

## Article

# Community learning through ecological action

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*"Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed, it is the only thing that ever has"*

Margaret Mead

## INTRODUCTION

This paper looks in depth at an ecological project in Gisborne, New Zealand, with particular reference to the broader 'community learning' implications of the project. It tracks the personal learning journey of some of the key participants in this project, and investigates what effect, if any, the project has had on the learning profile of the wider community. The theoretical framework of Paulo Freire's 'Pedagogy of the Oppressed' forms the basis for analysis of this paper.

The specific project that has been chosen for this study is located at Muriwai, Gisborne, and is under the control of the Ngai Tamanuhiri people of that region. The project itself involves the ecological restoration of Te Whero-where Lagoon, a wetland of some 160 ha at the base of Te Kuri a Paoa (Young Nick's Head), which once hosted a thriving community of many hundreds of local Maori, who depended largely on the lagoon and adjacent open sea for much of their food needs.

As the surrounding lands, and significant portions of the lagoon itself, were acquired (by various means) for the purpose of farming during the years 1870 to 1920, Ngai Tamanuhiri became increasingly marginalised, until a typhoid epidemic in 1913 saw the original settlement on the edge of the lagoon abandoned. There is little doubt that this epidemic resulted from increasing levels of human waste leaching into what was once a valuable food resource, a trend which has continued unabated with the current Gisborne city sewerage system being discharged untreated into the nearby bay.

High levels of erosion run-off from surrounding hills have washed down into the lagoon over the past fifty years, along with soluble nutrient pollutants from fertiliser applications onto surrounding farmland, and animal manure. Combine this with septic tank overflow washing down in streams, agricultural sprays, farmland drainage schemes and the indiscriminate dumping of rubbish into the lagoon over many years, and the picture of an area with a very compromised ecology is apparent.

This degradation equates closely with the Freirean concept of 'oppression', in that little or no consultation took place with Ngai Tamanuhiri prior to any of these events taking place, and the impact on the tribe being severe, with social, cultural and economic decline and dislocation resulting. In short, Ngai Tamanuhiri was reduced to being 'object' rather than 'subject' in the once close relationship they enjoyed with their turangawaewae (homelands). In contrast, surrounding farmers prospered on what is acknowledged as some of the richest and most productive farming land in the world.

The 'Conservation Group' of Ngai Tamanuhiri formed in 1996, and comprises eight local people (Ngai Tamanuhiri), and myself. The aim of the group is to restore the ecology of the lagoon area, and eventually Te Kuri a Paoa (Young Nick's Head) to its original state. A series of hui from 1995 to the present day have sought to consult with local people (both Ngai Tamanuhiri and adjoining farmers) and to seek the advice of ecology restoration practitioners. Again, this portion of the struggle equates closely with Freirean principles, with discussion around 'generative themes' leading to reflection on the situation, followed by liberatory action ('praxis' in Freire's terms).

The ever-changing dimensions of the lagoon offer a great challenge in terms of defining boundary lines between the various title holders of lagoon land. A large part of the work of the Conservation Group has been to establish goodwill among all of those concerned as to the value of the ecology restoration work being undertaken. For instance, it has been common practice for adjoining farmers to leave fences in a state of disrepair, in order to make use of the considerable cattle grazing opportunities that the lagoon edge provides. This causes immediate damage to the fragile ecology of the area, as well as increasing the faecal toxicity levels within the lagoon itself.

This historical background of Ngai Tamanuhiri posits the struggle for the ecological restoration of their treasur-

ed lagoon strongly within a Freirean framework of community learning towards a transforming action, from oppression towards liberation, and from dependency towards tino rangatiratanga (independence) over their territory.

## LITERATURE REVIEW

The works of Paulo Freire form the basis of the literature review from the 'community learning' perspective, with a wide number of texts contributing to the 'ecological action' dialogue. Freire's concept of 'critical consciousness' (conscientizacao) is at the heart of this study on a number of levels, and as such, forms the theoretical framework through which the actions of local people in embarking on an ecological restoration project are analysed.

In *Pedagogy of the Oppressed*, Freire (1997) also explores the themes of alienation and oppression, cultural domination and manipulation. All of these factors have had a role in the ecological degradation over the past century of what was considered by local people to be the most precious and plentiful of resources Te Wherowhero Lagoon. Freire's description of 'co-intentional education' is an apt descriptor of the process of re-learning about the ecology of the Lagoon area: "Teachers and students (leadership and people), co-intent on reality, are both Subjects, not only in the task of unveiling that reality... but in the task of re-creating that knowledge. As they attain this knowledge of reality through common reflection and action, they discover themselves as its permanent re-creators. In this way, the presence of the oppressed in the struggle for their liberation will be what it should be; not pseudo-participation, but committed involvement".

