INTRODUCTION

Welcome to the Southern Institute of Technology Staff Research Report for 2013. The report showcases the diversity of research interests among our staff and celebrates a variety of projects, both artistic and scholarly.

2013 proved to be a strong year for research at SIT. Our clear commitment to this area is important in ensuring that teaching and learning on higher level qualifications are supported by research. Support from the Southern Institute of Technology Research Fund, a contestable fund available to staff carrying out research, was awarded to a range of research projects in 2013. The fund also enabled many staff to present their research at conferences in New Zealand and internationally. The third Southern Institute of Technology Research Symposium was held in December and provided an opportunity for sharing research results in a collegial environment. This year also saw the Southern Institute of Technology host the National Tertiary Teaching and Learning Conference, and many staff contributed research presentations to the conference programme.

The Southern Institute of Technology plays an increasingly important role in regional research outputs. As the preeminent vocational tertiary institute in southern New Zealand, SIT is an important part of the local and regional community. The Southern Institute of Technology Research Institute, led by Research Manager Dr Sally Bodkin-Allen and Research Officer Dr Jo Whittle, worked on a project that was commissioned by Sport Southland, to undertake a survey of participation in sport and recreation among students in Years 7 and 8 in Southland. The project built on existing relationships established through earlier research with Sport Southland and enabled SIT researchers to engage in an extensive project in the local community. The results demonstrated that young people are actively involved in sport and recreation activities in Southland. Southern Institute of Technology also hosted a novel biodiversity expo: “Biodiversity in our Backyard”. This event brought many local groups together to share their knowledge and expertise in areas related to the environment. There were key note presentations from esteemed researchers Emeritus Professor Sir Alan Mark and Professor Henrik Moller, both of the University of Otago. These were supported by numerous ‘bite-size’ talks throughout the day from community groups and regional organisations, including Southern Institute of Technology Bachelor of Environmental Management students.

During 2013 staff presented their research at both national and international conferences, they have published nationally and internationally, and exhibited their works of art in many different contexts. Several staff focused on research related to teaching and learning, such as dealing with maths anxiety, developing an online programme using PeerWise to support examination revision, and sharing good practice for the engagement of Māori and Pasifika students. Staff were also involved in postgraduate study in areas ranging from the industry perceptions of a massage therapy degree, to the ways that local knowledge and practical wisdom contribute to the management of natural resources in Akaroa, through to the difficult issue of how nurse lecturers deal with assessing failing nursing students in clinical practice.

Research embraced such diverse topics as: the development of individualised care behaviour plans for patients with dementia; experiments in the visual representation of sound; a longitudinal analysis of water quality of freshwater springs in Southland, and pest management in the Waikato Forest. Staff working in the creative arts have exhibited their work locally at the Southland Museum and Art Gallery, as well as in other venues throughout the country.

I hope you enjoy reading about the diverse research activity at Southern Institute of Technology and I look forward to the continued development of our research capacity into the future.

Penny Simmonds
Chief Executive
Southern Institute of Technology

CONTENTS

4 Introduction
5 Contents
6 Southern Institute of Technology Research Institute
8 Celebrating ten years of massage therapy graduates
– Jo Smith, New Zealand Massage Therapy Research Centre
10 The relevance of degree qualifications to enhance the reputation of the therapeutic massage industry in New Zealand
– Donna Smith, New Zealand Massage Therapy Research Centre
12 Improving sprint cycling performance
– Will Payne and Henkie Renoc, School of Sport and Exercise
13 Is a programme-based business incubator the best way to foster entrepreneurship among business students?
– Fiona Tyree, School of Business
14 Sharing good practice around the engagement of Māori and Pasifika students
– Jerry Hoffman, School of Business
15 The odd one out: the gender imbalance in tertiary IT education
– Scott Morton, School of Computing
16 Math anxiety: risk factors, strategies and opportunities
– John Mumford, School of Computing
18 Human Computer Interaction: helping Southland children with special needs
– Sam Thoss and Ken Sutton, School of Computing
19 To Whariki: the interweaving threads of early childhood musical cultures in Aotearoa/New Zealand
– Sally Bodkin-Allen, School of Contemporary Music
20 Jungle fever hits Invercargill
– Andy Peel, Sir Anthony Hopkins School of Dramatic Arts
22 A collision of two worlds: what do you do when you have a nursing student who is failing?
– Sally Dobbs, School of Nursing

24 Using PeerWise to build and consolidate knowledge in nursing education
– Johanne Whistle, School of Nursing
25 Nursing and dementia: ‘please don’t take my sunshine away!’
– Jez Montague, School of Nursing
26 Ethical issues as experienced by nursing students in New Zealand
– Jill Sinclair, School of Nursing
28 Performing the DIY Public Museum
– Kathryn Mitchell, School of Visual Arts, Film and Animation
30 Technologies of early film and interdisciplinary performances
– Ruth Myers, School of Visual Arts, Film and Animation
32 Revisiting ‘Being There’
– Peter Belton, School of Visual Arts, Film and Animation
36 Making the Invisible, Visible
– Daniel McRae, School of Visual Arts, Film and Animation
38 Huntly Power Station and the history of environmentalism in New Zealand
– Jo Whittle, SIT Research Institute
40 A characterisation of cold water springs near the Mararoa River, Southland
– Erine van Niekerk, Centre for Research Excellence in Environmental Management
42 Phronetic social science: a methodology embedded in practical wisdom
– Anna Pollock, Centre for Research Excellence in Environmental Management
44 Waitutu Forest pest monitoring and the use of Cornish coquina in early English ceramics
– Ross Ramsay and Jo Whittle, Centre for Research Excellence in Environmental Management
46 Biodiversity in our Backyard
– Ross Ramsay and Jo Whittle, Centre for Research Excellence in Environmental Management and SIT Research Institute
48 Staff Research Outputs 2013
Survey of participation in sport and recreation among students in Years 7 and 8 in Southland

Southern Institute of Technology Research Institute staff Dr Jo Whittle and Dr Sally Bodkin-Allen carried out a large scale survey of sports participation among Year 7 and 8 students in Southland. The research was commissioned by the Southland Regional Sports Trust, Sport Southland, as part of its role to support the promotion of sports among school students in Southland.

The research aimed to examine current sports activities among Year 7 and 8 students at integrated high schools in Southland, identify any issues faced by schools in promoting sports to this age group, and establish the kind of support schools are seeking from Sport Southland and regional sporting organisations. ‘This was a fun project to be involved with,’ says Jo. ‘It was fantastic to work with the Sport Southland staff who were so keen to bring about changes based on the data we collected.’

Jo and Sally spent several weeks interviewing principals, teachers and sports co-ordinators, along with distributing a questionnaire to 1200 Southland students in Years 7 and 8 of their schooling (mostly aged between 10 to 13 years). They also carried out focus groups with Year 8 students at each of the seven participating schools. ‘We really enjoyed meeting so many wonderful young people around Southland,’ says Sally. ‘They had some great ideas about ways to improve things, and made a strong contribution to the research.’

The results suggest that sports participation is high amongst this age group in Southland. Over 55% of girls had played netball for their schools within the previous 12 months, and club rugby was popular with the boys, over 35% of whom played rugby. Basketball also rated highly; it was the sport played most frequently by Year 7 and 8 students, it was the sport boys were most likely to play for their school, and it was the most popular choice for the sport that both girls and boys wanted to do more of.

Over 40% of the participants said that nothing put them off participating in sport. The most commonly indicated factors encouraging students to participate in sport at school were: having fun; the influence of friends doing the same sports, and being told they were good at it. Students appreciated coaches who were skilled, organised and knowledgeable about the sport. They identified perceived unfair treatment and/or lack of commitment or skills in coaches or team managers as factors that could make them dislike participating in school sport.

Vanessa Hughey and Carly Anderson at Sport Southland have presented the results to local principals. The report has also been published on the Sport NZ website and is available at:


Contact:
Jo Whittle
SIT Research Institute
joanne.whittle@sit.ac.nz

Sally Bodkin-Allen
SIT Research Institute
sally.bodkin-allen@sit.ac.nz
Celebrating ten years of massage therapy graduates

Southern Institute of Technology is celebrating ten years of graduates from its Bachelor of Therapeutic and Sports Massage. Research into their experiences since graduating has been published in A massage degree and beyond, the culmination of a unique collaborative research project carried out by staff and undergraduate students.

