Māori Design and Tertiary Education

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Executive Summary

Introduction

The teaching of design and the methods used for communicating the history of design is marked by location within a settled society. Predominantly reliant on a design process that itself has been imported, this teaching tends to bypass the contemporary effects of *neo*-colonisation. This research project sought to initiate dialogue about the teaching of design within the broader context of Aotearoa/ New Zealand socio-political relations in order to identify good practices for tertiary educators. Through identifying and collating specific methods, practices and strategies for use in tertiary design teaching, the research aims to disseminate important ideas relating to *te Ao Māori* and Māori design principles, practices and processes to tertiary design educators.

We acknowledge that Māori knowledge always comes from (and stays in) local contexts. The research grew out of previous work including Masters research (Gardner, 2008) looking at "visual communication design by and for Māori", with subsequent practical application of some of the findings in a University of Otago teaching project. The development of a research *whānau* was a goal of the project, in line with Bishop's model of *whakawhānaungatanga*. Establishing a research *whānau* was one way in which issues of self-determination could be addressed (Bishop, 1996; Tuhiwai-Smith, 1999).

The overarching objectives of this research were to:

- Identify key Māori design tertiary teachers at universities, polytechnics and *wānanga*

- Articulate the importance and key findings of Māori design teaching

- Identify strategies and resources to add to the teaching of design and building of a design research *whānau (research collective).*

Implications for Tertiary Design Teaching

Three key elements were identified based around principles of traditional Māori learning:

1. holistic; cultural values are at the centre of education

2. emphasis on group rather than individual learning strategies; identifying the need for group support and the development of *whānau*-based learning environments, and realising the far reaching effect of both teaching and learning, and art and design, beyond the individual learner

3. identity-centred - "learning about you!": considering the importance of cultural identity fostered through teaching and learning

These could be drilled down into more specific approaches;

• *Whakawhānaungatanga*: an approach to learning together that puts people first: it is a *whānau*-based approach where Māori theory is embedded in all course content.

• Art, design and *hapori (community)*; an approach that considers that does not separate out art and design, rather that creativity is connected to community wellbeing. This can be practiced through community projects, to foster an understanding of the life and effects that art and design can have beyond the classroom, but more generally reflects an attitude towards membership of a community, and responsibilities to that community.

• *Mahinga (activities)* or learning by doing (repetition not iteration); an approach that is in contrast to the Western model of design and is potentially more closely aligned to a craft guild model.

• *Takitini,* collective rather than individual learning; an approach that is about operating in a marae context and again is in contrast to a Western model of the individual designer.

The translation of these ideas into a model for teaching design within a New Zealand context are reflected in four strategies that could address some of the issues identified as important.

Strategy 1: Māori educators introducing Māori content

This strategy allows both individual mentoring as well as the introduction of broader examples of cultural content. There should be no assumption of cultural knowledge or how a student wants to be taught, but opportunity for choice. While all lecturers should engage in learning relating to *te reo, tikanga* and *mātauranga Māori*, cultural teaching about these topics is better provided by Māori lecturers.

Strategy 2: A well resourced, integrated approach

This strategy is about building bridges through advocates for cultural themes and practices. It needs key people who will adjust their approach to teaching and not see changes as token gestures. This strategy aims to embed *kaupapa Māori* values in teaching, in doing so building bridges between Eurocentric and Māori educational models.

Strategy 3: Putting culture and identity in the centre

An ongoing process of modelling cultural values through teaching practices. Embedding within teaching an attitude that for students their culture can be what makes their work meaningful and contributes to the asset development of their *iwi/hapu*. A recognition that Māori and Pacific cultures extend meaning and relevance beyond themselves as individuals needs to be understood and supported.

Strategy 4: Regeneration, revitalization, innovation and future focus

A strategy that recognises that there needs to be an acknowledgement of the value of culture within design and that it is looking forward and is adaptable. Ongoing dialogue and resources are tools that facilitate this happening.

Overarching Themes

 1. Making good connections

A common theme and recommendation is ensuring support networks are in place for Māori students, including but not limited to *noho marae* (for Māori students), regular *hui* for Māori students and staff and providing role models and mentorship.

2. Narratives connecting the past with the future

This theme identifies the importance of narratives and their traditional use of connecting tradition with and through technologies. It recognizes the potential role of graphic and communication design in Māori development.

Challenges, Opportunities and Risks:

A major challenge identified for non-Māori design programmes is to understand and undertake systemic changes in order to allow cultural values to be in the centre, and not an add-on. Professional development in the learning of principles of *tikanga* and *mahi*, and *mātauranga Māori* will be necessary in some cases. This can also be seen as an opportunity to develop design curricula and teaching methods that reflect the unique cultural environment of Aotearoa/New Zealand. It is important to recognize culture as continually changing and responding to change. In all cases an *iwi*-focused (and *rūnanga*-focused) approach will be most suitable and all changes to curriculum should be in consultation with local *iwi* while building nation-wide relationships with *iwi* members and Māori advisors.

Introduction

It was the aim of this research project to identify and collate specific methods, practices and strategies for use in teaching, and in this way disseminate important ideas relating to *te Ao Māori* and Māori design principles, practices and processes to tertiary design educators. These research findings and tested strategies will benefit students of design in Aotearoa/New Zealand through teaching and help to develop cultural considerations for New Zealand designers. We acknowledge that Māori knowledge always comes from (and stays in) local contexts.

The teaching of design and the processes used for communicating the history of design is marked by location within a settled society. Predominantly reliant on a design process that itself has been imported, this approach bypasses the contemporary effects of *neo-*colonisation. This research project initiated dialogue about the teaching of design within the broader context of Aotearoa/ New Zealand socio-political relations.

When dealing with culture it is proposed that designers need to be informed about the importance of differences in epistemology, proper processes, guidelines and frameworks (Rooney, 2006). This is particularly the case for students of design. Combrie and Kupa (1998-9) emphasize, "communicators who use a cultural framework to develop and present information visually, agree that Māori respond positively to cultural elements in the design outcome and appreciate that the communication actually acknowledges the culture to which they belong". Martin (2006) proposes, "design is one of the most pervasive mediums in which culture is engaged". He adds that "design and culture are 'mutually generative of each other', where culture feeds the design process to generate creative outcomes, while at the same time is responsive to the performances of use and meaning, that shape the cultural context - a self-sustaining cycle".

The broader context of this research project may be positioned as a critique of the propagation of modernism and the colonisation of Māori culture. Modernism, still a popular design ideology and style features a universalising or 'one size fits all' dogma, and can be traced back to Western philosophers such as Plato, Socrates and Descartes. An historical New Zealand example of this persistent ideology can be recognized in regards to the "the twenty years immediately preceding 1840, with the move from orality, through manuscript literacy, to the introduction of printing" (McKenzie, 1999). The printed document that exemplifies the impact of modernism on Māori culture is the *Treaty of Waitangi*. The variant versions and conflicting views signify contact between a literate European culture and those of an oral Indigenous culture. This document offers a prime example of "European assumptions about the comprehension, status, fixities, formalities and legalities of written statements, as opposed to the flexible, dynamic and subjective accommodations of oral culture" (Dewes, 1975).

When one speaks of the history of design, we are not only referring to a technical, economic and social process, but also to psychological, cultural and ecological aspects (Hauffe, 1998).

Design as a relatively recently theorized discipline, draws its early texts from 19th and early 20th century Industrial Europe.

In 1908 Adolf Loos' text *Ornament and Crime* propounded that ornamentation was for degenerates and criminals, and in this he included ornamentation as a crime of primitive men. Here we see a confluence of design principles and processes with European culture, and at a time when colonization was at a peak. These Modern designers, created an international language of form, which crossed design disciplines, from architecture to type design, formalizing design principles and processes. Jagodzinski (1999) argues that art is a concept that is a 'distinct object of enlightenment discourse', and that art history is 'nationalistic and heroic'. Most contemporary design thinking (and education) is still strongly pervaded by these rationalist Euro-centric philosophies. Even contemporary Design writers such as Lupton (2004), Meggs (2005) and Noble and Bestley (1998) who start to question the Universal design process as a system capable of negating any design problem or brief do not consider culture as a particular viewpoint from which to conduct this critique.

Design can also be considered as a practice of putting human concerns at the centre of a problem solving exercise, and this research specifically explores the role that designers, Māori designers and artists play in the conceptualisation and development of design outcomes and then the role the design outcome has on the reader/user. User-focused design has had a strong theoretical development arising out of contemporary American industrial design company IDEO (http://www.ideo.com/press/item/design-thinking). This philosophy also provides a critique of the "one size fits all" paradigm, however again it fails to address cultural perspectives, taking instead a strong business focus.

From a *kaupapa Māori* perspective, design is understood in Māori culture as including many traditional and contemporary genres of design and art, and cannot be separated as a discipline from other methods of cultural communication. All are governed carefully through *tikanga* (protocol) and *mātauranga Māori* (Māori knowledge). Robert Jahnke, a Māori art and design educator at Massey University prefers the term (Māori) 'visual culture' over 'art', as more culturally empathetic, and able to embrace *mātauranga Māori* concepts and practices (Jahnke 2006).