Freire also writes of the important pedagogical aspect of "educational projects, which should be carried out with the oppressed". This contextualised facet of community learning is best achieved through dialogical investigation leading to the adoption of 'generative themes', "not just at the intellectual level, but at the level of action". This corresponds exactly to the process of hui and consultations undertaken by Ngai Tamanuhiri prior to the initiation of the Te Wherowhero restoration project in 1995, a process which "introduces or begins to introduce women and men to a critical form of thinking about their world".

Ranginui Walker (1982) takes a Freirean perspective to Maori development since colonisation in his article 'Development from Below', and concludes that the experiences of the Maori people as a result of British colonisation indicated that they have undergone the process of cultural invasion, political domination, manipulation and oppression, as defined by Freire.

He further concludes that transforming action must draw its inspiration and power from within the Maori community itself. It is not a gift to be conferred from outside.

Transforming action within a Freirean framework of local/indigenous conscientisation is at the heart of Te Wherowhero Restoration Project, and symbolic of a wider

transformation towards heightened political/cultural action in other, related arenas as well.

Mezirow (1990) furthers this dimension with his statement that "conscientization is dynamic and dialectical interplay between critical reflection and transformative action is not produced by educators. It is the result of reflective engagement in history-of what Freire calls the 'praxis' of liberation".

It is exactly this 'reflective engagement in history' that has been a key factor in the hui and discussions leading to the establishment of this project. Mezirow continues: "Conscientization is not merely speculative or theoretical interpretations of experience, it is critical reflection - looking back on assumptions underlying our experience and redefining our own being not merely as knowers but as reflective doers".

It is this 'redefining our own being' which in my opinion lies at the heart of a personal commitment to become involved in a community based ecological project such as the one at Te Wherowhero Lagoon. Inherent in this is a redefinition of one's relationship with the natural world, which is one of the key themes of this next part of the literature review, and a key aspect of the overall direction of this study.

There is a significant amount of recent literature which deals with the scientific perspective of ecological issues, but very little of it touches specifically on community learning through the conduit of ecology-based projects. It has become apparent through searching the available literature that this is an area with considerable scope for expansion of the knowledge base. 'Resurgence' magazine has proven to be a valuable source of information in this regard, contributing several articles to the body of knowledge in this emerging field.

The concept of 'Deep Ecology' as espoused by Arne Naess (1997), has particular relevance to community-based ecology movements, as it has its basis in a 'conscientisation' perspective regarding human interaction with nature. George Sessions (1993), in a *Resurgence* article (No.161), describes it as a total view - a world view - which involves not only our way of acting in daily life but also our relationship to Nature, our basic values, and our beliefs about what is of ultimate importance in life.

He mirrors the dialogical questioning of Freire in his statement:

"As a world wide social movement, the international Deep Ecology movement is best characterised by the deep questioning process and the lifestyles and ecological social/political actions which tend to follow from the platform".

The 'platform' to which Sessions refers is the 'Deep Ecology Platform', which Naess developed in 1984 and further refined in 1995 to read as follows:

1. All life has value in itself, independent of its usefulness to humans.
2. Richness and diversity contribute to life's well-being

and have value in themselves.

3. Humans have no right to reduce this richness and diversity except to satisfy vital needs in a responsible way.
4. The impact of humans in the world is excessive and rapidly getting worse.
5. Human lifestyles and population are key elements of this impact.
6. The diversity of life, including cultures, can flourish only with reduced human impact.
7. Basic ideological, political, economic and technological structures must therefore change.
8. Those who accept the foregoing points have an obligation to participate in implementing the necessary changes and to do so peacefully and democratically (Resurgence, 1997, No.185, p.17).

I include these points in their entirety because I propose that movements such as Te Wherowhero Lagoon Restoration Project are but a part of a worldwide groundswell of Freirean 'transformation' towards ecological consciousness, and that an essential part of that transformation is a personal commitment towards a closer relationship with the natural world.

Capra (1999) suggests that "to meet the challenge of the twenty-first century we need to build education on the foundation of eco-literacy". To this end he emphasises the importance of contextual knowledge, in which the various subject areas are perceived as resources in service of a central focus. An ideal way to achieve such an integration is the approach called 'project-based learning', which consists in facilitating learning experiences that engage students in complex, real-world projects for example a creek restoration through which they develop and apply skills and knowledge.