Dr Jo Smith is Programme Manager for the Bachelor of Therapeutic and Sports Massage. She has a background in health science and physiotherapy, and a Doctor of Philosophy from the University of Otago during which she examined massage therapy services for health needs. In 2013 Jo headed a major research study into the career journeys of past graduates of the Bachelor of Therapeutic and Sports Massage. The study investigated ten years of graduates of the programme and looked at how their lives had been impacted by undertaking a degree in massage therapy. Jo describes the results of that research as a celebration of ten years of massage therapy graduates. ‘The first bachelor’s degree for massage therapists in the southern hemisphere was launched at Southern Institute of Technology in 2002 and the first students graduated in 2004,’ she explains. ‘A ten year anniversary offered an ideal opportunity to look back on the achievements over that time.’

Issues examined through the research include the benefits of degree level education in this field, the employment journey of graduates, and their satisfaction with their massage careers. This is the first investigation in New Zealand into the careers of bachelor degree trained massage therapists and it is a valuable source of information regarding career and education satisfaction as well as career challenges. According to Jo, it also provides more accurate information not only for potential and current students but also the wider massage industry. ‘Our findings will help inform wider stakeholders about the inherent benefits of degree-based education for massage therapy,’ she says.

A fascinating component of the project was that it was carried out in collaboration with current Year Three bachelor degree students as part of their assessment for the research methods paper. All 14 students took part in the full research process, closely guided and supervised by myself and my teaching colleague Donna Smith,’ Jo explains. ‘It was a challenging process to manage at times, but it was an incredibly worthwhile experience for the students, who were involved in all stages of the research on a topic that was personally relevant to them and to their future careers.’

The methodology involved questionnaires and individual interviews and the data showed that graduates value their massage degree, whether or not they are currently practising massage therapy. A particularly powerful part of the report is provided by the ‘snapshots’ of graduates who share their professional experiences in their own words. ‘These snapshots are a wonderful record of our graduates,’ Jo says, ‘and their words of advice will provide motivation and focus for current and future students.’


Findings from the study are also available in poster form and can be found on the poster page of the New Zealand Massage Therapy Research Centre website: http://nzmtrc.sit.ac.nz/Pages/Posters.aspx

Contact:
Dr Jo Smith
New Zealand Massage Therapy Research Centre
jo.smith@sit.ac.nz

Dr Jo Smith
New Zealand Massage Therapy Research Centre
jo.smith@sit.ac.nz

New Zealand Massage Therapy Research Centre
The New Zealand Massage Therapy Research Centre (http://nzmtrc.sit.ac.nz) was established in 2009 to foster massage therapy research in New Zealand. One of its aims is to integrate massage therapy research and teaching by promoting research in the massage therapy field and research informed education. In addition to being involved in the project A massage degree and beyond, the NZMTRC was also working closely in 2013 with the massage therapy industry in seeking ways for research findings to be more accessible to massage therapists. This project is ongoing and strategies will be implemented during 2014 to assist in meeting this goal.
The relevance of degree qualifications to enhance the reputation of the therapeutic massage industry in New Zealand

The therapeutic massage industry remains ambivalent over the importance of degree-based education for the growth of the industry in New Zealand. Donna Smith explores the reasons for this in her doctoral thesis.

Donna is Programme Manager for the Bachelor of Therapeutic and Sports Massage and is undertaking her PhD through the University of Otago. Her research investigates perceptions about degree-based education for massage therapists as held by a range of stakeholders in the massage therapy industry. Given the desire by the industry for professional status, it is unclear why degree-based education has not been embraced. As Donna explains, ‘a bachelor’s degree for massage therapists has been available in New Zealand since 2002 but has not been embraced by many within the industry, and I wanted to know why this was the case.’ Through her observations of the massage industry, particularly its resistance to degree-based education, alongside her delivery of degree-based education for massage therapists and the findings of a pilot study in 2008, she was inspired to take the next step and commence a larger research study, to accurately understand stakeholders’ perceptions.

The practice of massage therapy for health and wellness is part of the growing Complementary and Alternative Medicine (CAM) industry and is a popular treatment for a wide range of health conditions. Over the last 20 to 30 years, massage therapists have taken some steps in the process of professionalisation for the purpose of attempting to gain legitimacy and acceptance as a serious health care option. To date, however, the practice of massage therapy within New Zealand is unregulated, with resulting variations in massage therapy education and practice standards. The dominant view in the industry is that a one to two year diploma is an acceptable qualification. Donna emphasises the role of degree-based education as a significant step towards massage therapists gaining professional status and recognition from other health professionals.

In particular, I want to investigate the perceived necessity of degree-based education for the practice of massage therapy. Alongside this I identify and explore perceived benefits of, and barriers to, degree-based massage education, as well as therapists’ understandings of degree-based education.

Donna chose to take a mixed methods approach to data collection, combining quantitative and qualitative approaches to take advantage of the strengths of each. Integration of both approaches provides a deeper understanding of the research question, she explains. ‘I therefore used a survey and semi-structured, in-depth interviews to gather data.’ While data analysis is still ongoing, with a number of interesting findings, Donna’s first impression is that people’s perceptions of degree-based education for massage therapists may be changing. She has enjoyed the challenge of the project she says. ‘Analysing the data and gaining answers to the research question has been both challenging and very satisfying.’

Contact:

Donna Smith
New Zealand Massage Therapy Research Centre
donna.smith@sit.ac.nz

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Improving sprint cycling performance

Research by Hennie Pienaar and Will Payne into the biomechanics and muscle activation patterns of elite track sprint cyclists aims at enhancing the performance of New Zealand’s top cycling athletes.

Hennie is an accredited exercise physiologist with a Masters in Human Movement Science and has been teaching in the Bachelor of Sport and Exercise programme since 2002. His colleague Will Payne, tutor on the Bachelor of Sport and Exercise degree programme, is a sports nutritionist with a Masters in Human Nutrition, a Postgraduate Diploma in Sports Medicine and a Bachelor of Physical Education and Human Nutrition from the University of Otago. Since 2011 Will and Hennie have been using their combined expertise to carry out research aimed at improving the performance of New Zealand’s top cycling athletes. In 2013 they shared their findings at the Sports and Exercise Science New Zealand Annual Conference in Christchurch. Their findings were presented at the conference in the novel form of an animated e-poster, presented on a large HD television screen, and the pair came away with the Best Presenters Award.

The New Zealand track sprint team has had an outstanding few years, coming from a ranking of fifth in the world in 2009 to winning silver at the World Championships in 2013 and coming fifth at the London Olympics where they also broke the World Championships in 2013 and coming fifth at the London Olympics where they also broke the

Will Payne
School of Sport and Exercise
william.payne@sit.ac.nz

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Will Payne
School of Sport and Exercise
william.payne@sit.ac.nz

Fiona is a tutor in the Postgraduate Diploma in Business Enterprise, a 60-week programme that follows a traditional MBA model of a short series of taught papers followed by a substantial self-directed research dissertation on a business topic of the student’s choice. The programme aims to provide students with the knowledge to engage in business enterprise. The programme has been offered at Southern Institute of Technology’s Invercargill campus since 2002 and more recently via its open distance-teaching faculty, SIT2URN. Until recently the programme was linked to a business incubator known as Te Kahu. However, due to low student participation, the decision was made to mothball the incubator. As part of the research for her Master of Business Administration through the University of Wales Fiona investigated the value of re-inventing Te Kahu.

Fiona notes the importance placed on entrepreneurship in the modern business environment and the role of education in developing entrepreneurial skills, as well as the need for business incubators to produce economic benefit. ‘Business incubators follow a number of different business models which makes it hard to make comparisons,’ she says. ‘This, coupled with the typical observation of their low economic outputs despite high resource inputs, and the low post-graduation survival rates, suggests that the impact of business incubators in the business environment may be highly overstated.’ In fact they may simply be enabling business models with low long-term survival to develop a false sense of success, she argues. ‘Entrepreneurship acknowledges that failure is part of success and that in business we should fail quickly and cheaply. The vast majority of successful businesses that create economic value and employment have been successful without participation in a business incubator programme.’

Her research indicates that access to Te Kahu would have little impact on decisions to initiate enterprise by current students and recent graduates of the postgraduate diploma. The most significant influence on student behaviour is previous experience in running a business prior to entering the programme. ‘My findings are supported by international research that shows that, once someone enters the business world, they usually remain there,’ Fiona explains. ‘However the number of students entering this programme with previous business experience is very low and this has a negative flow-on for Te Kahu.’

