Bringing Back Nature to Children Through Play in Home Garden

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Unleashing the Power of Play
20th IPA Triennial World Conference September 13-16, 2017, Calgary, Alberta Canada

Oral Presentation Session: Children’s Perceptions of Outdoor & Nature Play

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Introduction

• Outdoor environments shape the children, physically, socially and emotionally.
• This study focuses on discussing children engagement with nature through their play setting in home garden.

○ We need to find many different ways to give nature back to all of our children.

○ How the environment shapes the children through direct and indirect experience in nature.
Introduction

Nature is..
- universal and timeless
- unpredictable
- bountiful
- beautiful
- alive with sounds
- create a multiple places
- real
- nourishes and heals

(Greenman, 2005)

NATURE rich in PLAY

ENGAGEMENT TO NATURE (As Direct Learning)

Cognitive
- Children to be more creative, thinking logic and problem solving
  (Malone and Tranter, 2003)

Social
- Cooperating, sharing, making friends, take turns, Nature stimulate enjoyment, fear and challenge
  (Kellert, 2002)

Physical
- Motor skills development improve their strength agility and endurance

Different types of environments indicate more creative forms and play by engaging with natural and green - including fantasy and pretend play (Louv, 2006)

Research has shown play at the early years of a child’s can contribute significantly to the child’s cognitive, social and emotional development.

Schemata
5 important types of schema: scenes, events, actions, persons and stories
(Howard, 1997)

Patterns of Play
Behaviors can be linked through schemas which child can generalize and use in different situations
(Bruce, 1996)

Affection
Recognition & Discovery
Positive feeling and and emotional attached to a place
(Chawla, 1999; Kellert, 2002)

Evaluation / Evaluative
Repetitive Engagement
Children are likely to repeat their visit to the place base on their experienced and psychological affection,
CHILD DEVELOPMENT ON NATURAL ENVIRONMENT

Adaptive
- Adaptation in environments. Eg: balance while walking, step on sand, grass, stones, muds or branches

Sensory perception
- Involved physical movements. Eg: seeing, hearing, feeling etc.

Aesthetic
- Being sensitive to beauty. Eg: scents, colours, textures

Sensorimotor
- Ability to show ideas, thoughts & feelings

Cognitive
- Mental understandings. Eg: size, shapes, causes & effects

Communication
- Interactions with friends: sharing, problem solving, caring etc.

Socioemotional
- When children involve with nature, know as “Ecological Communities” (Green Hearts Society, 2014)
Research problem

Limitation from parents that find it hard to allow their children get **MESSY EXPERIENCES** without realizing that sensory play is part contribute to children progressive behavior.

Children lose their **VALUE OF NATURAL ENVIRONMENT** as a playground which nowadays access to new technology and IT gadgets are mostly contributing to children behavior which limits their thinking creativeness and motor skill development.
Research Aim

To explore how children interact with nature through their play in home garden base on naturalist’s education
Objective

To examine how the children’s physical, social and cognitive performance stimulated by the outdoor environment that leads to Experiential Learning.

**DOES** the outdoor learning activities on home garden creates a balance between play and learn which enhances children’s motor skill, social interactions and cognitive performance?
Case study area

- 62, Kampung Gunung Pasir, 71550 Sri Menanti, Negeri Sembilan, Malaysia.
- A Malay village styled private home with a large private compound, a fishing pond, and a swimming pool amidst the backdrop of undulating hills and forests.
- Situated approximately 1hr 20 minutes from Kuala Lumpur City Centre or 1hr 30 minutes from KL International Airport KLIA.
Landscape Elements

Children experience in nature is classified into three categories:
• Direct
• Indirect
• Various experience (Kellert, 2002)

Example: Play pond/stream, Board walk, Fishing, Leaf pile, Logs, Plants shrubs etc.
Methodology

25 students of 2 different schools (urban and rural), aged 6-12 years were participated in the survey. The study focus on middle childhood children since this is the most critical period of child’s development as well the social-emotional and cognitive takes place.

Development of middle childhood children:
- period of engagement with nature which known as ‘child period earth’.

<table>
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<th>Age</th>
<th>Girls</th>
<th>Boys</th>
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<tr>
<td><strong>Total</strong></td>
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<table>
<thead>
<tr>
<th>Parameters</th>
<th>Children’s Development</th>
<th>Example</th>
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</thead>
<tbody>
<tr>
<td>Physical</td>
<td>Motor skills (Gross and fine motor skills) development</td>
<td>Physical coordination like balancing, climbing, run, jumping and grasp.</td>
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<tr>
<td>Cognitive</td>
<td>Retrieve information, solve new problems and cope with new situations</td>
<td>Understanding, memories, ideas, adaptive, emotion, attitudes, evaluation, preference, meaning, experience.</td>
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<tr>
<td>Social</td>
<td>Broaden their relationship with peers and adult around them</td>
<td>Discipline, chatting, negotiation, helping and cooperation.</td>
</tr>
</tbody>
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Methodology

DATA COLLECTION STRATEGIES

Mosaic Approach:
Using observations, drawings, photography, participatory (interviews)

(Allison C, 1999)
Result and Discussion (children’s drawings)

Environmental elements encountered in children’s drawings

1. Man made element
2. Natural element
3. Element for sociality
4. Climate element
One of the true joys of going outside with children is their unabashed \textit{sense of wonder} and contagious excitement over discovering something new.
Result and Discussion (children’s drawings)

Environmental elements encountered in children’s drawings

1. Man made element
2. Natural element
3. Element for sociality
4. Climate element
Result and Discussion

= Physical characteristics of children

- Sensory motor integration – a very well-prepared activity that stimulation a lot of Proprioception and Coordination, together with group of collaboration. Can see who has more body consciousness.
Exploring and Thinking

Age group: Middle Childhood
Setting: Rural area

Naily (9 years) was in Primary School. She asked her mum a question about how to measure the small vegetables. The mum suggested that she asked Sarah (12 years) because she knows more about the process. Sarah was able to answer her question, and the four children start playing with soil. She joined later with them by sharing the knowledge that she had learned from Sarah.

Reality: *Create opportunities for children to share their interests with each other and use as basis for learning*
Transplanting seedlings into larger growing areas.
• They start with a patch of organic soil and turn it into beautiful, growing beds of edible plants.
Husin (6 years) was so excited to harvest the “loofa” when his mum gave him instruction. By using more descriptive language, for instance, instead of saying “harvest loofa before it gets too big,” she might say “harvest loofa when it’s the size of your arm, from your elbow to your fingertip.”

Reality: Create opportunities for children to experiment with typoname from adults.
Activities affected by the physical of children’s everyday landscape element:

- **Psychoanalytic**
  - Therapeutic effect: release their emotions freely (Distressing)

- **Arousal**
  - Stimulation to learn about the surrounding

- **Metacommunicative**
  - Communication using language to describe events, make believe play

- **Cognitive**
  - Process of assimilation (when children learn new things. Children adjust their knowledge when they see new things And at the same time they creating ‘Equilibrium (balancing).

- **Size**
- **Texture**
- **Form**
- **Colour**
Video 1

Children from urban

Children from rural
Video 2

Segment on home garden activities featured on media on the 21\textsuperscript{st} March 2017
Thank you