

Jo Dean & Keri Cheetham



Ahakoa he iti, he pounamu

Pounamu and tamariki are precious and have potential and possibilities

Introduction

Our young children are fast approaching a technological generation where we don't know what will be available by the time our current children will be working in the task force. What we do know are some strategies and skills to support them to become strong problem solvers that can think creatively.



Definitions

- Critical Thinking: purposeful, reflective judgement concerning what to believe or what to do.
- Creative Thinking: is a function of intelligence and takes many forms. Creativity is the ability to produce through imaginative skill something new. (Wright, 2010; Robinson, 2009)
- Two important aspects: gathering and absorbing the information (critical thinking) leading to the transformation of this knowledge to generate new ideas (creative thinking). (Simister, 2007)

Cognitive and personality traits

The ability to think creatively is closely linked to our cognitive/mental traits and also to our personality traits (Wright, 2010)

Cognitive/ Mental Traits

- Imagination
- Visualisation
- Thinking Styles
- Experimentation
- Logical Thinking

Cognitive and personality traits

Personality Traits

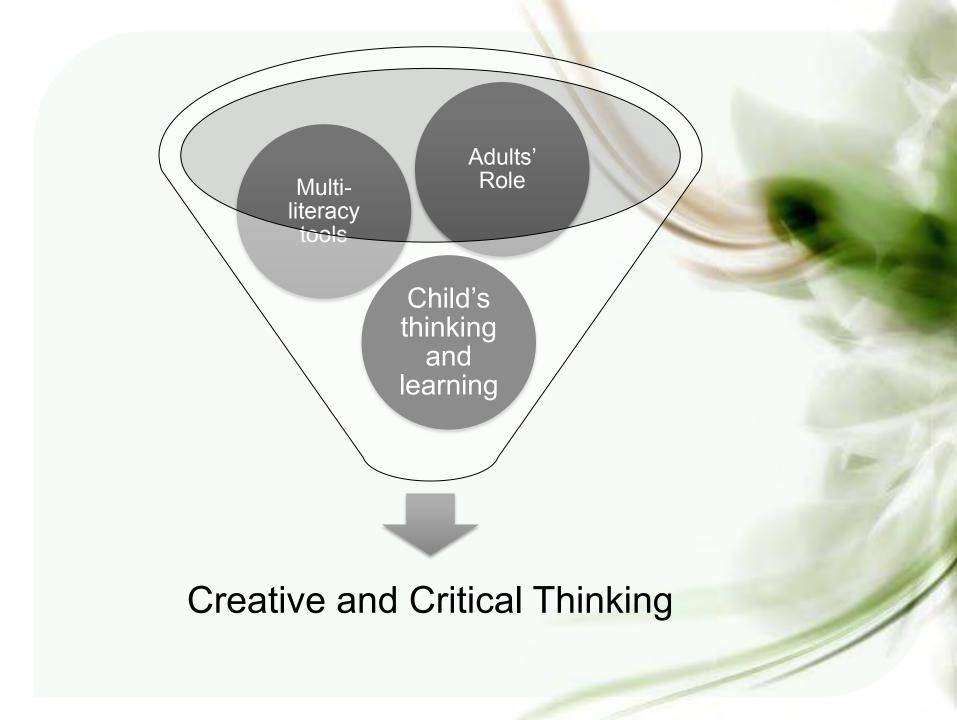
- Originality
- Independence
- Risk Taking
- Energy
- Curiosity
- Open Mindedness
- Perceptiveness

Imaginative Thought

Imagination, also called the faculty of imagining, is the ability to form new images and sensations that are not perceived through sight, hearing, or other senses. Imagination helps make knowledge applicable in solving problems and is fundamental to integrating experience and the learning process.

Links to Curriculum documents

Creative Thinking Skills	Related Learning Dispositions	Links To Te Whāriki, Stands and Goals	Links to New Zealand Curriculum Framework / Key competencies
Persisting with difficultly	Perseverance	Exploration	Thinking/Managing self
Making Decisions	Confidence	Exploration, Wellbeing	Thinking
Problem setting and solving	Responsibility	Exploration, Contribution	Thinking / Managing Self
Being Flexible	Confidence	Belonging	Managing Self/Participating and Contributing
Risk Taking	Courage, Perseverance	Exploration	Managing Self
Curiosity	Courage and Curiosity	Exploration	Thinking/Managing Self
Imaginative thought	Trust and Playfulness	Communication	Thinking
Independence	Perseverance	Wellbeing, Exploration	Managing Self
Experimentation	Courage and Curiosity	Exploration	Thinking
Perceptiveness	Responsibility	Contribution	Relating to others
Sharing Ideas	Confidence	Belonging, Communication	Relating to others/Using language



Multi-literacies

- Multi-literacies can be a range of tools to support children to express themselves.
- The links between artistic drawings, language and thinking are intricately intertwined.
- Children will often use drawing as a way to communicate their ideas and express themselves and their ideas.
- "The act of representing thought and action while drawing actually strengths children's later understanding of literacy and numeracy" (Wright, 2010, p. 7)

Recognising letters

Ben, it was great to work with you today. We had the magnetic board out with all the different letters. I suggested that you could show me how you spell your name. You were very confident at picking out the letters of your name. You showed me how your name starts with a big '...' and then you found the '.., .., .. and ..'.



