

# Contents

4	Foreword
5	Preface
6	Acknowledgments
8	Executive Summary
10	Introduction
12	Method
13	Findings
14	Value For Children
18	Value For Adults
22	Discussion
26	Nature Play Category
36	Conclusion
37	References
40	Feedback / Case Studies Nature Based Play Designed and Constructed - Nature Playgrounds
51	Nature Play Definition Nature Based Play Intent, Objective and Design Elements

### **Foreword**

As designers working on Nature-Based Play spaces, we always consider various aspects and elements. Seeing our projects through the lens of an Occupational therapist such as Cath Fitzhardinge provides us with a tremendous opportunity for new growth while allowing us to see our projects differently.

The findings from this report align with our ethos and affirm the importance of effective nature-based play. This feedback from the four Primary Schools and two Early Learning Centres which we previously created playgrounds for, provides us with positive insight and real-world evidence.

Alongside a greater understanding of the impact naturebased playgrounds have on children, this project has further informed us about what supports the educational needs of young people and the adults delivering the education. We are incredibly grateful for the time and effort Cath has put into gathering and compiling this work. The countless hours she has given, combined with her insight into this space, has not gone unnoticed. Thank you for your curiosity and what you bring as a specialist in this field.

We extended our appreciation and thankfulness to the clients involved in this project. We are so glad we could design and create play spaces for the children in your care. Having your feedback contributes to our growth and will contribute to better playspaces for more children in the future.

Angus Moore Managing Director Nature Based Play



I contacted Nature Based Play as I was interested to learn more about how their thoughtfully designed and crafted nature play spaces supported positive health, wellbeing and child development outcomes.

As an Occupational Therapist with a particular interest in the interaction between a person, their occupation, and their environment, I could see many benefits to the installation of nature play environments in schools, early childhood centres and local community parks.

However, I could also see that some of these spaces were often not utilised to their full potential. I could see a potential that has such positive effects on the mental, physical, social and emotional wellbeing of not only the children but also the educators, parents, caregivers and community who interact with the nature play spaces.

I was also aware that access to natural environments for many children, particularly those living in urban environments, is decreasing and wondered how manufactured nature play spaces were potentially "filling the gap" for children who otherwise would have very little to no interaction with the natural environment.

I'd like to thank Nature Based Play and the six participating sites for their willingness to participate in this anecdotal research project. I hope you enjoy learning more about how nature play spaces can support health, wellbeing and child development and how these spaces can be utilised to their full potential.

Cath Fitzhardinge
Occupational Therapist





# Acknowledgments

We acknowledge the traditional owners of the land on which we live and learn; the Whadjuk people of the Noongar nation. We pay our respects to Elders past and present, and thank them for caring for this land. We would like to extend that respect and thanks to all Aboriginal and Torres Strait Islander peoples today.

This research project intent was to evaluate six nature play spaces that were designed and constructed by Nature Based Play in order to gather feedback on how the spaces have been utilised and the impact of the spaces on children's play and development.

#### **Researchers and Authors**

Cath Fitzhardinge, Occupational Therapist - CathFitz OT Sarah Gautrey, *former* Sustainability Manager - Nature Based Play.

### **Editor and Graphic Designer**

Sara Polanski

### **Photography**

Amanda Miller Hilton Primary School
Christian Fletcher Gallery Munro Does Photos
Daniela Tommasi Nature Based Play
Endeavour Primary School

#### **Participating Schools and Early Childhood Centres**

Bright Sparks Early Learning Centre **Gosnells**Endeavour Schools **Port Kennedy**Horizons Childhood Learning Centre **South Fremantle**Mater Christi Catholic Primary School **Yangebup**Mosman Park School for Deaf Children **Mosman Park**Southern Grove Primary School **Southern Grove** 

# **Executive Summary**

Contact with the natural world (through active interaction or even passive contemplation) can affect human health and wellbeing in countless positive ways (Maller et al., 2009, Dankiw, 2020). Increasing evidence suggests that access to nature and green space provides children with numerous cognitive, social, emotional, and physical benefits.

These benefits include increased ability to concentrate, improved academic performance, better motor coordination, reduced stress and aggression levels, reduced risk of obesity, increased social interaction with adults and other children, and improved social skills (Strife & Downey, 2009; Maller et al., 2009; Dankiw, 2020).

For children, engaging in nature can also support creativity and problem-solving. Studies of children in schoolyards found that children engage in more creative forms of play in green areas and also play more cooperatively (Kellert 2005). Imagination, creativity and dramatic play are important aspects of child development as they help children gain understanding of the world around them by allowing them to evolve complex thinking skills, emotional intelligence and social skills (Dankiw, 2020).

Encounters in nature with plants and animals can also help children to learn qualities such as empathy and compassion and to develop a sense of awe and wonder (Louv, 2005).

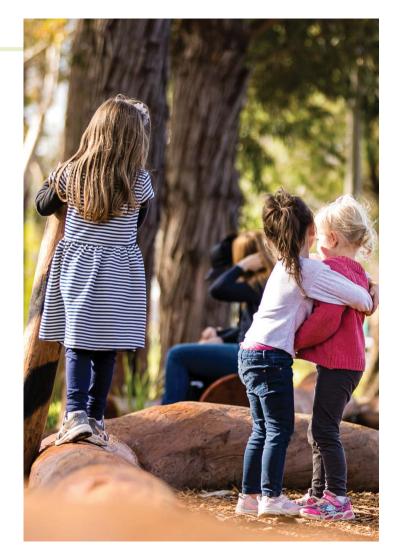
The growing awareness of the benefits of children's connection with nature highlights the importance of accessibility to it. Urban infill, increasing population, and higher density living make access to natural places harder to achieve (Maller et al., 2009). Decreased access to nature and increased time indoors have sparked concerns regarding children's diminishing direct contact with nature (Louv, 2005).

