

# Whakapuaki kā Rakahau nō Te Kura Matatini ki Otago

RESEARCH HIGHLIGHTS OF OTAGO POLYTECHNIC 2013



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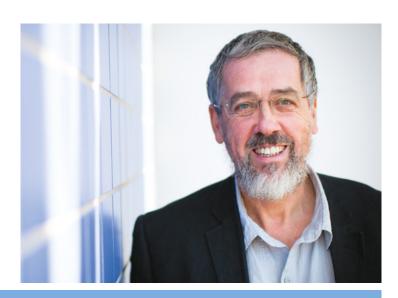
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## Introduction

ALISTAIR REGAN, DIRECTOR: RESEARCH AND ENTERPRISE

2013 has been a year of development and transformation for research and enterprise at Otago Polytechnic. This was the first year of working under the auspices of our new Research and Enterprise Strategic Framework and our vision to undertake research and enterprise projects that "...make a significant difference to the organisations and communities we serve."

This required a rethink of the way in which we support research and enterprise, including new ways of allocating funding and resources. We began the year with new systems in place, opening new opportunities for staff to engage externally, removing barriers and facilitating creative thinking.

To this end we have been developing new partnerships with industry and professional bodies, solving problems and contributing to their growth and development. The external focus has also been brought to the research and enterprise activity that underpins our teaching practice and develops the capabilities of our learners and our staff. This notion of working with our communities of practice is something we will continue develop in years to come. In this publication we are therefore focusing on research that supports and enriches our degree programmes.

Projects that had direct links to community well-being include an examination of the role of micronutrients in pregnancy, an investigation into art therapy, and two new books: one on family care and another on community development practice. Research responded to practical business problems such as contract management and time adjustment clauses within the building industry.

One of Otago Polytechnic's strengths is its art and design practice, and this year is no exception with practitioners exhibiting in London, Australia, Italy and online. Design thinking has also transformed the way in which we teach culinary arts and the new work here is evident with the development of a craft beer and an examination of the changing face of food media.

Also included are a number of projects focused on refining ways of teaching to improve student learning. These included an evaluation of new learning technologies (LABTutor) for Nursing students; an examination of pair programming in IT education; new ways of teaching sustainability to Fashion students and an application of appreciative enquiry as a way to develop our educators' capacity for reflective practice.

It is with great pleasure that I present this, our research and enterprise highlights for 2013.



## Art of experience

*Videodrome* is an interactive art piece that blurs the line between the virtual world and the physical, combining modern and retro technology and aesthetics.

Created by Electronic Art technical teacher, Ted Whitaker, *Videodrome* uses augmented reality technology to provide participants with an experience within an experience.

First installed in a Port Chalmers boat shed for a show curated by The Anteroom as part of Matariki celebrations, and later in Vogel Street for an Aotearoa Digital Arts Network symposium, the work featured a helmet created by Ted in the style of early atmospheric diving headgear. This headgear was lowered onto participants' heads using a pulley system, and clipped to the inside of the helmet was an iPhone. The phone was loaded with an augmented reality app that enabled participants to look around the environment around them, in real time, while simultaneously seeing a shadowy, fictional scene.

"Augmented reality involves an overlay of physical and virtual scenes," he says. "You can see the actual world around you, but laid on top is a view of a virtual environment."

This virtual scene was a pre-recorded 360 degree panorama of a leafy streetscape, created by Ted in the form of a diorama in his studio.

"So when you put the helmet on your face, you saw the partly-transparent image of this fictitious space as well as the real-time scene in front of you," he explains.

Ted was involved in every step of the process, including creating the helmet himself from copper sourced at a

local scrapyard. He also operated the pulley system that lowered the helmet onto the heads of the participants.

"In Port Chalmers, I was right alongside the participants and ended up being a kind of puppeteer, which was an interesting and somewhat bizarre place to find myself," he laughs.

For Videodrome's Vogel Street incarnation, Ted put himself at more of a distance.

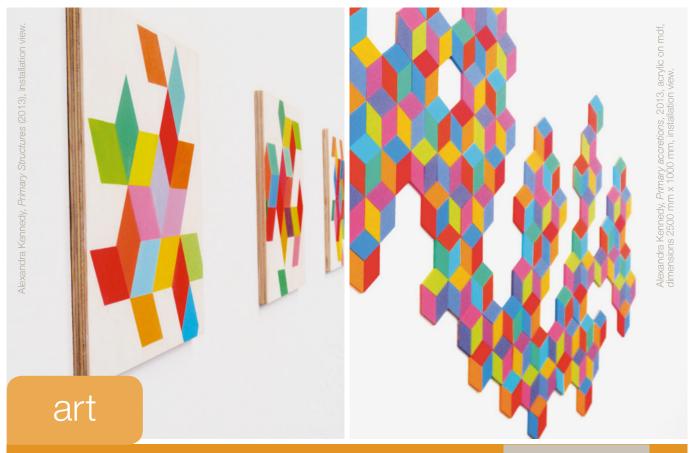
"I was up three stories in a penthouse with the helmet cantilevered out onto a beam, ready to be winched down to street level. To coordinate the lowering of the helmet, I had a person on the ground communicating with me via a 1980s walkie talkie," he smiles. "It was great because I was more removed but still fully involved."

Ted says the reactions of children to *Videodrome* were some of the most satisfying.

"They were really fascinated by it, and I took that as a real compliment," he reveals. "In a way, I see this augmented reality technology as still quite primitive, while the technology that children are exposed to with gaming and computers is far superior. So to have been able to capture their imaginations was especially gratifying."

Whitaker, T. (2013) Videodrome (Vogel Street). Exhibition of Augmented Reality Artwork, Aotearoa Digital Arts Network Symposium. http://www.ada.net.nz/symposia/symposium2013/ted-whitaker/





ALEXANDRA KENNEDY

## Primary structures

It was the chance discovery of a discarded children's board game that inspired the works in Alexandra Kennedy's *Primary Structures* (2013) exhibition, which was shown at the gallery, Factory 49, in Sydney, Australia.

