#### "More Than Just a Playground"

Phil Jackson Principal Marewa Primary School

Sabbatical Leave Report from Term two, 2012



### **Acknowledgements:**

Marewa School Board of Trustees for granting leave

Sarah McLaughlin and the staff of Marewa School for doing such a fine job running the school in my absence.

Pippa Groser, Head Teacher of Pencarrow Kindergarten

Learning Through Landscapes UK

Enviro Schools Facilitators throughout the North Island

The Principals, Head Teachers and staff of the following schools and preschools who welcomed us into their schools and were so helpful and inspirational:

He Iti Mo Otai

Otaki Kindergarten

Little Earth Montessori Kindergarten

Te Ra, Raumati

Tawa Montessori Kindergarten

Pencarrow Kindergarten

Manawaru Primary School

Hukanui Primary School

Caledonia Primary, Glasgow, Scotland

Merrylee Primary, Glasgow, Scotland

Muckhart Primary, Muckhart, Scotland

Ladywell Nursery School, Tullibody, Scotland

# **Purpose**

To research the development of and the benefits Natural Playscapes offer children's education and development.

To promote the concept of natural play spaces in New Zealand Schools and pre-schools.

# **Background**

Last year I was invited by an enthusiastic head teacher to visit Pencarrow Kindergarten in Wainuiomata to see some of the innovations that had been introduced into their

environment to enhance the learning and development of children who, in many ways, mirrored the social demographic of the school where I am principal.

The visit enlightened and motivated me to investigate further.

I could see the potential in what was happening and how it could effect positive change in my school and provide an environment where children, even within a city, were invited to experience an interactive, natural environment, and play within it, as opposed to sitting in front of a screen for their play, or participating in predetermined, organised play.

My first move was to read the works of Rusty Keeler, "Natural Playscapes" (<a href="www.earthplay.net">www.earthplay.net</a>) the American guru of natural playscapes.

From there, my initial proposal for my sabbatical was to investigate what was happening in New Zealand schools and preschools and how to promote Keeler's ideas about natural playspaces.

My study broadened after reading "Last Child in the Woods" by Richard Louv and "Moving the Classroom Outdoors: Schoolyard-Enhanced Learning in Action" by Herbert W. Broda.

I contacted the Enviro-Schools facilitators throughout the North Island and told them what I was intending to do and asked them if they could recommend any schools that are developing natural playscapes. From their responses I was able to organise visits to a number of schools and preschools in the Wellington, Horowhenua districts and in the Waikato.

At the same time I made contact with the folk at "Learning Through Landscapes" in the UK and arranged to visit some of the schools in Scotland they have been working with.

#### **Discussion**

It was a concern to me that the most common past-times of the children at my school were playing on the Xbox, computer games, or watching DVDs, all of which are used by some parents as a baby-sitting device. As a consequence the children aren't given the chance to experience the wonders of the natural world. The primary experience of nature is being replaced by 'the secondary, vicarious, often distorted, dual sensory (sound and vision only), one way experience of television and other electronic media' (Robin Moore – Professor, North Carolina State University). As a result, Howard Gardner says that the Eighth Intelligence, 'Has been hijacked to deal with the world of man-made objects'.

In his book, "The Last Child in the Woods", Richard Louv coined the term "nature deficit" to describe the situation where young people are being alienated from the natural world and the effect this has on their intellectual and physical development. Louv argues persuasively how children's lives can be improved by reconnecting to the natural environment.

I saw that the development of a natural playscape was a way of helping to make this reconnection and giving the children at my school the opportunity to play, experience, learn, and be creative in the freedom of a natural environment. I needed to know what would be required to develop a natural playscape that delivered all of this and what it would look like. My journey would be a practical one. I would observe and listen to the stories. I needed to see how schools and teachers, who had adopted a similar approach, had added value to their teaching programme. Would there be any positive impact on children's social learning and development?

### What *is* a natural playscape?

Natural playscapes are areas either naturally in existence or artificially constructed using mostly natural resources to create a space where children can play in a less restricted more creative, free and active way using these resources as their equipment.