Anecdotal feedback indicates that children (living in urban environments) often only have access to nature play by accessing nature play spaces at their educational centres or local parks.

To achieve the benefits of connection to nature (as outlined above), Nature Based Play (NBP) strives to replicate, as close as possible, nature spaces that look and feel like natural landscapes, with integrated playable and learning elements.

Establishing well-designed nature play spaces in schools, Early Learning Centres (ELCs), and public parks improves children's access to natural environments and play experiences that reflect the enjoyment and experience of exploring and playing in nature that they may not otherwise experience in everyday life.

NBP's philosophy of "serving the needs of children" is embodied by a continuing effort to create 'organic' playable nature spaces that prioritise children's play experience and support the positive health, wellbeing and development outcomes that these nature spaces inspire.



### Introduction

With over 20 years of experience, NBP has designed and created many different nature play spaces for schools and ELCs. Nature play spaces are essentially playable landscapes with a diverse range of varying nature play elements that combine to provide accessible and enhanced play experiences for children of all ages and abilities.

The term "Nature Play" can be considered along a nature continuum. Organic nature playgrounds sit towards the "nature" end of the continuum, such as local natural bushland, rivers and the beach. At the developed end of the continuum are manufactured spaces and more conventional play equipment with some aspects of "nature" incorporated into the space. There is more potential for children to find, shape and change their environment, and children's play in these areas is more unstructured, self-directed and self-initiated (Gundersen et al., 2016).

NBP nature play spaces have an undeniable organic style designed to reflect and replicate nature (as closely as possible) in a built and landscaped environment. We do this to create nature play spaces that provide natural, sensory, creative, challenging, accessible and diverse play experiences

for children of all ages. Nature play, at any level on the continuum, can promote a child's sense of inventiveness, creativity, management of risk, and savouring of the possibility of discovery and excitement (Sahlberg & Doyle, 2019).

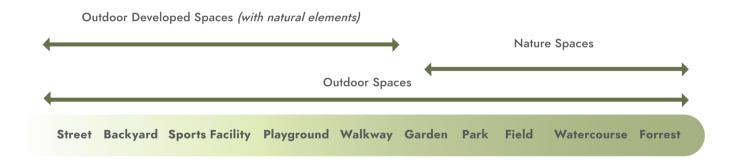
In 2021, a Play Australia discussion on "Nature Play – What it is and What it isn't" by Mary Jeavons (Jeavons Landscape Architecture) and Fiona Robbe (Fiona Robbe Landscape Architects) referred to this continuum. They also defined "Nature Play" as being characterised by five features:

- · Being outdoors
- Providing loose and manipulable materials
- Integrating living things made from materials sourced from nature
- · Allowing for decision-making and
- Autonomy

It is essential that nature-based spaces are designed to maximise the play opportunities and benefits for children.

NBP always strives to integrate these elements in their rawest form to provide challenging and creative spaces that children can explore and enjoy.

# Play Environment Along The Nature Continuum With Examples Of Typical Outdoor Spaces Nearby Home.



V. Gundersen et al. / Urban Forestry and Urban Greening 17 (2016) 116-115

### Method

To further understand and improve nature play opportunities for children, NBP conducted anecdotal research with Occupational Therapist Cath Fitzhardinge.

The research aimed to see what NBP's style of design inspired - in terms of play value, diverse play experiences and positive child development outcomes. A greater understanding of this was determined through gathering feedback on how NBP's nature play spaces have been utilised and their impact on children's play and development.

Six sites, including four Schools and two Early Learning Centres, agreed to be involved in the anecdotal research.

- Bright Sparks Early Learning Centre
- Endeavour Schools
- Horizons Childhood Learning Centre
- Mater Christi Catholic Primary School
- Mosman Park Deaf School
- Southern Grove Primary School

Informal interviews were conducted by Cath Fitzhardinge (OT) onsite with Educators and children (where possible). Interview questions included:

- 1. What were you trying to achieve overall for your school community by incorporating Nature Based Play?
- 2. Observing, and talking to the children, what are the three most enjoyed nature play elements within your playground?
- 3. What have been your overall observations of the children's interaction with the nature play space?
- 4. Have you observed any difference in the student's general behaviour during or after daily access to the nature play space?
- 5. Have you utilised the nature play space as an outdoor classroom?
- 6. Were there challenges introducing nature play?

The anecdotal feedback collected can be divided into two categories: Value for Children *(child factors)* & Value for Adults *(adult factors)*.

The child factors include direct feedback from the children, e.g., "what is your favourite..."; observed play experiences within the nature play space; and how these experiences relate to child development and learning.

The adult factors include: how adults view the nature play space and how it works in regards to their goals for the space, , e.g., to promote connection to nature and child development; any logistical considerations, i.e., cost, maintenance, safety etc.; and their own experience of being in the space.

For a detailed record of the responses, please refer to section **Feedback/Case Studies** pages 40-51. Some of the responses are also summarised in the following section.





### Play Value or "Favourite things."

The organic water play elements were highlighted as the most enjoyed and utilised nature play element for all surveyed spaces.

"The children love the waterplay, they work as a team to dam the troughs and at the end of recess their aim is to break the dam and allow the water to flow as far as possible - there is a marker at the current record!"

- Endeavour Schools

"Using loose parts in the water play, e.g., fig leaves for boats, plates, spoons, potions - in the carved wooden logs."- Mosman Park School for the Deaf.