There may still be a place for a business incubator outside of the programme, Fiona argues. She refers to previous research using the Theory of Planned Behaviour which suggests that there are certain factors that might be more likely to increase the likelihood of initiating business enterprise at the conclusion of formal post-secondary education. ‘There are opportunities to link with other programmes and to re-brand Te Kahu as an institute-wide entity, with involvement from across all faculties,’ she says. ‘This would require support at both the senior management and tutorial levels at Southern Institute of Technology. Additionally, senior managers should decide to close Te Kahu permanently and investigate the provision of alternative business support services that more directly match the current student base.’

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Sharing good practice around the engagement of Māori and Pasifika students

Dr Jerry Hoffman collaborated with Southern Institute of Technology Research Institute staff Dr Sally Bodkin-Allen and Dr Jo Whittle to publish an article in He Kupu Whakataki: Journal of Best Practice in Applied and Māori/Indigenous Vocational Education in 2013.

Jerry Hoffman is the Learning Support Officer at Southern Institute of Technology, and also teaches on the Postgraduate Diploma of Business programme. He has a Master of Education from Johnson State College in Vermont, and a PhD in Education from the University of Southern Queensland.

The article was a result of previous research that had been carried out for the Committed Learners Project (CLP), with the goal of disseminating the results of the project to as wide an audience as possible. The original CLP gathered data via a larger literature review, an extensive survey of nine Institutes of Technology and Polytechnics across New Zealand, and 39 interviews conducted at six of those institutes. The important topic of engaging Māori and Pasifika learners in tertiary study was one of four themes that emerged from the original data. The full CLP report was published in 2012.

It was great to be able to present the results of the Committed Learners Project in a different way,’ says Jerry. ‘The project contained some really valuable findings, and it seemed appropriate to make sure these were disseminated as widely as possible.’

Some of the good practice hints that emerged from the research included pronouncing the names of Māori and Pasifika students correctly; observing tikanga in the learning environment (such as avoiding sitting on tables or touching heads), and incorporating Māori terminology and language into teaching when possible. ‘The value for student success of encouraging a sense of belonging was something that stood out throughout the Committed Learners Project, but it is especially important for Māori and Pasifika students,’ claims Jerry. One way to develop this for Māori, discussed in a number of interviews, is through having a noho marae (overnight stay on a marae). ‘One of the participants pointed out how this was a valuable experience for all students, but that for Māori in particular it developed pride and an acknowledgement of identity.’ Other areas that came through in the findings were the importance of the roles of the Māori student liaison officer and Pasifika student support person. These roles were valued not only for what they offered to students at the institution, but also for the way they supported staff.

Jerry states: ‘I think it is important to recognise the many tutors at institutes of technology and polytechnics throughout New Zealand who contributed to this project. It brings together and highlights their good practice, including ways to engage Māori and Pasifika students.’ He quotes the words of one project participant: ‘when you have strength in your own culture you’re more accepting of others. But you need your strength first and we recognise it; that’s how we help promote Māori culture. We make sure that everyone’s culture is strong to them.’

Contact:
Jerry Hoffman
School of Business
jerry.hoffman@sit.ac.nz

Females continue to be the ‘odd ones out’ in tertiary IT education with women making up only one out of every six students. Scott Morton has been researching the perceptions of Southland high school students of both genders about careers in the IT industry.

Scott is the programme manager for the Bachelor of Information Technology and Postgraduate Diploma of Information Technology degrees at Southern Institute of Technology. He has a background in the computing and information technology (IT) industry and holds a Master of Advanced Computing from Bournemouth University in the UK. He is currently working on his Doctorate of Education through the University of Southern Queensland.

In 2013 he presented research into the reasons for a continuing imbalance between male and female students entering the Bachelor of Information Technology degree at the 26th Annual Conference of Computing & Information Technology Research & Education New Zealand in Hamilton. His paper examined the influences on their perceptions of IT as a study and career choice.

‘I also wanted to know what they thought a job in IT actually was, and what was driving students when deciding whether or not to follow a career in the industry,’ says Scott. ‘The stereotype of people working in IT is that they are “geeks” hiding in darkened rooms, staring at computer screens all day. I wanted to know if that stereotype – promulgated in popular media – was influencing their choice of IT as a career.’

Scott found that, overall, a similar proportion of male and female students said they liked IT lessons, however only 42% of participants, and 39% of the females, were taking IT subjects in their final year of schooling. The reasons they gave for not taking IT subjects was that the subject was ‘boring’ and they did not find the way it was taught to be interesting. Only 13% of participants and only 4% of females surveyed indicated that they would go on to study IT at tertiary level.

‘The female students perceived IT jobs as interesting, well paid and secure but they still did not want to take up roles within this industry,’ he reports. Another key finding was the age at which students began using computers or other devices. Sixty per cent of the students surveyed had started using a computer at or below eight years of age. ‘Students are coming into secondary education with a level of general computing knowledge that is often beyond the level of the current IT curriculum,’ Scott says. ‘This could help explain why so many students indicated that they found IT a “boring” school subject.’

He recommends updating the IT syllabus to ensure its relevance for the increasingly “tech-savvy” students coming into secondary education.

Contact:
Scott Morton
School of Computing
scott.morton@sit.ac.nz
Math anxiety: risk factors, strategies and opportunities

Work and educational settings are laden with math concepts so an aversion to math can be a barrier to the development of a student’s academic potential. John Mumford, tutor in the School of Computing, has been researching strategies for supporting students anxious about the subject.

John has always had a fascination with mathematics, especially its relationship to literacy and numeracy. He is particularly interested in the ways that students disengage with maths and how this can affect their success in different working and learning environments. John’s research in 2013 involved an investigation into math anxiety. He began by exploring literature in the subject. ‘Math anxiety is alive and well,’ John says. ‘There is a growing body of study relating to the panic, helplessness and fear that many individuals experience when they are faced with solving a mathematical problem.’ He states that it is surprising how many people have negative experiences with maths. ‘There is evidence via MRI scans that, for some, pain centres in the brain are activated by even the thought of a maths task.’

John identified several risk factors, and these were categorised into two broad areas: intrinsic and extrinsic. The first category focused on intrapersonal concepts, such as fear of numbers, low self-confidence and emotional responses. The latter category focused on interpersonal and environmental aspects, for example teaching styles and lack of empathy.

Strategies for dealing with maths anxiety were also identified in John’s research. ‘It is important to bring a positive attitude to errors and to turn them into learning opportunities,’ John states. ‘The literature suggests that it is important to view a wrong answer not as a failure, but as a chance to develop the right processes.’ Another useful strategy is to make explicit connections between informal and formal knowledge. This can be done through problem solving, and facilitating discussions about mathematical concepts. It is also important to value students’ common sense to help enhance the ability to problem solve and boost the confidence of students with math anxiety.

The results of John’s research were presented at the National Teaching and Learning Conference, held at Southern Institute of Technology in October 2013 and at the Southern Institute of Technology Staff Research Symposium in December 2013. He also plans to write a paper on the subject for publication in Southern Institute of Technology’s Journal of Applied Research in 2014. John enjoyed sharing his research with fellow tertiary teachers at the conferences and is looking forward to developing this area of research further in the future.

Contact:
John Mumford
School of Computing
john.mumford@sit.ac.nz

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Human Computer Interaction: helping Southland children with special needs

Southern Institute of Technology was approached by a local school teacher to develop computer devices to improve the communication experiences of a small group of severely physically challenged children. The challenge was taken up by Sam Zhao and Ken Sutton, tutors in the School of Computing. They worked with Bachelor of Information Technology student Andrea Whitney on a project that has resulted in an ongoing relationship between Southern Institute of Technology and a school in Invercargill.

The children, who were aged between 11 and 18, had limited motor movement and their mobility was restricted to assistant-powered wheelchairs. They had little or no means of verbal communication. A project such as this one is incredibly rewarding,’ says Ken. ‘Because of the limited mobility of the children and their lack of control over their movements, any detected motion had to have a wide tolerance range.’

From there the project involved extending the picture recognition games to using the Kinect for input, with the development of a simple music programme that involved the children controlling, via the Kinect, a virtual drum set with cymbals. The project was so successful that the tutors will continue working with the school and a new group of students in 2014. Ken and Sam presented the results of the project at the 2013 Computer and Information Technology Research and Education in New Zealand (CITRENZ) Conference held in Hamilton.

Contact:
Sam Zhao
School of Computing
sam.zhao@sit.ac.nz

Ken Sutton
School of Computing
ken.sutton@sit.ac.nz

Te Whariki: the interweaving threads of early childhood musical cultures in Aotearoa/New Zealand

When Dr Sally Bodkin-Allen was approached by the editors to contribute a chapter to the Oxford Handbook of Children’s Musical Cultures she leapt at the chance.