Previous research in this area has included Tracey Gardner's (2008) case study research with four Māori designers, as a part of her Masters thesis into "visual communication design by and for Māori". Her results identified that in tertiary design education a predominantly Euro-centric approach to considering design process and models are taught. Interestingly, three interviewees identified that a lack of relevant (or Māori -centred) curricula was offered at their respective tertiary institutions while students of design. These interviewees found that accessing Māori art and design knowledge was largely self-initiated and separate to their graphic design training. This knowledge was often obtained inherently through family or communities they were engaged with, from on-the-job training or experiences, or supplemented by Private Training Institutes that offered short courses or programmes on traditional Māori art (*raranga* and *whakairo*).The separation of customary Māori art and design practices in educational training as identified by interviewees was a common theme.

Gardner's Masters research identified that little to no documented research was available that specifically focused on or about a *kaupapa Māori* design process. In addtion there was no documented approach suitable for tertiary education and so this became the challenge of this research as a way of defining or understanding cultural influences on a communication design process.

A successful University of Otago CALT grant in 2009 was undertaken to incorporate *Māori* teaching approaches and problem-solving to four Communication Design papers taught at Otago University by researcher, Tracey Gardner, as a practical application of her Master's research findings. The project critically challenged students about their personal assumptions and world viewpoint within design. It encouraged students to journey through ethical and social issues within design in order to not only understand Māori design processes, but also develop their own guiding principles for all future design work. Students developed an understanding of cultural sensitivity and issues of collecting and using cultural knowledge.

Furthermore, this research project sought to extend upon the CALT research by exploring the teaching experiences of Māori tertiary design teachers from other tertiary institutions around New Zealand. The researchers do not claim to own any of the material, but rather can be seen as facilitators of a process that draws together a number of interested parties engaged in teaching and design studies. The research also includes contributions from artists and local *mana whenua* from within the Otago community.

The overarching objectives of the project were to:

- Identify key indigenous Māori design tertiary teachers at universities, polytechnics and *wānanga* within New Zealand

- Articulate the importance and key findings of Māori design teaching in practice

- Identify strategies and resources to add to the teaching of design and building of a design research *whānau*

The guiding research questions that informed our interviews and analysis were:

- What is the impact on Māori when design, as it is presently articulated, is led by non-Māori academics?

- Is the design process, as is often argued (in the case of academic knowledge), politically neutral?

- What design processes are included in an indigenous curriculum?

- How can predominantly Western models of design process currently taught and practiced in Aotearoa/New Zealand, be adapted to include and reflect *kaupapa Māori* methods and processes?

Case studies of five Māori designers and design educators were undertaken to collate thematic narratives based on experience and grounded in *kaupapa Māori* practice. The project specifically aimed to conduct case study interviews, with tertiary level lecturers/educators about their own methods, practices and strategies when imparting cultural knowledge to tertiary students. A *kaupapa Māori* research approach (Bishop 1996, Tuhiwai-Smith 1999) was employed to all research methods, and particularly in respect to all Māori cultural content.

The project utilised the strategies outlined by Linda Tuhiwai Smith in her seminal publication, *Decolonizing Methodologies* (1999), and Russell Bishop's, *Kaupapa Māori Research Methods* (1996). A fundamental principle of *kaupapa Māori* research is self-determination, where self determination is activated through a process of *whakawhānaungatanga* (relationship building). The researchers talked, shared and listened through the process of *kanohi ki te kanohi* (face-to-face) with the Māori design lecturer participants about their experiences. These conversations focused on their teaching of design process within Māori and non-Māori tertiary education environments.

As researchers engaging in *kaupapa Māori* research methodology, key indicators (as outlined by Bishop,1996) framed the research investigation:

- Initiation - who and how research is initiated?

- Benefits - who and how participants benefit?

- Representation - whose worldviews are heard in the text of the research?

- Legitimisation - whose realities are constructed? and

- Accountability - who the research is accountable to and who will disseminate the findings?

The development of a research *whānau* was a goal of the project. This was in line with Bishop's model of *whakawhānaungatanga*. Establishing a research *whānau* was one way in which issues of self-determination could be addressed (Bishop, 1996; Tuhiwai-Smith, 1999). The research findings have remained within the research *whānau*, and all materials and transcriptions are the property of participants and their communities.

The AKO Aotearoa web-based Community of Practice (or research *whānau*) environment was initially used as a repository for our material and site for ongoing discussions with and between the design educators interviewed and ourselves. However one participant was concerned about privacy, and all participants were too busy to manage this additional forum. Rather, participants preferred to communicate via email and phone conversations. The further distribution of findings will be decided in negotiation with the research *whānau*. These steps have been necessary to ensure that the *mana* (integrity) of the research is maintained, as well as the *mana* of each of the research participants and the knowledge they have

shared. A suggestion by participants is for a small print-based publication made available on the web as a pdf document, including resource links. This is considered a more suitable mode of dissemination of the findings. In addition a blog site for this document could allow ongoing community participation. This would enable and extend our research *whānau* methodology.

Furthermore, Otago Polytechnic and Otago University both have a guiding Memoranda of Understanding with Kai Tahu Runaka. Working closely together with *runaka* in the future of this project in our own schools remains a priority.

Methodology

With the administrative support of Paula Petley (working within the Otago Institute of Design office at Otago Polytechnic) we contacted in the hope of interviewing Māori design lecturers from twelve New Zealand tertiary institutions. These institutions were identified through a web search for 'tertiary Māori Design and Art programmes'. These institutions were made up of Whare Wānanga, Polytechnics and Universities throughout the North Island.: Waiariki Polytechnic, Northtec, AUT, Unitec, Whitireia Polytechnic, Massey University (Wellington and Palmerston North Campuses), Weltec, The Open Polytechnic, Tairawhiti Polytechnic, Te Wānanga o Awanuiarangi and Te Wānanga o Raukawa. The research team also contacted two members of 'Nga Aho' (the Māori Designers network)[1], in an attempt to engage with professional Māori designers with teaching and educational backgrounds.

Initial contact was made with these institutions (and individuals) with the hope of being directed to relevant lecturing staff, with follow up emails and phone calls to invite lecturers to participate in the project. Some of those contacted did not reply, some were unwilling to participate due to personal and employment circumstances (in one case a programme was facing immanent closure), and several lecturers replied requesting further information. Further information about the processes and researchers was supplied. However, due to the restricted timing of our proposed one week research trip (April 4th – 8th 2011), several more interested lecturers were unable to participate.

Five institutions (and specific lecturing staff in Māori design and art courses) agreed to interviews during the one week research trip. Travel to conduct interviews was arranged. All research participants were emailed (prior to interviews) and presented (at the interview) with copies of (Appendix 1):

- A letter of introduction

- Participant Information sheet and research consent form (as approved by Otago Polytechnic Ethics committee)

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[1] http://www.ngaaho.Māori.nz

- A preliminary reading by NZ 1980's design academic Max Hailstone, describing a Euro-centric iterative design process.

- 'How to join our AKO research group' logon information to the AKO website.

- A Design School booklet from Otago Polytechnic

In general interviews lasted between 1-2 hours and were held at a location chosen by the participants. Time was given for participants to familiarize themselves with the notes and it was observed that the academic language of the participant information sheet conformed to Western models of research and was off-putting. Only written notes were taken at the interviews (no audio recordings) and this helped foster a sense of ease, following the notion of *whakawhānaungatanga* that relies on a level of social comfort. An open-ended style of questioning allowed for frank discussion.

Interviews were concluded with an overview of the ongoing steps and key dates. Each of the participants were given *koha* as a small thanks for their time and contribution to the research project.

Following the return of transcripts and the project report draft one participant withdrew from the project, and one institution has not returned their consent form. For this reason specific details of their involvement have been withdrawn and they have been referred to through third-party material only. This negotiation will be ongoing. The results of the report will be disseminated to these participants who remain included in the research *whānau*. We recognize that the time limitations of the project have not suited all participants.

Results

Traditional Māori Learning

All of the research participants agreed that the traditional Māori model for education is very successful, and reflects good practice. This model is encompassed from pre-school through to postgraduate degree level learning through Te Kohanga Reo (Māori language pre-school), Kura Kaupapa (Māori-centred primary school), and Whare Wānanga (University, place of higher learning). The value of Māori-centred process cannot be underestimated, and nor can it be easily practiced in a non-Māori institution. Participants all identified that traditional and Māori-centred teaching and learning methods have been very important in making education and cultural knowledge accessible to Māori. A recent study (2011) undertaken by Te Kupenga Mātauranga o Taranaki - *Tahia te Marae, Tahia te Wānanga*

Marae and Māori Community-Based adult learning details ways in which Māori learners benefit from marae and Māori community based learning contexts through case studies made in the Taranaki

Te Wānanga o Raukawa was the first contemporary tertiary level institution to be centred around a Māori-centred model of learning, and reflects the ongoing efforts of the ART confederation (the ART confederation represents the tribes, Te Āti Awa, Ngāti Raukawa and Ngāti Toarangatira). Te Wānanga-o-Raukawa has *iwi* (tribe) and community aims as central values and aims to contribute to the Confederation *iwi* and the wider community by producing skilled graduates who can move between Māori and Pākehā worlds effortlessly. "Their involvement will enhance the quality of decision-making on issues affecting the Confederation as well as on matters affecting the community at large."[2]

Te Wānanga o Raukawa aim to provide a traditional context for learning both traditional and contemporary processes, tools and ideas. Learning is always made relevant to *iwi, hapu (sub-tribe)* and *whānau*. This identity process and connection is first encountered and developed through the enrolment process. Te Wānanga o Raukawa do not only accept Māori students (Pākehā may enroll too), but the process of teaching and learning is always delivered in a Māori context, and a Māori-centred way.