Other outstanding nature play elements included swing ropes, forts and loose parts."The water play/mud kitchen, and climbing structures/fort (the kids love to get up high), and the circular swing - which we requested for sensory input." - Bright Sparks ELC.

Some individual elements provide a range of play experiences and developmental outcomes. Such as the vestibular motion swing that is "Popular with the kids and also provides learning opportunities to be patient and take turns"- Horizons Childhood Learning Centre.

### Play and Learning Experiences

A wide variety of play experiences were enjoyed and valued as a positive for children. "Good engagement of students with water play. Older girls have set up day spas, irrigation systems or dams"

- Southern Grove Primary School.

Opportunity for outdoor learning was provided through various nature play designs and elements. Mosman Park School for the Deaf often incorporates learning into the nature play space, e.g. "bringing dinosaurs out into the space, using the space as the setting for the Gruffalo."

"The children seem to be more 'in charge of their play' and we observe a lot more imaginative play, e.g., shops, mud pies, and 'the woodchips are lava" - Bright Sparks ELC.

By installing the nature play space Bright Sparks ELC were "wanting to encourage multi-age use of the space, for kids to get "back to nature", and have challenges in surfaces, levels etc".

# Value for Children

"Occasionally, we use the space to encourage weight bearing, heavy loads and proprioception for children with sensory needs".

- Mater Christi Primary School.

"One of the goals was to allow older children a quiet space to sit and chat during breaks without others running or climbing over the space."

- Endeavour Schools

#### **Childhood Development and Educational Outcomes**

Educators observed several developmental outcomes due to the newly installed nature play space. Positive outcomes for children with diverse needs and/or behavioural difficulties via nature play elements were highlighted, e.g., children sought out water play as a calming/sensory activity.

"Being hearing impaired, the majority of class time is visually based. We find that students can be visually overstimulated. By coming outside, we often see kids sitting quietly and staring up through the dappled light of the trees/leaves" - Mosman Park School for the Deaf.

"Occasionally the outdoor space can be used as an opportunity to help children settle if they are upset or demonstrating difficult behaviours."

- Horizons ELC.

"The space is very inclusive, often encouraging kids to work together. The sensory stimulation of the visual and kinesthetic learning adds a different experience for the students e.g., water play, garden beds, using grown herbs in cooking."

- Mosman Park School for the Deaf.

"It is a great opportunity for staff to observe developmental play stages, problem-solving and teamwork skills and often creates excellent tangible teaching opportunities around these." - Southern Grove Primary School.

Please refer to **Feedback/Case Studies** or a detailed breakdown of nature play elements, resultant play experiences and associated developmental outcomes for children.





### Reason For Nature Play Space or Concerns Regarding Previously Existing Play Spaces

Responses included limited play opportunities in the previous play space, the need for lots of equipment, e.g. bikes, to be placed in the space every day and children "fighting" over who got to ride the bikes. Wasted or unused space was seen as a potential for more engaging play areas.

#### **Centre Benefits**

All responders agreed that the nature play space was good value for money and provided good outcomes for the children. The nature play space and amenity were a definite asset to the ELCs in terms of parents choosing the centres for the access to well-designed nature play spaces and its connection to the Centre's philosophy of the environment as "the third teacher".

"We have had families enrol here saying they had seen the outside play area and were keen for their children to access this". - Bright Sparks ELC "Our outdoor play space is a massive selling point when we take prospective families on tours of the centre"

- Horizons CLC

Collaborative design processes identified the needs of the Centre, the issues they needed to overcome, and what play experiences they wanted to include.

"The design was well thought out with good vision, they (NBP) get kids and get what they want to do!"

- Southern Grove Primary School

"Good communication with client and staff and also with the kids during the build process."

- Endeavour Schools

"Concept master plan, with staged options for building and budgets a good option."

- Bright Sparks ELC

# Value for Adults

#### **Educator Benefits**

Nature play spaces were also used as "outdoor classrooms", with provocations and activities set up in the space.

"Kids love this area as an outdoor classroom and stage."

- Endeavour Schools

The staff also appreciate the nature play areas and describe them as pleasant spaces that allow staff to get out of stuffy classrooms and breath in the fresh air.

"The nature spaces also invite staff to participate in play, e.g., stand and stretch while hanging on the ropes, help set up the dam or leaf shops."

- Mosman Park School for the Deaf

Responders noted positive changes in behaviours in the new space, for example:

"We've noticed a big change in behaviour, previously the kids relied on educators putting toys out for them to play with (often fights over toys), now we rarely need to put the toys out." - Bright Sparks ELC

"We have minimal behavioural problems during recess and lunch because everyone is engaged."

- Southern Grove Primary School

### **Identified Challenges After Initial Installation**

Educators occasionally reported some challenges introducing nature play and loose parts play. Explicit teaching and coaching were required for the children to know how to utilise the space and the loose parts safely.

"Some Loose parts were not being used appropriately (, e.g., cubby sticks) and were subsequently removed from space."

- Mater Christi

"Some ongoing supervision issues depending on the 'rules' of the individual teachers around particular types of play behaviours, e.g., playing with sticks."

- Endeavour Schools

"Some initial issues with different age groups using the space, but over time all age groups can coexist together in the space." - Bright Sparks ELC

"Some parents and children were a bit wary about getting dirty/wet/hurt, and we had some small injuries in the beginning (e.g., grazed knees) however, this usually improved with explanations and children becoming more familiar with the space."

- Horizons ELC



## Discussion

The United Nations High Commission for Human Rights values the importance of play so highly that it has been recognised as a right for every child to "relax, play and to join in a wide range of leisure activities" (Article 31, The United Nations Convention on the Rights of The Child).

