, 2020.
- Webster, J., & Chiappin, A. (2020, September). Interface 1, Interface 2 [Monoprint and intaglio print, 2020]. In *Pōraruru (Disequilibrium)* [Group exhibition]. 2020 ITP Research Symposium, Rotorua, New Zealand.
<https://app.lapentor.com/sphere/itp-gallery-2020-1600383919>

Curation

- Baker, P. (Curator). (2020). *Feast for the Eyes #1, Feast for the Eyes #2*. [Group exhibitions]. Vent Gallery, Eastern Institute of Technology, Hawke's Bay, New Zealand, February-April 2020.
- Gibbs, S. (Curator & exhibition designer). (2020). *Tokorau* [Toihoukura summer exhibition]. Tairawhiti Museum, Gisborne, New Zealand, November 28, 2020 January 31, 2021.
- Gibbs, S. (Co-curator & exhibition designer). (2019). *Tū te whaihanga: A recognition of creative genius*. Tairawhiti Museum, Gisborne, New Zealand, October 7, 2019 May 2021.
- Kooppu, E., & Solomon, M. (Curators). (2020). *Wharehou* [Group exhibition, student and staff works from Toihoukura]. Toi Matarau Gallery, Maoriland, Otaki, New Zealand, July 29-September 30, 2020.

Exhibition Catalogue

- Baker, P. (2020). Double cross [Statement and image]. In *Ngā toi ō Toi, Issue 2 - Pōraruraru (Disequilibrium); 2020 ITP Research Symposium, Eastern Institute of Technology & Toi Ohomai Institute of Technology staff exhibition, 24-25 Sept, 2020* (p. 7).
<https://indd.adobe.com/view/72e54ae4-fb5c-48b3-947a-b49ca37bcc36>
- Baker, P. (2020). [Statement and images]. In *EAST 2020* [Exhibition catalogue]. Hastings City Art Gallery, New Zealand.
- Binding, W. (2020). The art of digestion [Essay]. In *Ngā toi ō Toi, Issue 2 - Pōraruraru (Disequilibrium); 2020 ITP Research Symposium, Eastern Institute of Technology & Toi Ohomai Institute of Technology staff exhibition, 24-25 Sept, 2020* (pp. 24).
<https://indd.adobe.com/view/72e54ae4-fb5c-48b3-947a-b49ca37bcc36>
- Binding, W. (2020). Studies for the plaza [Statement and image]. In *Ngā toi ō Toi, Issue 2 - Pōraruraru (Disequilibrium); 2020 ITP Research Symposium, Eastern Institute of Technology & Toi Ohomai Institute of Technology staff exhibition, 24-25 Sept, 2020* (p. 10).
<https://indd.adobe.com/view/72e54ae4-fb5c-48b3-947a-b49ca37bcc36>
- Downie, C., & Taafe, P. (2020). Hybrid [Statement and image]. In *Ngā toi ō Toi, Issue 2 - Pōraruraru (Disequilibrium); 2020 ITP Research Symposium, Eastern Institute of Technology & Toi Ohomai Institute of Technology staff exhibition, 24-25 Sept, 2020* (p. 15).
<https://indd.adobe.com/view/72e54ae4-fb5c-48b3-947a-b49ca37bcc36>
- Kooppu, E. (2020). *Hei ō mō Apanui*.

Sutherland, B. (2020). Storyboard for a painted film 1 [Statement and image]. In *Ngā toi ō Toi, Issue 2 - Pōraruru (Disequilibrium); 2020 ITP Research Symposium, Eastern Institute of Technology & Toi Ohomai Institute of Technology staff exhibition, 24-25 Sept, 2020* (p. 21).
<https://indd.adobe.com/view/72e54ae4-fb5c-48b3-947a-b49ca37bcc36>

Design

- Gibbs, S. & Tangaere Baldwin, M. (2020). *Toihoukura Maramataka 2021* [Calendar]. Eastern Institute of Technology.
- Koopu, E. (2020, October). Te Māramatanga [Artwork presented to MP Kiritapu Allan]. Gisborne, New Zealand.
- Lardelli, D. (2020). *Te Whare o Tangaroa—The House of Tangaroa* [Artwork presented to Steve Yung in recognition of his time as Sealord CEO October 2020]. Commissioned by the Sealord Group Ltd, Nelson, New Zealand.
- Paterson, R. (2020). *Tukutuku panels for Te Ara o Tāwhaki, Napier, New Zealand*. Te Ara o Tāwhaki, Eastern Institute of Technology, Napier, New Zealand.