The book is a selection of chapters contributed from authors all over the world. It forms a collection of perspectives on children and the ways that they engage with music as singers, dancers, players and listeners. Sally is the Academic Leader and a tutor for the Bachelor of Contemporary Music at Southern Institute of Technology. Her chapter presents an exploration of the musical threads woven throughout the lives of young children growing up in Aotearoa/New Zealand. It provides an introduction to the ways that young children engage with music in four different early childhood contexts: kohanga, a’oga amata, childcare centres and kindergartens. While all differ from each other in philosophy, they all draw on similar musical threads.

A great deal of the information in the chapter came from my experiences carrying out fieldwork in various early childhood centres around Aotearoa/New Zealand as part of my PhD,’ says Sally. This was updated by incorporating new literature along with experiences from Sally’s wider involvement in the early childhood sector.

‘One of the aspects I really enjoy about songs for young children in Aotearoa, is the availability of songs that have been written to reflect a specifically New Zealand identity,’ Sally says. These songs include “You’ve got to Put on Your Hat” and “I went Down to the Beach”, both by the Auckland-based Kids Music Company. The first is a didactic song which stresses the importance of wearing hats, sun block and sandals during summertime, and the second uses a clever integration of natural materials from the beach as percussion instruments: shells, rocks, and sand in shakers. These two songs make connections to the outdoor environments which are an inherent part of the lives of young children growing up in Aotearoa/New Zealand.

Christmas songs are another part of the early childhood centre repertoire where a distinct sense of identity can be seen. “Christmas on the Beach”, a song that appears on the Kiwi Kidsongs Collection (2000), a musical resource created for primary schools throughout Aotearoa/New Zealand, has filtered down to preschools. ‘Christmas in the Southern Hemisphere occurs in summertime, and so many of the traditional Western carols are not particularly relevant for children here,’ Sally explains. “Christmas on the Beach” refers to having a barefoot beach picnic under a pōhutukawa tree, an image that is far closer to home than snow and mistletoe.’ Other traditional songs might be adapted. One such example is “A Kiwi Jingle Bells”, a book and CD set of a reworked example is “A Kiwi Jingle Bells”, a book and CD set of a reworked example of the traditional carol with lyrics that reflect a distinctly local Christmas. The verses refer to hokey pokey ice cream, pavloa, chocolate fish and Anzac biscuits all ‘cracker Kiwi kai’ – in the story of a family’s beach Christmas.

The Oxford Handbook of Children’s Musical Cultures is edited by Patricia Sheehan Campbell and Trevor Wiggins and published by Oxford University Press.

Contact:
Sally Bodkin-Allen
School of Contemporary Music
sally.bodkin-allen@sit.ac.nz
Jungle fever hits Invercargill

Fiona Forrest
Programme Manager in the Sir Anthony Hopkins School of Dramatic Arts, directed students in a sell-out production of Rudyard Kipling’s classic story The Jungle Book.

“You know you’re onto something good when a series of stories published in 1894 can still be brought to life in 2013,” says Fiona, who selected this story because it combined her love of India, animals and the works of Rudyard Kipling. “We wonder if Rudyard Kipling knew he was creating a classic when he wrote The Jungle Book, and that it would also be seen in film and dramatic productions through the decades.” The first version of the film was released in 1937, and the latest stage production in New Zealand was produced in 2013 by Cat’s Pyjamas Theatre Company. In association with student actors of the Southern Institute of Technology Sir Anthony Hopkins School of Dramatic Arts, at Centrestage Theatre as part of the Southland Festival of the Arts.

The production was a truly collaborative project, with the cast including students from the Southern Institute of Technology Sir Anthony Hopkins School of Dramatic Arts, and the Multi Nations Society and the staff of Curry Guru restaurant.

Grant of Southland Boys High School was the theatre technician, while Jennifer Jiang, a Bachelor of Hotel Management student, undertook the role of front-of-house usher. Bachelor of Applied Visual Media Arts photography students, facilitated by tutor Kevin Miles, captured images in the final technical run. There was also a community presence, with contributions by the Southland Multi Nations Society and the staff of Curry Guru restaurant.

The stories of The Jungle Book are loved by children throughout the world. ‘As Mowgli the man cub stumbles into the wolf pack, Kipling takes us into the heart of the jungle and reveals the fears and excitement of the animal kingdom,’” says Fiona. “Along the way Mowgli meets wise Bagheera the black panther, Baloo the bear and Kaa the snake.” In order to establish the world of the story the cast were required to study the life and times of Rudyard Kipling, the original Jungle Book story and the history of India. Having visited India Fiona was able to provide key facts about the land, industry, culture, customs and jungle environment. During the Southland Festival of the Arts the cast was also able to view New Zealand actor and director Jacob Rajan performing his devised work set in India, Guru Chai. “Meeting with him after the show to discuss arts and India catapulted the actors into the heart of the Indian jungle,” Fiona asserts.

The actors undertook extensive research for characterisation as jungle animals and observed and studied their designated animal for many weeks, with some even visiting a zoo. According to Fiona, ‘the families of monkeys and wolves in particular grew week by week, bringing great excitement and squeals of delight to audiences young and old with their animal antics’. The theoretical framework incorporated by Fiona into the rehearsal process included acting theorists Antonin Artaud, Konstantin Stanislavski, Sanford Meisner, Lee Strasberg and Jerzy Grotofowski. One of the major challenges for Fiona was vocal production of correct dialects and accents of the Indian language. Bachelor of Digital Media student Harish Adithiya from India worked with the cast on both interpretation and pronunciation of words. “This greatly enhanced the understanding of the work and inspired the actors to develop deeper, real life meaning and cultural elements in performing the traditional story.”

The production season proved a sensational hit for youngsters and for adults who remembered this fantastic book from their own childhoods. “I am proud of cast and crew and all who contributed to transporting us to the Seoni hills of central India,” Fiona says. “They managed to capture the essence, colour, animals and village people of 1894 and, most importantly, to honour the truth and spirit of Kipling’s story.”

Contact:
Fiona Forrest
Sir Anthony Hopkins School of Dramatic Arts
fiona.forrest@sit.ac.nz
A collision of two worlds: what do you do when you have a nursing student who is failing?

Research by nurse educator Sally Dobbs addresses the difficult issue of how nurse lecturers deal with assessing ‘failing’ nursing students in clinical practice. She presented her findings at the Australasian Nurse Educators Conference, Wellington, where she was voted best presenter.

Academic and Relationship Leader in the School of Nursing, Sally Dobbs has 28 years of experience in nurse education in New Zealand, the UK and overseas, including three years in Nepal. She has a Master of Education (Health Education/Promotion) and a Master of Science in Medical Science. Her current research forms part of her Educational Doctorate through Massey University. Her topic was inspired by her concern over the complex issues surrounding how to fail students who did not meet safety and skill standards during clinical placements in the final year of their degree study. ‘Strange as it may seem, failing a failing student is actually not a simple matter,’ Sally says. Clinical educators often find themselves caught between their professional nursing duty to protect the safety of future patients and their desire to see all their students succeed.’ She describes this position as being caught between two worlds: the nursing world and the education world. ‘In straddling these two worlds, nurse educators are responsible to a range of different organisations, from the Nursing Council of New Zealand and district health boards to polytechnic CEDs and academic boards, that operate with differing and sometimes conflicting performance expectations.’

Sally carried out indepth interviews with 14 clinical nurse educators at institutes of technology and polytechnics around New Zealand. She found that, when deciding whether a student should ‘fail’ or ‘pass’ a clinical assessment, nurse educators commonly asked themselves: ‘would I want this person looking after me or a member of my family?’ Sally says that even when the answer was an emphatic “no”, some educators still chose not to fail the student. The reasons for this included lack of training in assessing clinical placements, differing expectations among educators, and a reluctance to end a student’s hopes of a nursing career. ‘Many of those who did fail unsafe students were left feeling guilty and worried that their decisions were not supported by their colleagues or managers.’

Sally identifies a number of areas that could be strengthened to ensure that clinical educators feel supported in their decisions to fail students. One major issue is who should be the ‘gatekeeper’ for the nursing profession. She explains: ‘a key issue is that of specifying where ultimate responsibility lies for failing a student: the nursing profession, or the polytechnic nursing school. Currently that is not clear.’ Sally also recommends defining clear national criteria for the full range of clinical skills that students need to achieve over the course of the degree, and developing a recognised educator training programme in clinical assessment. ‘Failing a student is unlikely to ever be an easy decision but steps such as these could make it more transparent and much less stressful for all concerned,’ she says.