It doesn't need a big budget! In many areas, natural playscapes are part of the countryside which grows around the school, gullies, beaches, bush stands, riverbeds... lucky them. But, in the inner city suburbs, lack of imagination is the only barrier to creating the same playscapes as long as a few criteria are observed.

- i. It must be as natural as possible, using natural shapes and materials, emulating what mother nature has done for us already. That is the point. We are learning to relate to a natural environment and interact within it. If it requires that we construct it, we need to be mindful of the fact that it can be manipulated, developed and expanded upon by children.
- ii. Give them what they would find in nature. Shells, wood, sand, dirt, rocks, water, plants, slopes, hollows. The list is endless. One of the easiest innovations is to stop mowing an area of the playground and let the grass grow. Lots of city kids have never romped around in the long grass.
- iii. Children would be allowed the freedom to make what they will with the natural materials. Sand castles are not the only construction to be made with sand. Digging can be for the sake of digging alone. Our expectations of results are not relevant. The play is theirs. Leave them to it.

Question: How do I get *children to accept the invitation to engage* in their natural environment?

Answer: By developing a playscape that encourages children to interact with their world on their terms, to experiment with the materials, to develop a curiosity about their surroundings and to have opportunities to be creative in their play so that they want to preserve this environment they have enjoyed at their fingertips.

This awareness of what they have and the language of understanding that is developed through interaction of their surroundings, creates a prime opportunity for educators. They can build on the curiosity in a variation in lesson planning that uses the new landscape to enrich the children's learning.

Below are examples of playscapes that have been set up in the schools that I visited which illustrate how simple it can be to change the environment and which allow children to widen their experience of it. These schools have provided an environment that uses different media e.g. sand, shingle, wood, stones water and grass for children to play in and experience.

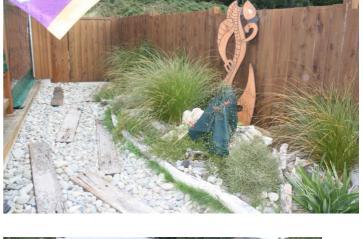


At Little Earth Kindergarten they used driftwood logs, ropes, old ladders and sleepers lying with sand and shingle to create a varied textured landscape.



Tawa Kindergarten used similar materials.







Pencarrow Kindergarten used to have a playground that had swings and other play equipment and the ground was entirely covered with black safety matting. They have developed areas of different textures and used portable materials: wood blocks of different sizes, shells and stones to create an ever changing playscape.



Pencarrow Kindergarten created little water play areas within the shingle beds which can be removed quickly and easily. Schools have created water play areas in imaginative ways.





Pupils at Te Ra School created this stream bed and built a bridge to go over it. There is a tap at one end to control a flow of water.

At Ladywell Nursery School in Scotland they have a wooden race that children can tip buckets of water down and channel in different directions.



#### Solitude and social interaction.

Research has shown that children often seek quiet places in which to be alone or places in which to hide. This is beneficial to their emotional well-being and is especially important to children with special needs. Schools have met this need with a variety of





planting options.
Otaki Kindergarten has constructe

Otaki Kindergarten has constructed a "maze" with punga trees.

At Merrylee School in Glasgow there were a number of willow tunnels built as part of their natural playscape creating interesting nooks and crannies.



At Manawaru School in the Waikato, they were lucky enough to have a gulley already with a big stand of bamboo. The children had built a hut in it and they used the bamboo to construct all sorts of things: kites, more huts, shelters...

Hukanui School in Hamilton made the

most of their natural surroundings by allowing their senior students to play in the dense

native bush covered gulley at the back of the school.



#### Children's fascination with the natural world.

Insects, butterflies, mice and birds are always interesting for children to watch and follow. At some schools "bug motels" have been set up to allow curious children to study at close

quarters and find out about insects and spiders. Muckhart, Scotland, (left) timber rounds have been built into a stone wall where various insects were beginning to take up residency.

A stack of old pallets at Ladywell Nursery School (right) was a variation on the theme and had good tenancy.

These bug motels can be complemented by the planting of butterfly gardens or planting wild flower gardens or simply letting the grass in some areas of the school grow long through which paths can be mown for running access.