Composition

- Pierard, T. (2020). Chunk with it [Music; original soundtrack]. In H. J. Weal (Director), *Dead* [Feature film]. Felicity. (Theatrical release September 2020)
- Pierard, T. (2020). Cutting time [Music; original soundtrack]. In H. J. Weal (Director), *Dead* [Feature film]. Felicity. (Theatrical release September 2020).
- Pierard, T. (2020). Dark times [Music; original soundtrack]. In H. J. Weal (Director), *Dead* [Feature film]. Felicity. (Theatrical release September 2020).
- Pierard, T. (2020). Flipside [Theme music; original soundtrack]. In H. J. Weal (Director), *Dead* [Feature film]. Felicity. (Theatrical release September 2020)
- Pierard, T. (2020). Moaning beautiful [Music; original soundtrack]. In H. J. Weal (Director), *Dead* [Feature film]. Felicity. (Theatrical release September 2020)
- Pierard, T., Weal, H., & Walker, A. (2020). The charge [Music; original soundtrack]. In H. J. Weal (Director), *Dead* [Feature film]. Felicity. (Theatrical release September 2020)
- Rohe-Belmont, P. (2020). *Materoa E!* [Lyrics]. Performed by Mātangirau in Titonga Waiata Hou-Waiata Ā Ringa section, Ngāti Kahungunu Kapa Haka Whakataetae-Ā-Rohe, Wairarapa, New Zealand, February 22, 2020.
- Rohe-Belmont, P. (2020). Ngā Taiwhenua o Ngāti Kahungunu [Lyrics]. Performed by Mātangirau in Whakawātea section, Ngāti Kahungunu Kapa Haka Whakataetae-Ā-Rohe, Wairarapa, New Zealand, February 22, 2020.
- Rohe-Belmont, P. (2020). *Te Hāronga o Te Kaahu* [Lyrics]. Performed by Mātangirau in Titonga Waiata Hou-Poi section, Ngāti Kahungunu Kapa Haka Whakataetae-Ā-Rohe, Wairarapa, New Zealand, February 22, 2020.

Rohe-Belmont, P. (2020). *Te Matorohanga* [Lyrics]. Performed by Mātangirau in Whakaeke section, Ngāti Kahungunu Kapa Haka Whakataetae-Ā-Rohe, Wairarapa, New Zealand, February 22, 2020.

Rohe-Belmont, P. (2020). *Te Reo Irirangi o Kahungunu!* [Lyrics]. Performed by Te Kura Kaupapa Māori o Ngāti Kahungunu o Te Wairoa, Tama Tūrangā, Hastings, New Zealand, November 20, 2020.

Performance

Dennis, R. (Kaikarākia). (2020, August 24). Tā-i-te-kawa, new establishment of Hastings police, Hastings, New Zealand.

Dennis, R. (Kaikarākia). (2020, December 21). Tā-i-te-kawa, Summer solstice, Ātea a Rangi, Awatoto, Napier, New Zealand.

Dennis, R. (Kaikarākia). (2020, December 22). Tā i te kawa, Papakainga Waiohiki.

Dennis, R. (Kaikarākia). (2020, February 5). Blessing and clearing of herenga waka o Ahuriri (Napier Port), Napier, New Zealand.

Dennis, R. (Kaikarākia). (2020, February 12). Blessing of tipuna whare o Tāwhaki Ngā poupou hou, Eastern Institute of Technology, Hawke's Bay, New Zealand.

Dennis, R. (Kaikarākia). (2020, May 1). Ātea-A-Rangi (Rising of Mahutonga, Pouturangi, Whanui), Awatoto, Napier, New Zealand.

Dennis, R. (Kaikarākia tautoko), K. (2020, March 21). Blessing held on behalf of Ātea a Rangi Educational Trust.