Contact:
Sally Dobbs
School of Nursing
sally.dobbs@sit.ac.nz
Using PeerWise to build and consolidate knowledge in nursing education

Nurse educator Johanna Rhodes has developed considerable expertise in the use of PeerWise, an online platform that encourages nursing students to manage their own revision and learning.

She shared her experience in a recent paper published in the Southern Institute of Technology Journal of Applied Research.

Johanna teaches on undergraduate and postgraduate programmes in the School of Nursing. She completed her Master of Health Science (Nursing) through Otago University in 2010 and, in addition, she graduated with a Master of Teaching from the University of Otago in 2013. During 2013 Johanna published the results of her research into the value to student nurses of using the online revision software platform PeerWise for knowledge building and consolidation. Johanna developed a PeerWise course to support Year Three students revising for the ‘state finals’, the national examination graduating students must pass in order to be able to practice as registered nurses in New Zealand. This examination is made up of a large number of multiple-choice questions and is facilitated by the Nursing Council of New Zealand.

‘My research was built on a need to support meaningful revision for students about to sit the state finals,’ Johanna explains. PeerWise provides an online repository of multiple-choice questions created, answered, rated and discussed by educators and students. The programme supports self-directed learning by students, who are able to use it to help consolidate their knowledge by taking part in an online or ‘e-community’ with their educators and classmates. ‘I saw that with PeerWise there was an opportunity for students to continuously build knowledge and revise throughout the year to prepare for their state finals,’ she says. ‘Typically, at the beginning of a semester, you begin with an empty repository and this grows gradually as the course progresses and more and more questions are added by the tutor and also by the students themselves.’

The paper reports the research Johanna carried out with participants drawn from students enrolled in the final year of their Bachelor of Nursing programme at Southern Institute of Technology in 2012. Her findings confirmed that PeerWise provided students with an opportunity to build and consolidate their knowledge throughout the year. All participants reported that they found the process helpful to their learning, in particular the provision of a rationale for each answer. ‘Providing a rationale appears to be a pivotal strength of PeerWise,’ Johanna asserts. Other benefits Johanna’s research identified included providing students with developing knowledge about what they knew about a topic, and providing a direction for further knowledge building. Her research strongly supports the use of PeerWise as a teaching tool, and she argues that ‘the programme is tailor-made to optimise the potential of learner-determined knowledge.’

The full paper can be found on the website of the Southern Institute of Technology Journal of Applied Research:

http://sitpjo.sit.ac.nz

Contact:
Johanna Rhodes
School of Nursing
Johanna.rhodes@sit.ac.nz

Nursing and dementia: ‘please don’t take my sunshine away!’

As dementia becomes a global crisis the future of dementia care is an increasingly important issue. Dr Jed Montayre considers that health care providers need to recognize the individual life histories and to comprehend the new realities of their clients in order to care for them better.

Jed arrived in New Zealand from the Philippines in 2011 and practiced in Invercargill as a registered nurse before joining the School of Nursing at Southern Institute of Technology. He has a Masters in Nursing from Cebu Normal University in the Philippines and in late 2013 he completed his PhD in Research and Evaluation. ‘My interest in dementia began early in my nursing career when I learned about the condition from healthcare journals and from movies or stories described to me,’ he says. ‘That interest continued and I ended up working in aged care looking after patients with dementia.’ His doctoral research focused on the development of individualised behaviour care plans for older people admitted in secured dementia facilities.

The research recognises the social life histories of clients and how these influence their current behaviours as manifest in certain circumstances, in ways that challenge primary caregivers and families. ‘Even though there is a plethora of research findings and current information on dementia available to the public and to care providing sectors there still remains a challenge for everyone to understand dementia under a combination of factors,’ Jed argues. ‘My research highlights the importance of knowing a dementia patient as the person that he or she was. Care givers need to know what their patients used to do: their jobs, hobbies and other life events.’ This includes learning about undesirable or sad incidents such as death of loved ones, post-traumatic effects of war, or earlier diseases and illnesses.

Jed’s study explores such factors in relation to current behavioural manifestations in people with dementia. The findings emphasise that behavioral care plans need to be intensively individualised and unique; no counterpart template or textbook-perfect intervention can establish a generalised approach that will effectively manage all people suffering from dementia.

Jed urges caregivers and health professionals to be more sensitive and responsive to triggers of behavioural manifestations in the context of a person’s social and personal life history. Nurses and care assistants working in secured dementia units are often unaware of their clients’ personal backgrounds. ‘This can lead to misinterpretation of a dementia patient’s behaviour, and in turn can make for adverse outcomes,’ he explains. ‘Staff may misinterpret a dementia patient’s call for assistance as aggressive behaviour or a threatening act. This situation influences the kind of nursing care given to client and, at the same time, undermines the provision of a good quality life for people admitted for dementia care.’

His research also highlights the importance of understanding dementia clients’ perception of their own world or, in other words, their reality. He gives an example: ‘One lady keeps taking another lady’s walking stick, because she thinks she needs it because it is raining. Should you disagree and argue with her? For this behaviour to be managed properly, a dementia patient’s perception of reality needs to be understood first.’ Most of the time, however, exploration of the client’s perception of reality is considered unimportant. ‘Some people would ask: “what’s the point? After all, they have dementia.”’ Jed believes that being aware of how each client perceives reality can form the basis of individualised behavioural care plans which can be used to predict and better manage behavioural issues.

Contact:
Jed Montayre
School of Nursing
jed.montayre@sit.ac.nz
Ethical issues as experienced by nursing students in New Zealand

What ethical dilemmas are student nurses likely to be confronted with during work experience in clinical practice, and what situations do they find most distressing? These are the questions School of Nursing tutor Jill Sinclair asked students around New Zealand.

Jill Sinclair is a nurse educator and programme manager on the Bachelor of Nursing programme at Southern Institute of Technology. In 2013 she completed her Master of Nursing at the Eastern Institute of Technology. Her thesis project involved research into the most frequently occurring ethical issues experienced by nursing students in New Zealand. She also gathered data on the levels of distress that the students feel when faced with these issues. ‘It has long been recognised that nursing students do not experience ethical problems in clinical practice the same way as experienced nurses do,’ she says. ‘However there has been no research published in this country that explores the experiences of ethical issues among undergraduate student nurses in clinical practice.’ Jill believes research in this area is important so that nurse educators can recognise the unique problems students face and help develop ethical reasoning and competence among students.

Jill’s research interest was sparked when her students reported concerns about ethically-challenging incidents they had experienced during their clinical placements in hospitals, community clinics, rest homes or other health workplaces. ‘These situations can be very upsetting for students as they struggle to understand and process the healthcare environment,’ she explains. ‘I found myself questioning why it was that I didn’t view the situation the same way as my students did though. Had my moral lens changed over my years in nursing practice? And how should we be teaching ethics to undergraduates, so that they have some knowledge about how to navigate the real issues they are likely to encounter?’

In order to collect her data Jill developed a web-based questionnaire that she distributed via email to members of the New Zealand Nurses Organisation National Student Unit. She received 509 responses to the questionnaire, which asked students about ethical issues related to patient rights and patient care. ‘I found that unsafe working conditions was the most commonly occurring ethical issue facing Bachelor of Nursing students,’ Jill reports. ‘This was also the issue that the respondents found most distressing.’ Breaches of ethical principles relating to patient rights such as confidentiality, privacy, dignity and respect were also causes of concern for respondents. ‘Students reported being distressed by witnessing situations that involved compromises to the safety of patients, including unsafe working environments, unsafe health care practices and suspected abuse or neglect,’ she says. They also described concerns over lack of support and supervision, bullying, end-of-life care issues and breaches of the ethical principle of veracity.

However the overall distress levels were lower for the majority of issues for those participants in the later part of their degree. This can be summarised best by a student comment: ‘I found this (breach of dignity) highly distressing at first but now that I have seen it several times I am probably moderately distress about this situation as I feel powerlessness to change the situation’ (Participant no.182 – Year Three student).

With such a rich source of data Jill was able to frame a series of recommendations on this important topic. ‘I hope that my findings will be used to inform ethics education of nursing students and support this aspect of their clinical experiences,’ Jill says. ‘By developing ethics education around the main concerns that students have in clinical practice, I hope that student understanding of the issues will be enhanced, as will their ability to respond appropriately when these situations arise.’