He describes ecological literacy (eco-literacy) as "the language of nature" which he sees as the key to building sustainable communities - social, cultural and physical environments in which we can satisfy our needs and aspirations, "without diminishing the integrity of the natural world and the chances of future generations." To do this, Capra says:

"We can learn valuable lessons from ecosystems, which are sustainable communities of plants, animals and micro-organisms. To understand ecosystems we need to learn the basic principles of ecology - the language of nature".

I contend that this quest to learn from living systems (which equate to our own evolutionary history and future) for the long-term survival of life on this planet is at the very heart of 'community learning through ecological action.'

According to Capra, this 'new vision of reality' will form the basis of our future technologies, economic systems and social institutions. It is obvious that this has profound implications for education in the twenty-first century. It will

require a pedagogy that puts the understanding of life at its very centre. It will be an experience of learning that overcomes our alienation from the natural world and rekindles a sense of place. Teaching this new knowledge, which is also ancient wisdom, will be the most important role of education in the next century.

This, I believe, is already under way through such projects as the one described in this dissertation.

Bill Devall (2000), Professor of Sociology at Humboldt University, refers to the concept of 'the ecological self', which he describes as "an intimate, personal, sensuous, erotic connection that we have with a specific place." He sees the ecological crisis we currently face resulting partly from the way we have cut ourselves off from nature, thus allowing us to exploit nature as a mere 'commodity'. "The ecological self returns us to our primordial human experiences in a natural world".

Alan Watson Featherstone (2000), also writing in Resurgence, states that:

"The process of ecological restoration is a natural one, but is being prevented throughout the world by the scale and intensity of human activities. What we need to do now is to stop interfering with that process, and instead help it to take place. Around the world, concerned individuals and groups are beginning to do this".

Featherstone goes on to detail a number of such projects worldwide, ranging from North America to Costa Rica, and from Scotland to the Mekong Delta, and concludes:

The healing of the Earth, combined with a cessation of our own nature-destroying activities, has to become the over-riding task of humanity in the decades ahead.

He also echoes the 'ecological self' ethos of Devall in his statement that: Ecological restoration is not just about helping to reconnect the strands in the web of life. It also helps to reconnect the people with some of the most important things in their lives. It helps to reconnect us with our power as individuals to make a difference in the world and to reconnect us with hope for the future.

Together we can create a future in which humanity lives in harmony with the rest of Nature on a healthy planet with restored ecosystems.

This sentiment is strongly expressed on several occasions in the interviews with key participants in the project, and is central to the initiation and ongoing success of it.

Berkes and Folke (1998) point out that our current 'separateness' from nature is a relatively recent phenomena:

"With a few exceptions, including the Western industrial societies of the last 400 years or so, human societies have generally regarded themselves as part of nature and not separate from it".

They point to several well-documented studies of cultures as diverse as Fiji, Europe, North America, Asia and throughout Oceania which they cite as traditional integrated human - nature concepts of the environment,

which regard the land, water and human environment as a unit, one and indivisible.

Progressive theologian Father Thomas Berry (1988) maintains that we need to learn a 'New Story' of the origins of Earth, since the Old Story, the classical account of how the world came to be and how we fit into it, is not functioning properly. He further maintains that the natural world is the maternal source of our being as earthlings and the life-giving nourishment of our physical, emotional, aesthetic, moral and religious existence. The natural world is the larger sacred community to which we belong. To be alienated from this community is to become destitute in all that makes us human. To damage this community is to diminish our own existence.

Dr Ervin Laszlo (1994), advisor to the Director-General of UNESCO concurs with this approach. In 'The Choice: Evolution or Extinction?' he states that: "Today, after 15 billion years of material-spiritual evolution, human beings have a chance to set forth this creative unfolding consciously and purposively". It is in us that the evolving universe achieves self-recognition. It is our primary sacred community. Recognising the sanctity of all creation we could move, as Albert Schweitzer suggested, from the uncaring exploitation of our environment toward a true reverence for nature. The choice is ours: evolution or extinction. The choice of evolution presupposes that we have acquired a critical measure of evolutionary literacy; learned to replace intercultural coexistence with inter-existence; managed to catalyse the necessary degree of social creativity; adopted global, moral and responsible ways of thinking and living; provided access to the necessary forms and levels of education, information, and communication to people; and succeeded in creating a functional and reasonably equitable world order.