Play is a child's predominant occupation. Although "playing" may look like a simple activity that children engage in when they are "not learning, eating or sleeping", so much more is happening in their little bodies and brains. Play develops children's brains and builds active bodies. It allows children to use their creativity and imagination while developing their physical, cognitive, social and emotional capabilities. Play, both intellectual and physical, is critical for a child's healthy growth and learning (Sahlberg & Doyle, 2019).

Neuroscience studies in recent years have also tied play in childhood to the development and proper functioning of the brain. Play has also shown direct and indirect effects on brain structure and functioning; "Play is not frivolous; it is brain building" (Yogman et al., 2018).

Active free play outdoors [nature play] is a kind of play that promotes healthy sensory and motor development in children. In nature, children learn to take risks, overcome fears, make new friends, regulate emotions, and create imaginary worlds

(Hanscom, 2016). The outdoors awakens rejuvenates the mind, and engages all the senses at once (Hanscom, 2016)

.

So, we know a lot is going on in the bodies and brains of children (and adults) whilst they play. By engaging in the meaningful occupation of play, a myriad of neural pathways are being laid down, i.e., learning happens all the time during play. When children engage in play, they also interact with the play environment. The interaction between the child and the environment positively or negatively influences their play. Nature's unending openness invites the child to use their imagination and engage in more self-directed play. In contrast, a more closed or conventional piece of play equipment may limit the play opportunities, e.g. a slide.

When there is a person-environment fit in supporting the valued occupation (i.e. play), success in occupational performance eventually leads to participation and well-being. This type of interaction can be seen more simply in the Person-Environment-Occupation-Performance Model (PEOP) (Baum, Christiansen & Bass 2015).

The PEOP Model can be applied when considering and evaluating the efficacy of nature spaces and the positive effect that these spaces can have on a child's overall health and well-being.

#### Person-Environment-Occupation-Performance (PEOP) Model

#### **PHYSIOLOGICAL**

sleep, nutrition, strength, inactivity, mobility

#### **COGNITIVE**

attention, memory, reasoning

#### **NEUROBEHAVIOURAL**

motor and sensory systems balance, coordination, proprioception

#### **PSYCHOLOGICAL**

self-esteem, mental health, motivation

# SPIRITUAL beliefs



#### SOCIAL SUPPORT

practical & emotional support from family, friends, school

#### SOCIAL & ECONOMIC SYSTEMS

affecting access to nature play and opportunities

#### NATURAL ENVIRONMENT

access to nature, climate

#### **CULTURE & VALUES**

traditions, does family value play

# BUILT ENVIRONMENT & TECHNOLOGY

universal access

## Discussion

Each child is unique and will interact with the same environment differently. NBP groups their designs and elements into the nine nature play categories: Water, Loose Parts, Nature Discovery, Cultural Learning, Active (*Physical*), Rope, Musical and Sensory, Themed and Secretive Play.

In this case, the **Environment** (NBP's Nine Nature Play categories and the elements are incorporated into the following categories). The Occupation (Play Types & Experiences); The Performance (the child's engagement in play types); and The Person (the child) all interacts and combines to influence the child's Occupational Performance & Participation (Child Development Outcomes).

To categorise the play experiences, we have used the Tool for Observing Play Outdoors (*TOPO*) Loebach, 2020, a new typology of outdoor play that represents a significant advancement in the ability to fully and effectively study and plan outdoor play environments. It also provides more diverse, high-quality play settings that will support the healthy development of children (*Loebach*, 2020).

It categorises outdoor play into nine different Play Types with related subtypes: Physical, Exploratory, Imaginative, Expressive, Digital, Restorative, Bio, Non-play and Play with Rules.

A child's physiological, psychological, motor, sensory/perceptual, cognitive, neuro-behavioural, and spiritual components are then related to the play experiences to demonstrate Occupational Performance or Child Development that's happening when they're engaging with the nature play elements and spaces.

Some of the many positive child development outcomes that can be related to enhanced nature play and discovery are listed below:

- Connection to Nature and Environmental Stewardship
- · Educational Opportunities
- · Emotional Regulation and Mental Health
- Eye Hand Coordination
- · Fine Motor Skills and Gross Motor Skills or Strength
- · Balance or Vestibular System and Proprioception
- · Selective Attention and Procedural memory
- · Initiation or Termination
- · Problem Solving or Reasoning
- · Restorative Play or Rest or Retreat
- · Sensory Integration
- · Visual Perception or Scanning
- · Social Interaction
- · Spiritual Connection or Sense of Awe and Wonder
- · Imagination or Creativity



WATER PLAY: Interacting, enjoying and shaping water.

#### **NATURE BASED PLAY ELEMENTS**

Timber Troughs; Carved Water Rocks, Logs, and Stumps; Natural Streams and Water Stream Connections.

Balance / Vestibular System		Mental Health	/
Connection to Nature	/	Problem Solving / Reasoning	/
Educational Opportunities	/	Proprioception	
Emotional Regulation	/	Restorative Play / Rest / Retreat	/
Environmental Stewardship	/	Selective Attention & Procedural memory	/
Eye Hand Coordination	/	Sensory Integration	/
Fine Motor Skills	/	Social Interaction	/
Gross motor / Strength		Spiritual connection / Sense of Awe / Wonder	/
Imagination / Creativity	/	Visual Perception/Scanning	/
Initiation / Termination	/		



LOOSE PARTS PLAY: Interactive and creative play.

#### **NATURE BASED PLAY ELEMENTS**

**Playgrounds Loose Parts:** Combination of natural and upcycled loose parts of different types and items, including larger and medium sized portable and movable natural items.