Koopu, E. (2020). Matariki i te Pō. In M. Rika (Director), *Matariki i te Pō* [Music video clip]. (Musical release July 2020). <https://www.youtube.com/watch?v=r4xOSP5lz7g>

Marshall, M. (2020, December 6.). [Solo recital]. Music by Arkhipovsky, Marshall, Mermikides, Rak, Koshkin, Terzi. Nelson Centre for Musical Arts, Nelson, New Zealand.

Marshall, M. (2020, December 4). [Solo recital]. Music by Arkhipovsky, Marshall, Mermikides, Rak, Koshkin, Terzi. Le Café, Picton, New Zealand.

Marshall, M. (2020, May 10). [Solo recital]. Music by Dvorak, Reis, Cardoso. Online concert.

Marshall, M., & French, A. (2020, December 5). [Chamber music recital]. Music by Boccherini, Arkhipovsky, Marshall, Mermikides, Rak, Koshkin, Terzi. House Concert, Blenheim, New Zealand.

Marshall, M., & Trimmer, J. (2020, January 13). [Chamber music recital]. Music by Norman, Arkhipovsky, Castelnuovo-Tedesco. 4th Wall Theatre, New Plymouth, New Zealand.

Pierard, T. (2020, October 25). Tūtira Mai Ngā Iwi (featuring Don McGlashan, Hollie Smith, Louis Baker and Whirimako Black) [Performing on drumset]. In *Hawke's Bay Arts Festival*, Toitoti Opera House, Hastings, New Zealand.

Rohe-Belmont, P. (Kaiako, kairanga, kaihaka & kaitito). (2020, February 22). Mātangirau. Ngāti Kahungunu Kapa Haka Whakataetae-Ā-Rohe, Wairarapa, New Zealand.

Commission

- Gibbs, S. (2020, November). *Rongomātānane: God of cultivated foods* [Painting].
Commissioned by Cedenco Foods, Gisborne, New Zealand.
- Koapu, E. (2020, August). *Ka Hura* [Artwork presented to Rangi Mataamua in recognition of his contribution to Maisey Rika's new album]. Commissioned by Maisey Rika Music, Whakatane, New Zealand.
- Koapu, E. (2020, August). *Ko tāua, tāua* [Artwork commissioned by Natalie Coates]. Whakatane, New Zealand.
- Koapu, E. (2020, July). *Tāwhirimātea* [Artwork presented to Tiki Taane in recognition of his contribution to the production of 'Tawhirimatea', a composition by Maisey Rika]. Commissioned by Maisey Rika Music, Whakatane, New Zealand.
- Solomon, M. (2020). *Te Whare o Tangaroa—The House of Tangaroa* [Carved and relief; artwork presented to Steve Yung in recognition of his time as Sealord CEO October 2020]. Commissioned by the Sealord Group Ltd, Nelson, New Zealand.
- Tangaere Baldwin, M. (2020). [Commissioned body of work including painting, sculpture, photography and digital design]. In *Everything old is new again: The Turnbull Library at 100* [Group exhibition]. The New Zealand Portrait Gallery Te Pukenga Whakaata, Wellington, New Zealand, September 17-December 13, 2020.

Thesis

- Rayner, R. (2020). *Training and testing of 1v1 agility in Australian football* [Doctoral dissertation, Federation University Australia]. Federation Research Online.
<http://researchonline.federation.edu.au/vital/access/HandleResolver/1959.17/173773>
- Whaanga, R. (2020). *The success stories of wāhine Māori: Before, during and after social work education* [Master's thesis, Massey University, Palmerston North, New Zealand].
<https://mro.massey.ac.nz/handle/10179/15834>
- Ye, Z. (2020). *Effect of lees manipulation on the chemical and sensorial characteristics of New Zealand Sauvignon blanc wine*. [PhD thesis, Lincoln University, Christchurch, New Zealand].
https://researcharchive.lincoln.ac.nz/bitstream/handle/10182/13111/Ye_PhD.pdf?sequence=3&isAllowed=y