Joanna Macy (1990) writes of the deep ecology potential within each individual through 'remembering' our history and connection to this planet. As organic manifestations of life on Earth, we have a long and panoramic history. We are not limited to this one brief moment of our planet's story; our roots go back to the beginning of time. We can learn to remember them. The knowledge is in us. As in our mothers' wombs our embryonic bodies recapitulated the evolution of cellular life on earth, so we can do it now consciously, harnessing intellect and the power of imagination. We can reclaim our history in order to know afresh our deep ecology.

Andrew Waterhouse (2000), is part of a group in the highlands of Scotland dedicated to the replanting of indigenous plants into that environment, and he makes a relevant point relating to the emotional needs of those who volunteer for such work.

It is clear that many of the wildwood initiatives which have developed certainly do have a strong local and personal dimension; they have grown out of emotional as well as ecological needs. Many of these schemes rely on the work and dedication of volunteers; surveying the land, trees.

In concluding the literature review, I wish to make an observation regarding personal/community responsibility towards ecological issues, as opposed to government-/global authority responsibility. For instance, Mark Hertsgaard (1999), in his recent publication "Earth Odyssey - around the world in search of our environmental future", calls on governmental/United Nations initiatives to implement change towards a more sustainable future. He proposes 'The Global Green Deal' which would rely on market mechanisms to the maximum extent possible, while realising that government must also establish 'rules of the road' that compel markets to respect rather than harm the environment. In particular, governments must reform skewed tax, subsidy and economic accounting systems so that the market internalises environmental values.

While recognising the necessity of such institutional change, this study looks at our ecological and environmental future from another angle altogether; that of personal, individual and/or community commitment to learning and acting on a new sense of responsibility for the ecology of the world around us, an ecology from within that has the power to change those individuals and/or communities at a level of profound consciousness.

## Interviews

For the purpose of this study, three interviews were conducted with people who are currently involved in the Te Wherowhero Restoration Project, and have been involved for a number of years. An overview of each interview is followed by an analysis of common themes, in which thematic links to the literature review are explored.

### Interview 1: Soraya Pohatu

In Soraya's view, concern for the future of Te Wherowhero Lagoon area was a major factor in the project being established. "A couple of people in particular were very keen to see the project get under way, and their ideas were discussed at hui a iwi at the Muriwai Marae from 1995 on." Of major concern was the level of pollution in the lagoon, especially in light of the fact that the area had been a major food source for Ngai Tamanuhiri people.

Soraya became involved in project due to her strong belief that "we need to look after what we've got now." She grew up in that area and could see the effects of pollution on kai moana (food from the sea), and was concerned that there would be nothing left there for her grandchildren if current trends continued. The main sources of that pollution are from farm run-off into rivers and the city sewerage discharge affecting the lagoon in various tide/wind combinations.

Soraya "didn't even know what ecology was" before embarking on this project and now has an in-depth know-

ledge of the changes in the geographical and environmental ecology of that area. For instance, she was fascinated to learn that Te Kuri a Paoa (Young Nicks Head) at the southern end of the project was once an island, and that the lagoon on the south side of Te Kuri (Orongo Lagoon) would have been connected to Te Wherowhero Lagoon. She has learnt much about the plants of the area, especially from exploring the bush remnants on surrounding land. She has also gained an awareness of how the health of the ecology of an area affects the people of that area.

She has also learnt a lot about specific plants and their uses, such as pingao and harakeke (flax), and the planting and maintenance of these taonga. Much learning has also taken place around the history of these plants, and in particular about how specific cultivars of harakeke came to be at Te Wherowhero. Such stories provide important archival information on the history of Ngai Tamanuhiri as a people.

Other indirect learning has come from the need to co-ordinate various networks of interest towards a common goal, such as the need to communicate closely with neighbouring farmers on developments within the project, and Justice Department officials who supply Periodic Detention trainees for one day per fortnight to work on the project. Soraya also has the responsibility to organise Hui to keep the wider Ngai Tamanuhiri community up to date with the project, and to seek approval for new developments. Her work with neighbouring farmers in particular has meant she has “got to know them on a different level – previously I had only ever seen them when they came to the Marae on Anzac Day.”

Soraya identifies a strong link between her involvement in this restoration project and the work and study she takes on elsewhere in her life; that of Social Work, specifically in the area of mental health, and Care-giving. Connectedness to the whenua (land) and knowing where you come from are vital dimensions in Maori mental health. The health of the ecological systems of land and sea is reflected in the wairua (health) of the people; the two concepts are inseparable. There is also the issue of economic independence and income supplementation that a polluted ecosystem implies. “It’s hard times for lots of people. Not being able to go to the beach and collect kai moana is a big gap within our own whanau.”