**Playtime Loose Parts:** Smaller natural and upcycled pieces that allow children learning and sensory experiences.

Balance/Vestibular System		Mental Health	
Connection to Nature	/	Problem Solving / Reasoning	/
Educational Opportunities	/	Proprioception	
Emotional Regulation	<b>/</b>	Restorative Play / Rest / Retreat	/
Environmental Stewardship	/	Selective Attention & Procedural memory	<b>/</b>
Eye Hand Coordination	<b>/</b>	Sensory Integration	/
Fine Motor Skills	/	Social Interaction	/
Gross motor / Strength	<b>/</b>	Spiritual connection/Sense of Awe /Wonder	/
Imagination/Creativity	/	Visual Perception/Scanning	/
Initiation / Termination	/		

<sup>\*</sup>Physiological, cognitive, neurobehavioural, psychological, spiritual etc. N.B These lists are not exhaustive

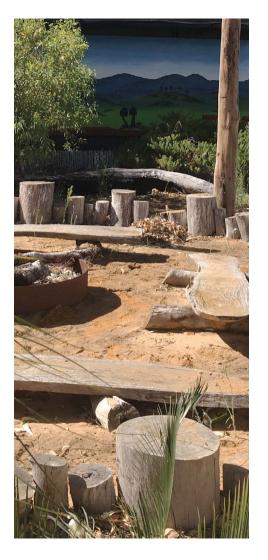
NATURE DISCOVERY PLAY: Exploring and interacting with nature.

#### **NATURE BASED PLAY ELEMENTS**

**Natural landscapes:** Ground Logs and Rocks; Natural Habitats; Mounds and Swales; Natural Streams; Raw Natural Timbers; Natural Plantings; Loose Parts.

**Outdoor Areas:** Outdoor Classrooms; Yarning Circles; Natural Sitting areas; Buddy Benches; Timber seats and Tables; Fire Pits.

Balance/Vestibular System	/	Mental Health	/
Connection to Nature	/	Problem Solving / Reasoning	/
Educational Opportunities	/	Proprioception	/
Emotional Regulation	/	Restorative Play / Rest / Retreat	/
Environmental Stewardship	/	Selective Attention & Procedural memory	/
Eye Hand Coordination	/	Sensory Integration	/
Fine Motor Skills	/	Social Interaction	/
Gross motor / Strength	/	Spiritual connection/Sense of Awe /Wonder	/
Imagination/Creativity	/	Visual Perception/Scanning	/
Initiation / Termination	/		



CULTURAL LEARNING AND PLAY: Learning and interacting with culture.

#### **NATURE BASED PLAY ELEMENTS**

**Indigenous Items:** Yarning Circle; Mia Mia; Campsite; Grinding Stone; Bush Tucker Trails; Scarred Trees

**Indigenous artwork:** Six Seasons table; Totems; Carvings; Animal representations.

Local story artwork: Local Heritage; Signage, Carvings and Stories.

#### **CHILD DEVELOPMENT OUTCOMES\***

Balance / Vestibular System

Mental Health

Connection to Nature

Educational Opportunities

Emotional Regulation

Emotional Regulation

Connection to Nature

/ Problem Solving / Reasoning

/ Proprioception

/ Restorative Play / Rest / Retreat

/ Selective Attention & Procedural memory

/ Eye Hand Coordination

Sensory Integration

/ Social Interaction

/ Gross motor / Strength

Imagination / Creativity

Mental Health

/ Problem Solving / Reasoning



<sup>\*</sup>Physiological, cognitive, neurobehavioural, psychological, spiritual etc. N.B These lists are not exhaustive

ROPE PLAY: Tactile, strength and physical play.

#### **NATURE BASED PLAY ELEMENTS**

Rope Bridges; Balancing Ropes; Ground Ropes; Loose Rope.

#### **CHILD DEVELOPMENT OUTCOMES\***

Balance / Vestibular System

Connection to Nature

Educational Opportunities

Environmental Stewardship

Eye Hand Coordination

Fine Motor Skills

Gross motor / Strength
Imagination / Creativity

Initiation / Termination

/ Mental Health

✓ Proprioception

Problem Solving / Reasoning

Restorative Play / Rest / Retrea

✓ Selective Attention & Procedural memory

✓ Sensory Integration

✓ Social Interaction

Spiritual connection / Sense of Awe / Wonder

Visual Perception/Scanning



<sup>\*</sup>Physiological, cognitive, neurobehavioural, psychological, spiritual etc. N.B These lists are not exhaustive

ACTIVE (PHYSICAL) PLAY: Challenging, risky and physical play.

#### **NATURE BASED PLAY ELEMENTS**

Climbers: Log Climbers, Rope Climbing; Tumble Down Fort.

Swings: Vestibular Swing; Tree Swings.

**Balancing:** Balancing Nest; Rope Balancing and Sway Bridge; Balancing Serpents;

Balancing Logs and Steppers; Timber Ladders and Steps.

### Running / Crawling / Sliding:

Large Timber Tunnels; Slides; Mounds and Swales.