Thanks for sharing with me Ben. I can see in your portfolio that you have been doing this at home too! I have also seen you write your name on the children's sign



in list too! What a great effort you made! Another useful place to write your name is on your artwork as this is a way to identify your work when it goes into the drying rack. I look forward to seeing you explore your writing in other areas of kindergarten.



Ben, today you came on your first exciting adventure on the Lollipops van. We went to see the amazing art exhibition by Lynley Dodd at the Art Galley. It was great that your wum could come along too.

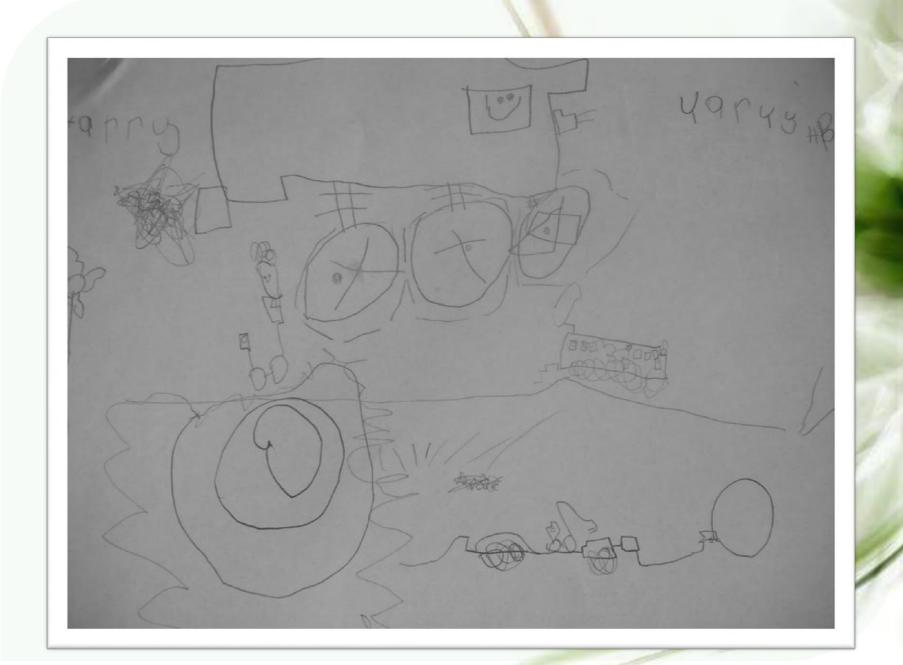
Ben, I have seen you develop some fantastic drawings lately and hope this visit will inspire your interest further.

The journey to the gallery was very exciting as we all travelled together in the van. Once we got the gallery we found a quiet space to read



one of the books by Lynley Dodd, this is a well known book that you relate to well Ben. I was impressed that you were able to help me with some of the names of the dogs in the story. Once we had finished sharing the story we took a look round at some of the very early illustrations by Lynley. Some of the pictures were created in pencil, charcoal and black ink. It was interesting to see how Hairy Maclary developed from a basic pencil drawing. Ben, you demonstrated your interpretation of Scarface Claw. I can see you have experimented with thin and fat lines to emphasise his fur standing up. I look forward to seeing more of your artistic creations.





The language of art

Drawing became a pathway for Ben to use a range of creative processes to communicate his ideas. He demonstrated fluency by illustrating different events within his scheme of drawing.

Elaborating on different objects by discussing in detail how the car moves across the page, into the paint factory

"Composing through art, like play, is a fundamental function of early cognitive, effective and social development. Through art, children actively construct understandings of themselves and their worlds, rather than simply becoming the passive recipients of knowledge" (Wright, 2010, p 7).



