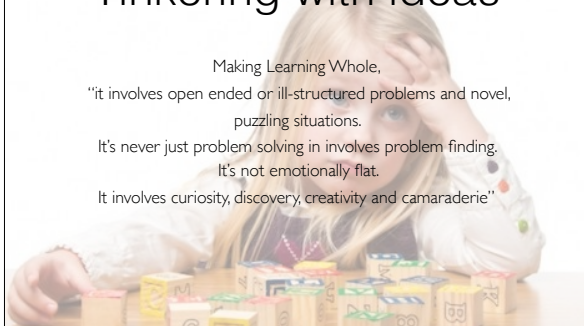


Tinkering with ideas



Making Learning Whole,
"it involves open ended or ill-structured problems and novel, puzzling situations.
It's never just problem solving in involves problem finding.
It's not emotionally flat.
It involves curiosity, discovery, creativity and camaraderie"

Ta te tamariki tana mahi wawahi tahā

It is the job of the children to smash the calabash
Children are playful and don't know the importance of an object. This is not the fault of the child and they should not be punished for what is their nature. Here the calabash is a metaphor for rules and regulations, which from time to time children and adolescents may over step in order for them to develop themselves.





Ūkaipō are the places we find ourselves, our strength, our energy. Having a place where you belong, where you count, where you are important and where you can contribute is essential for Māori wellbeing. As a whole person with your identity intact, you can make your contribution.

<http://edtalks.org/video/breaking-down-silos-connecting-across-sectors>

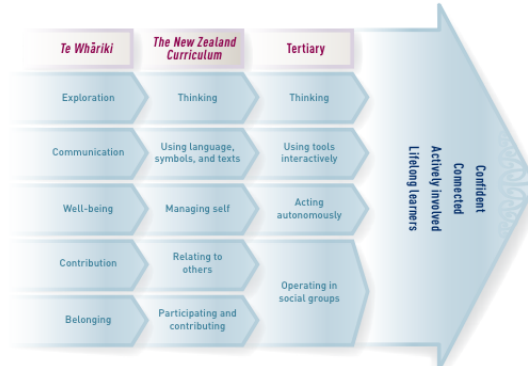
What will a successful Ohinemuri tamaiti look like when they leave your setting?
In other words what are your hopes and dreams for the tamariki in your individual settings?



Curiosity self esteem feeling safe
social skills
sense of belonging manage themselves common
sense knowing how to have fun
balanced pride in who they are confident
creative
life long learner persistent risk take
resilient
mistakes are ok resourceful respectful
empathy
independence positive attitude collaborative
cooperative
strong sense of self belief

The key competencies: Cross-sector alignment

This diagram suggests how the tertiary competencies align with those of Te Whāriki and The New Zealand Curriculum:



Thinking

Students who are competent thinkers and problem-solvers actively seek, use, and create knowledge. They reflect on their own learning, draw on personal knowledge and intuitions, ask questions, and challenge the basis of assumptions and perceptions.
NZ Curriculum

https://www.ted.com/talks/gever_tulley_s_tinkering_school_in_action?language=en



Tinkering begins with this kind of problem solving and a curiosity about how something works. When children are encouraged to solve problems on their own, they learn a great deal though the questions and hands on experiments that lead to a solution. Even preverbal children pose questions and identify problems - think of a baby who works hard to grasp an out of reach toy.

Tinkering is a mindset - a playful way to approach and solve problems through direct experience, experimentation, and discovery.



<https://www.youtube.com/watch?v=mWlpo7xi6MI>

Sir Ken Robinson
Collaboration
Composure
Creativity
Compassion

<https://www.youtube.com/watch?v=Bg-GEzM7iTk>



'The Decline of Play and Rise of Children's Mental Disorders'. In this TED talk Peter Gray talks about the decline of play and the correlation between lack of time to play and depression in older children. s

Gray wrote, "Free play and exploration are, historically, the means by which children learn to:

- solve their own problems,**
- control their own lives,**
- develop their own interests,**
- and become competent in pursuit of their own interests."**

Connecting Gray and Robinson..... and David Perkins



Solve their own problems -
Control their own lives -
Develop their own interests,
and become competent in pursuit of their own interests

creativity
composure.
compassion
collaboration.

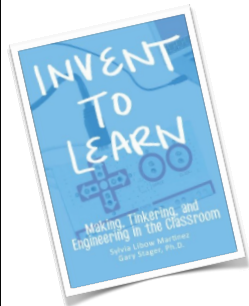
When David Perkins talks about learning in his book Making Learning Whole he says,

"It involves open ended or ill- structured problems and novel, puzzling situations.