Oral Presentation

External

- Bahho, M. (2020, August 5). *Buildings that teach* [Oral presentation]. Hawke's Bay Branch of the Royal Society Te Apārangi, Eastern Institute of Technology, Napier, New Zealand.
- Binding, W. (2020, February 19). *Manual of dexterities* [Public floor talk]. In *Manual of dexterities* [Solo exhibition], Muse Gallery, Havelock North, New Zealand.
- Binding, W. (2020, November 21). [Public floor talk]. In *EAST 2020* [Group exhibition]. Hastings City Art Gallery, Hastings, New Zealand.
- Erturk, E. (2020, October 15). *Hawke's Bay Digital Divide Project* [Oral presentation]. Rotary Club, Taradale, New Zealand.
- Forrest, R. (2020, September 24). *NZCAT Awards final report presentation: The Furry Whanau Wellbeing research study* [Oral presentation]. New Zealand Companion Animal Trust Trustees.
- Gibbs, S. (2019, November 15 & December 10). *Tū te Whaihanga— An acknowledgement of creative genius*. [Public lecture presented as exhibition designer]. Te Whare korero a Mahaaki, Tairāwhiti Museum, Gisborne, New Zealand.
- Gibbs, S. (2020, October). *Tū te whaihanga: A recognition of creative genius* [Oral presentation]. National Museum of New Zealand Te Papa Tongarewa Trustees, Tairāwhiti Museum, Gisborne, New Zealand.
- Gibbs, S., & Wallace, E. (2020, March). *He Taonga Nukuroa: Te Wero o Tū te Whaihanga/ Sacred Treasures on a long journey: The challenge of Tū te Whaihanga* [Oral presentation]. Uneven Bodies Symposium, New Plymouth, New Zealand.
- Jagroop-Dearing, A. (2020, November 16). *A summary of the largescale Havelock North campylobacter outbreak and the associated hospitalisations* [Oral presentation]. Hawke's Bay Medical Research Foundation Annual General Meeting, Education Centre, Hawke's Bay Fallen Soldiers' Memorial Hospital, Hastings, New Zealand.
- McDonald, S., & Walker, R. (2020, October). *Indigenous nephrology* [Plenary presentation]. Virtual ANZSN Education Workshop for Nephrology Advanced Trainees.
- Marshall, M. (2020, August 31). *Culture, music and society* [Oral presentation]. Latin American, Caribbean Cultural Society (LACCS-UK) 2020 Webinar Series, London, England.
- Morris Matthews, K., & Tipene-Leach, D. (2020, July 22). *Ngātahi: Evaluation of the Project in Year Three (June 2019-June 2020)* [Oral presentation]. Ngatahi Leaders' Hui, Pukemokimoki Marae, Napier, New Zealand.
- Morris Matthews, K. (2020, August 7). *Why now? Jerome Spencer—Her life and times* [Oral presentation]. The Hawke's Bay Federation of Women's Institutes' Annual General Meeting, St. Columba's Church, Taradale, New Zealand.
- Morris Matthews, K. (2020, October 15). *Reflections* [Oral presentation]. Napier Girls' High School Old Girls Association meeting, Napier, New Zealand.

- Nikula, P.-T. (2020, January 30). *Climate action & international education*. Education New Zealand Pan sector group on sustainability [Online].
- Nikula, P.-T. (2020, May 7). *Agents and Covid-19: Current challenges and post-covid-19 scenarios* [Oral presentation]. Education New Zealand [Online webinar].
- Nikula, P.-T., Koutaniemi, M., & Salmi, A. (2020, September 26). *Yliopistojen kansainvälisyys ja hiilijalanjälki [International education and carbon footprint]* [Oral presentation]. UNIFI (Universities Finland) Annual Sustainability Forum [Virtual workshop].
- Nikula, P.-T. (2020, September 30). *New Zealand higher education policy & coordination* [Oral presentation]. Centre for Higher Education, Tampere University [Online webinar].
- Nikula, P.-T. (2020, November 18). Education agent regulation in Australia and New Zealand [Oral presentation]. In *The secret life of international recruitment agents* [Webinar]. Centre for Global Higher Education webinar, Oxford University. <https://www.youtube.com/watch?v=DXTxVVg-S3o>
- Talpey, S., & Rayner, R. (2020). *Agility in rugby: Implications for performance and injury prevention* [Oral presentation]. Rugby Research and Injury Prevention Group 2020 Summer Lecture Series. https://www.youtube.com/watch?v=aZMn2WJGy8E&list=PL4p8zQ_dglCwr66eBhrj7V1UpYO5huT-k&index=7