At Muckhart Primary School, a large area of their lovely grounds was planted in regenerating wild flowers and grass. Paths were mown through the patch during the summer, the plants died down in winter. It was a haven for butterflies, bees and flying insects. Weeds grew amongst the

flowers and stinging nettles were part of the learning experience!







A bird hide, a feature from Caledonia School, was simply a curtain on the inside of a window with small holes cut in it through which children could observe the behaviour of a variety of birds feeding on a bird feeder they had erected immediately outside.

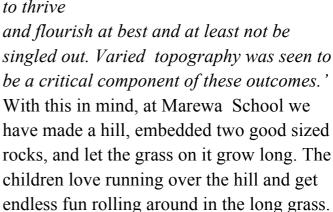
#### Hills and Gullies

There are few, if any, places in a city for young children to enjoy the undulations of hills and gullies. In a study ,referred to later, from Merrylee Primary school, the following observations were made.

'Natural playspace 'appears to provide an important alternative to football/tarmac based activities of flat ground. It allows children who may not appreciate such



reciate such activities to thrive



We have staged ceremonial battles, we have shared books on the slopes, had tiger hunts and ambushes and it is an ideal setting to re-enact many children's stories.

### **Construction and Materials**

As you can see from the illustrations the construction of these play areas has just made use of materials that can be cheaply bought, scrounged, picked up from the beach or donated by kind benefactors.

An important part of these playgrounds was to develop a collection of materials that children can use for building. Kids especially enjoy building huts.



A special needs child at another school, who could only attend school for one hour a day fully

At Te Ra the children have a ready supply of pallets, planks and other bits and pieces to build with. (The Property Manager does regular safety checks)



supervised, now attends full time and spends all his break time making things in the playscape and playing in their dirt pile. Being able to do this has been motivation to help him to, attend full time and settle in class effectively.

At Marewa School we have built a secure bin which is full of various bits of timber, off cuts, and planking which is used during breaks for large construction play.



"outdoor classrooms". Muckhart School, with the help of staff from *Learning Through Landscapes*, built a castle complete with moat. (right). The one below is at Caledonia School in Glasgow



The Outdoor classroom at Te Ra School in Raumati also includes a fire pit.



### **Moving the Classroom outdoors**

In order to encourage greater use of the environment for learning in all areas of the curriculum a number of schools have created







### **Creative Play**

One of the positive results coming from the construction of natural playscapes is that the freedom offered by the environment encourages creative and imaginative play.

At Marewa School we have started developing a natural playscape and already we have noted changes in the behaviour of our children that support the findings of the Merrylee experience. This last term the number of playground incidences has dropped markedly and the variety of games that children are playing has increased and the younger children especially are playing a lot more imaginative games.

One of the interesting things, mentioned in the research, is that in a normal playground the leaders tend to be those children who are physically more capable and stronger. In a natural playscape the creative and imaginative child becomes the leader. We saw an example of this when, during construction of our hill, we had a large mound of earth and grass turf, and one of our young boys, who is a bit of an outsider, organised teams of children to help him built an "adobe" hut on the mound.

### Case Study: Merrylee Primary School

About five years ago Merrylee Primary in Glasgow was totally rebuilt. AS part of the rebuils, the Glasgow City Council, along with the Forestry Commission, redeveloped the playground. The rubble from the old building was built up in a corner of the school and formed into some hills. Willow tunnels were planted, an outdoor classroom was set up, native trees were planted, a bridge between two hills was built and the grass was left to grow long.

A condition of the Forestry Commission's support was that the school had to agree to a longitudinal study (2008 - 2011) on the effects the new playscape had on children's learning and behaviour.

The study is entitled "Natural Play: Making a difference to children's learning and wellbeing" by Leslie Groves and Hugh McNish

The study conducted a *before and after* collection of data and looked at three main questions:

- 1. Can a natural play space lead to enhanced emotional and physical wellbeing for children compared to a traditional playground space?
- 2. Can a natural play space lead to enhanced classroom-based and outdoor-based learning for children compared to a traditional playground space?
- 3. Can a natural play spaces in school settings offer good value for money?