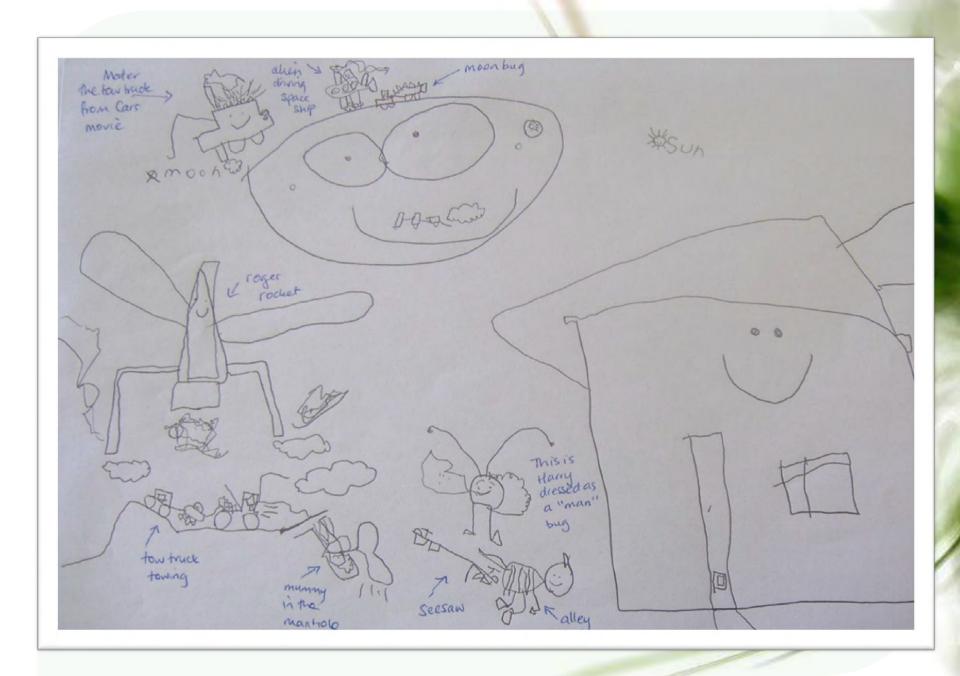
Building on interests and experiences

Teachers at kindergarten celebrated outside community experiences with the children and their families. This developed a rich source of information that can support and extend children's learning.

For example:

Ohakea Air Show family experience – "We went as a family to the Ohakea air show where H. saw lots of new and old

aircraft" said Mum.



It wasn't long before you joined some fences and it became serious work for 'Farmer Ben.' First the horses were put into the paddock. I noticed how you carefully placed them. Then they were let out. You said, "The farmer let them out." I ask, "Was it Farmer Ben?" You reply, "Yep." with a smile.



Then I noticed that you were beckoning me!
"Come on I'll show you. I saw the lady I was looking for. She is real." We peered through the window and I recognised who Ben had been looking for....it was Michelle. Problem solved.

I like how your sense of humour is developing Ben.

Ben, I have thoroughly enjoyed getting to know you and how diverse your imagination is. Your creative ideas and how you are able to use resources is amazing.

Initially you were very keen to show me a lady. You knew her face but couldn't remember her name as you had seen her inside.

Several times we peered through the window, trying to find her but gave up.

You then decided to explore the farm set on the veranda. You were quick to show me how the fences connected. I like how you were deep in concentration and noticed I how your tongue came out!

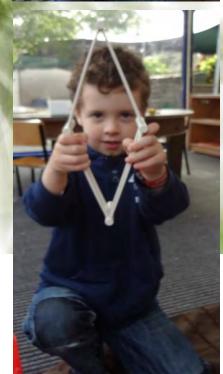
Elijah wanted to give to you a penguin stamp, including the footsteps on your arm. I got them as well. We were then told to blow them so as they would dry. That was great how you stopped your play so that Elijah could give you a stamp. What a caring friend you are.





I liked how inventive you were with the fences and you said to me, "Look Karen a diamond, a square." Perfect shapes. Kai pai.





01.03.12.

What's happening within this story:

- Adult's Role: here the role was to support Ben as he moved between learning expreiences and also questioning Ben to provide him with opportunities to share his knowledge and ideas in a playful way.
- Child's Thinking/Voice: throughout the learning experience Ben's voice is evident as he shares his ideas about his games and knowledge of farms and shapes with the teacher.
- Creative thinking skill: imaginative thought and sharing ideas.

- Link to multi-literacy tools: use of physical tools to encourage Ben's love of telling stories, dramatic play.
- Environment: teachers have used Ben's interests in animals to set up the environment and encouraged him to explore his love of drawing in a different way, storytelling.

Using play as a vehicle for their explorations, children selectively and frequently move from one mode to another to represent and re-present what they know most effectively. They may choose to draw it, or tell it, or show it through their bodies — or to combine these modes (Wright , 2010, p. 20).

As for Ben, he began to transfer his imaginative and fantasy ideas used in his drawings into dramatic play. Ben was able to enact his ideas and prior knowledge to create a story with the animals.

Child's experiences through conversation

Ben - "I didn't tell you the story about the zoo", then you preceded to tell me how you liked the Sun bears best at the zoo, and how "they don't eat honey, they eat pine cones, some bears don't eat pine cones, they eat honey". Later I talked to Mum, and she shared that family had gone to Wellington Zoo. Ben, I can tell from all that you shared with me, that you enjoyed the trip and all the different animals. Thanks for sharing with me about some of the animals that you saw.