Balance / Vestibular System	/	Mental Health	
Connection to Nature	/	Problem Solving / Reasoning	/
Educational Opportunities	/	Proprioception	/
Emotional Regulation	/	Restorative Play / Rest / Retreat	
Environmental Stewardship	/	Selective Attention & Procedural memory	/
Eye Hand Coordination	/	Sensory Integration	/
Fine Motor Skills		Social Interaction	/
Gross motor / Strength	/	Spiritual connection/Sense of Awe /Wonder	/
Imagination/Creativity	/	Visual Perception/Scanning	/
Initiation / Termination			

<sup>\*</sup>Physiological, cognitive, neurobehavioural, psychological, spiritual etc. N.B These lists are not exhaustive

THEMED PLAY: Role playing and enchantment

#### **NATURE BASED PLAY ELEMENTS**

Outdoor Furniture: Fairy Bridge; Mud Kitchens; Shop Fronts;

Themed Play Structures: Boat POD; Tumble Down Fort; Wood henge Forts;

Carved canoe; Log Tower / Lighthouse; Tree Houses; Stick Hut (Stage)

Artistic Themed Items: Animal & Totem Artworks; Log carvings of animals / people;

Balance / Vestibular System		Mental Health	/
Connection to Nature	/	Problem Solving / Reasoning	/
Educational Opportunities	/	Proprioception	
Emotional Regulation	/	Restorative Play / Rest / Retreat	
Environmental Stewardship	/	Selective Attention & Procedural memory	
Eye Hand Coordination	/	Sensory Integration	
Fine Motor Skills	/	Social Interaction	/
Gross motor / Strength		Spiritual connection / Sense of Awe / Wonder	/
Imagination / Creativity	/	Visual Perception / Scanning	
Initiation / Termination	/		



**SECRETIVE PLAY:** Hideaways and escapes

#### **NATURE BASED PLAY ELEMENTS**

Cubbies: Classic Cubby; Stick Hut; Lean-To Cubby; Loose Parts Cubby Sticks;

**Natural:** Timber Tunnels; Hideaway trails; Natural Planting Nooks and Shelters; Timber Screens

Balance / Vestibular System		Mental Health	/
Connection to Nature	/	Problem Solving / Reasoning	
Educational Opportunities	/	Proprioception	/
Emotional Regulation	/	Restorative Play / Rest / Retreat	/
Environmental Stewardship	/	Selective Attention & Procedural memory	/
Eye Hand Coordination	/	Sensory Integration	/
Fine Motor Skills	/	Social Interaction	/
Gross motor / Strength		Spiritual connection / Sense of Awe / Wonder	/
Imagination/ Creativity	/	Visual Perception/Scanning	/
Initiation / Termination	/		

<sup>\*</sup>Physiological, cognitive, neurobehavioural, psychological, spiritual etc. N.B These lists are not exhaustive

MUSICAL AND SENSORY PLAY: Tactile and sensory learning.

#### **NATURE BASED PLAY ELEMENTS**

#### **Outdoor Furniture:**

Fairy Bridge; Mud Kitchens; Shop Fronts.

### **Themed Play Structures:**

Forts; Towers; Treehouses; Huts and Cubbies; Rafts and Canoes.

Artistic Themed Items: Animal & Totem Artworks; Log Carvings Of Animals/People.

Balance / Vestibular System		Mental Health	/
Connection to Nature	/	Problem Solving / Reasoning	/
Educational Opportunities	/	Proprioception	
Emotional Regulation	/	Restorative Play / Rest / Retreat	/
Environmental Stewardship	/	Selective Attention & Procedural memory	/
Eye Hand Coordination	/	Sensory Integration	/
Fine Motor Skills	/	Social Interaction	/
Gross motor / Strength		Spiritual connection / Sense of Awe / Wonder	/
Imagination / Creativity		Visual Perception / Scanning	/
Initiation / Termination	/		





## Conclusion

Access to discoverable and active play in nature — with its wonder and risks — is essential for healthy child development. When children are outside, they move more, sit less, and play longer. Children are more curious about and interested in natural spaces than prefabricated structures (*Tremblay et al.*, 2015 & Sahlberg & Doyle, 2019).

In order to provide meaningful nature play opportunities for children (and adults) living in urban environments, it is essential to design accessible nature play spaces that replicate nature, and its play experiences, as close as possible. Nature play spaces that incorporate natural elements, are minimally structured, and include a lot of loose parts, encourage more self-directed and child led play.

This further facilitates socialisation with peers, the community and the environment, builds interpersonal skills and facilitates healthy development (*Tremblay et al.*, 2015).

Nature play elements such as water play and loose parts play, tick all the boxes when it comes to nature play experiences and child development, offering a diverse and high value range of experiences and outcomes. Well-designed nature play spaces integrated within Schools, Early Learning Centres, Community Centres and Local Parks, provide nature-based play opportunities for children who may not otherwise have regular or in fact, any access to nature.

Consideration must also be given to a child's ability to access and interact with the environment, which is often governed by the educator or caregiver. It is all well and good to have an amazing nature play space available, however if the "rules" prevent the full intended use of the space (, e.g., children are not permitted to play with sticks to build leantos/cubbies), then the potential for self-directed child-led play is impeded and the design intent of the space is lost.

Understanding the countless benefits of nature play (as described) may empower educators and parents to support children to use nature play spaces (as well as nearby natural environments) to their full potential.

There has never been a more important time for children to be accessing nature, for all the major health and wellbeing benefits. It is imperative that children and families are supported to have ongoing access to natural environments, and well-designed nature-based spaces, within their local communities.

Optimising the potential benefits of these nature play spaces is a challenge; advocacy and education around the connection between nature play and health and wellbeing, including more consultation and education with children and their "grown ups" may promote the value of nature play and, in turn, improve the health and wellbeing of our children.

#### References

Baum, C. M., Christiansen, C. H., & Bass, J. D. (2015). The Person-Environment-Occupation- Performance (PEOP) model. In C. H. Christiansen, C. M. Baum, & J. D. Bass (Eds.), Occupational therapy: Performance, participation, and well-being (4th ed., pp. 49-56). Thorofare, NJ: SLACK Incorporated.

Dankiw, KA., Tsiros, MD., Baldock, KL., Kumar, S. (2020) The impacts of unstructured nature play on health in early childhood development: A systematic review.