"The game was made up of rhombus-shaped pieces in various colours," she describes, "that could be endlessly reconfigured in sequences to generate the illusion of three-dimensional forms."

Alexandra, Postgraduate Coordinator and Senior Lecturer at the Dunedin School of Art, says the pieces in this game inspired her to examine associations between 2D and 3D, concept and perception, and system and intuition.

*Primary Structures* was made up of a series of paintings on plywood, and one large wall-mounted work made from pieces of MDF.

The large work was comprised of 400 wooden rhomboid shapes, machine-cut by a joiner and hand-painted by Alexandra in the colours of the 12-point colour wheel, then assembled rhizome-like on a wall.

"I liked the idea of starting out with a system – here geometry – and also a system of colour, and allowing the system to fail in the process of making the work",

Alexandra says. "The organisation of colour in the wall work followed a system, but there was a seemingly more random use of color in the smaller works painted on plywood."

The paintings all depicted different configurations using same basic rhomboid form.

The title of the show, *Primary Structures*, is significant, as Alexandra is making reference to artists who exhibited at the 1996 exhibition of the same name held at the Jewish Museum in New York.

"It featured so-called 'reductive art', characterised by plain, anonymous execution and the use of simple geometric configurations as the basis of the work," she explains, "foregrounding the independent-object status of each work of art."

Kennedy, A. (2013) Primary Structures Solo Show. Factory 49, Sydney, Australia. 27 Nov - 7 Dec. 2013.







## Expressions of identity

Passports, coins and national motifs – to what extent do these symbols truly reflect national or personal identity? Are nationality and identity inextricably linked, like two sides of the same coin?

This question is posed by Johanna Zellmer in *place\_ment*; a joint exhibition, symposium and publication presented at the Alchimia School of Contemporary Jewellery and Design in Florence, Italy.

Originally from Germany, Johanna has lived in New Zealand for more than 15 years.

"I don't long or grieve for Germany – on the contrary, I am very happy here," she says. "So I began to question why I hadn't given up my German passport to become a New Zealand citizen, and wondered how other immigrants felt."

These thoughts inspired Johanna to embark on a remarkable art project spanning several years, involving 17 immigrants from eight different countries.

### Personalised passports

"Does a passport, which is an official, government-issued document, become a personal emotional document and why?"

After acquiring the requisite computer-design skills, Johanna created an individualised 'passport' for each immigrant.

Participants were asked to draw what they remembered of the symbol featured in their official passports, and the key symbol from their country's coins. These drawings became printed motifs on the pages of their customised passport.

Johanna also included a coin from each respective country. "I cut out and removed the symbol from the coin, leaving a rim which I inserted into the cover of the passport like an electronic chip," she describes.

While official passports present information that is important for state, Johanna's passports include details about the holder's family, occupation, financial interests and feelings about 'home'. "Official passports make everyone the same by stripping away the particular identifying details that reflect the person you really are," she explains. "I wanted to fill my passport with more personal information."

No passport would be complete without a photograph of its holder, and the images for Johanna's passports were taken by photographer Chris Reid.

"The photos were taken in profile from the neck up, but they are cropped in the passports so the only detail you see of the person is their ear and neck," Johanna explains. "You get a sense of skin colour and possibly gender, calling attention to the assumptions we make when we look at people without knowing exactly what their background is."

Her decision to highlight the ear alludes to a historical personal profiling technique that involved scrutinising people's ears to detect signs of criminality and ethnicity.

"When I grew up, in German passport photos your left ear had to be visible as a kind of identifying marker. A lot of really biased things have been done with the ear in the past."

### Bespoke jewellery

"Jewellery is quite interesting as an art form because it has an impact on the wearer. You are often aware of what it feels like, so it may change your posture or the way you feel about yourself."

Johanna transformed the symbols she had cut from the coins into personalised pieces of jewellery for each participant. She forged and flattened the cut-out emblems, creating softer, more ambiguous forms. Into these, she drilled the owner's official passport number.

"I had to find a way for them to be worn so the number would appear like a branding on the neck when light shone through," she says. "I wanted the jewellery piece to be gender-neutral, so I discounted earrings as they tend to be considered more feminine accessories."

After deciding against attaching them to pins or brooches (too dependent on clothing) or headpieces (too elaborate), she settled on modern hearing aids.

"They are almost invisible, worn by both genders and very much related to project where culture, language and country are so closely related," she explains.

An audiologist taught Johanna how to fit the hearing aids to her participants. She then used fishing wire to suspend the forged symbols from the devices to achieve the desired effect of a branding on the neck. For the <code>place\_ment</code> exhibition, the jewellery pieces were mounted to life-sized prints of the owners' profile photographs.

"It was quite challenging to organise the exhibition, symposium and publication that made up *place\_ment*, given that my two co-collaborators were in Europe," Johanna recounts, "but it was so rewarding to be able to bring together our different explorations of identity and origin."

Eismann, B.; Pizzini, A.; Zellmer, J. (2013) place\_ment - the 'placing' of precious objects as a means of exploring issues related to identity and origin. Otago Polytechnic/Te Kura Matatini ki Otago, ISBN 978-0-908846-60-3, issued in association with an exhibition and forum at Alchemia School of Contemporary Jewellery and Design, Florence, Italy. Oct 2013.

## Digital millinery

The process of creating a hat is traditionally a tactile experience. But an interest in the use of 3D technologies in fashion motivated Dr Margo Barton to practise the ancient craft of millinery using modern digital techniques.

Margo, the Polytechnic's Academic Leader: Fashion, was keen to "consider the millinery design process from the experience of the designer, rather than focusing on the end product: the hat itself."

She worked with animation and engineering-based software, after making a conscious decision to steer clear of programs created for the fashion industry.

"They impose a lot of restrictions – on the placement of seams for example – which stifles the creative process," she explains.