> "Te Wānanga-o-Raukawa is a unique centre of higher learning devoted to the world of Māori knowledge, (Mātauranga Māori). Te Wānanga-o-Raukawa is a reformulation of an ancient Polynesian institution known as the whare wānanga, which were tribal centres of higher learning. The method of teaching at Te Wānanga-o-Raukawa is based upon knowledge and wisdom passed on by our ancestors. Through our holistic approach to teaching and learning, you will experience a new and exciting journey into knowledge. Courses are based on group learning or 'hui" rather than through individual learning. Ultimately, you will learn about you! We invite you to journey with us and to see and experience the world through Māori eyes."[3]

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[2] From Te Wānanga o Raukawa website, http://www.wānanga.com/?q=node/16 (accessed 30 May 2011)

In August 1975, the Raukawa Marae Trustees began a 25-year tribal development experiment, known as Whakatupuranga Rua Mano - Generation 2000. Te Wānanga-o-Raukawa was born out of this revival to assist the ART Confederation to achieve its educational aspirations.
The Raukawa Marae Trustees, resolved to establish Te Wānanga-o-Raukawa in April 198…for the advancement of knowledge and for the dissemination and maintenance of knowledge through teaching and research. The Raukawa Marae Trustees saw Te Wānanga-o-Raukawa as a natural and necessary extension of Whakatupuranga Rua Mano.
Repeated proposals were presented to the Crown in the late seventies and early eighties and only attracted lukewarm responses. Despite this, the development of a wānanga was given top priority by the Raukawa Marae Trustees. Te Wānanga-o-Raukawa became an incorporated body in 1984. In 1993 Te Wānanga-o-Raukawa were recognised by the Crown as a "wānanga" under their new legislation known as the Education Amendment Act 1990. By this time Te Wānanga-o-Raukawa had been fully operational for over a decade."

[3] From Te Wānanga o Raukawa website, http://www.wānanga.com/?q=node/16 (accessed 30 May 2011)

Te Wānanga o Raukawa's own website describes this as an "**holistic**" approach and uses **group** rather than individual learning strategies in teaching and delivery. They also identify that students are "**learning about you!**"

Interestingly, these three themes were acknowledged and reiterated by all of the research participants of this research.

One lecturer (Participant 1) explicitly supports the *wānanga* model, while realizing that not all students have access to *wānanga* learning:

> "Most of our people don't understand older art forms, let alone new ones. People are clambering for practices without fully understanding what they are. We really need to have more Māori teaching these things. Maybe it would be better to have them at other institutions where people can access them? *Wānanga* needs to be there (plays an important role) *hui-a-tau*, a place to share, (they are) conferences where people can gather to share this knowledge." (Participant 1)

Teaching outside of *wānanga* however, some lecturers interviewed described strategies for incorporating Māori values. Some are identified here:

Whānau-based learning

Whānau-based learning was also identified by two lecturers (working outside of *wānanga*) as the possibly the best learning environment for Māori content. In this model of delivery, Māori theory is taught intrinsically, and is embedded in all course content.

> "In terms of delivery of the programme, the intentions were largely realised, to provide a *whānau*-based learning environment with multiple levels of access to knowledge and *mātauranga Māori*. Students could be in the same place, with senior Māori artists/designers, (and) it was a real privilege for students to work alongside these people. The nature of Māori stuff, process, design, were coming from a Māori worldview in principle. At the time the Ministry of Education report on Māori leadership identified a need for worldviews to be taught intrinsically". (Participant 4)

This instrinsic approach is supported by another lecturer who suggests that living through Māori values is a priority.

> "To me what is important is some of the underpinning values that you can bring. Some of these values are aspirational, you reach out to it. So while we may not operate as a *whānau*, we may aspire to operate like one. We recognize all the things that are important to *whānau*, for example *hapu* and *iwi*, and so identity becomes a major part of this. To say and identify 'yes I am part of this *whānau*, yes I am part of this *hapu…iwi*' …identity is a clear thing. What are the things that reiterate this? Forms of

expression, e.g. *whaikorero*, the *reo* itself, all of the arts, performances, and all of the *tikanga*."

(Participant 1) is uncertain whether *whānau*-based learning is achievable:

> "I think the *Whānau* model is quite distant to us now, I've dreamt of this model, but we don't operate like this now, not really. We are too inculcated into Western ways. The *Whānau* model means that you really work together as a family, family oriented, we do things all together, look after, educate young ones…now we say that kids have to go to school, out there, even Kura Kaupapa are still working within a Western framework. (Participant 1)

In a broader sense the importance of mentorship was defined by one lecturer (Participant 1).

> "(You need) to make it possible for Māori students to see what the possibilities are, and letting students start to identify who they are. For example, at our institution we have an initiative called 'Iwi Creativity', a celebration of them being Māori creatives (an annual event, to celebrate what students are doing). Māori students make up a small proportion of enrolment (around 100) but we try and find ways for them to make connections with other Māori students."

This interviewed lecturer helps with this process, in an advisory role for Māori students, and helps with studio projects.

> "I always ask where are you from? I want to know what their *iwi* connections are and as a result see them coming back for help and advice. These are not my own students, but from other areas (of the school)."

One example given was a previous student who is now an industrial designer, completing his Masters through another institution. (Participant 1) helped him to develop his own passion, and to direct that back to his Māori roots.

The lecturer explains how he had a mentor as a student.

> "I had a mentor as a student, he was a Pākehā who had a Māori wife. He was my mentor but she was always interested in what we were doing. It was enough to know that they were watching out for me. We all have the same struggles within mainstream institutions, working or teaching Māori design. Here - like elsewhere - the question is one of trying to incorporate Māori design…does this work as a model? It works for non-Māori more than it does for Māori."

Art, Design, Creativity and Hapori

All our participants struggled with the idea of separating concepts of art and design. For one lecturer even these definitions were too separated from a bigger idea of creativity, which was more connected to community wellbeing. "For Māori the purpose of creativity is different." This lecturer (Participant 5) explained that there is no word or theme that separates creativity and life, for example '*wairua*' refers to creativity, but also refers to the health and wellbeing of the community. Examples of this include *raranga*, *whakairo*, which record stories and histories (for the wellbeing of the community). Here the term *hapori* is also important, more closely reflecting ideas of community, and the collective importance of creativity to the community.

Teaching practices: Mãhinga, learning by doing

One lecturer (Participant 2) elaborates further about teaching processes that also relate to the methods used at a *wānanga*.

> "I teach through repetition, each new class begins with repeating a lesson and adding a new thing. We start with a comfortable space and add a new bit. It centres the students in the learning. Because we have built a space students know that they can step up, or step back. Students learn to self manage. We have lots of learning experiences together, and the teacher becomes part of the learning."

Here this lecturer describes a process of mãhinga or 'learning by doing', and refined through repetition. (Participant 4) describes this as a model more closely aligned to a mastery model and suggested that in European history this is closer to craft guild model, such as silversmithing.

Learning through repetition (and not iteration) is in contrast to the Western model of design, identified by New Zealand design academic Max Hailstone.

> "The question "What is design?" may therefore be answered as follows: Design is a process. It is a process whereby a designer, equipped with a technical knowledge of all processes and materials available at the time, and a true understanding of the problems to be solved, and of the constraints that may be imposed upon the solution, together with a sensitive and humanitarian respect for the same, combines these different elements into a cohesive practical whole"…"Whilst "design" is placed in the process of "decision making, etc.", it should be obvious that the design process is involved in making all other processes possible, i.e. the design of the extraction, conversion and manufacturing systems and machinery"

In regard to Max Hailstone's model another lecturer (Participant 4) suggests the iterative model is also the process enlisted by the larger educational framework that we operate within, not just a Western design methodology.

> "In terms of our process, we ask students to explore, repeat, test and trial…rather than a mastery model, (but) still within the bounds of a Western education system. You could find parallel modes and contexts for learning through emulating (in both Māori and Western systems). We could find customary (models of learning) under the tutorage of an expert, such as guilds. But in this education system an iterative design process IS the model of learning." (Participant 4)

She suggests that this education wide (iterative) model is both a product of the emphasis on Bachelor degrees as hierarchically set above diplomas, (and therefore considered to have more value) and also a result of a postmodern emphasis on the individual learner.

> "Technical depth cannot be achieved in the same way as it once was in the in the period of say 1991-94 in the Polytechnic system, when there was more emphasis on specialization of skills. After that period we saw the disestablishment of high-end technology, learning and specialization (back then there were certificates, diplomas and higher diplomas in technical fields like ceramics and silversmithing)… Today's education values the individual's design process, above and beyond a set of learning skills. It is a departure from the Polytechnic model towards a University model. This is a result too of postmodernism. We need to ask ourselves, how has the degree model restructured the values in a programme?" (Participant 4)

Another lecturer (Participant 5) states, "Māori culture is an 'applied culture', and we need to provide applied learning, not through one focus, but many interconnected things … globally indigenous cultures are applied."