Internal

- Austin, K., & Pentecost, M. (2020, June 18). *Earning your place in the world: Social work students' perceptions of the positioning of social work in Interdisciplinary Teams* [Oral presentation]. EIT Staff Research Seminars, Brown Bag Lunch Series, Hawke's Bay, New Zealand.
- Awawdeh, L. (2020, November 19). *Road map to my previous and current research on animal welfare* [Oral presentation]. EIT Staff Research Seminars, Brown Bag Lunch Series, Hawke's Bay, New Zealand.
- Chisnell, C., & Pentecost, M. (2020, October 22). *An invisible population—The experiences of young adult carers studying at the Eastern Institute of Technology* [Oral presentation]. EIT Staff Research Seminars, Brown Bag Lunch Series, Hawke's Bay, New Zealand.
- D'Souza, E. (2020, February 27). *A systems approach to evaluating and improving school food environments in Aotearoa* [Oral presentation]. EIT Staff Research Seminars, Brown Bag Lunch Series, Hawke's Bay, New Zealand.
- Edwards, R. (2020, August 13). *Predator control in Hawkes Bay: A repeat survey of landowner perceptions* [Oral presentation]. EIT Staff Research Seminars, Brown Bag Lunch Series, Hawke's Bay, New Zealand.
- Erturk, E., & Bakker-Reynolds, G. (2020, May 21). *The expanding role of immersive media within education* [Oral presentation]. EIT Staff Research Seminars, Brown Bag Lunch Series, Hawke's Bay, New Zealand.

- Fagan, K. (2020, September 10). *Social identity, belonging and tattoos* [Oral presentation]. EIT Staff Research Seminars, Brown Bag Lunch Series, Hawke's Bay, New Zealand.
- Forbes, V. (2020, November 19). *Probematizing 'safety' in rest homes in New Zealand: The 'problem documenter'* [Oral presentation]. EIT Staff Research Seminars, Brown Bag Lunch Series, Hawke's Bay, New Zealand.
- Forrest, R., & Armstrong, L. (2020, April 22). *The Meke Meter – A self-reported wellbeing measurement tool* [Oral presentation]. EIT Staff Research Seminars, Brown Bag Lunch Series, Hawke's Bay, New Zealand.
- John, S. P. (2020, February 27). *Influence of information technologies on retail marketing strategies* [Oral presentation]. EIT Staff Research Seminars, Brown Bag Lunch Series, Hawke's Bay, New Zealand.
- Koopu, E. (2020, May 6). *Hei ō mō Apanui* [Oral presentation]. EIT Staff Research Seminars, Brown Bag Lunch Series, Tairāwhiti, New Zealand.
- Maclaren, O. (2020, May 21). *Bay Play 2019: A collaboration between the Hawke's Bay Community Fitness Centre Trust and EIT* [Oral presentation]. EIT Staff Research Seminars, Brown Bag Lunch Series, Hawke's Bay, New Zealand.
- McKelvie-Sebileau, P. (2020, May 6). *How do EIT staff get to work? (and what are the barriers to more staff using active transport?)* [Oral presentation]. EIT Staff Research Seminars, Brown Bag Lunch Series, Hawke's Bay, New Zealand.
- Morris Matthews, K., Tipene-Leach, D., Hiha, A., McKelvie-Sebileau, P., Abel, S., Chisnell, C., Austin, K., & Malcolm, C. (2020, September 10). *NgāTAHI—Evaluation of a workforce development programme for those who work with vulnerable children in Hawke's Bay* [Oral presentation]. EIT Staff Research Seminars, Brown Bag Lunch Series, Hawke's Bay, New Zealand.
- Munday, K. (2020, October 22). *Sizeism in healthcare—Implicit bias and how we can address it* [Oral presentation]. EIT Staff Research Seminars, Brown Bag Lunch Series, Hawke's Bay, New Zealand.
- Nelson, E., & Cowie, B. (2020, November 17). *Learning in nature: Phase 2* [Oral presentation]. Opening of Ōtātara Outdoor Learning Centre, Eastern Institute of Technology, Hawke's Bay, New Zealand.
- Nikula, P.-T. (2020, June 18). *Voluntary climate action by New Zealand businesses* [Oral presentation]. EIT Staff Research Seminars, Brown Bag Lunch Series, Hawke's Bay, New Zealand.
- Paterson, R. (2020, September 16). *Binding a whare with community: Tukutuku panels for Te Ara o Tāwhaki* [Oral presentation]. Kōrero Timotimo – Snack and Chat Seminar, Eastern Institute of Technology, Hawke's Bay, New Zealand.
- Pearson, M., Papps, E., & Walker, R. C. (2020, April 22). *A qualitative interview study of the experiences and perspectives of registered nurse prescribers* [Oral presentation]. EIT Staff Research Seminars, Brown Bag Lunch Series, Hawke's Bay, New Zealand.
- Roy, R. (2020, August 13). *Regression analysis of the feedback from various groups of students in a business simulation game in a management course* [Oral presentation]. EIT Staff Research Seminars, Brown Bag Lunch Series, Hawke's Bay, New Zealand.