Visiting the farms surrounding Muriwai has given Soraya a far greater understanding of how farming practices impact on an ecologically sensitive area such as Te Wherowhero Lagoon. As mentioned earlier, farm run-off of animal manure is a major problem, but there is also the problem of cattle getting through less than adequate fences to graze in the lagoon area itself, and artificial fertilisers, chemicals etc. washing off farms and into the lagoon. Being involved in this project has made Soraya realise the holistic nature of ecology, and how events and practices at a distance from the lagoon can still impact on that ecologically sensitive area. It has also impressed up-

on her the practical dimension of ancient wisdom and practices, such as the system of ‘rahui’ whereby certain areas were considered ‘off limits’ for a specified period of time, until that particular ecological aspect had had a chance to recover from an imbalance of some sort. She is horrified that local people used the lagoon as a rubbish tip for many years. “I think because part of the values have left, those values of rahui and looking after have disappeared.”

Being involved in this project has given Soraya insights into her community that would probably not have otherwise occurred. In particular she is concerned that the community are too inclined to take things for granted, and complacently believe that places like Te Wherowhero Lagoon will always be there. She is concerned that a lot of the economic development focus of the community is on fishing and forestry, without an awareness that the health of the wider environment is essential for all other activities to flourish. The decision making process is largely dictated by monetarist values, whereas Soraya believes that other values, such as environmental issues, should be taken into greater account. “Dollars can never replace the loss of a taonga such as this precious lagoon.”

Taking on this project has also helped Soraya become more focussed in pursuit of her own learning, largely through the realisation that once she committed to a project she was very determined to see it through to its conclusion. She now knows that if she believes in something, she sticks at it through thick and thin. Working with the Periodic Detention trainees has also been a watershed in building her confidence in the role of learning facilitator, in that she freely shares her extensive knowledge of the ecology and history of the area with those working on the project. “To me they’re not just there to do a job. If you give them value about what they are doing, that’s more important. Then they can walk away feeling really good about who they are and come back in twenty years time with their mokopunas (grandchildren) and say, ‘I helped with this project’”.

The project has had an influence on the wider Tamanuhiri community, with Soraya talking of “kuia, my nans, going down there and saying it’s beautiful. It gives them pride about who we are and to me that’s really important. We can walk with our heads high we don’t need to hang them low. It relates back to the dumping of rubbish there. Is that how bad we felt about ourselves?”

On the question of how this project aligns with the world-wide trend towards a greater awareness of environmental issues, Soraya answers that many of the catastrophes we are witnessing world-wide are the result of “a world out of balance. We continue to do things we shouldn’t be doing, and there are consequences to pay for that”. She believes it is up to every community to make a small contribution towards ecological restoration, and “what a big difference that would make in the long run. It’s got to start somewhere; it will be the next genera-

tion when it REALLY kicks in”.

## Interview 2: Jody Toroa

Jody Toroa believes that the initial inspiration for the ecological restoration programme at Te Wherowhero is an “inherited responsibility that us ‘young’uns’ have picked up on.” Te Wherowhero and surrounding areas have been the “playground, our wahi tapu” that she and her generation grew up in, “and now it is our responsibility to manaki and tiaki our taonga, our treasure.” There has been ongoing dialogue with both Council and local people about the state of the area (rubbish dumping etc.), and more general awareness of the area generated by hui a iwi, research towards Treaty claims, and reports looking at possible future directions for surrounding land (e.g. Te Kuri a Paoa, Young Nicks Head). Millennium celebrations then became a focus for pulling the project together.

Jody has been impressed with the wide circle of involvement that the project has stimulated, namely farmers from neighbouring farms and people from the city, as well as local whanau, hapu and iwi. The other pleasing factor from her point of view has been the inter-generational nature of the project, with younger people becoming involved as well. Jody feels that the planting project in the lagoon area is the first step, but that the long-term focus of the revegetation project is Te Kuri a Paoa (Young Nick’s Head), which is currently farmed as part of Nick’s Head Station. “The mana of that maunga sits in a lot of us. The state that she’s in at the moment is a major concern. Through this project there’s going to be an education of the other ‘keepers’.”

One of the major learning for Jody as a result of being involved in this project is that “it’s a platform for relationships.” An example she gives of this is the learning ripple that has passed through the community as a result of pingao being planted at the lagoon edge.

Weaving is an art form that has remained very strong among Ngai Tamanuhiri, and “to have pingao within (the area) as a resource, instead of going elsewhere, that’s just awesome!”