(Participant 5) relates new technology as requiring a multidisciplinary approach which encourages multiple users. He made the observation that technology today is multidisciplinary and encourages multiple users. "We witness some of our best students in workshops are working on delivered tutorial content in class, while also watching a DVD, surfing the web, talking on Facebook, and texting someone in the class behind them". Lecturers were annoyed and discouraged by this behaviour however (Participant 5) asked them to observe, and wait until student projects had been assessed before making a judgment. What they found was that each student did really well in this class, and the

assessment returned a 100% pass rate. It made him realise that part of the problem were due to expectations derived from old models of teaching. "Students want immediacy. They want content, and they get bored with depth of one topic…. We need to keep stimulating and inspiring students. They want to engage in as much content as they can, not to be drip-fed one thing at a time".

Takitini, Collective rather than individual learning

One lecturer (Participant 1) noted that the Western model of designing is quite individual, although they do use teams as well. There are also collaborative models – reflecting more on a studio model, with a lead designer, and use of assistants. (Participant 1) asked "…is this a European model? It may be a parallel (model) in terms of *wānanga*-style teaching…we tend to use those systems… Is this the right question? Or is there a bigger philosophical question? Is there another way we should be thinking about design altogether?" He elaborates, "I look at things we have done over the years…we do like to work together, especially in terms of creativity. I don't like to separate art and design, I always think of these two things as the same."

Another lecturer (Participant 4) suggests,

> "Hailstone's article talks about the "mining of the material". He is not in touch with the spiritual value of that material. If we put the individual designer at the centre (of the process) then we fail to engage with the spiritual value of the context that we try to engage with. We (Māori) shift the emphasis from the individual maker to the spiritual value, and begin to engage with sites and their originality. For Hailstone's iterative process, *mauri* is given, if anything second place."

This lecturer (Participant 4) comments that the degree programme (model) requires that the individual student comes up with individual thinking and this is in contrast to the rules of operating in a marae context. So for students there is a need to negotiate multiple thresholds to do this.

> "No you don't have to be Māori to do this, but you need to be incredibly familiar, and want to learn and understand. Māori education of any sort is complicated. Any form of education has its bias, and its framework".

Working within Tertiary Institutions

Most of our participants were working within Universities/Polytechnics/ITPs, rather than Māori-centred courses. Some of these institutions had started by having separate marae-based or traditional model learning/courses, either in the form of a Māori art/design stream or through teaching Māori art/design in another department, such as Māori Education or Māori Development programmes. In all cases these separate courses had recently become integrated into mainstream Bachelor of Art and Design schools. Lecturers in these recently changed environments identified both advantages and disadvantages, citing potential access to resources and possible pathways in degree programmes as good but overall the programme experience as an uncomfortable fit.

> "I am communicating to a group of students within a Western institutional space. I've never felt completely confident about the success of that. For a community of Māori students we are able to provide a community of support, and this is more successful. We cannot compare to a *wānanga*. When we first wanted to teach on a *marae*, I asked, 'does the context matter?' Yes of course! *Marae* teaching was important." (Participant 4)

In all cases teaching and learning required the development of strategies to integrate cultural models, and not concede to token inclusion at a content level. Some of these identified strategies are outlined:

Strategy 1: *Māori educators introducing Māori content*
One model is to include plenty of Māori educators within programmes, who can introduce Māori content to individual students, as well as part of a broader classroom set of examples. There is a risk here that students are "expected to perform ideas of Māori" an assumption that is not always relevant to every learner. There is also a risk that Māori staff become responsible for "all things Māori", from student support to providing cultural advice on a large scale. It seems in both cases that (plenty of) Māori support staff need to be available to make sure that Māori content is integrated and connected to other learning. One lecturer (Participant 4) also outlined the risk of assuming that Māori students want to be taught in a culturally specific context.

> "What has surprised me in the last 10 years is that I thought that when students exited Kura Kaupapa they would want to be taught in *te reo*. Anecdotally, however I have found that if these students selected art programmes outside of *wānanga*, they wanted to be in a mainstream school. I was surprised by the lack of demand for specific Māori

programmes, but recognise that students want successful Māori staff as mentors/role models and support people. This is particularly true at Masters level. By then students are becoming more specific about their learning environment. They are having more focused conversation about *kaupapa Māori* and it can be accommodated (at Masters level)." (Participant 4)

"We have to get Māori staff in front of Māori students and resourced well. Non-Māori staff do support Māori students, but often Māori students just want to be left to do their exploration and their own work, I mean you don't ask a Pākehā student to make Pākehā art. This is especially evident with school leavers; they don't want to be pigeonholed." (Participant 4)

"We assume that students come in with a level of cultural knowledge, but my role is to introduce students to cultural examples. They will not always respond. We, as Māori educators, develop a set of assumptions, that Māori students will want a Māori model of knowledge. People that want that tend to be older students, statistically Māori women start tertiary education in their 30's. Older students are very keen to challenge the institution's model, to deconstruct and critique the academic institution." (Participant 4)

A Māori-centred approach to learning and the introduction of Māori methodologies to Māori students appears to be most successful with adult and postgraduate students, outside of traditional Māori art/design programmes.

"So in the past ten years I have helped students to access methodologies such as Smith and Bishop, and the Pakeke Winiata matrix of values. At Masters level, *kaupapa Māori* is very important and necessary. I supervise Samoan and Māori students principally, as well as small number of Pākehā and Rarotongan students." (Participant 4)

Further however, the risk of expecting Māori students (as well as Māori staff) to perform "being Māori" is exacerbated in Māori contexts. For example one lecturer identified the *noho marae* context as such.

"*Noho marae*, it's different when you take a broad bunch of students to a *marae* (i.e. mixed Pākehā and Māori). There is a pressure on Māori students to perform being Māori. The best experience is (when we take) Māori students only." (Participant 4)

Strategy 2: *A well resourced, integrated approach*

At one institution the head of Creative Technologies, has redesigned their arts and design programme recently to align more closely with a '*marae*-based model'. In order to realise this goal, they identified Māori staff who would quickly understand and be able to practice these ideas in a teaching context.

> "(Staff member 1) really embraced the philosophy of the degree, and applied higher-based learning. But when we started this model we encountered problems in teaching delivery, because we did not have enough people who understood *marae*-based learning. When we started using these terms we (inadvertently) set up a stigma with the course, so our philosophy was described as 'problem-based learning'. This applied learning is the same as *marae*-based learning but more inclusive, it's a way of life. For example you sit on the *paepae* when you have earned the right to, up until then you have to prove yourself through work." "(Participant 5)

He recognised the need to build bridges, and asked the question "how can we build bridges? As a practice? And embed *kaupapa Māori* principles in teaching?"

(Participant 5) has attempted to design a course that might build bridges between cultures. Compulsory components in the degree programme include collaborative thinking, technology and cultural practice.

> "ITPQ allowed us to run (our course at (Participant 5's institution) as a test model, recognizing it was full of holes, but really innovative. The teaching model has been through transitions and evaluations but has been signed off every year."

The course is unique in New Zealand. "Here we think that (Participant 5's institution) is leading the way, in terms of building a bridge between two models." (Participant 5) cited Ken Robinson's examples of education and creativity and that he makes reference to creativity but not to any particular culture.

> "Indigenous culture and creativity, they are the same thing. I love this subject matter but also it is a vision, which carries on from the work of Sir Apirana Ngata…"

(Participant 5) strongly believes in the need to have Māori values and cultural processes taught in an integrated way outside of *wānanga*.

> "There are others working with this vision, for example Pita Sharples is waiting for these things to evolve, in order to develop a strategy. We need advocates (like ourselves) in non-*wānanga* contexts or 'change agents'."

(Participant 5) describes how people who understand this process are very valuable to tertiary institutions

> "I brought (staff member 1) in; he delivered closest to this philosophy, of collaborative thinking, technology and cultural practice. He got hit though, by those who didn't understand. (Staff member 1's) teaching was the closest to that *marae*-based learning model."

For all lecturers working to integrate Māori culture and values into non-Māori programmes, the biggest challenge identified was finding people who were willing to adjust their teaching/learning model to work with Māori themes and practices. They identified existing lecturers as not wanting to change their teaching practices, and seeing any work with Māori as over and above their already busy workload. One suggested that to some degree international teaching staff were more open to learning about Māori culture than New Zealand Pākehā. Another suggested that all new lecturers needed to be connected with cultural aims of the institution, in a way that was compulsory and contracted. One suggested that staff need to be open to new pedagogies, such as Andragogy (a theory of experience-based learning, originally devised for adult learners) which may be supported and directed by students, " it's not a new model of teaching/thinking but it's an older model, an integrated and collaborative model". (Participant 5)

All agreed that there must not be token gestures, "We don't believe in this model." "Communication, it's all about people, (we) need to communicate with *tangata whenua* and designers".

"We need lots of role models; there are lots around now." (Participant 5)

Strategy 3: *Putting culture and identity in the centre*

One lecturer (Participant 5) describes a cultural design course that is in the centre of learning in their programme,and compulsory for all students.

> "It's not just about Māori culture; you bring your own culture. We ask the question, what is your *whakapapa*? This creates a starting point for students to have open discussion. Shared perspectives and understanding, and an emphasis on collaboration is encouraged in our course."

Cultural values are modeled through teaching practices:

"We need to demonstrate sharing through teaching. We provide a starting point through learning *te reo*, but this is just a starting point. We encourage understanding and sharing each other's cultural perspectives." (Participant 5)

Alongside broader cultural values, identity is cited as an important aspect for all students and their work develops from this:

"The course is based around students' identities, and this is vital to their process, it's the starting point for their process. We would like to build cultural philosophy into every course." (Participant 5)

This is described as an ongoing process, both for students and staff teaching on the programme.