"When a hat is not on a head it looks a little like a boat, so I employed product design technology in the way a boat-builder would. It was a very different process to physically making a hat," she recounts. "Scale and gravity didn't matter anymore, so I could make a hat as big as a house or as small as a brooch – it was really exciting."

She also attempted to print her designs, with limited success. "Because I was interested in the process more than the end result, I tried to 3D print my sketches but the lines were too fine and they broke," Margo recalls, smiling.

Instead, she made flat patterns from her 3D designs and printed them onto acetate.

"I was then able to recreate the hats physically, although the results were serendipitous", she laughs. "Some were really amazing but others were not so pleasing!"

**Barton, M.** (2013) New Hat? Explorations in 3D Digital Millinery Designing and Making. Paper presented and published in the proceedings at the 1st International Conference on Digital Fashion, Fashion Digital Studio, London College of Fashion, University of the Arts, London. 113 - 122.





HAYDEN CROFT

## Coaching with cameras

The perspective of a sportsperson in action is quite different to that of a coach or spectator on the sidelines. Imagine how sports performance could be enhanced if coaches could see, in real time, almost exactly what their players see.

When All Blacks' coach Wayne Smith wanted to make this notion a reality, he approached OISA Lecturer Hayden Croft, asking him to create something that the team could use to enhance decision making ahead of the 2011 Rugby World Cup.

Since then, Hayden has pioneered the development and use of head-mounted cameras that transmit live, first-person perspectives of players' responses during training.

"The use of player-mounted cameras in sport isn't new, but most of these devices cannot transmit footage as it is captured," he explains. "This results in a significant delay before the footage can be analysed, so they're not commonly used in a practice setting."

However, Hayden's light and unobtrusive head-mounted camera transmits footage to a viewing laptop for immediate review, capturing players' responses to opportunities and threats in a unique way. The footage can be viewed live, but also immediately replayed or scrolled through.

"This allows us to work with coaches and players to better understand and assess player decision-making."

Other elite sports teams striving to improve their performance are reaping rewards from their willingness to implement video technology into their practice regimes. Hayden currently applies this performance analysis technology with the Southern Steel netball team and the Otago ITM Cup rugby team.

And he is undertaking further research to measure the impact it has on performance.

"Psychological priming literature states that, in theory, seeing a first-person view should prepare you better for an event," he says, "and our preliminary results support this. We're now undertaking a scientific study with several rugby teams to see if this is the case."

**Croft, H.**, Kardin Suwarganda, E. & Faris Syed Omar, S. (2013) Development and application of a live transmitting player-mounted head camera. Journal of Sports Technology, Published online: 24 Jul 2013.



## Building delays – who pays?

We've all seen the television shows about building projects, in which it seems inevitable there will be time delays and ballooning costs for the clients.

Time adjustment clauses are worked into construction contracts, allowing contractors to request time extensions if unforeseen difficulties crop up during a build, and to pass on any resulting costs to the clients. But what really constitutes an unforeseen event? And is it correct that the clients should bear these costs? Construction lecturer David Finnie says he decided to research this subject as it was the greatest grey area in his own mind, despite having worked extensively in the construction industry. He examined time adjustment clauses in New Zealand and Australia, with interesting results.

"Obviously, things like significant weather or natural events are reasonably unforeseeable," David acknowledges, "but contractors are expected to consider buildability before they tender for a project." Buildability involves examining a building's design and identifying any potential obstacles before construction begins, to reduce errors, delays and cost overruns.

"Say you have a building design with foundations a metre deep," he proposes. "If the contractor struck soft ground and had to dig deeper than a metre, who would be required to pay for that? Everyone I asked – architects, consultants, quantity surveyors – said the client would, as the contractor would submit it as an unforeseen event requiring a contract variation."

But David's research indicated otherwise. "Every textbook and journal paper I came across said buildability risk is the responsibility of the contractor," he confirms. "With any architectural design, the designer does not actually warrant that it is buildable. In submitting a lump sum price, the contractor is saying that they can build that design for that price."

David says the underlying principle is that the party best able to manage the risk should be allocated it. "In common law established through precedent cases, a reasonably competent contractor is obligated to foresee buildability," he says. "But there's a real disconnect between what the courts will determine and what the parties involved understand to be the case."

David has incorporated his findings into his teaching, and also organised a seminar in Dunedin to inform the local construction industry of these legal precedents. "The very simple solution for contractors if they wish to avoid liabilities around buildability is to exclude key risks within their tender bids. The important thing is for them to be aware of the risks in the first place. That way, nobody can be caught unawares."

**Finnie, D.** (2013) Comparison of Time Adjustment Clauses between DZ3910, AS4000 and STCC. Australasian Journal of Construction Economics and Building. 13(1), 66-84.

## A crafty brew

While the idea of a brewery in the classroom may sound like many a student's idea of heaven, it's the applied learning opportunities it presents that excite Otago Polytechnic's Cookery lecturers Adrian Woodhouse and David Gillespie.

The pair quickly identified the rapidly-expanding New Zealand craft beer industry as a viable teaching resource, and through research and development they have created a recipe that combines passion with tangible outcomes.

They began by researching some of the successful emerging craft beer brands in Wellington, each of which had created a strong brand persona incorporating savvy storytelling and distinctive, traditional brewing techniques.

Subsequently, Adrian and David started their LABEERinth craft beer initiative in late 2012, to capitalise on the outreach achieved by the Polytechnic's popular Food Design Institute Facebook page, The Lab.

"The endeavour has now evolved to a level where we have produced 120 litres of our own labelled craft beer, and our production kitchen is now a registered brewery," Adrian says.

The first of the range is Labeerinth Indian Pale Ale -The Educator, with a Pilsner and a stout soon to come. "We are blessed in New Zealand to have some of the world's best raw ingredients with the superior hops and malt that hail from the Nelson region," David explains. "We have also integrated sustainability into our brand naturally, by using recycled bottles."

The new LABEERinth brew was a talking point at Otago Polytechnic's end-of-year student exhibition, *Excite* in 2013, and all the feedback received from the public is being evaluated as the lecturers discern which brews to create in future.