Contact:
Jill Sinclair
School of Nursing
jill.sinclair@sit.ac.nz
Performing the DIY Public Museum

Public museums in New Zealand are concerned about funding, collection care, audience engagement, building maintenance and staffing. Kathryn Mitchell is exploring a radically different concept: a ‘DIY Museum’ that acts as a series of fluid, adaptable, performed actions: a local, crowdsourced, social institution.

Kathryn is an artist, and a tutor and programme manager in the School of Visual Arts, Film and Animation. She has a Master of Fine Arts from the Otago Polytechnic School of Art and brings considerable experience in art practice and business to her teaching and research. Her current area of research looks at the challenges and opportunities in reorienting museums from the periphery to the heart of their communities, initiating social action and facilitating public access to cultural heritage. As she explains, ‘my research employs action research alongside a literature review and a series of identified case studies including Volkswagen’s The People’s Film, Kevin Macdonald & Ridley Scott’s Life in a Day (2010), and Rijks Museum’s Rijks Studio to situate the conditions in which a social, crowdsourced, public museum could be performed, documented and distributed within a community.’

Kathryn’s research references the rhetoric of ‘institutional critique’, a term first used by Andrea Fraser in her 1985 essay on ‘In and Out of Place’. The concept has provided a framework for a multitude of art practices which question the neutrality of the institution of the museum and art gallery. In a more recent essay Fraser suggests that institutional critique has itself become ‘institutionalised’, and she argues for the consequent impossibility for artists to occupy a critical perspective from a position outside of or in opposition to the institution.

Drawing on a wide range of literature Kathryn explores the historic background to the emergence of experimental challenges to the traditional, hegemonic idea of the museum. ‘A radical rethink of the role of art and the traditional artwork/viewer relationship can be traced back to the early twentieth century avant-garde visionaries,’ she explains. ‘The Futurists and Dadaists, for example, engaged with the potential that new technologies such as photography, film and sound reproduction could contribute to the development of novel aesthetic forms.’ Experimental exhibition practices facilitated the emergence of the exhibition as an environment both inside and outside the museum that immersed viewers in multi-sensory, multi-media, participatory environments. ‘Moving forward to the more recent past, in the 1990s virtual museums promoting particular collection items of special significance became available via the CD-ROM,’ Kathryn states. ‘This tradition of highlighting items from the museum is still widespread in today’s museum websites, as media historian Erkki Huhtamo suggests, with a relatively small number focusing on the inclusion of museum experiences aimed at activating the remote visitor.’

Kathryn’s research follows this tradition of technological engagement into the twenty first century with an exploration of the potential for the crowdsourced museum. The term ‘crowdsourcing’ was used in 2006 by Jeff Howe in Wired magazine to describe a movement he associated with ‘digital natives’ who could utilise low cost tools, with limited attention to production quality, to distribute work on the World Wide Web. ‘Crowdsourcing has become prevalent in today’s cultural institutions,’ says Kathryn. ‘The term is widely used but I apply it to the idea that content is generated by or outsourced to users. The crowdsourced museum therefore needs to have a deep commitment to its community as both user and co-curator.’

Contact:
Kathryn Mitchell
School of Visual Arts, Film and Animation
kathryn.mitchell@sit.ac.nz
Technologies of early film and interdisciplinary performances

Kiss, sneeze, dance, flirt, fight – just some of the bodily displays performed directly for the lens in late-nineteenth and early-twentieth-century popular film. Ruth Myers explores how performance in early film and its technical apparatuses challenged the disciplinary regulation of gender, sexual codes and decency.

Ruth is an artist and tutor at Southern Institute of Technology in Invercargill. She has a Masters in Art and Design from Auckland University of Technology (AUT) and is currently working on her doctoral thesis in the School of Art and Design at AUT. Her research focuses on performance and media arts, and she has a strong interest in historical film practices and feminist theories of gender and sexual identity. Her PhD project questions intersections of identification and performativity via reflexive body performance in video and sculpture.

This has been a highly productive year for Ruth who has given a number of presentations and exhibited work in Auckland, Riverton and Invercargill, as well as collaborating with teaching colleague Kathryn Mitchell in ‘Civilising Divisions’, a performance at the Dunedin Fringe Festival in March 2013. The year culminated in an invitation to Ruth to present a conference paper for the ‘Performing Disciplines’ session at the Inter-discipline Art Association of Australia and New Zealand (AAANZ) Annual Conference in December 2013. The AAANZ conference is a highly regarded academic event. ‘It was a fantastic opportunity to present in an international forum alongside well-known artists, senior academic staff and fellow PhD candidates,’ says Ruth. She was awarded a research grant from the AUT Postgraduate Researcher Dissemination Fund for advanced research degree candidates to attend the conference, as well as support from the Southern Institute of Technology Research Committee.

Ruth’s paper focused on technologies of early film and interdisciplinary performances. ‘This topic sits within my current PhD project “being made”:’ Ruth explains. ‘My project explores "viewing encounters" with the filmic body in early film and contemporary video art, as conditioned by temporalities of display that situate participants in forms of shared performance, addressing and implicating the viewer.” Whether to titillate or amuse, educate or inform, these self-conscious performances share an overt address of the lens: an explicit exploration of technological mechanisms with a direct address to an audience. ‘In this way I can explore the complexities and politics of viewing, and being viewed, within the larger frameworks of leisure, work and amusement.’ Ruth focused on film loops presented via the kinetoscope: an individual peephole viewing device often deployed in arcades and preceding cinematic projection. One important source in the paper is the early physiological material in Thomas Edison’s 1894 Kinetoscopic record of a sneeze as well as his disturbing 1903 Electrocution of an elephant.

‘The paper locates observer and observed within political complexities of performing self and other,’ she says. She addresses concepts of the body, ‘normality’ and the location of social power. ‘I was fascinated by how the apparatus of the kinetoscope draws attention to our own politicised performances.’ The paper has been submitted for publication as part of the conference proceedings in the AAANZ journal.

Contact:
Ruth Myers
School of Visual Arts, Film and Animation
ruth.myers@sit.ac.nz
Revisiting ‘Being There’

Artist and educator Peter Belton is celebrating a highly productive and successful year which saw three exhibitions of his works including a major exhibition at the Southland Museum & Art Gallery, Invercargill.

Between February and April 2013 Peter Belton’s painted drawings were shown in a major exhibition in the Southland Museum & Art Gallery. Sixteen large works were presented and were, as the exhibition title suggests, a response to ‘being in the moment’: a physical engagement with the elements in and around the outdoors. In June and July 2013 Peter held a joint exhibition with John Wishart at the Bank Gallery, Invercargill. There were four works exhibited, including three new pieces. In October Peter was represented by four new paintings in the Southern Institute of Technology staff exhibition, Cheaper by the Dozen, in Raw Gallery, Invercargill.

The Southland Museum & Art Gallery invited Peter to exhibit his works, describing him as a well-known and respected artist renowned for his boldly drawn images of people and their relationships with the environment. An exhibition media release commented that: ‘these depictions are ultimately about the artist and how he recognises, feels, reflects, identifies and analyses the subject matter: how things are seen in relation to the space they occupy as well as to each other.’

Each sketch, when developed further into drawings, has its own story as to how it came into being. Peter uses an example of one sketch to illustrate this point. ‘When working from the broken escarpments on the flanks of Mt. Roy I took a break to eat a sandwich, then lay on my back on the only, small, patch of earth on a spine of sharply falling rock’, he says. ‘Under the midday sun I dozed off, only to be woken by rapid, excited wing beats. Skylarks fleeing down the ridge had whizzed by close to my head. I looked up and sitting on a rock barely three metres from my head was a falcon, no doubt the cause of the rush. He had stopped to check me out. Into subsequent sketches, that day and in my studio drawings, I drew the trajectories of bird flight.’

At a later date Peter made eight visits to Mihiwaka, a prominent hill with sweeping vistas up the Otago coast from Taiaroa Heads to Karitane and beyond, each in different weather and times of day. ‘Making a coherent response to so much visual information, affected by these shifts, was seemingly impossible and my efforts were frustrated until the eighth visit in very gusty conditions,’ he explains. ‘I recalled my sketches of bird flight; then set about fashioning my drawing on the sweeping action of the wind around, into and over the hillsides. This provided me with a structure, with a rhythmic coherency onto which I could project and develop my re-presentation of landform. My imposition of structure was my attempt at making sense of my being there.’

Contact:
Peter Belton
School of Visual Arts, Film and Animation
peter.belton@sit.ac.nz
Overwritten by Peter Belton. Mixed oil media, 900x1100mm

Swept by Peter Belton. Wakatipu. Mixed oil media on board, 770x900mm.