It's never just problem solving it involves problem finding

It's not just about right answers. It involves explanation and justification.

It's not emotionally flat.



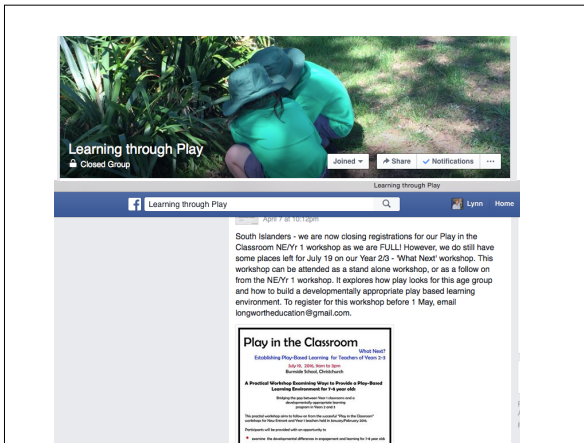
Problems grow out of the conditions of the experience being had in the present, and that it is such that it arouses in the learner an active quest for information and for production of new ideas. The new facts and new ideas ... become the ground for further experiences in which new problems are presented.

It's never just problem solving it involves problem finding

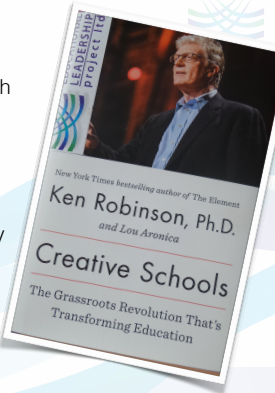
It involves curiosity, discovery, creativity, camaraderie".


"Real learning is achieved through the investigative process. Children have to be encouraged to search for the answers themselves. It is up to the teachers to provide the tools and resources necessary for the children to conduct these inquiries and make meaningful discoveries. One well-formed question will do more to inspire than any number of answers. In every facet of our educational pursuits, it becomes crucial to begin an open dialogue with our students, to encourage healthy debate and to have them form their own conclusions." Peter Gray





Free play is the means by which children learn to make friends, overcome their fears, solve their own problems, and generally take control of their own lives. It is also the primary means by which children practice and acquire the physical and intellectual skills that are essential for success.....





Managing Self
Students who manage themselves are enterprising, resourceful, reliable, and resilient. They establish personal goals, make plans, manage projects, and set high standards. They have strategies for meeting challenges. They know when to lead, when to follow, and when and how to act independently.
NZ Curriculum

The 5 best toys of all time.....



<http://www.legofoundation.com/en-us/research-and-learning/research-and-learning>

Children using Lego to assist with connecting their creative thinking to creative writing.

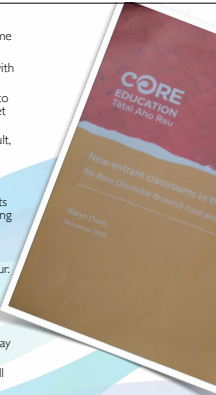
Major findings Changes in children's engagement and belonging

From the very first day the teachers introduced "Relating to Others Time", the children initiated and engaged in their own creative interests. While teachers set up some activities for children, they often positioned these as provocations, and they found children readily engaged in the programme with little need for redirection or support. The teachers were excited by the children's learning, and noticed significant differences between this group of children and the previous classes they had taught. For example, the teachers felt children new to school settled much more quickly than in the past. Very few children appeared to be showing any distress or unhappiness about being at school.



The teachers believed that the familiarity of the play-based programme for children, with its emphasis on relationships and on providing children the freedom to make real choices about where, what, and with whom to participate, meant children were more relaxed and excited about coming to school. The predictability of a relaxed and fun start to the day seemed to invite children to engage and, therefore, helped set the tone of the day. The teachers felt they were now able to give children time to develop a sense of belonging at school and, as a result, they actually settled more quickly. Furthermore, what went on at "Relating to Others Time" provided the teachers with prompts for conversations and discussions so that they could get to know the children better too, as well as for making connections to other aspects of the curriculum. It was also evident in some children's creative writing that interests explored, or projects developed, at "Relating to Others Time", provided inspiration in this aspect of the curriculum.