"Most courses start here by looking at identity, not just *whakapapa*, start with your room, it's the start of a process…The Hailstone model is a very corporate model, and one which doesn't reflect creativity today". (Participant 5)

(Participant 5) uses the example of tagging,

"it's a corporate medium now….You just have to look at how corporates have adapted their ways, whom are they getting in? They are trying to appeal to youth culture…The process (Hailstone's) is still there, but it starts with identity."

(Participant 5) believes that designers (always) want to embed their own culture in their work, this makes their work meaningful to them. This is evident in some of his graduates' stories. "They want more control, and not to be a part of 'creative factories'. Back then the design industry was a factory. What has changed in the last 10 years?"

Strategy 4: *Regeneration, revitalization, innovation and future focus*

Nearly all of the lecturers we spoke to talked about art and design and the historical point that we are at now. There is a general understanding amongst our research *whānau* that effective and important work has been done (and is ongoing) in the regeneration and revitalization of traditional art forms and knowledges. This work is achieved both inside and outside of formal *wānanga*.

This research project, with a history and interest in contemporary Māori graphic design, identified a gap between the revitalization of culture and the need to be forward thinking, and consider the effect that new media will have upon Māori visual language in the future.

Narratives are one way to connect history and different technologes. One lecturer (Participant 1) identifies this as,

> "…– narratives – are key to *tikanga* but are also expressions of our identity. You see through history, people grasp at these opportunities. There is a real desire to create new expressions of who we are. There are plenty of examples. As a designer we do that all the time, design has got to have meaning and application to your *whānau*, *hapu* and *iwi*. If it doesn't have meaning then it makes no sense. People wanting to break the mold, i.e. Māori trying to push the boundary, you have to be very clear in your mind about the bigger picture. The narratives are crucial and timeless. *Whakapapa*, cosmological narratives, they cant be disputed, you cant deny those histories…So how can we think about those histories and extend them beyond our time?" (Participant 1) elaborates that expressions of narratives can be via *whaikorero*, *kowhaiwhai*, *raranga*, traditional Māori design. "You have to understand the *kaupapa* behind these forms, these are the narratives. It's difficult to separate the narratives from the *tikanga* that goes with them."

(Participant 1) refers to how weavers talk about weaving and in relation to *tikanga*/narratives. "A weaver may see themselves as the vehicle through which the process passes." (Participant 1) reiterates the need to move forward, and develop new designs, without letting go of tradition.

One example (Participant 1) gave was surrounding his role in helping a *marae* develop a new gateway. A challenge was laid down (to develop a new gateway), but for the local people the idea (of a gateway) had to fit a stereotype.

> "That stereotype followed the Ngata model. (Really) we needed to examine the *whakapapa* of that place. We were grasping at an identity, and not fully understanding the process." (Participant 1)'s role was to help "illuminate these narratives for our people." But he asks: "how do we get past this point of grasping at pan-Māori models, and not just return to such stereotypes?"

"I see that there is a gap in learning. People with knowledge are able to move forward, and people without knowledge can't. Some locations and situations are more important. There could be another research project in that question." (Participant 1) refers to culture as needing to continually be open to change:

> "How can it be that we changed from being a (culture with a graphically) rectilinear style to a curvilinear one during our time in Aotearoa? No one was telling the artists (when they first arrived in Aotearoa), but try and break the curvilinear form today – the *koru*! And not that we want to, but I am interested in breakthrough thinking, how things change…Maybe it will happen through graphic design or maybe new technologies

such as Facebook and social media? We've got old as well as young resisting this change, those on the *paepae*, they resist change."

"The key is that we need to understand where we fit now, where Māori society is at, where its heading, where we need to aim, where future-focused thinking is, that's where we need to go. As a focus we need to be conversant with that – I think that's the role of the designer – we represent our *iwi*, it's a responsibility if we have had knowledge given to us, no good just leaving that knowledge to sit, (it) needs to be built on, and we need to acknowledge where that knowledge came from. The focus has started to shift to *iwi* focus, rather than Māori focus. *Iwi* identity starts to emerge, much stronger. What do creative people have to offer this? They have as much to offer CONCEPTUALLY, not just offer expressions of this (i.e. not just at the end of the process). We need to recognize the opportunities for that to happen. Graphic Design may be one such opportunity."

A complex and ongoing relationship was identified, for Māori culture and practices, of which art and design are but one contemporary and traditional example. All research participants acknowledge the very real importance of acknowledging Māori visual language as traditional and connected to specific *iwi* contexts. It is important that traditional mahi and tikanga surround this learning. It is also becoming important that, once traditional knowledge has been developed, that tradition allows a way forward, and room for developing innovation in traditional art forms, as well as *tikanga* and *mahi* for using new media. This was identified by most of our participants as a challenge for Māori teachers and learners in the 21st century.

This is supported in the work of Greenwood and Te Aika (2010) where they identified the importance of recognizing Māori content as always being situational and contextual, and able to respond to community needs.

Implications

A number of identifiable practices were described as important to a Māori-centred design learning experience as a result of this work. Whilst good practices involve a Māori-centred process taught in a Māori institution some approaches were identified that could help to include Māori-centred design processes in non-Māori tertiary institutions. These were based around principles of traditional Māori learning and three key elements were identified:

1. holistic; cultural values are at the centre of education

2. emphasis on group rather than individual learning strategies; identifying the need for group support and the development of *whānau*-based learning environments, and realising

the far reaching effect of both teaching and learning, and art and design, beyond the individual learner

3. identity-centred - "learning about you!": considering the importance of cultural identity fostered through teaching and learning

These could be drilled down into more specific approaches;

• *Whakawhānaungatanga*: an approach to learning together,that puts people first: it is a *whānau*-based approach where Māori theory is embedded in all course content.

• Art, design and *hapori*; an approach that considers that does not separate out art and design, rather that creativity is connected to community wellbeing. This can be practiced through community projects, to foster an understanding of the life and effects that art and design can have beyond the classroom, but more generally reflects an attitude towards membership of a community, and responsibilities to that community.

• Learning by doing (repetition not iteration); an approach that is in contrast to the Western model of design and is potentially more closely aligned to a craft guild model.

• Collective rather than individual learning; an approach that is about operating in a marae context and again is in contrast to a Western model of the individual designer.

The translation of these ideas into a model for teaching design within a New Zealand context are reflected in five strategies that could address some of the issues identified as important.

Suggested Strategies:

Strategy 1: Māori educators introducing Māori content

This strategy allows both individual mentoring as well as the introduction of broader examples of cultural content. There should be no assumption of cultural knowledge or how a student wants to be taught, but opportunity for choice. While all lecturers should engage in learning relating to *te reo, tikanga* and *mātauranga Māori*, cultural teaching about these topics is better provided by Māori lecturers

Strategy 2: A well resourced, integrated approach

This strategy is about building bridges through advocates for cultural themes and practices. It needs key people who will adjust their approach to teaching and not see changes as token gestures. This strategy aims to embed *kaupapa Māori* values in teaching, in doing so building bridges between Eurocentric and Māori educational models

Strategy 3: Putting culture and identity in the centre

An ongoing process of modelling cultural values through teaching practices. Embedding within teaching an attitude that for students their culture can be what makes their work meaningful and contributes to the asset development of their *iwi/hapu*. A recognition that Māori and Pacific cultures extend meaning and relevance beyond themselves as individuals needs to be understood and supported.

Strategy 4: Regeneration, revitalization, innovation and future focus

A strategy that recognises that there needs to be an acknowledgement of the value of culture within design and that it is looking forward and is adaptable. Ongoing dialogue and resources are tools that facilitate this happening.

Overarching Themes

1. Making good connections

A common theme and recommendation is ensuring support networks are in place for Māori students, including but not limited to *noho marae* (for Māori students), regular *hui* for Māori students and staff and providing role models and mentorship.

2. Narratives connecting the past with the future

This theme identifies the importance of narratives and their traditional use of connecting tradition with and through technologies. It recognizes the potential role of graphic and communication design in Māori development.

Challenges, Opportunities and Risks:

A major challenge identified for non-Māori design programmes is to understand and undertake systemic changes in order to allow cultural values to be in the centre, and not an add-on. This was particularly identified by one participant as a challenge for *pākehā* teaching staff. Professional development in the learning of principles of *tikanga* and *mahi*, and *mātauranga Māori* will be necessary in some cases.

On the flip side, this is an opportunity to develop design curricula and teaching methods that reflect the unique cultural environment of Aotearoa/New Zealand.

Risks include the need to recognize culture as continually changing and responding to change. One participant identified one such change as a shift from pan-Māori to *iwi*-focus. In all cases an *iwi*-focused (and *rūnanga*-focused) approach will be most suitable and all changes to curriculum should be in consultation with local *iwi* while building nation-wide relationships with *iwi* members and Māori advisors.

Case Studies and further research

All participants expressed the value and importance of precedents (*tipuna*). An objective of this research was to begin to identify resources that could add to knowledge and start to build the research *whānau*. The beginnings of this resource list are listed in Appendix 2. However the development of resources suitable for teaching at tertiary level is identified as very relevant future research. This research could develop case studies relating to the outcomes of this report, using individual designers (and design lecturers and identified student projects) as examples of models of contemporary design practice. This is a worthy applied research project which could provide clear examples and practices.

