Lifetime Learning – Nature’s Way

Tipu Ake ki te Ora - Reflections on Learning

The Tipu Ake Lifecycle ¹ – An Organic Leadership Model for Innovative Organisations and Communities was distilled from lessons learnt and shared by the tiny Te Whaiti School in the Whirinaki Rainforest ², Te Urewera, New Zealand in 2001. It is freely shared on the web at www.tipuake.org.nz where it attracts international recognition as a tool to help organisations learn and grow as living systems ³. See http://www.tipuake.org.nz/files/pdf/Growing%20Living%20Organisations.pdf

As organisations embrace Tipu Ake ki te Ora’ - “Growing ever onwards and upwards towards Wellbeing” as a means to help stimulate organic learning and growth behaviours, it is fitting to reflect that it is but a spinoff from a school and a community whose passion was to stimulate learning and growth in their children. See this on video at www.tipuake.org.nz/videoclips.htm and read their oral history story ⁴ at http://www.tipuake.org.nz/stories/school_oralhist.htm

This story written for the NZ Playcentre Magazine, goes back to the school to re-listen to their stories and uses some of the metaphors that have grown to become the Tipu Ake Organic Leadership Model to help us cast some different (and hopefully challenging) natural light on the fundamental processes by which children and people learn. It also goes to the roots of learning organisation thinking.

Nature as our teacher.

There is a new approach to design that looks to nature to find out how it does its business…. For example scientists ask, “How does a paua (shellfish) at room temperature in salt water create a shell more beautiful and harder than the best ceramics that we can produce in high temperature kilns consuming lots of energy”? But Biomimicry ⁵ can go far beyond just the science of product design; nature can point us to richer, healthier ways of working together to grow effective schools, organisations, businesses, communities, cities and countries. Even more importantly the cyclic and highly inter-dependent processes of nature remind us that learning is a natural and organic condition, not a linear mechanical process driven by curriculum, compliance or rigid educational school systems.
Rich lessons from a rainforest.

Nature is the ultimate teacher. Its lessons can help us grow citizens that are resilient, sustainable, fast learning and able to exploit the opportunities for real growth that exist in our interdependency with everything else we are connected with. Perhaps the rainforest with all its complexity talks to us of a “Living Systems Thinking approach” that can breathe new life into education and organisations for our seemingly chaotic and complex world:

- We see that all the species have an inherent drive towards outcomes; no one needs to tell a plant which direction to grow in. Can people, organisations and our learning grow in that self-directed way too?
- It is empowered by the sun. Can we absorb that external energy and experience that illuminates our blind spots, questions our assumptions and encourages us to grow?
- It tells us about the pests that block the growth of our species; those negative behaviours that turn us downward and stunt development if we do not name and control them.
- It reminds us about the recyclers that turn dead material into compost, recovering waste; finding opportunity even in adversity and death. The bi-products of one becomes a food for the next. Nothing and no-one is thrown away.
- It warns us about the poisons that stop the germination of anything new; those toxic enemies within our own minds that sap the courage we need to step beyond the known and out of our comfort zones.
- It sings the praises of the birds; the entrepreneurs of the forest who pollinate, spread and plant seeds for the nursery nature has prepared under the nurturing forest canopy; incubating new learning!
- With the naked eye, we can’t see the complex network of mycorrhizal fungi, a complex underground pipeline system that interconnects diverse species and the earth, swapping the nutrients of life. Could we share our learning in a similar way and operate as part of such a win-win network alliance?
- We are reminded about the importance of strong roots; where all new growth and resilience always starts, both in the forest, our communities and in individuals. Organisational systems and evaluation processes above ground level seldom ever see, acknowledge or fund the growth of this root capability.
- When events like external storms hit a forest, the ecosystem adapts to grow new opportunity from the chaos created. There are always billions of seeds lying dormant waiting to grow. To learn, we can do the same, letting nature dictate priorities; looking to grab growth opportunities when and where the conditions are right.
- The rich rainforest ecosystem where all species are highly interdependent, demonstrates what happens when we collaborate and celebrate all our diversity, using it to share our learning and check our assumptions. Monocultures become very vulnerable in times of turmoil.
The Tipu Ake Lifecycle – An Organic Leadership Model for Innovative Organisations

Perhaps we could also apply Tipu Ake collaborative leadership behaviours in our Kohanga Reo, Playcentres, Classrooms, Schools and Universities to make them more effective.