Teachers felt that there were fewer concerns with children's behaviour. Not only were they seeing very few new children demonstrating serious behaviour difficulties, those in year 1 who had previously needed significant support (including interventions from Resource Teachers of Learning and Behaviour), no longer needed this level of guidance. While changes to the classroom culture and programme may not have been the only influences in the changes in behaviour, the teachers felt these were a major contributor to the engagement of all children.





The Box

<https://www.youtube.com/watch?v=falFNkdq96U>
<https://www.youtube.com/watch?v=UI9c-4dX4Hk>

Caine's Arcade

Participating and contributing

Students who participate and contribute in communities have a sense of belonging and the confidence to participate within new contexts. They understand the importance of balancing rights, roles, and responsibilities and of contributing to the quality and sustainability of social, cultural, physical, and economic environments.



String

*Cardboard
Tube*



Participating and Contributing

This competency is about being actively involved in communities. Communities include family, whānau, and school and those based, for example, on a common interest or culture. They may be drawn together for purposes such as learning, work, celebration, or recreation. They may be local, national, or global. This competency includes a capacity to contribute appropriately as a group member, to make connections with others, and to create opportunities for others in the group.

Mud



Specific praise



Not correcting

<http://www.radionz.co.nz/national/programmes/ninetoonoo/audio/2595176/what-3-to-7-year-olds-need-to-learn-nathan-mikaere-wallis>

Right - wrong answers!

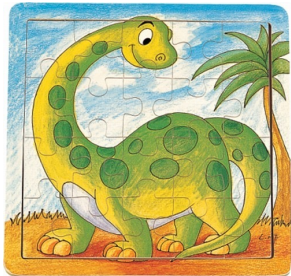
Divergent Thinking. Divergent thinking, the ability to branch out from a starting point and consider a variety of possible solutions, involves fluidity of thinking, broad scanning ability, and free association. It is thought to be a major cognitive process underlying creativity (Guilford, 1968; Russ & Kaugars, 2001).

It's never just problem solving it involves problem finding
It involves curiosity, discovery, creativity, camaraderie".

The connection between play and divergent thinking has been established in various lines of research. First, a relationship has been found between divergent problem solving ability and the characteristics of children's play materials.



Sixty-four preschool children had the opportunity to play repeatedly with convergent (e.g., puzzles with one correct solution) or divergent (e.g., blocks, which can be assembled in a variety of ways) materials. When the children were later asked to solve a variety of problems, those who had engaged in divergent object play were more flexible and more original in their problem solving approaches, and quicker than those in the convergent play group to abandon ineffective problem-solving approaches.



The researchers concluded that the experience of interacting with toys that suggest a single correct way to be played with may teach children that there are correct answers, and may encourage them to seek them out. Playing with open-ended materials, on the other hand, may suggest that there are numerous approaches that can be taken to any problem.



Dansky (1980) observed ninety-six preschool children in a free-play situation,

He then assigned them to one of three conditions:
(1) free play,
(2) imitative play, and
(3) a problem-solving task.

Dansky (1980) found that the children in the free-play situation performed the best on the divergent problem solving task, but only if they were spontaneously high in their level of make-believe play. He concluded that it is not play in itself that predicts problem solving skill, but the extent to which children become involved in make-believe when they are playing.



Relating to others

Relating to others is about interacting effectively with a diverse range of people in a variety of contexts. This competency includes the ability to listen actively, recognise different points of view, negotiate, and share ideas. Students who relate well to others are open to new learning and able to take different roles in different situations. They are aware of how their words and actions affect others. They know when it is appropriate to compete and when it is appropriate to co-operate. By working effectively together, they can come up with new approaches, ideas, and ways of thinking.

"If you provide your child with lots of imaginative, exploratory activities, you will activate the seeking system in her brain. When this system is working, your child will have an appetite for life, curiosity, and the drive and motivation to make her creative ideas into a reality."
Margot Sunderland



<https://www.youtube.com/watch?v=9Wr7OPT5R2M>



"If a child is to keep alive his inborn sense of wonder, he needs the companionship of AT LEAST ONE ADULT who can share it, REDISCOVERING WITH HIM THE JOY, excitement and mystery of the world we live in." ~ Rachel Carson

<http://richardlouv.com/books/last-child/videos/>
Last child in the woods

Richard Louv

"If this (the starry sky) were a sight
that could be seen only once
in a century.....this
little headland would be thronged with
spectators. But it can be
seen many scores
of nights in any year,
and so the lights
burned in the cottages
and the inhabitants
probably gave not a thought
to the beauty
overhead;
and because they could see it
almost any night,
perhaps they will never
see it.
-Rachel Carons, environmentalist and
author of The Sense of Wonder