"There's so much scope for development," Adrian comments. "A Bachelor of Culinary Arts graduate could create their own craft beer within this incubator, and either invest capital themselves or contract brew to an existing brewery. The scope for success is unlimited."

Woodhouse, A. & Gillespie, D. (2013) The LABEERinth craft beer: The first of the range from the LABEERinth craft beer range (The Educator).





## The influence of food media

Chefs and educators of all persuasions are influenced by the impact that food media and celebrity chefs are making. Television cooking maestros such as Hugh Fernley-Whittingstall, Nigella Lawson and Jamie Oliver have challenged fellow chefs to expand and experiment with their ingredient choices, cooking methods and culinary appliances.

"This influence extends to both the purchasing choices of chefs," says Associate Professor in Hospitality, Richard Mitchell, "and a shift in focus from behaviourist to constructivist learning sparked by knowledge transfer through all forms of media."

A brief glance into the pantry of even the least adventurous cook will reveal ingredients previously unknown or considered to be 'exotic'.

"Suppliers of food-related products testify that the growing demand for a widening range of produce has also sparked debate over their seasonal availability, ethical considerations and costs," Richard explains. "Many New Zealand chefs are often connected to the source of their food and have a strong allegiance to locally grown and artisan suppliers."

Together with Stephen Ellwood, a lecturer in Cookery, Richard presented a paper on food media to a conference in Austria.

"Our paper highlights many of the factors that challenge the traditional model of culinary education, and presents some of the innovative responses educators are developing to address this new wave of cooking consciousness," Stephen says. "Chefs such as Ferran Adria and Heston Blumenthal have pushed the boundaries of traditional culinary arts by introducing design methodologies, research and application to produce a new wave of cuisine. Their influence has inspired design-focused learners to innovate and create which in turn impacts on their career choices and output."

Ellwood, S and Mitchell, R. (2013) Food Media and the Tension Between Access and Excess. Paper presented at Foodscapes: Access to Food – Excess of Food Conference, Department of Geography and Regional Science, University of Graz, Castle Seggau, Austria. 22-25 September 2013. 58.





JADE WRATTEN

## Healthy mothers and babies

The importance of good nutrition during pregnancy and lactation is emphasised by midwives in their role when working with women and whanau.

Midwifery lecturer, Jade Wratten, co-authored a chapter on micronutrients, their effects and the foods that contain them, in the book *Nutrition in Pregnancy and Childbirth:* Food for Thought.

"A pregnant woman requires various micronutrients for her own nourishment and to facilitate critical life processes within her body such as cell division and DNA synthesis," Jade explains. "We wanted to create a comprehensive and accessible source of information on micronutrients for midwives and health professionals." But she points out that people consume food – not micronutrients in isolation.

As a midwife of 14 years, Jade has a keen interest in nutrition in pregnant women. She coordinates a paper on nutrition for childbearing women and a postgraduate course for registered midwives.

"Midwives are charged with providing holistic information encouraging women to adopt and maintain a wellbalanced diet," she says. "Midwives may be more likely to share nutritional information to women if they feel confident in their understanding of micronutrients and their contribution to health and well-being, but we are not dieticians."

Jade says food is much better to consume than supplements.

"Women often rush out to buy pregnancy multi-vitamins which can be expensive, but with the exception of folic acid and iodine, these supplements are usually unnecessary."

She suggests that pregnancy is a time when women may be inspired to create positive dietary change.

"They can use it as an opportunity to make positive life changes and set a great example for their whole whanau," she says.

Wratten, J., Martin, C. & Mullen, A. (2013) Examining Micronutrients in Pregnancy and Lactation. Chapter 3 in Davies, L. & Derry, R. Nutrition in Pregnancy and Childbirth: Food for Thought, Routledge. ISBN-10: 0415536065, Kindle Edition 2013.



## Being Māori

"Manaakitaka is probably one of a handful of concepts that is understood by all Māori with any inclination of who they are," says Richard Kerr-Bell, an Academic Leader at the Polytechnic's Capable NZ. "It's one that is vital to get right and a lot of importance is placed on it."

Manaakitaka is commonly translated to English as hospitality; Richard says that's a good place to start, but it is more than that.

- "A kaumatua once explained to me that manaakitaka comes from mana-a-kī, meaning to be full of mana," he explains. "So it's the idea that your ability to provide whatever and however it is that you are providing speaks of your own energy, your spiritual quality.
- "Then there's the question of responding to guests in Aotearoa New Zealand in a Māori context given that this is part of who we are in these islands," he continues. "I think it's incumbent on all of us who belong to this nation to really understand and be able to play an appropriate part in manaakitaka."

Richard is Ngāpuhi and grew up in Tokoroa, but has lived in Dunedin for more than 20 years. He says he felt moved as he reflected on his experiences of being offered manaakitaka by Kai Tahu people. He says most people, no matter their culture, have ways of making others feel welcome, using the analogy of having a relative arrive to stay at his home recently.

"My son wanted to stay in the lounge and do his own thing, but he knew he had to come out and be a part of us welcoming the rellies before he could go back to playing," he says. "As long as people understand there's a role for all to play in making people feel welcome, things work better for everyone."

Kerr-Bell, R. (2013) Te Kaupapa Tuatahi, he Manaakitanaga. Scope: Contemporary Research Topics, Kaupapa Kai Tahu 2. October 2013. 22-27.



PROFESSORS SAMUEL MANN AND KHYLA RUSSELL

## Glimpsing the past

An innovation that brings history to life, digitally recreating landscapes of times gone by, is the result of collaboration between Kai Tahu and Otago Polytechnic.

The Polytechnic's Professor of Information Technology, Samuel Mann, was interested in digitally rebuilding landscapes and settlements that are now vastly changed. Through the whakapapa, waiata and stories recounted to him by local rūnaka, he was able to bring past scenes to life using 3D game technology. This interactive simulation was called *SimPā*.