The model is rooted in the natural metaphor of a tree growing in a rainforest, reinterpreted on the right side in a form that relates it to more conventional business thinking.

The ground level we call the undercurrents, that exciting place of turmoil and apparent chaos where energy abounds to sustain the germination of new ideas.

It takes courage to go down into the undercurrents and sometimes even more to grow a new idea out of it. Courageous leadership that champions a change attracts a team around it like a magnet, allowing them to agree on the second phase – a common vision of the outcomes sought.

Tipu Ake encourages our team to grow to operate at the higher collective sensing and wisdom levels; above the process level with all its analytical and often contradictory Key Performance Indicators KPIs. Here we keep asking the common sense question, “Is our process effective? Is it taking us to where we really want to go? towards that state of ORA (Wellbeing)?”

Pest control is the process of naming and controlling those behaviours that would otherwise return our team to the undercurrents. For example; a project hero with a big ego who claims all the credit, keeps a team in the undercurrents; constantly in reactive mode, fighting fires. That becomes a drip feed poison that breeds dependency. No one bothers to try anything new, believing they will just get shot down.

By comparison a team that operates in the collective sensing and wisdom level, proactively identifies the issues and deliberately goes down to the undercurrents to resolve them, exploiting all the diversity and strengths of the team to test assumptions. Be a smart bird, get to love going there, go with the flow, harvest ideas in the turmoil and resist for a while the temptation to escape to the supposed comfort of our conventional linear process level thinking; to organise our way out of it. That will follow naturally in it’s own time.
Tipu Ake from a lifetime learning perspective:

If we want to grow a well (life enhancing) society for the future, then the outcomes from our education system should be young adults for whom the thrill of discovery and rapid learning that they enjoyed from birth (and before), then at playcentre, kohunga reo, on through school, university, our workplaces and leisure will stay with them for life.

Let's play with the Tipu Ake model and remap it more from a learning and growth perspective.

Let’s think of the middle process level as being our formal education process that is defined in early childhood centres, schools, university or business. It is here that we find the formal systems that provide consistency and the ability to take learning from one place to another.

Tipu Ake may suggest that the roots of real learning lie below this; where courageous learners (perhaps we may call them learning ringleaders) find themselves out of their comfort zones, there making discoveries about themselves and the world, then share this excitement to attract others to grow with them.

This underground collaborative learning environment allows participants to accelerate safely through the formal education process to reach a state above it where they grow the key social skills to allow them to mutually observe and evaluate what is going on around them, then take responsibility for their own learning and life (The Maori expression for this - Tino Rangatiratanga). Here they accumulate and share the peer wisdom that helps them recognise and proceed towards a state of wellbeing (ORA) where continuous learning enhances life.
On the right hand side we identify a few pest behaviours that “the system” could well “put onto” our learner. In moderation, some of these may be a positive external disturbance that challenge and force them out of their comfort zone, but if they are consistently applied, they become poisons that sap the courage needed to germinate new learning. The learner must react to these pests – for example:

- Abuse, punishment and bullying - poisons that stop new growth germinating
- Discourage the ringleader – block those probing the boundaries of discovery
- Divide and conquer – amplify differences, rather than exploiting our diversity.
- Demand compliance – often to meet the risk adverse protocols of the system
- Undermining the observations of learners – forcing preconceived paradigms
- Dishonesty - in the form of the saying; do as I say not as I do
- Withdraw ongoing learning support for future paths - eg parents, schools, community

On the left hand side we see those proactive bird type behaviours that a group of learners can choose to deploy at any level to go down and grow new learning.