Conclusions

The need for the ongoing development and maintenance of a research *whānau* was a clear outcome of this project. Many of the lecturers we spoke to were working without a support network in their school and appeared to be clear about their own visions, but worked very hard, without the benefit of a network in the tertiary sector.

At a strategic level there are very clear and relevant lessons learned from the research project. Change within institutions however, will require a dedicated response, and will require a well-resourced and integrated approach. Some widespread understandings as well as some particular and detailed adaptations will be required. However if the strategies identified are considered, with clear consultation and guidance and partnership with local iwi, we do believe that the opportunity exists to develop tertiary level design curricula relevant to the New Zealand context.

The opportunity was identified to develop further research in order to provide clear examples of good practices and role models. While this work has been begun through this project further development of a relevant set of resources was outside of the scope of this initial research.

Reflection

We found the process of undertaking these interviews extremely rewarding, making meaningful connections with very interesting and hardworking people. We felt that our initial research question, and our personal curiosity had led us to an interesting and relevant topic, and that although it was a smaller group than we had originally anticipated interviewing, the participants we spoke to were very relevant and each held a lot of knowledge on this subject. We felt strongly that we had embarked on the process of lasting relationships, and after each interview left buzzing and excited. Further, each participant fostered a strong vision surrounding their own work and the future of Māori Design, and we felt very fortunate to have been able to hear and share their vision.

We also felt that our own relationship as researchers, who have worked together for many years, and have developed trusted and social relationship (*whānaungatanga*) has been key to the successful ability to undertake these interviews. It formed a complementary energy to balance the newness of our relationship with participants. We embodied a student-teacher relationship, a Māori-Pākeha relationship and a collaborative relationship. We felt that we made it really clear to participants that we had come to listen and to learn, and to help develop a research community, not to direct the results of our conversation towards a specific end.

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Appendices

Appendix 1: Materials given to Participants

Letter introducing the project,

26 March 2011
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Maori Design and Tertiary Education Research Project

We have identified you as an educator in the field of Maori art and design, with many years experience.

We are inviting you to participate in a research project. This is a small research project that has received funding from AKO Aotearoa that focuses on the way we teach 'design process' in Aotearoa/New Zealand. By contacting you we are asking you to participate in an interview at your institution shortly

Some background to this research:

This research project is a collaboration between Otago Polytechnic School of Design, and Otago University Department of Design Studies.

It has grown directly out of Masters Research undertaken by Tracey Gardner, who talked with Maori Communication Designers as part of her project. One of her results identified that Maori design graduates (from non-Maori tertiary institutes) felt inadequately prepared for their work as designers within Maori communities.

Tracey will be involved in the interview phase of this project and will provide ongoing feedback throughout the duration of this project.

Upon reflection, we realize that the theory that supports our curriculum is drawn mainly from European or American contexts, and the 'design process' as we teach it, does not reflect cultural issues appropriate to our own context in Aotearoa/New Zealand.
Tracey's full thesis can be found here: http://eprintstetumu.otago.ac.nz/81/

We acknowledge that Māori knowledge always comes from (and stays in) local contexts. This project aims only to take small first steps towards research developing dialogue, scenarios and/or recommendations for educators handling and disseminating Maori design theory. Otago Polytechnic and Otago University both have guiding Memoranda of Understanding with Kai Tahu Runaka and we will be working closely together in the future of this project in our own schools. However there are currently no tertiary institutions teaching Maori Art and Design in Te Wai Pounamu.

In 2009 a small teaching grant saw Tracey Gardner at Otago University Design Studies undertake an applied teaching project in this area. The results of this project can be found here: https://wiki.design.otago.ac.nz/groups/maoridesign/. This project was focused more on student reaction/perceptions to Maori design theory in a specific project, where students worked with Tracey and Te Roopu Māori Students' Association. We believe that there needs to be diverse and applied cultural thinking within tertiary curriculum, and this research project hopes to learn more about how we could approach this.

What this research project involves:
We want to talk with you about your approach to teaching the design process. We have some broad questions (see below), and will record our conversation. You may wish to show us some examples of successful student work to illustrate your teaching.
We hope to interview Maori design lecturers from 9 institutions: Waiariki Polytechnic, Northtec, AUT, Unitec, Whitireia, Massey University, Weltec, Tairawhiti Polytechnic and Te Wananga o Raukawa.

Through collecting the opinions of a variety of educators we hope to gain better understandings and develop strategies to improve on teaching the current (Eurocentric) design process model in order for design students studying in non-Maori Design Schools to be better prepared for designing in a New Zealand context.

The interview will take between 30 minutes and 2 hours, depending on your availability. Transcripts and all analysis and results will be available for you to review and/or change at any time, and you are able to withdraw from the research or talk to our cultural advisors if at any stage you feel uncomfortable.
With your permission, summaries of the key ideas we talk about will be posted on a 'Community of Practice' page on the AKO Aotearoa website (at this stage it is a private/closed site), and included in a report. The report will draw from your experiences shared and alongside the wiki page, these are the outcomes of this project.

Aims and Objectives:
The teaching of design and the processes used for communicating the history of design is marked by location within a settled society. Predominantly reliant on a design process that itself has been imported, bypasses the contemporary effects of *neo*-colonisation. This research project is intended to initiate dialogue about the teaching of design within the broader context of Aotearoa/New Zealand socio-political relations. Is the design process, as is often argued, in the case of academic knowledge, politically neutral? And how might we develop a truly indigenous curriculum?
The project has grown out of Tracey Gardner's Master's thesis and her desire to extend her research in a practical manner that would resolve the colonising effects of knowledge production in the field of design education. At this point literature surrounding the teaching of design process is situated within a dominant western discourse of knowledge and objectivity, and through this research project, we will work collaboratively with research participants in order to extend and broaden the current design paradigm as it relates to this context.
The outcome of this research will be the extension of teaching practices built upon the conversations that we will have, and the proposed group discussions that may evolve from this. The researchers do not claim to own any of the material, but rather aim to be facilitators of a process that draws together a number of interested parties engaged in teaching and design studies. It will also include artists and a number of local mana whenua from within the Otago community.

Methodology:

The project will utilise the strategies outlined by Linda Tuhiwai Smith in her seminal publication *decolonizing methodologies* (1999) and Russell Bishop's kaupapa Maori research methods (1996). A fundamental principle of Kaupapa Maori research is self-determination and that self-determination is activated through a process of *Whakawhanaungatanga*. The researchers will talk, kanohi ki te kanohi with Maori design lecturers about the teaching of design process within kaupapa Maori tertiary education environments.

- Initiation - who and how research is initiated?
- Benefits - who and how participants benefit?
- Representation - whose worldviews are heard in the text of the research?
- Legitimisation - whose realities are constructed? and
- Accountability - who the research is accountable to and who will disseminate the findings? (Bishop, 1996).

As a result of our conversations we hope to develop a research whanau in line with Bishop's model of *Whakawhanaungatanga*. Establishing a research whanau is one way in which issues of self-determination can be addressed ((Bishop, 1996; Tuhiwai-Smith, 1999). The research findings will remain within the research whanau, and all materials and transcriptions the property of participants and their communities.

We will use the AKO Aotearoa web-based Community of Practice environment as a repository for our material and site for the research ongoing discussions. The site will be closed, i.e. private to the research whanau members only. The researchers will write a report for AKO Aotearoa, and again this will be private and not distributed. The distribution of findings will only be in negotiation with the research whanau.

CONTACT US:
We really hope that you can support this research with your valuable time and experience and look forward to talking with you.

Many thanks on behalf of the team,
Caro McCaw,   Tracey Gardner
Otago Polytechnic School of Design,   Traced: Researched Design

Our project team:
Researchers:
Caroline McCaw, Academic Leader, Communication Design, Otago Polytechnic contact: caroline.mccaw@op.ac.nz, 021 735 846
Dr Sarah Wakes, Associate Professor, Design Studies, Otago University
contact: sarah.wakes@otago.ac.nz
Tracey Gardner, researcher, Graphic Designer and Managing Director at Traced:Researched Design, URL: http://www.facebook.com/traceddesign
contact: trae@traced.co.nz, 021 224 9798

Cultural Advisors:
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AKO Aotearoa:
AKO is the national centre for tertiary teaching excellence:
http://akoaotearoa.ac.nz

Participant Information Sheet and Otago Polytechnic Ethics Form

Participant Information Form

Project title Maori Design & Tertiary Education Research Project

General Introduction

This is a collaborative research project between Otago University and Otago Polytechnic. This research project examines how predominantly Western models of design process that are currently taught and practiced in Aotearoa/New Zealand can be adapted to include and reflect Mäori methods and processes. Case studies of Mäori designers/design educators within tertiary institutions, will be undertaken to create strategies based on experience and grounded in *kaupapa Mäori* practice. You have been contacted because of your contribution to teaching and education within Mäori-centred courses in art and design. If you agree to take part in this research we would like to meet with you to discuss and record your teaching experiences and methods.

What is the aim of the project?

It is the aim of this research project to identify and collate specific methods, practices and strategies for use in teaching, and in this way disseminate important ideas relating to *te Ao Mäori* and Mäori design principles, practices and processes to tertiary design educators. This project initially intends to develop research findings and tested strategies that may benefit students of design in Aotearoa/New Zealand through teaching, and help to develop cultural considerations for New Zealand designers.

How will potential participants be identified and accessed?