Indirect learning resulting from this project has been the “locking in of all of the other activities around Te Wherowhero that are happening in isolation from each other, things like the interaction with various government and local government agencies, such as DOC and Water Quality Division of Council. Now we can begin to gather information from all of these sources, and start developing some medium to long-term strategies for the well-being of Wherowhero itself, in the form of an Environmental Plan for Ngai Tamanuhiri.”

Jody Toroa has been inspired into further learning about the whakapapa of harakeke (flax), resulting from this project and research it uncovered into flax cultivars of the region. Much of this work was carried out during the

1960’s by a woman called Rene Orchiston, and held in a collection by the DSIR (now Crown Research Institute). One particular cultivar, ‘Paoa’ originated from Te Wherowhero, and is now being propagated for inclusion in the planting project and is prized as weaving flax. “For myself, it goes back to the kaitiakitanga within Ngai Tamanuhiri, and (this project) is a catalyst for action.” She now feels the time is right for specific plantings within the project for specific end uses for weaving. For example, certain flax cultivars are used for whariki (mats) and others for piu piu. “That’s when we start engaging more than just ourselves, and it gives it another dimension.”

For Jody, learning about the ecology of the Muriwai / Wherowhero area has come from those who can remember plant, animal, bird and seafood life of many years ago, and who have been inspired by the project to recount that knowledge from the past: “It’s been a springboard for the past, and recollection. The re-vegetation project excites them (the older members of the community), and it brings out that kind of korero. It’s given me a wider brief.”

She also cites a document written by myself in 1988 on management options for Te Kuri a Paoa (Young Nick’s Head) as another point of learning about the ecology of the region. “That has been a really good document. It’s gone round and round, and it will still keep going round and round, and that’s a good catalyst for korero”. One of the positive outcomes of the project for her is that some of the huge knowledge and history of the area is now starting to be documented, whereas previously it has been predominantly an oral history. “It gives our kids something to leap off when they take over the kaupapa.”

In terms of learning more about her community, Jody has come to appreciate the contributions of various members of the community to the project. An important aspect of this is what she terms “a cultural learning for our farmers. We have a lot here that have been here through their forefathers, and have no regard whatsoever for the people of Muriwai, and to see some of their neighbours getting involved is a bit of a mind-shifter as well, so in terms of learning about a community, and a bit of change within a community, it’s a powerful little tool. For me it’s a political tool, without going out and using it as a platform. Its good ground for different ones with different ideas to come together and there’s learning in that.”

In terms of her own learning, Jody feels that the project has affirmed a lot of knowledge for her, especially as it relates to traditional cultural arts. “A lot of different ones go down there and just tutu and tipi around, and one of them is Aunty Kui. You won’t see her probably when the group are down there planting because she’s busy and her weekends are for her whanau, but she’s at home making a korowai (cloak) in a traditional process, so I’m talking to her. She’s told me how to tiaki (care for) the pingao, and what she does when she goes down there with her little spade. So in terms of my own potential learning, it doesn’t really go back to the physical planting.

It goes back to what that planting is generating in terms of knowledge being shared. That would be something I would like to further track, within the whole kaupapa.”

She also feels that this project should act as a template for further environmental planning within Ngai Tamanuhiri. “That was an idea and it actually happened.

A lot of ideas don’t happen, so we can say; ‘we did it down here, we can do it with this and we can do it with that’.”

The project has seen a change in Muriwai people as well, according to Jody. “You are looking at something that is growing in front of you. You live here all your life, and gradually you have a change and with that change your behaviour changes a bit. There’s a lot pride and respect and ownership and like I say, a bit of Whakapapa korero comes out as well, and it’s indirect. You won’t see people going down there with their spades but it’s something people are really proud of, our kaumtua and our whanau as well. I’d like to involve the school a lot more, so that every year they are working it into their curriculum, but that will come with time.” Like Soraya, she cites a very positive attitude among the Periodic Detention workers towards the project, and the sense of pride and ownership they feel for the project.

Jody perceives a link between this and other ecological restoration projects world wide, and especially with some of our Pacific neighbours. “Climate change is happening, and even within Turanganui a kiwa (Gisborne region) and the Bay, it’s a major impact.” She feels the need for a forum to discuss issues such as this “to share that kind of korero, it’s tino rangatiratanga, us getting in there and doing it for ourselves, mana motuhake for ourselves.”