- Focus on outcomes for life, not the outputs that the education system demands
- Have conversations and tell stories that share knowledge and consolidate values
- Sense what is going on around us and test our assumptions against others (Diversity)
- Learn the system’s rules so we know how to break them properly   (The Dalai Lama)
- Grow mutual trust and support from others around us
- Have the courage to explore and germinate the seeds of new learning
- Challenge those boundaries that define our comfort zones

Most early childhood observers will recognise these proactive learning behaviours as being quite natural, so perhaps we could look at some of the conflicts between this style of learning and some characteristics of our formal education and organisational processes:

1. Natural learning can be constrained by a pre-occupation with Risk Management.

   There is a danger that Health and Safety and other compliance regimes isolate learners from the reality of discovery in the world, depriving them of the opportunity to learn to manage risk and stretch themselves. The negative outcomes of this denial perhaps surfaces when as teenagers they get into fast cars. It could also be seen in the attraction for adventure tourism.

   We hear of schools having to close down swimming pools in places where after school the children continue to confidently go swimming together in deep fast-flowing rivers where they “watch out” for each other.

2. Natural learning is a collaborative process of discovery, not just an individual thing:

   Much early learning comes out of courageous experimentation where learners seek to discover the utter brilliance of the world around us. It is reinforced by interaction and play with others. It is in this environment that we learn to understand the “rules of the playground we live in” with our peers. Further down life’s journey that same learner may use these skills to facilitate a positive world trade agreement that addresses poverty!
If positive collaborative learning opportunities are not available to learners in the formal setting, then the group may choose to get together in another context. We could call this “hanging out with the gang” where they may well go back into the undercurrents to find their own new way through life. The formal system might be tempted to describe this as inappropriate behaviour!

3. Natural learning outcomes are seldom measured in the education process.

For reasons of accountability, repeatability, and qualification benchmarking our formal education processes are required to be measured. This is driven by corporate mantra like “What we measure and reward, is what we get”, or “If you can’t measure it, you can’t manage it”. We talk about measuring “learning outcomes”, but too often we confuse this with simply measuring the ability to recite culturally specific outputs that meet the assessment criteria.

The higher we go in the education system, the more its focus becomes individual, the subject of study becomes more specific, participants get to be more competitive and the value of sharing learning is devalued. It is ironic that many who later shine as learners and we look up to as citizens, are often those who were deemed to be slow learners who dropped out of school, bored by its rigidity. Where could they have been if their journey had instead continued to allow them (and all others) to retain a world-view of life and learning that is natural, exciting, complex and filled with surprises.

4. Wisdom is born from Natural Learning

When we learn together; acknowledging the wealth of experience we each bring to the table, reflecting on what we sense is going on together, questioning our assumptions and using all our diversity, we together grow community wisdom.

The knowledge economy confronts us with information overload. In 1930 when the world’s knowledge was mainly in written form, the number of books doubled every 30 years. By 2010 it is predicted that the amount of data stored in electronic form will double every 10 hours. The old adage of “Knowledge is Power” encouraged us to keep “collections” of it in our own pocket, withholding it from others. Leaving strategic decision-making to those who held it, no longer works. Now success comes from the “connections” we make with others to grow a flexible multidimensional processing engine that allows us to gather, question, filter, process and make sense of what individually is incomprehensible, uncertain and worse still ambiguous.

The school at Te Whaiti have a saying that highlights their commitment to shared knowledge - one of their most important values – “We have no room around here for matapiko (stingy) gatekeepers” – those who hold all the information to themselves.

In our world of complexity, their lessons from nature help show us how to share learning, leadership and action.
5. Natural Learning, like an ecosystem is cyclic and highly interdependent

Too often we think of education as a staircase with linear steps each of which builds for the next level and having reached one, our ego makes us loathe to go back down a relearn or revise what time may have caused us to lose the plot on. We are all aware of expressions like “Out of the mouths of babes….” but seldom heed them.

Tipu Ake reminds us that natural learning is about going down in complex cyclic ways into the undercurrents to grow new seeds of learning that enable us to grow even higher and more resilient. With Tipu Ake we learn spit out the pests and poisons that hold us back, becoming smart birds able to voluntarily operate on each and every level simultaneously.

6. Learning Organisations are alive and thrive on Natural Learning.

If we are to grow learning organisations (including those in education) that are creative, resilient, agile and able to face challenges that a global world of complexity and change throws at them, then they must be made up of diverse and strong individuals with these characteristics too. They must learn how to grow as a living whole that is much greater than the sum of its parts. That involves what we call Systems Thinking.