Foveaux Autumn Moment
by Peter Belton.
Oils on board, 770x900mm.
Making the invisible, visible

What does sound look like? David Woolley describes how he employed interactive design to augment the invisible phenomenon of sound, amid the challenges of completing his Master of Design within one year.

A full-time tutor in the School of Visual Arts, Film and Animation, in 2013 David also took on the challenge of carrying out a Master of Design through Massey University in Wellington. ‘I thought: full-time Masters in a year, I can do that!’ laughs David. ‘I hadn’t realised that such an undertaking on top of full time work would prove quite the juggling act.’ He managed to achieve his goal and at the same time create a number of innovative and challenging works of art to make the invisible – sound – visible.

The aim of the Masters’ project was to give the user a heightened sensory experience by augmenting the invisible phenomenon of sound. Sound itself cannot be visible, but the effects of sound can be made so. The research reflects David’s personal fascination with the unseen elements in nature, made visible through scientific principles and technology. ‘Much of this project unifies my passion for audio and vision through design,’ he explains. ‘Through this research I was able to bring together my love of music and art with my fascination with physics.’

His research was informed by the works of audio-visual designers such as Victoria Vesna, Kit Webster, Rob Hawkes and Evan Grant. Concepts applied from their works included engaging audiences through participatory aesthetic experiences by augmenting otherwise unseen objects and making them visible, and the exploration of interplay between dimensions. Other elements included using computer programming techniques to create visuals that responded to audio in real time, and that revealed the science of sound through cymatics: the study of visible sound co-variation.

David’s project culminated in a public exhibition of his installation work in Wellington where he aimed to present a dynamic, interactive visual representation of sound. Audience interaction was an integral part of the audio-visual experience. The experience began when visitors entered a darkened room where a single semi-transparent sphere was suspended at eye level. ‘The dark room created and intensified audience focus,’ David says. The suspended sphere received a continual loop of 3D animated projections and from these it produced a 2.5D video projection. ‘This was used to demonstrate how sound really travels around us,’ he explains. ‘Sound is not the simple sine wave pattern as it is usually portrayed. Sound explodes in bubbles around us.’ Images on the sphere therefore portrayed sound as if emanating from the centre of the ball and spreading out over it.

The audience itself provide the raw material. A second installation used a computer, camera and highly sensitive microphone to provide projected cymatics. If people spoke, coughed or even whispered, this was picked up by a highly sensitive microphone and these sounds produced cymatics through water which were then projected onto a large suspended disc. Vibrating water at different frequencies produces patterns and these were captured via a small video camera, says David. After being further enhanced to provide a more intense, kaleidoscopic effect, the ‘sound’ was projected onto a large, suspended 3m diameter disc receiving cymatics and oscilloscopic real-time visualisations. Colour fluctuations within cymatics were created by sound-reactive LEDs in and around the cymatic device in an attempt to intensify cymatic colouring.

David was fascinated by the spontaneous responses of the viewers. ‘Whether they actively participated or simply watched the behaviour of others, people were definitely made more aware of sound through contemplation of simultaneous visuals of form and pattern.’ And David’s final comment on the experience of doing all this alongside a busy teaching schedule? ‘What was I thinking!’

Contact:
David Woolley
School of Visual Arts, Film and Animation
david.woolley@sit.ac.nz
Huntly Power Station and the history of environmentalism in New Zealand

In an article published in 2013 in the journal Environment and Nature in New Zealand Dr Jo Whittle explores the public resistance to construction of the Huntly Power Station and reveals a little-known aspect of New Zealand’s environmental history.

Jo is the Research Officer at Southern Institute of Technology. She is an historian with an interest in technology and the environment. In a recent article in the environmental history journal Environment and Nature in New Zealand, Jo examines the history of the construction of the coal-burning Huntly Thermal Power Station built on the lower Waikato River from 1973 to 1983. ‘Many people will have seen the power station as they drive along State Highway One between Auckland and Hamilton,’ she says. ‘It’s a vast square building with two tall chimneys, just north of Huntly township.’ The scheme was one of the biggest construction jobs ever undertaken in New Zealand and it is the country’s largest thermal power scheme. It brought enormous changes to the small town of Huntly and the surrounding rural landscape.

The story of the construction of the power station highlights a little-known aspect of the emergence of an environmental consciousness in New Zealand. ‘We are more familiar with campaigns to save beautiful natural places,’ Jo says. As she argues, ‘the first famous conservation battles were over developments in places where few people lived: in national parks and scenic areas such as native forests or lakes.’ In contrast, protests at Huntly never achieved the status of a national environmental campaign because the power station was not built in an area that many people considered scenic. One of the reasons for locating the power station in Huntly was a belief that citizens of that small and declining coal-mining town would be less likely to complain about a power station on their doorsteps than the inhabitants of most other communities in the North Island. ‘The Huntly case has been largely overlooked but it is actually very important in our national environmental history,’ Jo argues. ‘It really interested me because it was one of the first big power schemes built in an area where a large number of people lived, worked and played. It had impacts on domestic water quality, air quality, noise and traffic and it disrupted residential areas and schools.’ While debates about remote, natural places were stimulated by a national sense of identity, issues of air and water pollution occurred in the places where people lived – their ‘back yards’ – and revealed ‘the environment’ as a local and a domestic domain.

Jo explains, ‘these communities were the nearest neighbours to the power station, less than 500 metres away.’ At Huntly, Jo argues, local people used what was then the very new language of environmentalism to articulate their own views of the impacts that the power station would have on their lives. Ultimately strict conditions were placed on the operation of the power station to manage environmental impacts, and the community also managed to convince the government that social impacts should be taken into account in development decisions.

The full article is available online at: http://environmentalhistory-au-nz.org/new-zealand/new-zealand-journal/ Contact: Jo Whittle SIT Research Institute joanne.whittle@sit.ac.nz

Huntly Power Station on the banks of the Waikato River. (Photographer: John Whittle)
A characterisation of cold water springs near the Mararoa River, Southland

**Erine van Niekerk.** Programme Manager for the Environmental Management Degree, is spear-heading the ongoing monitoring of cold water springs adjacent to the Mararoa River in Western Southland. The aim of the research is to establish a baseline set of data that will contribute toward the future management of the quality and cultural values of these unique waters.

Erine is working in collaboration with Jason Holland of Adventure Southland and Clint Rissman from Environment Southland on a longitudinal analysis of the water quality and chemical composition of three freshwater springs on private farmland along the Mararoa River. The study also compares the characteristics of the spring waters with those of the adjacent Mararoa River, in order to analyse observed differences in water quality and composition between the two.

In addition to providing information about current water quality the long-term collection of data is important for understanding the way that the springs relate to the wider catchment. ‘Ultimately we want to determine the source of the spring waters,’ says Erine. ‘Very little is known currently about the sources and behaviour of these important water resources. Springs act as a zone of interaction between surface water, groundwater and various terrestrial ecosystems,’ she explains. ‘We believe the data collected to date establishes a baseline that can contribute towards helping answer questions about the sources and flow direction of groundwater in this area, and about the connections between the springs and the nearby river.’

Monthly sampling of the springs began in July 2011, with analyses of a wide range of parameters including temperature, pH levels, total suspended solids and levels of dissolved boros, bromines, total nitrogen and phosphorus. The chemical composition of the springs is quite different from that of the adjacent river and indicates that their waters are derived from groundwater discharge and that the springs have a lower mean recharge altitude. Over the testing period water quality in the springs falls within recommended environmental guidelines. ‘Currently water quality in the springs is high,’ states Erine. ‘We hope that the data can be applied in the future to enhance positive and collaborative approaches to water and land management in order to maintain their environmental and cultural qualities.’

Contact:

**Erine van Niekerk.** Centre for Research Excellence in Environmental Management

erine.vanniekerk@sit.ac.nz
Phronetic social science: a methodology embedded in practical wisdom

Local knowledge and practical wisdom has much to offer in the management of natural resources. This belief underpins research by Anna Palliser into the management of the complex environment of Banks Peninsula in Canterbury.

Anna teaches on the Environmental Management Degree programme at Southern Institute of Technology. She holds a Master of Environmental Education and Sustainable Development degree from University College of Wales, Trinity College Carmarthen and has just completed her Doctor of Philosophy through University of Otago. Using the Banks Peninsula situation as a case study she analysed the factors that assisted or impeded local people in developing the capacity to take a central role in the sustainable management of their environment.