She concludes with the following statement: “It’s a powerful thing for any culture to do something that has a life from the past, and it does have a life of its own, the mauri of Te Wherowhero here and today-the re-vegetation project, then into the future and the life it’s going to have then. The whole inter-generational kaupapa of the project itself is something that we’re not even really acknowledging and affirming for what it is and what it means to us, the future, and what it actually means to our past, our tipuna, to actually see this happening.”

### Interview 3: Jody Wyllie

For Jody Wyllie, the initial inspiration for the Wherowhero ecological restoration project came from the approaching millennium, and a desire to have a lasting project in place to mark that event. “It was important to me that something like this was done because at that stage, late 1997, a lot of people within Ngai Tamanuhiri were only talking about having some sort of party as part of the millennium celebrations, and to me, with the dawning of the new millennium, that wasn’t enough. It was important that we had a look at the environment because there were certain things that were happening within Ngai Tamanuhiri and within the Muriwai area that needed to be done, and Te

Wherowhero and Te Kuri were two important landmarks because of their historical significance to the people there, and at the end of the day they needed work on them. There was a lot of erosion, there was a lot of pollution within the Te Wherowhero Lagoon and this particular project was our way of building something for the future generations of Ngai Tamanuhiri, that’s the reason that I got involved.”

Another factor in Jody’s involvement was a strong interest that his father showed in the ecology and care of the area, especially Te Kuri a Paoa (Young Nick’s Head), where serious erosion was damaging the headland itself and the fishing and shellfish gathering areas surrounding it.

One of the major learning that has come out of this project for Jodie Wyllie is the recognition that a project like this is huge, and it’s going to take a number of years to carry out. Another thing is just how much the environment within the Ngai Tamanuhiri tribal area (Te Kuri and the Wherowhero Lagoon) has deteriorated over the years, and how important these particular areas are to our people both culturally and in terms of sustaining our people both with seafood and fishing. Some of the other things I’ve learnt are about the plant and wildlife species that are there, and how much our people have taken from the area and how little has gone back into it.”

Jody points out that when he first embarked on this project he basically had no idea of the ecology of the Te Wherowhero/Te Kuri area, and it was through working with people like Dr. Geoff Parks that he has gained a better understanding of just how fragile the ecology is within both of these areas. He cites the example of the bush remnant on the southern side of Te Kuri a Paoa, which he had no idea was a rare and unusual example of low-land coastal bush on the East Coast.

In terms of how the project has helped him learn more about his own community, Jody made the comment that sometimes in a project of this nature; some of the biggest hurdles can in fact be from within the very community involved in the project.

Jody’s own learning and learning potential have been positively enhanced by this project, through the conduit of “the stories and the korero passed down from the old people within our tribe, and that’s one of the things that I’ve come to realise in this day and age, that a lot of the stories and the history and traditions passed on from our old people are very, very important. For me that is something that needs to be emphasised with projects like this, that a lot of the history and traditions come in handy with a project of this nature.”

Jody believes that the project has been a huge learning experience for local people, and he has had a lot of feedback from locals talking about how their perception of the ecological restoration process has grown as the project has taken shape. “In some ways it has (also) been a big re-awakening of a lot of the things that have been passed down, but have been not so much forgotten, but put on a

back burner somewhere.”

Jody is certain that this project does align with a world-wide trend towards a greater awareness of environmental issues. “With this project I think it’s important that as a people, Ngai Tamanuhiri do our part in terms of promoting the environment within the Gisborne area, and for me, a place like Gisborne needs to have a lot of work done on it ecologically, in that a lot of the bush has been removed, and there’s a lot of erosion and pollution going on in Gisborne at the moment.”

### Analysis of interviews

In analysing the three interviews I will explore both the common themes of the contributors, and analyse the connections between the interview dialogue and the literature review earlier in the assignment. In doing this I wish to affirm my belief that all three of these interviews speak volumes on their own account about the theme of ‘Community Learning through Ecological Action’, and that the analysis process is to further confirm the insights and wisdom spoken by the three contributors. I also wish to express my heartfelt and sincere thanks to Soraya Pohatu, Jody Toroa and Jody Wyllie for agreeing to take part in this study. All three preferred to use their real names rather than a pseudonym.

The over-riding theme flowing through all of the interviews are deeply felt, spiritual connection with papatuanuku/earth, and a strong sense of kaitiaki (guardianship) accompanying that. All of the interviewees spoke of a connection between this project and future generations of Ngai Tamanuhiri, which links with Laszlo (1994) and his statement that “it is in us that the evolving universe achieves self-recognition. It is our primary sacred community”.