Gundersen, V., Skar, M., O'Brien, L., Wold, L., & Follo, G. (2016). Children and nearby nature: A nationwide parental survey from Norway. Urban Forestry and Urban Greening.

Hanscom, A. Balanced and Barefoot: How unrestricted outdoor play makes for strong, confident and capable children. Oakland, CA: New Harbinger Publications; 2016.

Jeavons, M. & Robbe, F. (2021). A Play Australia Online Learning Series Conversation: "Nature Play: What it is & what it isn't."

Kellert, SR. Building for life: Designing and understanding the human-nature connection. Washington, DC: Island Press; 2005.

Loebach, J., Cox, A., (2020). Tool for Observing Play Outdoors (TOPO): A new typology for capturing children's play behaviours in outdoor environments. International Journal of Environmental Research and Public Health, 17(15)

Louv, R. Last child in the woods: Saving our children from nature-deficit disorder. Chapel Hill, NC: Algonquin; 2005.

Maller, C., Townsend, M., St Leger, L., Henderson-Wilson, C., Pryor, A., Prosser, L., & Moore, M. (2009). Healthy Parks, Healthy People: The Health Benefits of Contact with Nature in a Park Context. The George Wright Forum, 26(2), 51-83.

Sahlberg, P., & Doyle, W. Let the Children Play: How more play will save our schools and help children thrive. New York: Oxford University Press; 2019.

Strfe, S., & Downey, L. (2009). Childhood Development and Access to Nature: A New Direction for Environmental Inequality Research. Organization & environment, 22 (1), 99–122.

Tremblay, M., Gray, C., Babcock, S., Barnes, J., Bradstreet, C., Carr, D., Chabot, G., Choquette, L., Chorney, D., Collyer, C., Herrington, S., Janson, K., Janssen, I., Larouche, R., Pickett, W., Power, M., Sandseter, E., Beate, H., Simon, B., & Brussoni, M. (2015). Position Statement on Active Outdoor Play. International Journal of Environmental Research and Public Health. 12 (6).

Yogman, M., Garner, A., Hutchinson, J., Hirsh-Pasek, K., Golinkoff, R.M., Baum, R., Gambon, T., Lavin, A., Mattson, G., Wissow, L. (2018) The Power of Play: A Pediatric Role in Enhancing Development in Young Children. Pediatrics, 1

#### **SOUTHERN GROVE PRIMARY SCHOOL**

## By incorporating NBP, what were you trying to achieve overall for your school community?

Worked in previous schools with Nature Play, sensory exploration, water play, mud kitchens, gross motor. Noticed students weren't taking risks.

## Observing, and talking to, the children, what are the three most enjoyed nature play elements within your playground?

Water play - includes mud kitchens (in carved wood), river, building dams. The School requested an added swing rope and it is used every day (a cushion has been hung over the rope for comfort). Often the kids don't want to go inside!!

## What has been your overall observations of the kids' interaction of the NBP space?

Minimal behavioural problems because everyone is engaged, good engagement of older students with the water play, older girls have set up "day spas", irrigation systems/dams. By adding new loose parts, materials as provocations the play changes each time and sparks new ideas/games.

# Have you observed a high level of co-operative and collaborative play with the kids moving items and constructing play structures (Loose parts play)?

Yes, it is a great opportunity for staff to observe developmental play stages, problem solving and team work skills. Often creates excellent tangible teaching opportunities around these.

## Have you utilised the space as an outdoor classroom, what have your outdoor learning experiences been for teachers and kids?

At times Education Assistant's might bring children out to the space as a sensory break.

## Do you feel that NBP delivered value for money in the design and construction of the NBP space?

Definitely!!! If there is one element that doesn't seem to get used as much as expected it would be the tee pees, the school tried to weave around the tee pees to enclose it a bit more, just not utilised as much. It is relatively costly to upgrade the mulch and sand, however our Principal feels it is an investment.

#### What did NBP do well in delivering the NBP project?

Including the students in the ideas, great to work with. "They get kids and get what they want to do!"

#### Were there any challenges introducing nature play?

Initially a lot of the loose parts were broken or used inappropriately. Therefore, specific teaching sessions were used and explicit teaching around safe use of loose parts and safe risk taking was implemented.

At times some children of different cultures were scared of getting dirty/wet. Discussions and education to parents helped with this to encourage the "shoes off" policy.

#### **NATURE BASED PLAY ELEMENTS ON SITE**

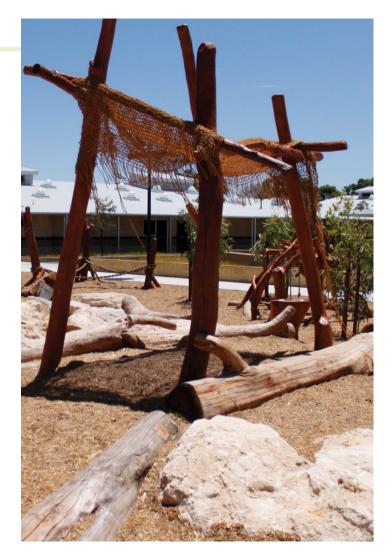
**Loose Parts**: twisty natural branches; stackable patterned planks; recycled wharf rope; snake head and tail with wharf rope; cubby sticks with rope lashing

**Water:** large burl carved top stumps.; water shoots; water logs, stumps and water rocks, activated dry creek

Nature Discovery: mounds and swales; limestone rocks varying sizes, mini forest trees. ground logs; soft-fall mulch: sand

Active (*Physical*): humpback climber, balancing logs, play mounds with cubby/forts

Rope: balancing rope walk



#### **BRIGHT SPARKS ELC**

## By incorporating NBP, what were you trying to achieve overall for your school community?

Original play area: an old swing set, not well placed, kids were often bored, resulting in "acting out" behaviours, nothing inviting for the kids, the play area was separated into two sections, often siblings were crying at the fence, wanting to play with their older siblings. We wanted: a multi-age space, "back to nature", challenges in surfaces, levels, the design needed to accommodate large tree roots.