As part of her research Anna interviewed a wide range of local people, groups and government agency representatives, attended community meetings and spent periods working with two local community groups to achieve resource management and conservation outcomes. Her work opened up fundamental questions for her around what types of environmental knowledge are given priority in addressing environmental management issues. She examined the different types of knowledge generated by scientists and by local people and found that the two do not necessarily reach the same conclusions about environmental realities in what is a complex socio-ecological system. ‘Knowledge that is considered universally “true” and which can be used to develop general or universal theory is currently considered to have higher value than local knowledge and practical wisdom,’ Anna says. ‘I believe this creates a deficit model when it comes to understanding how to manage the environment. It discounts the important knowledge of people who live and work in an area.’ She considers that professional environmental managers need to draw on local knowledge to support decision-making.

Anna’s research methodology was underpinned by a phronetic approach to social science as developed by Oxford Professor Bent Flyvbjerg. ‘Phronesis is associated with knowing the best thing to do in a given situation as guided by experience and an embedded understanding of the context,’ Anna explains. ‘This is in contrast to “episteme” or knowledge that is abstract and universal, which is the knowledge that is currently considered in academia and policymaking to have a higher value than phronesis.’

Anna argues that a phronological approach has much to offer in the analysis of complex socio-ecological systems like that of Banks Peninsula. ‘We need to move away from privileging so-called scientific data over that of indigenous and local ecological knowledge, in order to develop equitable approaches for working with a range of knowledges,’ she says. In the complex environmental problems we are faced with, it is rarely possible to determine what is true. ‘Far more often we have to decide what is the best thing to do in the middle of much uncertainty. Phronesis, or practical wisdom and experience, can contribute much to these situations.’

Contact:
Anna Palliser
Centre for Research Excellence in Environmental Management
anna.palliser@sit.ac.nz
Waitutu Forest pest monitoring and the use of Cornish soapstone in early English ceramics

Dr Ross Ramsay was involved in a number of major research projects in 2013 that reflected his diverse areas of expertise, from promoting pest management in the forests of Fiordland to publishing on the chemical composition of antique ceramics.

Ross teaches on the Environmental Management Degree programme. He holds a Bachelor of Science and Master of Science (Hons) from the University of Auckland and a PhD in geology from the University of New England. He has been heading a collaborative project to survey and manage possums, rats and stoats in the Waitutu Forest in eastern Fiordland, an untouched, lowland broadleaf-podocarp forest. His work at Waitutu involves surveying and trapping pest mammals on land owned by the Waitutu Incorporation and managed for conservation purposes by the Department of Conservation.

The project is supported by Southern Institute of Technology, Environment Southland, the Waitutu Incorporation and Wairaurahiri Jet. A number of students on the Southern Institute of Technology Environmental Management Degree programme are involved in the project, setting out and checking traps and collecting data on pest numbers and trapping results. ‘The project provides a great opportunity for our students to get direct, hands-on experience of a conservation project in a pristine environment,’ says Ross.

The Waitutu trap monitoring programme ran for the full year, evaluating the effectiveness of conventional 150 box traps against the automatic GoodNature A24 Henry traps. In addition 12 GoodNature A12 Henry traps were also monitored. At this stage of the monitoring conventional box traps are well ahead in the control of rats and mustelids when compared with the automatic Henry traps. ‘This is a pity as we have been keen to support a New Zealand initiative,’ Ross explains. ‘It became apparent by the end of 2013 that neither the GoodNature A12 and A24 traps were working as we had been led to believe. Although questions were directed back to the manufacturer as to the efficacy of both types of traps in early 2013, it was not till mid-2014 that we had verbal advice that a design fault in the form of gas leakage had been recognised by GoodNature at least 18 months earlier!’ Subsequently all automatic Henry traps have been replaced with reconditioned traps. ‘The main criticism we would make is the need for much better communication between the manufacturer and the user in the field.’

During 2013 Ross also continued his on-going research into the development of the English porcelain industry. Research funding from Southern Institute of Technology has allowed on-going research into the use of the raw material soapstone (a rock rich in talc) in the production of early English porcelains. In early 2013 Ross and his co-researchers Pat Daniels and Gael Ramsay published a major monograph on the Limehouse porcelain manufactory. In this account, based on porcelain composition, Ross and Gael have been able trace a line of descent from ceramic crucibles made in Stanmore, England, through the Burghley House porcelain jars produced prior to 1683, then the experimental work of the Royal Society of London in its porcelain firings from 1708 to the 1720s, and thence through to Bow and Limehouse porcelain manufacturers.

The research team also published a monograph in 2013 that further contributes to the understanding of the development of early English porcelains. ‘This research addresses the most significant problem in current English ceramic studies, namely the date of manufacture and factory attribution of a number of soapstone George II busts and associated historical wall brackets,’ says Ross. ‘To date virtually every eighteenth century factory and recipe type has been invoked to explain these figural porcelains. By examining a number of these busts we have been able to develop a chronological development based on potting and historical documents. We can clearly identify a Dettingen group made in mid-1745, and a Culloden group made in mid-1746.’ Ross notes that the symbolism associated with bust and bracket is critical in dating them. ‘The bust of King George II wearing a cuirass refers to the battle of Dettingen in late 1743, while a second group with brackets refers to the battle of Culloden, the Protestant succession and the suppression of Catholic rebellion.’ This has helped us correctly date their manufacture.

Contact:

Dr Ross Ramsay
Centre for Research Excellence in Environmental Management
ross.ramsay@sit.ac.nz
Biodiversity in Our Backyard

Dr Ross Ramsay and Dr Jo Whittle were part of a collaborative team who organised and ran a regional biodiversity expo to share ideas about how landowners can protect biodiversity on their own land.

The inaugural Southland Biodiversity Expo ‘Biodiversity in our Backyard’ was held at Southern Institute of Technology in Invercargill on Saturday 13 July 2013. It provided an inspiring snapshot of what landowners, businesses and communities throughout Southland are achieving by working together to enhance biodiversity and reduce their environmental footprint.

The event was organised by Southern Institute of Technology, Fonterra, Environment Southland (ES), Department of Conservation (DOC) and New Zealand Landcare Trust. ‘The expo was conceived as a one-stop shop for inspiring ideas and practical tools to help landowners protect and enhance biodiversity,’ explains Ross. ‘It was aimed at Southland farmers and lifestyle block owners who wanted to find out more about the benefits of biodiversity on private land. It offered inspirational and practical ideas on how to look after streams and wetlands, protect bush remnants and encourage native birds and insects on private property.’

Approximately 140 people attended the day of presentations and enjoyed informative displays from agencies such as ES, DOC, Fonterra, Landcare Trust, Southland Community Law Centre and a wide range of community and environmental groups from as far away as Dunedin, Central Otago and Stewart Island. There were live geckos, freshwater crayfish and eels on display, which proved to be very popular with both children and adults. Phil Reid of Hokonui Radio acted as the MC for the event.

Key note speakers included Emeritus Professor Sir Alan Mark and Professor Henrik Moller, both of the University of Otago, and Lynsey Stratford from the environmental award winning South Coast Dairies at Curio Bay. These key note talks were supported by 16 ‘bite-size’ presentations throughout the day, where farmers, local government and agencies, nurseries, Southern Institute of Technology Environmental Management students, community groups and trusts shared their good ideas for promoting biodiversity on private land in just five minutes each. ‘This was a great format for maximum sharing of good ideas and practical tools in the minimum time,’ explains Jo.

Environmental Management students – very visible in their bright orange t-shirts – helped set up and run the expo stand. Ross is enthusiastic about the way the day unfolded. ‘This was a very successful event,’ he says. ‘It was a great example of how organisations and individuals can work collaboratively to support biodiversity protection and achieve local environmental goals.’

Contact:
Dr Ross Ramsay
Centre for Research Excellence in Environmental Management
ross.ramsay@sit.ac.nz

Jo Whittle
SIT Research Institute
joanne.whittle@sit.ac.nz
STAFF RESEARCH
OUTPUTS 2013

Books and monographs

Daniels, P., Ramsay, R. & Ramsay, G. (2013). The George I busts and historic wall brackets. The motivation, technology and symbolism by which the models can be dated to 1744-6 and attributed to the first Bow Factory in Middlesex. Oxfordshire, United Kingdom: Gomer Press.


Published papers and articles


Exhibitions


Performance


William-Manson, H. (Sir Anthony Hopkins School of Dramatic Arts, Southern Institute of Technology). Director, Gone with the breeze by Tim Kelly and Bill France. Invercargill: Centrestage. October 2013.
Conference presentations


Public talks


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Postgraduate theses