Potential participants for this research have been identified through their contribution within 9 tertiary institutions in NZ (Massey University, Weltec, Unitec, AUT, Waiariki, Tairawhiti Polytechnic, Te Wananga o Raukawa and Te Wananga o Awanuiarangi) that offer Mäori immersion courses in art and design. The researchers Caroline McCaw and Tracey Gardner (Ngati Tuwharetoa ki Kawerau) would like to visit you at your respective institution to conduct a face to face oral interview that will be audio recorded. After the interview process ongoing contact will be maintained by the researchers of this project. Copies of recorded narrative and/or transcribed data from your interview will be given. Subsequent copies can be requested after the interview process (up until July 2016).

What type of participants are being sought?

The type of participants being sought for this research are lecturers/educators from tertiary institutions within NZ that have currently, or previously, taught Mäori-centred courses in art and design. We hope to recruit 5-6 participating lecturers/educators for the case study interviews, and seek a wide range of participants.

What will my participation involve?

Should you agree to take part in this project you will be asked to undergo a face to face oral interview in a setting of your choice. This interview will be audio and/or video recorded with your written consent. The interviews will range in time between thirty minutes and two hours, depending on the your availability. If you agree to take part in an interview a *koha* will be given for your participation.

How will confidentiality and/or anonymity be protected?

Your confidentiality and anonymity will be protected through ongoing consultation in regards to analysis of results and research findings. Any case study material gathered as a part of the interview process will only be used with your written consent.

What data or information will be collected and how will it be used?

The information that will be collected are personal experiences, methods, practices and strategies for use in teaching. This information will disseminate important ideas relating to *te Ao Māori* and Māori design principles, practices and processes to tertiary design educators. A copy of the results of the project will be sent to those who have directly contributed to the project. The information will be analysed for appropriate methods, strategies and models that may be considered relevant to incorporate into teaching in a predominantly non-Māori tertiary Design school environment. The presentation of all methods, strategies and models within the public domain will be consulted and agreed upon before they feature in any other curricula and/or resources. If at any stage during and/or after this research project you have concerns, please feel free to contact our cultural advisor, Professor Paul Tapsell or Donna Matahaere-Atariki, who will reconcile these with the research team.

Data Storage

Caroline McCaw, Dr Sarah Wakes and Tracey Gardner will have direct access to participant data that is collected. Transcriber(s) of the data will also have access to interview data for a limited period of time. Any raw data that is collected will be held in secure storage within the School of Design at Otago Polytechnic for five years (up until July 2016). All raw data (audio interviews) will be retained on the Otago Polytechnic School of Design's secure server and backup drives for a five-year period, after which point it will be destroyed. The Project Leader, Caroline McCaw will retain digital copies of all data in her office on a departmental hard drive and on backup media. Every attempt will be made to guard against unauthorized access, use or disclosure during the five-year period (up until July 2016). Any published material as a result of this project will be archived for five years after the publication date, for possible future scrutiny.

Can participants change their minds and withdraw from the project?

You can decline to participate without any disadvantage to yourself of any kind. If you choose to participate, you may withdraw from the project at any time, without giving reasons for your withdrawal. You can also withdraw any information that has already been supplied until the stage agreed on the consent form. You can also refuse to answer any particular question, and ask for the audio/video to be turned off at any stage.

What if participants have any questions?

If you have any questions about the project, either now or in the future, please feel free to contact either:

- Caroline McCaw, School of Design Otago Polytechnic, Private Bag 1910, Dunedin, 021 735 846 caroline.mccaw@op.ac.nz
- Dr Sarah Wakes, Otago University Department of Design Studies, PO Box 56, Dunedin (03) 4793148 sarah.wakes@otago.ac.nz
- Tracey Gardner, 021 224 9798, trae @traced.co.nz
- Cultural advisors: Donna Matahaere- Atariki donna@araiteuru.co.nz
- Professor Paul Tapsell, paul.tapsell@otago.ac.nz (03) 479 8677

Consent Form

Project title

Mäori Design & Tertiary Education Research Project

I have read the information sheet concerning this project and understand what it is about. All my questions have been answered to my satisfaction. I understand that I am free to request further information at any stage.

I know that:

- My participation in the project is entirely voluntary.
- I am free to withdraw at any time without giving reasons and without any disadvantage.
- If I participate in an interview, a copy of the data (including audio files) and the research findings will be returned to me and securely stored for five years (up until July 2016) after which it will be destroyed. If it is to be kept longer than five years my permission will be sought.
- A *koha* will be given for my participation in an interview.
- Any case study material gathered as a part of the interview process may contribute to the development of curricula, academic publications and resources
- If I have any concerns I can direct these to the cultural advisors for this research project.
- The results of the project may be published or used at a presentation in an academic conference but my anonymity / confidentiality will be preserved.

Additional information given or conditions agreed to

I agree to take part in this project under the conditions set out in the Information Sheet.

.... (signature of participant)

.... (date)

.... (signature of researcher)

This project has been reviewed and approved by the Otago Polytechnic Ethics Committee.

Interview Questions

INTERVIEW QUESTIONS:
APRIL 2011

1. Teaching the Design Process

Design educators (such as Christchurch designer and lecturer Max Hailstone in the attached example) describe an iterative design process. This process, sometimes called a "universal design process" involves proposing, refining and evaluation design solutions in consultation with a client and reflecting their design problem.

a) In your experience does this process adequately describe the pathway taken by Maori designers?

b) Can you describe other important aspects of design process that you teach students?

c) Do you refer to other models when teaching design process?

d) Are there methods, or strategies used by Mäori designers that are different from what is described above?

2. Putting theory into Practice

a) Do you use client-based or community-based projects in your teaching programme?

b) Can you describe a project that is a good example, and reflects your ideas about design process?

3. Learning strategies?

a) How important is the context, presentation or style of teaching, in helping your students learn about design processes?

b) What specific strategies do you use to support student engagement and achievement in the classroom?

4. What other issues effect teaching of design process?

This is an open ended question designed for you to tell us the key issues as you understand them, if they haven't already been covered.

CONTACT US:
We really hope that you can support this research with your valuable time and experience and look forward to talking with you.

Many thanks on behalf of the team,

Caro McCaw,   Tracey Gardner
Otago Polytechnic School of Design,   Traced: Researched Design

Our project team:
Researchers:
Caroline McCaw, Academic Leader, Communication Design, Otago Polytechnic contact: caroline.mccaw@op.ac.nz, 021 735 846
Dr Sarah Wakes, Associate Professor, Design Studies, Otago University
contact: sarah.wakes@otago.ac.nz
Tracey Gardner, researcher, Graphic Designer and Managing Director at Traced:Researched Design, URL: http://www.facebook.com/traceddesign
contact: trae@traced.co.nz, 021 224 9798

Cultural Advisors:
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contact: paul.tapsell@otago.ac.nz
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Administrative Support:
Paula Petley, Otago Institute of Design
Contact: Paula.petley@op.ac.nz

AKO Aotearoa:
AKO is the national centre for tertiary teaching excellence:
http://akoaotearoa.ac.nz

Max Hailstone article, as preparatory reading

So much for what design is not. Therefore, what is design?

As established earlier, everything that is man-made has been designed and we are surrounded by numerous examples of the results of the design process. In other words, a product of the design process is anything that has had intellectual thought applied to its making.

All pieces of design originate from raw materials which are eventually transformed into the finished product. This is made possible by passing the raw material through various processes. There are four main processes involved; the process of extraction; mining, drilling, logging, etc: the process of converting the raw material from one state to another, usually from a raw to a refined state; smelting, rolling, refining, pulping, etc: the process of decision-making concerning how it will be used; *designing* etc: and finally the manufacturing process which involves converting the material from its refined basic state to the finished product; printing, building, injection moulding, etc.
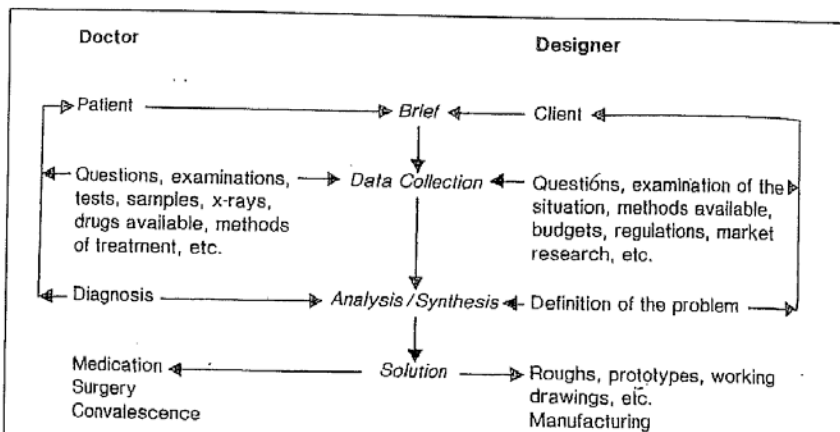
[Whilst "design" is placed in the process of "decision making, etc", it should be obvious that the design process is involved in making all other processes possible, i.e. the design of the extraction, conversion and manufacturing systems and machinery.]

The word *process* is used advisedly here. Design is a process; what is more, it is a process that has set procedures which, minor variations aside, are common to *all* designers. This is quite different from the *modus operandii* of painters, sculptors, etc, who develop their own individual work methods, and may even change them from time to time. Having a set procedure and similar components of work are two further elements that distinguish design from fine art activities.