"SimPa reflected and explored the relationships between Kai Tahu whakapapa and landscape," explains the Polytechnic's Kaitohutohu, Professor Khyla Russell, "and all the ways in which we define the concept of whakapapa. We connect ourselves to landscapes and seascapes through whakapapa, and perceive of these places as being a part of ourselves. Over time, these scenes have changed enormously, but when you listen to the old stories and waiata, you can imagine what it was like, she says."

One such story from Otākou describes a deafening birdsong right down to the shoreline – something Khyla herself remembers. "As kids, there were lots of orchards – everybody had a few cows, pigs and chooks, and an orchard," she recalls. "We were only 25 minutes from town [Dunedin], but it was a different world."

"This contemporary technology affords us a new means of imparting our stories to our iwi members," she affirms, "wherever in the world they may be."

Russell, K. & Mann, S. (2013) The many indigenous bodies of Kai Tahu. In J. Fear-Seagal & R. Tillett (Eds.), Indigenous Bodies: Reviewing, Relocating, Reclaiming. Albany NY: SUNY Press. 179-190.

### Relationships key to student success

A commitment to Māori student success has led staff at the School of Social Services on a journey of learning that has resulted in a major improvement in Māori achievement rates.

"The statistics were pretty clear – our Māori students were not succeeding at the same rate as other students," explains the Head of School, Chris Williamson. "We all wanted our Māori students to succeed as well as anybody else. It's an equity issue and a social justice issue."

To facilitate this, tau iwi staff members were guided through a series of workshops and hui, consulting with the Polytechnic's Kaitohutohu Office and undertaking the Certificate in Mata ā Ao Maori courses.

"We learned there is a critical difference between the standard Western approach to working, in which interpersonal relationships tend to come out of the work itself, and approaches that work for Māori," explains Chris. "For example, one thing we changed was a stronger focus on building relationships with all of our students before beginning the content delivery."

A sense of community is also fostered through an overnight camp attended by staff and new students, at which students develop relationships with their peers, lecturers and support staff.

The results of such changes have been remarkable, with Māori student success rates climbing dramatically – there is now no significant difference between the Māori student success rates and those of non-Māori.

Williamson, C. (2013) Developing a staff training package to support tau iwi engaging with a Maori Strategic Framework. Paper presented at the New Zealand Association of Counsellors Annual Conference, Napier. May 23-24, 2013.

CHRIS WILLIAMSON



## A sense of community

Projects as diverse as conservation plans for wetlands and anger management programmes for women are now helping to illustrate the emergence of a community development practice specific to this country, as the result of a new book.

Community Development: Insights for Practice in Aotearoa New Zealand is co-authored by Otago Polytechnic's Research Coordinator, Jenny Aimers, and Dr Peter Walker from the Department of Sociology, Social Work and Gender at the University of Otago.

"One of the things we were really aware of, as we both had worked in community development previously, was that there were very few community development texts written about the New Zealand context," she explains. "While this project was intended to be of practical use to people interested in working in community development, we also provided a brief historical context that included some specific information about its practice in Otago and Southland as we'd observed it when we worked in the field, and a section on the various influences on practice.

"We were keen to explore the idea of 'praxis', developing theory through practice."

The bulk of the book is a series of narratives from detailed interviews of 13 community development workers, each of whom had practised in a range of settings throughout Otago and Southland since the 1980s.

"As power is a critical element of community development it was important to us that readers could come to their own conclusions, so using the narrative method was ideal," Jenny says. "The reader doesn't have to simply take our word for what we say, as our interpretations are reflected in the practitioners' stories."

Not only do these stories provide a rich source for the authors' research undertakings, they also make for compelling reading.

"They are incredibly engaging, and the people involved have been so generous and candid in sharing their experiences of what has worked and what hasn't."

In the book, practitioner Suzanne Ellison says "... communities don't develop in a straight line, they don't tidily complete step one and then move on to step two and three. Before you know it some key person has left, or there's a bust up in relationships between some key individuals or groups, and then the community is making another start, hopefully not from step one but a bit further down the line. They'll start a re-build, or their time as a group may have passed."

The authors restricted themselves to interviewing practitioners from Otago and Southland to ensure they gathered meaningful data.

"In this method of qualitative research it is important that the research setting has a sense of boundedness enabling it to provide a variety of relevant, interconnected, accessible data," Jenny affirms. "So we did ensure our participants represented diversity in terms of urban and rural projects and a breadth of different fields of work."

Indeed, although the book is practitioner-based rather than project-based, the assorted work experiences of the participants are varied. They include coordinating an anger management group for women, developing an environmental management plan for wetlands, facilitating a community's efforts towards energy self-sufficiency, and iwi development initiatives.

There are also guest chapters written by academics expert in the areas of Māori and Pasifika community development.

"Through the stories the practitioners shared with us, we have been able to show that there are many different approaches to community development in New Zealand and all of them are valid," Jenny says. "This acknowledges that community development in Aotearoa New Zealand is a fluid practice that is continually evolving."

The research found that there are many paths to community development, ranging in style from political or confrontational, to collaborative or independent of the mainstream. In addition to that, Jenny says, community development practice in New Zealand incorporates a contextual environment and cultural mix that is unique to this country.

"We also found that influences and standpoints for community development work varied across time periods," Jenny explains, "sometimes as a result of social and political movements such as anti-racism or feminism, but also because of the influence of visiting experts. For example, Fr Philippe Fanchette's structual awareness workshops were toured by the Catholic Church in the 1980s, and asset-based expert Peter Kenyon was brought here by the Government's Community Employment Group in the 1990s."

In the third and final part of the book, the authors brought together the shared themes from their research and created a community development 'toolbox', identifying elements that were consistent across time and areas of practice.

"The toolbox also references some past academic work that categorises community development into community planning, community action and identity development," she says. "We hope this section of the book will prove helpful to community development practitioners in New Zealand."

Jenny notes that there is a fitting symmetry between the process of writing the book and its subject matter.