Links with past generations and the wisdom and stories handed down from tipuna was another common thread, with Jody Toroa talking about “the mauri of Te Wherowhero” and “what it actually means to our past, our tipuna, to actually see this happening.” This echoes Macy (1990) when she writes: “Our roots go back to the beginning of time. The knowledge is within us. We can reclaim our history in order to know afresh our deep ecology”.

Soraya was very concerned at the way that the lagoon was used as a rubbish dump until quite recently, concluding with the statement, “Is that how bad we felt about ourselves?” This sentiment fits closely with Father Thomas Berry’s (1988) analysis of an almost spiritual dimension of our association with the environment. The natural world is the larger sacred community to which we belong. To be alienated from this community is to become destitute in all that makes us human. To damage this community is to diminish our own existence.

There are numerous threads throughout the interviews to what Capra (1999) describes as ‘eco-literacy’ or ‘the language of nature’. In fact, in reviewing the text of the three interviews carried out, it has become obvious to me that this ‘language of nature’ is the dialogue through

which the interviewees relate to the ecological dimension of Te Wherowhero. It is an indefinable dimension of ‘connectedness’ with Te Wherowhero and its environs which imbues the language of those interviewed, evoking what Berkes and Folke (1998) describe as traditional integrated human–nature concepts of the environment which regard the land, water and human environment as a unit, one and indivisible.

Similarly, the human ecology concepts of inter-connectedness and inter-dependence as espoused by Naess, Devall and Featherstone, and analysed in the literature review of this study, all find their voice in the three local people interviewed. This is further augmented by the dimension of Maori connection to the whenua (land), which is strongly articulated in its own right in the interviews.

In terms of the adult education and community learning aspect of this study, it is the Freirean dimension which gives us the greatest insights into the Te Wherowhero Ecological Restoration Project, and the involvement of those key personnel interviewed. In all three of these interviews it is Freire’s concept of ‘critical consciousness’ which is the over-arching dimension that blends theory and practice in this instance.

It is not intended at this stage to repeat the points made in the introduction and literature review regarding the Freirean elements of this paper, as they are fully articulated in those sections of the study. However, I wish to reinforce the point that Freire’s theories of reflection and action (praxis), and conscientisation are central to the initiation and continuity of the Te Wherowhero Ecological Restoration Project.

Jody Toroa reflected on this when she said “that was an idea and it actually happened, a lot of ideas don’t happen”, and she went on to advocate the Te Wherowhero project as a template for other projects within Ngai Tamanuhiri. She also linked the project with the political liberation aspirations of Maori, saying: “its tino rangatiratanga, us getting in there and doing it for ourselves, mana motuhake for ourselves.”

All three interviewees made specific mention of the value of korero and hui (dialogue and gatherings) in focussing concern over the ecological degradation of Te Wherowhero into action. This aspect of Freirean interactive consciousness rising was happening on several different levels at a time, from formal meetings and presentations by ecological consultants to informal dialogue during chance meetings of individuals at Te Wherowhero. Jody Toroa describes this perfectly when she talks about Aunty Kui and her dialogue as she tends plantings in the lagoon area. It is learning initiated by and for local indigenous people through culturally appropriate and community-sanctioned activities.

### CONCLUSION

The ecological restoration project at Te Wherowhero has come about after many years of neglect of that area, to



the extent that the local indigenous owners of the area felt alienated and powerless with regard to its future. Through the efforts of a small group of highly committed individuals, local people have once again begun to respect and value this taonga (treasured area) of Ngai Tamanuhiri, and learn from the korero of elders who have had a long association with the area.

Regardless of whether it is recognised as such or not, the process that has been followed in this revitalisation (of both a people and a place) closely follows the philosophies of Paolo Freire as he fought to overcome oppression in several third world states; that of instilling in local people a critical consciousness of the forces of oppression that are restricting their progress, and learning ways of overcoming that oppression. Local and indigenous knowledge was always the key component in this co-learning adventure, where teacher and learner were one and the same (co-teacher and co-learner).

Many of the oppressive political regimes that Freire dedicated his life to changing have since been overthrown by 'people power', a strong vindication of his life's

work and struggle. However, the oppression of environmental degradation looms larger than ever, and threatens the very fabric of indigenous cultures around the globe. It gives hope and vision to the environmental struggle ahead that the words and deeds of a great adult educator, Paolo Freire, can be re-focussed toward the life threatening oppression of ecological genocide.

***"Thou hast a concern, therefore thou must do it"***  
Old Quaker quotation.