Fitjof Capra in “Creativity and Leadership in Learning Communities” reminds us of the rules of life: see www.ecoliteracy.org/publications

- Every living system is a network
- A human community is a network of conversations
- The most powerful organisational learning and collective knowledge sharing grows through informal relationships and personal networks - via working conversations in communities of practice
- The spontaneous emergence of order – of new structures and new forms of behaviours – is one of the hallmarks of life
- If we think of the relationship between emergence and design in terms of a continuum, we can say that drifting too far towards design will become overly rigid, unable to adopt to changing conditions. On the other hand drifting too far towards emergence causes us to lose the ability to efficiently produce goods and services
- A culture fostering emergence must include the freedom to make mistakes, In such a culture experimentation is encouraged and learning is valued as much as success.

Tipu Ake ki te Ora embraces “Living Systems” thinking:

Observers like Janine Benyus, Fritjof Capra, Margaret Wheatley, Maaori Marsden, Elisabet Sahtouris and others also help remind us of nature’s lessons:

✓ When living systems want to get stronger they connect with more living things (e.g. to different living species that bring in diversity and resources – monocultures in plants and life are vulnerable)
✓ Nature makes its most important connections underground at the root level, these are very hard to see (let alone to make) from above.
You can't change a living system, all you can do is disturb it, (then it in itself adapts in response to opportunities and threats seen in that disturbance)

The disturbances that have the most immediate effect are those that challenge the equilibrium and assumed order of the system.

Living systems focus on finding opportunities for growth in chaos. They are self-organising and are not preoccupied with time or risks.

Living things never do what they are told (participants always add in their own local ideas, knowledge and perspectives)

If we think we can externally change, re-structure or re-engineer a living system ..... then it is probably already dead!

Understanding these natural world principles casts new light on the processes of visioning, learning, intervention and change management that we attempt to use as individuals, in our schools, communities, organisations, government and across the planet

In Conclusion:

An anonymous Te Whaiti community person reflecting on nature, interpreted Tipu Ake ki te Ora as:

“Growing an awareness and understanding of the world of outcomes; beyond the physical, beyond the spiritual, even beyond our imagination”.

The obligation to focus on real outcomes that this placed on the Te Whaiti School was highlighted in an interview with its previous principal:

“The key was to find something that the students could be successful at that looked impossible, because if you can overcome a hurdle that is really difficult, that opens the door. We decided to use School Certificate [at the time] to find a subject that they could achieve in and take it at a young age. That success generates confidence and that has really been the key to it. You are always going to have trouble if you are lacking in confidence. Once your attitude changes and you become more positive, and you become more confident, that learning becomes a little easier and you more successful in it - Success breeds success! - Genevieve Doherty

This need for stretch challenges in education and life is highlighted by an all-encompassing bold vision from the Waitaha people which recognises the need for all senses and parties to be involved in our children’s learning and growth:

When we raise our children with the wairua [the spirit] to hear the plants grow, and their minds to touch the stars; that is Waitaha
References:

1. The Tipu Ake Lifecycle: For more information on Tipu Ake visit www.tipuake.org.nz where you will find it shared in the public domain for the benefit of all the world’s future children. Here you can download the full model, stories, Powerpoint explanatories (in English and French) and its unique conditions of use. Tipu Ake is traditional intellectual property, which will continue to belong for all time at Te Whaiti Nui-a-Toi. Guarded by its kaitiaki, the children and people living there. See www.tewhaiti-nui-a-toi.maori.nz Acknowledge by koha, a gift in return based on its value to you.

2. The Whirinaki Rainforest - see community web portal www.whirinaki.org.nz


11. Song of Waitaha – A History of a nation (ref from page 133) www.songofwaitaha.co.nz

For links to more stories about growing living organisations http://www.tipuake.org.nz/stories/supporting_stories.htm

The compiler of this article, Peter Goldsbury, has been privileged to be a part of the community and coordinates the now international volunteer team and network that has documented and helps share Tipu Ake. The words within reflect those of a whole community of people who freely share their knowledge for the benefit of all our future generations