The design process itself is very simple. If the role of the doctor in general practice is compared to that of the designer then it may become easier to understand. Normally a doctor cannot practice medicine without a patient. He cannot prescribe any treatment before he has ascertained the nature of the illness, by identifying the symptoms. This is achieved by questioning and examining the patient. The doctor then analyses the findings of his/her questions, examination and tests, and makes a diagnosis of the patient's condition. Acting on this diagnosis he/she then prescribes treatment or medication to cure the problem.

The designer is in much the same position. Normally he/she cannot practise design without a client. Like the doctor, the designer has to ascertain exactly what the problem is that the client wants solved. By questioning the client and examining the situation he/she will accumulate a considerable amount of information and will be able to analyse and establish *exactly* what the problem is that the client has. It is possible that the client, like the patient, may have identified the wrong problem: for example *all* stomach-aches do not require the removal of the appendix to provide the cure!! Being satisfied that the problem has been correctly identified, work can now commence on producing the solution.

From :
Hailstone, M. (1985) *Design and Designers*
Christchurch : The Griffin Press and The
New Zealand Industrial Design Council

```
         Doctor                                                    Designer

  ┌─▷ Patient ──────────────▷ Brief ◁──── Client ◁─┐
  │                                                 │
  │◁─ Questions, examinations, ──▷ Data Collection ◁── Questions, examination of the ▷│
  │   tests, samples, x-rays,                         situation, methods available,
  │   drugs available, methods                        budgets, regulations, market
  │   of treatment, etc.                              research, etc.
  │                                  │                                              │
  │◁─ Diagnosis ─────────────▷ Analysis / Synthesis ◁─ Definition of the problem ──▷│
  │                                  │                                              
  │                                  │
  │   Medication ◁──────────── Solution ─────▷ Roughs, prototypes, working
      Surgery                                      drawings, etc.
      Convalescence                                Manufacturing
```

It is clear from the above diagram that the critical stage for *all* concerned is the "data collection" stage. If insufficient or false data is collected then the "diagnosis" or definition of the problem will be wrong or inadequate. The proposed "solution" will not provide a "cure". The designer should be prepared to retrace his/her steps from the "analysis/synthesis" stage, back athrough the "data collection" stage to the "brief" stage until he/she is confident that all possible avenues of inquiry have been exhausted, and that he/she is fully armed with all *available* information. This may take place several times before one establishes the true problem (complaint). As stated previously, this process is quite simple. It really is no more than commonsense. Any activity that we undertake has gone through a design process of sorts; i.e. we identify the problem, collect the relevant data, order and evaluate the data and finally produce a proposed course of action.

Whilst the design process has purposefully been reduced to four main stages it should be understood that there are many more smaller ones that fit in between these major ones. In the case of large scale projects, each of these can involve many people, a lot of time, and a considerable amount of information. One apparently excessive example gives a good indication of the lengths and depths to which one could (should?) go. The project, "To design a hospital bed", was undertaken between 1963-7 at the Royal College of Art, London, under the direction of Dr L. Bruce Archer.

Firstly, 41 critical factors and 85 problem areas involved in the use of a hospital bed were established requiring a worldwide search of literature covering 100,000 documents. Having built the prototypes, the project team then organised and carried out trials in hospitals, with attendant pathologists, anaesthetists, radiologists, physiotherapists and work study staff. The prototype was then studied in practice by a team of nursing tutors and staff nurses and their comments recorded. Twenty beds were then installed in a hospital and each bed was monitored from 6 a.m.-10 p.m. All activities concerning the beds were recorded. This trial was designed to yield information on 60,000 activities, 4500 samplings and about 270 attitude surveys: in all about *1,700,000 pieces of information!*

What are the basic characteristics that make a design problem different from other fine art problems?

Apart from the process, which has been outlined above, there are a number of other factors that characterise a design problem as opposed to a normal fine art problem.

1   It is important to remember that all design problems are identified by humans, usually on behalf of humans. In other words a set of conditions are identified which produce an irksome situation: it may be a lack of comfort; expense in money or time; too cumbersome; or (less pragmatically) it may not look or feel satisfying. In fact there could be a multitude of reasons for identifying the problem (or combinations thereof), but basically it is usually something that is beyond the normal capability of inexperienced people to solve — they require some from of help or aid; a "tool" is required.

2   The solutions to design problems have to be manufactured. Whether it is an individual "one-off" building as in the case of architecture, or whether many millions are produced as in the case of the ball-point pen, the solution has to conform to production technology, or, in very rare cases, the production technology has to be designed to produce the necessary solution.

3   Since design problems are usually solved on behalf of other people, the projection of the designer's personality into the solution can be dangerous.

4   A tight budget is usually in operation throughout the process including the end product cost.

5   There is always a strict time factor in force, the "deadline".

6   The production or manufacturing of the end product is usually undertaken by someone other than the designer. This necessitates a very good *form* of communication that may need to be used internationally. As a consequence various conventions have been incorporated into the drawing techniques employed by designers. Other conventions or standards are involved with colour designations, and component and material sizes.

7   Quite often the designer will be working very closely with the other people who constitute the "design team". In the case of television set design, for instance the "team" is very extensive, whereas in book illustration only one or two other people may be involved.

It should be quite obvious from this that the design problem is *normally* very different to that of a painting or a piece of sculpture. However, in the case of public commissions murals, memorials, etc., the above characteristics would be embodied in the painter's or sculptor's resolution and production of the original concept.
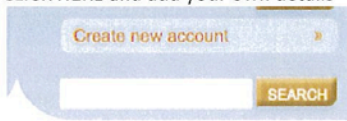
How to join the AKO research whānau website

HOW TO JOIN OUR RESEARCH GROUP

Are you a member of AKO Aotearoa?
AKO Aotearoa are a national centre for tertiary teaching excellence.
Their website is at www.akoaotearoa.ac.nz
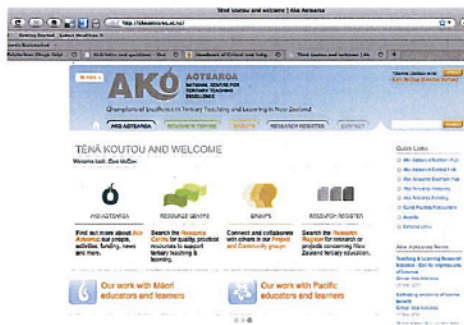
In the top right hand corner there is a "CREATE NEW ACCOUNT" field
CLICK HERE and add your own details

Quick Links

○ Ako Aotearoa Northern Hub

○ Ako Aotearoa Central Hub

○ Ako Aotearoa Southern Hub

○ Ako Aotearoa Academy

○ Ako Aotearoa Funding

○ Good Practice Publications

When you have done this please email Tracey or Caro,
tell us your USER NAME and we will invite you to join our group
Caroline.mccaw@op.ac.nz, Trae@traced.co.nz

Our group is called "Tools for teaching Māori design theory"
You can find it under "GROUPS" or just type in this address:
http://akoaotearoa.ac.nz/projects/tools-teaching-maori-design-theory

Appendix 2: Resource list

Key people and literature identified by the research team and project participants

People and Networks

- Sir Apirana Ngata, whose emphasis in education was getting Māori to learn both Māori and European models. http://www.teara.govt.nz/en/1966/ngata-sir-apirana-turupa/1
- Awatoru Project. Official site now obsolete (as at 4th October 2011). General background information found here: http://www.tearaao.com/background.html
- Sir James Henare, whose work and interest centered on Māori education and success. http://www.teara.govt.nz/en/biographies/5h15/1
- Professor Robert Jahnke. Head of School and Professor of Māori Studies at Massey University, Palmerston North. Specialises in Māori Visual Art and History of Māori Visual Culture.
- Lyonel Grant, master of *whakairo*, who designed the Unitec *whare*, bridging traditional concepts with contemporary approaches /techniques. http://www.unitec.ac.nz/index.cfm?A480A61B-145E-6A3C-4618-47BABDC869B0 http://www.lyonelgrant.com/works/whare.htm
- Dr Ranginui Walker. Māori academic, historian and writer. http://www.waitangi-tribunal.govt.nz/about/wtmemb/rwalker.asp
- Associate Professor Ross Hemera - Senior Lecturer for Massey University, Wellington, School of Visual and Material Culture. Ngai Tahu artist. Ross was consulted and contributed to the direction and results of this research report.
- Kaupapa Māori research methods: http://www.rangahau.co.nz/method/
  - http://www.cad.auckland.ac.nz/index.php?p=Māori_he,
  - www.kaupapaMāori.com/assets//Māori_research.pdf
    Two good bibliographies with research links
- Nga Aho Māori Designers Network – a society and network of Māori design professionals initiated by Rau Hoskins, Jacob Scott, Karl Wixon and Carin Wilson. Rau and Carin were contacted for this research. http://www.ngaaho.Māori.nz.
- Nga Puna Waihanga (National body of Māori artists and writers). http://christchurchcitylibraries.com/Māori/Puawaitanga/Waihanga/
- Greenwood J & Te Aika, L-H (2010) Hei Tauira: Teaching and Learning for Success for Māori in Tertiary Settings, Full report available: http://akoaotearoa.ac.nz/community/m%C4%81tauranga-m%C4%81ori/news/hei-tauira-teaching-and-learning-success-m%C4%81ori-tertiary-settings