### **Emotional and Physical well-Being**

The research found that:

- "Natural play space offers a multi-choice space for play to suit different styles and personalities. Indicators of emotional wellbeing appear to have improved and opportunities for enhanced social interaction as well as solitude, where needed, have been provided. "Physical activity levels also increased"
- "Incidents of accidents, injuries and bullying have gone down dramatically, despite (and perhaps because of) the encouragement of children to risk assess themselves"
- "Children's exposure to risk and responsibility for assessing risk has led to a demonstrable increase in resilience"
- "The natural play space has offered a rich and stimulating environment where children are able to learn to engage with nature"
- "...the natural play space itself provides an enhanced space for free and creative play"

### **Natural Play and Learning**

The following findings from the MerryLee study about natural play were:

- Improvement in the time needed to settle back into class
- Improvement in mood after play
- Decrease in concentration and attainment levels before play: could be due to higher levels of excitement before going out to play (*further study needed to clarify this finding*)
- Increase in concentration and attainment after play
- Increase in the quality of children's social interactions with each other and with the teacher
- Decrease in incidents of difficult behaviour
- Significant increase in outdoor teaching time

At another school they had a special needs child, who, prior to moving there, could only attend school for one hour a day and was fully supervised during this time. Now he attends full time and spends all his break time making things in the playscape and playing in their dirt pile. Being able to do this has been motivation to help him to settle in class.

At another school they had a special needs child, who, prior to moving there, could only attend school for one hour a day and was fully supervised during this time. Now he attends full time and spends all his break time making things in the playscape and playing in their dirt pile. Being able to do this has been motivation to help him to settle in class.

# Value for Money

"the provision of a natural play space within a school represents excellent value for money."

#### **Conclusion**

What are the benefits of creating natural playspaces?

- Improved academic performance
- Improved concentration in children
- Development of social and language skills
- Marked increase in the amount of imaginative and creative play
- Increased physical activity
- Improved physical and mental health
- Promotes resilience
- Decrease in the amount of playground accidents, injuries and instances of bullying
- Increased knowledge of and care for the environment
- Very cost effective

While it appeared to me obvious that children should care for their environment, the problem was how to sell that to children in a way that wasn't didactic? What were the ways we could make the invitation to engage attractive? How to make that an intrinsic part of the way children grew and interacted with their world so that the decision was theirs? They have to learn to love it themselves, to know it intimately and to have a language of relationship. The most successful way for early learning is through play. The creation of a natural playscape in a school allows this to happen. It offers them the freedom to explore, be creative, use all of their senses and draw them away from the trap of being tied to the electronic world. It comes before recycling and planting vegetables. It is the first step in embracing where we live and how we operate in our place in the world.

At Marewa Primary School I approached my staff with my findings and some challenges. I proposed that we adopt some of the ideas I had seen in my observations of schools so far. The response has been very positive over the majority of the staff and efforts to experiment and embrace some of the concepts have been stimulating. We have a hill, grassed and with rocks at each end, a new pea metal pit with standing posts, a number of 'po', a bin containing large pieces of construction material, areas set aside for a second hill which will have a water feature, collections of shells, driftwood and nuts. We have designated an area for an outdoor classroom which will be planted with native trees to establish boundaries and which will have old totara beams (donated) for seating. Our grounds already attract lots of tui and other birdlife and this space, adding to an abundance of fruit trees already there, has the potential to provide an open, inspirational place of learning and teaching outside.

## **Bibliography**

Rusty Keeler "Natural Playscapes" www.earthplay.net

Playscapes: arcady@cox.net

Richard Louv "Last Child in the Woods" Chapel Hill, US: Alogonquin Books

Herbert W Broda "Moving the Classroom Outdoors" Stenhouse Publishers

Forestry Commission, Scotland "Natural Play in school grounds"

 $\underline{www.forestry.gov.uk/pdf/Naturalplaycentralscotland.pdf/\$FILE/Naturalplaycentralscotland.pdf/\$FILE/Naturalplaycentralscotland.pdf$ 

Forestry Commission, Scotland "Baseline Study of Play at Merrylee Primary School Glasgow"

 $\underline{www.forestry.gov.uk/pdf/NaturalPlayBaselineStudy.pdf/\$FILE/NaturalPlayBaselineStudy.pdf}$ .pdf

Learning Through Landscapes: www.ltl.org.uk