

# OBSERVING CREATIVITY IN BUSH KINDERGARTENS

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We acknowledge and pay respect to the traditional custodians of this land - to Elders past, present and emerging, for they hold the memories, the traditions, the culture and hopes of Aboriginal and Torres Strait Islander peoples across the nation

# Background to BK research

- 2015 – Researching science affordances in bush kindergartens
- 5 sites, 12 educators, 125 children (4-5 years old)
- Educators' perceptions – interviews

‘Children are more creative in bush kinder’

Research question:

How is creativity demonstrated in bush kinders?

# Prior Creativity research

- Schofield (1996) - Teaching problem solving strategies in context equipped students to produce more innovative solutions.
- Howard-Jones (2002) - creative thinking is enhanced when *attention is allowed to wander in a relaxed and uncompetitive environment*.
- Barak (2004) – creativity fostered by mind-mapping and brainstorming.
- Campbell, Webster and Jane (2004) -Creativity is assisted by :problem solving, taught in context, brain storming and mind mapping, incubation period between investigation and design of solution
- Sternberg (2007) – teacher - 12 keys for developing the creativity habit
- Kim (2011) - Found that creative thinking was declining in all age groups. An increasing emphasis on high-stakes, standardised testing was contributing to this.Focus on 'one right answer' assessment environment suppresses opportunity to engage in creative thinking.
- Cropley (2014) - open-ended , child-instigated tasks where a solution was not immediately apparent and multiple solutions were possible, enhanced creativity- for example children's play situations.

# Creativity definitions

- Csikszentmihalyi (1996) claims that the term 'creative' originally meant "to bring into existence something genuinely new that is valued enough to be added to culture".
- Sternberg and Lubert (1999) define creativity as the ability to produce work that is both novel (original, unexpected, imaginative) and appropriate (useful, adaptive concerning task constraints).
- Creativity is the GENERATION OF INNOVATIVE IDEAS for the construction of original products containing new concepts, new methods of arranging materials and new systems.
- 'big C creativity' refers to the highly creative person or the genius creator.
- little c creativity. -a person can modify or make "inventive decisions when faced with new or challenging contexts" (Haigh, p60). So, everyone is capable of creative thinking.

# Measuring creativity

- Adapting-Torrance Test for Creativity Factors.

8 factors can be tested for in both group and individual activities.

For example – paper plate activity



# Factors chosen

- *fluency*: the ability to produce a large number of ideas
- *flexibility*: the ability to produce a large variety of ideas
- *elaboration*: the ability to develop, embellish, or fill out an idea
- *originality*: the ability to produce ideas that are unusual, statistically infrequent, not banal or obvious.

Fluency: the ability to produce a large number of ideas



Flexibility: the ability to produce a large variety of ideas



Elaboration - the ability to develop, embellish, or fill out an idea



Originality - the ability to produce ideas that are unusual, statistically infrequent, not banal or obvious (and elaboration)



# Results of creativity research

Creativity factors

Site.....

Date.....

<p><i>fluency</i>: the ability to produce a large number of ideas</p> <p><b>3/65</b></p>	<p><i>flexibility</i>: the ability to produce a large variety of ideas</p> <p><b>5/65</b></p>
<p><i>elaboration</i>: the ability to develop, embellish, or fill out an idea</p> <p><b>36/65</b></p>	<p><i>originality</i>: the ability to produce ideas that are unusual, statistically infrequent, not banal or obvious</p> <p><b>19/65</b></p>

# Conclusion

- Children did display a large number of creative factors, both in groups and individually.
- Elaboration (35/65) was the most prominent factor demonstrated through play. Not unsurprising if you refer back to Haigh's (2013) 'little c' definition of creativity (a person can modify or make "inventive decisions when faced with new or challenging contexts
- Originality (19/65) – quite high, but difficult to make judgements.
- Fluency and flexibility – both quite low. Is this because children's experiences are limited? Research in primary and secondary schools indicate that front-loading with experiences and information can enhance creativity but is this applicable at pre-school?

# Sl 5-8 – sample photograph with explanation ie 4 vignettes

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