Tipene-Leach, D. (2020, April 8). *Te Whare Pora: The Wahakura extension programme* [Oral presentation]. EIT Staff Research Seminars, Brown Bag Lunch Series, Hawke's Bay, New Zealand.

Ye, V., Torrico, D., & Qin, J. (2020, April 8). *Sensory characteristic of Hawke's Bay chardonnay wine using polarized napping* [Oral presentation]. EIT Staff Research Seminars, Brown Bag Lunch Series, Hawke's Bay, New Zealand.

Other Output

Bennett, P. N., Richards, M., Trask, M., Walker, R. C., Claus, S., Nygard, H., George, R., Xu, Y., Figueiredo, A., Monote, C., Kagwe, N., Moodley, R., & Donner, J.-A. (2020, May 4). *ISN KHPWG identifies global issues in nephrology nursing care*. International Society of Nephrology. <https://www.theisn.org/news/item/3539-isn-khpwg-identifies-global-issues-in-nephrology-nursing-care>

Erturk, E. (2020, March 23). *Cashless society* [Radio Interview]. Radio Kidnappers, Hawke's Bay, New Zealand.

Erturk, E. (2020, November 30). Opinion: The digital divide—What is holding our small businesses back. *Hawke's Bay Today*. <https://www.nzherald.co.nz/hawkes-bay-today/news/opinion-the-digital-divide-what-is-holding-our-small-hawkes-bay-businesses-back/RPK3BEQAMWWC4LKAIXTEC2FZMY/>

Lopez, D., Ikarath, S., & Ekundayo, S. (Eds.). (2020). *Celebrating student success* [Booklet of student posters, Auckland campus]. Eastern Institute of Technology.

Marshall, M. (2020). *Fragments: The Radio New Zealand recordings* [Audio CD]. Rattle Records.

Marshall, M. (2020). *Wild honey: Chamber music for guitar* [Audio CD]. Rattle Records.

McKelvie-Sebileau, P. (2020, August 31). Opinion: Food security plan vital for health and wellbeing of region's children. *Hawke's Bay App*. <https://cdn.hbapp.co.nz/news/opinion-food-security-plan-vital-for-health-and-wellbeing-of-regions-children>

Nikula, P.-T. (2020, January 30). *Removing the mystery from the education agent industry*. International Education Association of Australia. <https://www.ieaa.org.au/blog/removing-the-mystery-from-the-education-agent-industry>.

Nikula, P.-T. (2020, June 15). *Working in partnership with education agents during and after COVID-19*. AgentBee. <https://agentbee.net/education-agents-covid/>

Nikula, P.-T. (2020, June 29). Will tertiary fee changes in Australia increase Trans-Tasman study? *Briefing Papers*. <https://briefingpapers.co.nz/will-tertiary-fee-changes-in-australia-increase-trans-tasman-study/>

Rudge, M. (2020). *Gifts for kin: The role of second hand clothing for Ni-Vanuatu RSE workers and their families* [Article]. Vanuatu National Library & Port Vila Public Library, Vanuatu Kaljoral Senta (Vanuatu Cultural Centre), Port Vila, Vanuatu.

Walker, R. C. (2020, May 12). *Considering alternatives to support home hemodialysis: The benefits of community hemodialysis houses*. International Society of Nephrology. <https://www.theisn.org/news/item/3548-considering-alternatives-to-support-home-hemodialysis-the-benefits-of-community-hemodialysis-houses>.