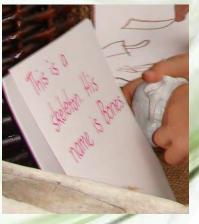
A SKELETON CALLED BONES





When I brought a hare skeleton to kindergarten. Ben was very keen to investigate the bones. We 'goggled' hare skeleton, finding and printing an image - just to check if the bones we were looking at were in fact a hare's bones. We all (Ben, other children and I) compared the real bones to those in the picture and thought about how the skeleton was made up. We thought about our own skeletons and bodies too, pressing at our bones and investigating the way we moved. I provided some other resources to provoke this thinking – a plastic human skeleton, a skeleton puzzle, a book and, later, some more bones and some xrays. Ben named the plastic skeleton 'Bones'. I love it!









I found some really fascinating skulls – we figured one was probably a cow, one a bull and one a pig. Ben had a go at drawing the cow's skull.

I'M LOVING THIS LEARNING!

I really love Ben's interest, sense of humour and ability to put his drawing skills to a new purpose. I also loved seeing Ben work with and alongside other children. Amie and Ben did the puzzle together and Thomas and Ben did a lot of investigating together.



Ben you are a STAR! From Linda February 2012

What's happening within this story:

- Teacher's role: co-inquire and investigate alongside Ben.
- Child's thinking/voice: Ben is beginning to gain understandings of being an inquirer and is becoming an investigator, through this he is learning new knowledge and skills yet is still exploring his passion of drawing.
- Creative thinking skill: imaginative thought.

- Link to Multi-literacy tools: ICT was intoduced to extend on knowledge and allow comparisons to be made and new understandings developed. Books were used to research and generate discussons between the group.
- Environment: The environment allowed Ben to switch between drawing his imaginative ideas and stories to using these skills to research and draw 'real life' representations. The use of stimulants (bones) as prompts supported Ben's interest and skills in drawing to be explored within a different topic 'skeletons and bones'.

Dinosaur habitat

Ben, you and Jack talked together and decided to go into the dinosaur habitat to explore the environment there. You had played together before and it was great to see you getting together again for a shared purpose. The space was set up in a really cool way, nets hanging over the top, logs and vegetation placed to look as though it was really growing there.

You were looking for some babies to match up with the adult dinosaurs and then you were using them to role play scenarios such as hunting an fighting.

You and Jack were sharing ideas and information about all the things you knew about dinosaurs such as what they were called and what they ate.

It was great to hear you both chattering away and being so involved in the imaginative world of these prehistoric creatures. I hope the two of you will get together to have fun sharing and learning again soon.

Lynaire







DIGITAL ART







William, Linda's son, came into kindergarten today to share some digital art with us. He had a tablet that he used a special pen on, which drew a picture onto the screen. Ben had a go at making a picture and this is what he created.

Conclusion

This research highlights how early childhood is a critical period for promoting creativity and creative thinking skills. By using a holistic approach teachers need to consider their role, the child's voice, environment and the multi-literacy tools to ensure children have developed life long skills that they can apply to any new situation or experience.

"The imagination is energetically deployed and reaches its peak in children's early years of life, however, it gradually declines as children grow older. But, imagination is precisely what is needed to keep us intellectually flexible and creative in modern societies" (Wright, 2010, p. 2)

References

Anttila, E, & Sansom, A. (2012). Movement, embodiment, and creativity: Perspectives on the value of dance in early childhood education. In O. Saracho (Ed.), Contemporary perspectives on research in creativity in early childhood education (pp. 179 – 204). America; Information Age Publishing, Inc.

Campbell, C. & Jobling, W. (Eds). (2012). Science in early childhood. New York: Cambridge University Press.

Carr, M. (2006). Learning dispositions and key competencies: a new curriculum continuity across the sectors, *Early Childhood Folio*, 10.

Claxton, G. (2002). *Building learning power.* Bristol, Great Britain: LO Limited.

Ministry of Education. (1996). *Te Whāriki: Early childhood curriculum.* Wellington: Learning Media.

Ministry of Education. (2007). *The New Zealand curriculum.* Wellington: Learning Media.

Robinson, K. (2009). *The element: How finding your passion changes everything.* Great Britain: Allen and Lane.

Robinson, K. (2001). *Out of our minds.* United Kingdom: Capstone Publishing Ltd.

Simister, C.J. (2007). *How to teach thinking and learning skills.* London: Paul Chapman Publishing.

Vygotsky, L.S. (1978). *Mind in society: The development of higher mental processes.* Cambridge, MA: Harvard University Press.

Wright, S. (2010). *Understanding creativity in early childhood. Mean-making and children's drawings.*London: Sage.