"It's been very much a community development project all the way through," she says. "From the gathering of content to the peer review prior to publication, we tried to involve as many people as possible to ensure we produced a high-quality document with real worth."

Aimers, J & Walker, P. (2013) Community Development - Insights for Practice in Aotearoa New Zealand. Dunmore Publishing, ISBN 9781927212080.

"Through the stories the practitioners shared with us, we have been able to show that there are many different approaches to community development in New Zealand and all of them are valid."





## Therapy through art

The expressive arts are widely known to be therapeutic, and it's this principle that has seen the emergence of arts therapy as a professional field.

"I use a combination of modalities using music, movement, dance, visual art, poetry and so on, to work on things therapeutically with a person," explains Rose Stanton, Learning Advisor at Otago Polytechnic's Learning Centre. "These therapies were first developed particularly for people who were finding it difficult to use spoken language in an extended way or had some sort of disability."

Rose completed her Master's degree in the practice, which involved working in a clinical situation using arts therapies and the completion of an additional year of clinical training. She subsequently collaborated with Dr Linda Wilson, principal lecturer in Occupational Therapy, who suggested she write a journal article from her research.

"My experience is often when people have written a Master's they have so much material, and they can find it difficult to begin condensing it," says Linda. "That's where I can help, by coaching them through the process."

Linda says arts therapy is a field that acknowledges diversity. "In the last 50 years, being different and doing things differently has become increasingly normal," she says, "so it's accepted that people learn to express feelings and cope with things in various ways.

"Therapeutic processes are also increasingly diverse, educational processes are increasingly diverse, and I think there's an understanding that different people learn and make sense of things in different ways, including through the expressive arts."

Rose's research was a case study that offered an individual the opportunity of a multi-modal exploration of voice. The participant experienced four sessions of arts therapy, exploring her perception of her own voice – and her use of it – through movement, visual imagery, poetic metaphor and dialogue. "We identified that this was something that had the potential to improve her self-image and facility for self-expression," Rose explains. "The result was that she felt more positive about the quality of her voice, and more confident about using it.

"Arts therapy is a wonderful psychotherapy that offers many opportunities because it works well alongside so many other approaches," she affirms. "I am hopeful it will continue to grow more prevalent here in New Zealand."

**Stanton, R. & Wilson, L.** (2013) Discovering authentic voice: An expressive arts therapy exploration of therapeutic voice work. Australian and New Zealand Journal of Arts Therapy. 8:1. 27-37.

## Caring for family members

The many connections and relationships between people cannot necessarily be quantified financially. These networks are known as 'social capital', and are incredibly important for the functioning of a healthy society, according to Dr Mary Butler, a Senior Lecturer in Occupational Therapy.

"We are increasingly caring for people in the community, and because of this we are depending more and more on informal carers to do this work," she says. "Often these carers are people who have previously been working and earning an income, who find themselves caring for a loved one without any financial support."

Mary has considered this concept in the context of family care, co-authoring the book Family Care and Social Capital: Transitions in Informal Care. The idea originated from work that was being done a few years ago, which eventually led to the payment of family carers by the Ministry of Health.

"I've been really involved in the area of funding around informal care, and I drew from my PhD findings as a witness in the successful Human Rights Tribunal case about the payment of family carers," she says.

Mary and her co-authors were interested in the idea of care both as an expression of social capital and as something that engenders social capital in the community. When people begin caring for family members they start out as novices, she says, but over time they will often develop considerable clinical expertise.

"They go into it knowing nothing and may find the professional support available to them is not what they had hoped it would be, so they begin to take hold of

the expertise themselves," she explains. "The people who succeed in caring for family members long-term are often highly intelligent and have a lot of resources in terms of social capital. Families with that degree of social capital can make a significant difference to the quality of life of the person being cared for."

The book contains a series of case studies to illustrate the realities of family care and social capital.

"Each chapter focuses on a different stage of life for the person being cared for," Mary recounts. "So we look at a baby born with a disability and how families adapt to a change in their dreams; how someone grows into young adulthood with a disability; how someone disabled in adulthood through injury faces issues about freedom and autonomy, and an older person requiring care. And there is a chapter on young carers, which is an often neglected subgroup of carers."

It examines the key issues in caring for people at each of these stages, providing useful information for medical, social work and occupational therapy students, as well as policy-makers.

"In doing so, this book fills a gap in the literature in terms of care across the lifetime," she says.

Barrett, P., Hale, B. & **Butler, M.** (2013) Family Care and Social Capital: Transitions in informal care. Springer, Dordrecht.



### Community

"We are increasingly caring for people in the community, and because of this we are depending more and more on informal carers to do this work."

## Sustainable fashion

'Fast fashion' - cheap and quickly-produced clothing - is readily available these days. But how many of us consider the ethics behind it?

Sustainable, ethical practice in business is a hot topic. Those embarking on a career in the fashion industry will have to face the realities of fast fashion and its implications for workers and their welfare.

Caroline Terpstra (Head of the School of Design) and Tracy Kennedy (Senior Lecturer) are enthusiastic about educating students about sustainable practice, both in fashion and business. Their project focused on a group of second-year fashion students and explored how different learning models impacted on levels of sustainable literacy and awareness amongst the students.

"We wanted to develop a baseline understanding of the students' knowledge and awareness around issues of ethical behaviour and sustainability," Caroline says. "These students will be influencing the industry, so encouraging them to engage with these issues now can influence their future behaviour."

Their research involved three steps: information-giving, experiential learning and reflection. This allowed students to absorb information, learn through experience and then reflect on what they had learned.

"Our intention was to understand how our students think, and to raise awareness through personalising the issues for them," Tracy explains. "We gave the students real situations to respond to, aksing them what they would do in specific situations. Would they challenge their employer if a question of ethics arose?"

The research produced positive results. Caroline and Tracy saw a definite change in the awareness and understanding of fashion students.

"Students' attitudes were stronger, more concrete at the end of the project," Kennedy says. "It definitely raised awareness – and the 'experiential learning' made the issues more real."

The past few years have seen a shift in consumer attitudes towards fast fashion and sustainability. Consumers are now forcing change, as they want to see quality and ethics together.

"Consumers are now far more aware of ethics in fashion," Caroline says. "They can check online to see whether clothing retailers are sourcing from ethical suppliers. There's a lot more transparency now."

In the future, Caroline and Tracy would like to study the influence that social media has on ethics and sustainability awareness. The use of the internet and social media in learning has advanced since they began the project in 2008, Caroline explains.

"Social media allows students to access information on ethical dilemmas in the fashion industry, but it also means that they have to learn to filter information. We would love to follow this up."

Kennedy,T. & Terpstra, C. (2013) A stitch in time saves nine: Identifying pedagogies for teaching sustainability issues to fashion students. The Research Journal of Textile and Apparel (RJTA) Hong Kong Institution of Textile and Apparel. Vol. 17, No. 2, May 2013.

"These students will be influencing the industry, so encouraging them to engage with these issues now can shape their future behaviour."





KAROLE HOGARTH

## Advancing patient care

Otago Polytechnic has the first nursing school in New Zealand to embed the online *LabTutor* technology into its curriculum.

Pioneered in New Zealand and accepted internationally as a teaching tool for medical students, *LabTutor* is created by Dunedin-based AD Instruments. Using a computer interface and plug in components, *LabTutor* increases students' engagement with the sciences and enhances their understanding of difficult concepts.

It enables students to measure their own physiological outputs and also perform laboratory tests such as ECG, Spirometry and EEG. It provides students with a safe platform to engage in practical experiments and enables them to compare their own results with a real life patient's data.

"Students need many different blended-delivery techniques to integrate the theoretical aspect of their studies," says Dr Karole Hogarth, Senior Lecturer and Curriculum Leader in Nursing.

"Real-life case studies engage the student's interest through client interviews, personal history, medical notes and test results," she says. "Through this process, students gain a realistic perspective of the complex background required to have an informed discussion about patient care."

**Hogarth, K.** (2013) Implementation of Labtutor into nursing bioscience teaching. Paper presented at the Australasian Nurse Educators Conference, Wellington.

## Drawing from experience

When tasked with the role of motivating her School of Social Services colleagues to create research papers, Margaret McKenzie delved into her organisational toolkit and pulled out a deceptively simple strategy.

Using the appreciative enquiry strategy to develop a research culture and capacity, she encouraged her colleagues to draw from their already existing experiences. She then documented this process as a working template for her own research paper.

"Appreciative inquiry can be a matter of exploiting what already exists. Through conscious reflection and valuing everyday tasks and achievements, my colleagues began to reframe their thoughts about possible research papers that they could present."

One of the papers that emerged focused on the retention of Māori students within the School of Social Services, while another saw two colleagues collaborate and write individual papers on current counselling theory, in answer to the question: What are you teaching and why?

Another paper was created by a staff member who had co-written a reflective journal while her sister was dying. With encouragement, this staff member published their journal as an e-book. She was awarded a travelling scholarship, and presented her paper to a very receptive audience at an international conference.

"In this instance the material already existed. It just needed to be acknowledged as the valuable resource that it was," she says.

McKenzie, M (2013) Appreciative Inquiry Capacity Building with Colleagues Margaret McKenzie AASWWE Symposium Imagining Futures for Social Work Education and Research, Curtain University, Perth WA. 3-4 October 2013.





## Sharing knowledge

Emma Tumilty helped set up TEAR (The Ethics Application Repository) in 2012. Since then the open-access, online ethics repository has gone from strength to strength.

Ethics is a subject close to Emma Tumilty's heart. In addition to her role as Executive Assistant to the Director of Teaching and Learning at Otago Polytechnic, she also sits on the Polytechnic's Ethics Committee, and is completing a PhD in Bioethics.

Emma has been working alongside Martin Tolich from the University of Otago, as a volunteer on TEAR. "We wanted to help smooth the ethics application process for novice researchers – to make it less daunting," she explains. "We didn't see why new researchers had to reinvent the ethics wheel from scratch every time."

The repository enables applicants to access donated information. It follows the step-by-step logic that experienced researchers use when planning their research, especially within vulnerable populations.

TEAR has brought in donations from researchers worldwide. The repository has allowed both researchers and ethics committees to access a wealth of information on research in sensitive areas such as illegal gambling, sex work, domestic abuse and delicate educational research.

From modest beginnings, TEAR has now gained international recognition. The website is in the process of being handed over to a group at Oxford University, and the Social Research Agency in the UK. Martin and Emma are currently in the process of facilitating the transfer.

"TEAR has been even more successful than we ever imagined," Emma says.

Tolich, M. & E. Tumilty (2013) Making ethics review a learning institution: The Ethics Application Repository www.tear.otago.ac.nz. Qualitative Research. April 2014, vol. 14, 2: 201-212.

## Support = success

Worldwide, the failure rate for first-year computer programming students is alarmingly high. Recent research has identified that those who ended up failing often had problems with computer programming in the early days, or weeks, of their studies.

The Pair Programming in CS1 research project at Otago Polytechnic – one of the first of its kind – used an existing software-development technique to support novice computer programming students.

"We believe in the importance of supporting all students," explains project collaborator Krissi Wood, "especially those who might otherwise struggle or even fail."

Wood and her co-researchers Dale Parsons, Joy Gasson and Patricia Haden are all lecturers within the Bachelor of Information Technology programme at Otago Polytechnic.

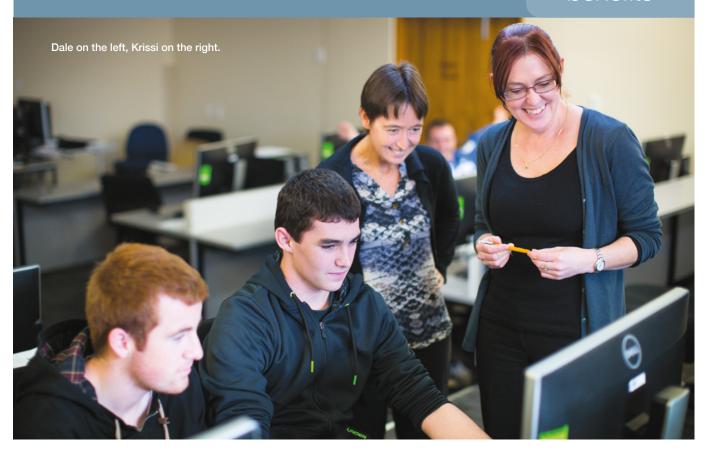
"The project took an industry-standard technique for collaborative software development and modified it for use in the classroom with novice programming students," Krissi says. "We use a 'banding' technique when pairing students up, ensuring that students with similar levels of confidence work together."

The project's success has already changed teaching practices within the course. The lecturers have presented and published their research internationally, which has helped strengthen Otago Polytechnic's global relationship within computer science education.

"This research feeds directly into our classroom teaching," Krissi affirms. "It has really boosted student success, as well as improving social interaction skills. For the future, we will continue to explore new teaching techniques and activities that make learning to program more accessible and enjoyable for all students."

Wood, K., Parsons, D., Gasson, J., Haden, P. (2013) It's Never Too Early: Pair Programming In CS1. Fifteenth Australasian Computing Education Conference Adelaide, Australia, 29 January - 1 February 2013.

## Education benefits





**RACHEL ALLAN** 

## An ode to photography

As a proponent of early, chemical-heavy photographic techniques, Rachel Allan found herself feeling anxious about their future in the face of rapidly-advancing and ubiquitous digital technologies in photography. For her Master of Fine Arts, she created her own "ode to photography", exploring and expressing her concerns.

"I was interested in the concept of uniqueness – the idea that with older photographic methods there is only one physical photograph," she says. "My view was that the reproducibility, or ease of it, degraded the uniqueness of a digital image. But in reality, every one of those replications is unique; factors such as temperature and the delivery of the ink, result in tiny differences with every print."

Rachel also considered the digital imitation of older-styles of photography.

"I had started making tintypes, which are the first-generation polaroids." While perfecting this delicate technique, she discovered a new iPhone application that offered a digital duplication of the tintype effect. "The timing was perfect," she laughs. "On my phone, I made works mimicking old Kodak-film and polaroids."

Rachel printed some 1800 such images at Harvey Norman – a nod to the increasing commodification and reproducibility of photographs – and assembled them in a huge wall work.

"If you look at old Kodak photographs, you can date the image based on the colour," she says. "1950s images were tinged blue and in the 60s they were pinkish, and so on. I reflected these eras of photography in my imitation polaroids." Running parallel to Rachel's photographic acts was her collection of hundreds of knitted animals, sourced from local opshops.

"I saw that these lovingly-made toys had been discarded, and this mirrored for me the sense of photography being both precious and disposable," she explains. "I took each knitted animal home and created a backstory for each one, building on the idea that each of these toys was unique."

Rachel herself attempted to "become" a knitted toy over a period of six months, first wearing knitted ears, and later acquiring a knitted tail and mittens. She wore these every Friday and went about her usual activities.

Ultimately, Rachel 'skinned' each of the toys, using their knitted pelts to make a cape that she wore when presenting her Master's. "Unpicking the animals was an emotional experience, as each had its own individual story," she recounts. "The unravelling was partly an expression of disposability and also a reflection of how photography loses some of its magic and mystery when you start peeling it apart and looking at the mechanics of it."

As a metaphor for protection, the cape also reflected Rachel's original impetus for her Master's: her desire to see older modes of photography preserved and sustained.

### Student research

Otago Polytechnic research degrees:

Theses and dissertations submitted in 2013

#### MASTER OF FINE ARTS

Allan, Rachel: Shall I knit you one? (See page 2 for article.)

**Kennedy, Blair:** Traces, ripples & echoes: (There is a lot of truth in fiction, and even more fiction in truth)

Madill. Philip: Virtual continuum

McAlevey, Kimberley: \*some text missing

Mountain, Richard: Contemporary ceramics, existence

and survival

Novak, Aroha: Fairy tale remix

Wassenaar, Marion: Carbon Black

#### MASTER OF OCCUPATIONAL THERAPY

**Mottern, Gemma:** The effectiveness of static hand and wrist splints for people with rheumatoid arthritis: A systematic literature review

Wilson, Karen: Getting to the point: an exploration of sustaining engagement in non-essential occupations

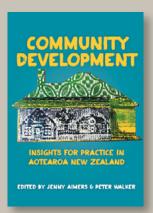
#### MASTER OF DESIGN ENTERPRISE

Yao, Jiahui: MIX & MATCH: The research, development and design of a system to optimise working relationships within and between fashion enterprises and educational institutions in Shanghai.

Available from the Robertson Library: www.library.otago.ac.nz/robertson

## In print

### The latest books from Otago Polytechnic researchers



### Community Development: Insights for Practice in Aotearoa New Zealand

Aimers, J & Walker, P Dunmore Publishing

This book examines the depth and breadth of experience in community work practice in Aotearoa New Zealand with examples of practice in Otago and Southland. Although the examples are drawn from this area, their application is universal, encompassing the theory and practice ('praxis') of community development as both a process and a way of perceiving the world. Case studies are presented within an editorial structure, providing a useful, insightful and easily-read community work resource for practitioners and students.

See page 16 for article.

### **Family Care and Social Capital: Transitions in Informal Care**

Barrett, P, Hale, B & Butler, M

Springer Publishing

Becoming a caregiver is increasingly a likely life transition for many. Drawing on research and personal experiences of working with family caregivers, the authors of this book examine a range of family-caregiving situations from across the course of a person's life. In drawing attention to key moments of vulnerability faced by family and informal caregivers, and by suggesting how to assist reconnection at these moments, the book provides a guide for those working in the area of health, disability and care.

See page 19 for article.



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