## Observing, and talking to, the children, what are the three most enjoyed nature play elements within your playground?

The water play/mud kitchen, and climbing structures/fort (the kids love to get up high) and the circular swing which we requested for sensory input).

## What has been your overall observations of the kids' interaction of the NBP space?

We've noticed a big change in behaviour, previously the kids relied on educators putting toys out for them to play with (often fights over toys), now we rarely need to put the toys out. The children seem to feel more "in charge of their play". Also observed a lot more imaginative play e.g. shops, mud pies, the woodchips are lava!!!

# Have you observed a high level of co-operative and collaborative play with the kids moving items and constructing play structures (Loose parts play)?

Yes, the children like to work together to make mud pies, shops etc.

#### Have you observed any difference in the general behaviour of the students' after having daily access to the nature play space?

For our kindy program we start the day with 30minutes outside play, when they come in the children are generally more settled and ready for the mat sessions.

## Do you feel that NBP delivered value for money in the design and construction of the NBP space?

Yes, we liked the staged options and for the cost we have noticed a big change in many aspects. We have had families enrol here stating that they had seen the outside play area and were keen for their children to access this. Lecturers for our staff have also commented on the amazing outdoor space.

#### What did NBP do well in delivering the NBP project?

Jan and Terry worked on the design, they were easy to talk to, listened to our vision and came up with a good fit. Work was done in a timely manner, and continued even through wet weather.

#### Were there any challenges introducing nature play?

Some challenges included the shared access, but this was only for the "babies' room" 0-18months - it is difficult to monitor the little ones, the woodchips in their mouths, the bigger kids running around and not being so aware of the little ones etc.

Therefore they can only take a couple of babies out at a time, allotted timeslots have worked well to manage this. Also need to be wary of the bees during spring. In the early days we needed to focus on explicit teaching particularly around climbing i.e. 3 points touching.

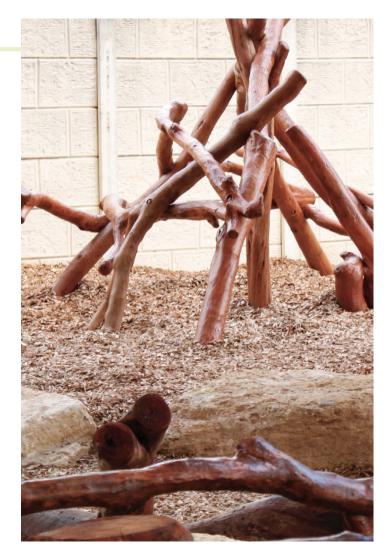
#### **NATURE BASED PLAY ELEMENTS ON SITE**

**Water:** carved top stump, carved top log, rock water feature, carved top water rock;

**Nature Discovery:** ground logs, ground rocks, timber stepper seats; tree plantings; mounds & swales; soft-fall mulch: sand

Active (Physical): humpback climber; log tunnels; vestibular motion swing with rope nest attachment;

Musical and Sensory: log drum, talking pipes; sensory pebble circle path; white sand pit; Themed Play: fairy bridge; mud kitchens Secretive Play: large timber cubby



#### MATER CHRISTI CATHOLIC PRIMARY SCHOOL

By incorporating NBP, what were you trying to achieve overall for your school community?

Increased opportunities for children to play and interact with nature, given we are so close to natural bushland.

Observing, and talking to, the children, what are the three most enjoyed nature play elements within your playground?

Waterplay, fort, rope and log balance.

What has been your overall observations of the kids' interaction of the NBP space?

Overall, we see much more group activities, children who would have previously stayed on the outer tend to join in more.

Have you observed a high level of co-operative and collaborative play with the kids moving items and constructing play structures (Loose parts play)?

Unfortunately, the loose sticks for the lean-tos caused too many issues with poking etc so they have been removed.

Have you observed any difference in the general behaviour of the students' after having daily access to the nature play space?

Occasionally use the space to encourage weight-bearing, heavy loads and proprioception for children with sensory needs.

Have you utilised the space as an outdoor classroom, what have your outdoor learning experiences been for teachers and kids?

Tend to use it during class times as a brain break e.g. do an obstacle course through the area, then back into the classroom.

#### Were there any challenges introducing nature play?

Initially we had a roster for classrooms to use the area, now things have "settled down" it is free for all to use. Some areas are out of bounds for certain ages (sitting on top of the covered monkey bars).

Initially the woodchips were tricky for the kids to get used to, now they keep their shoes on. The tap for the waterplay is an issue, it would be better if it is only accessible from the main tap.

#### NATURE BASED PLAY ELEMENTS ON SITE

Water: carved water logs, carved water rocks and

timber trough into sandpit

Loose Parts: cubby bones and loose cubby sticks;

snake head with rope

Secretive Play: cubbies; cubby under fort

Active (Physical): mini monkey bars, rope ladder to fort;

tumble down fort; tangled log nest

Rope: tangled rope nest

Nature Discovery: ground logs and rocks; stillness nook;

soft-fall mulch; sand

"We like the covered monkey bars because they don't get hot and we can climb on top!" - Mater Christi Catholic Primary School



#### **ENDEAVOUR SCHOOLS**

## By incorporating NBP, what were you trying to achieve overall for your school community

Initially needed a sensory garden, as recommended by an OT, then it has developed over the years and has been built in several stages. Wanted uneven terrains, still wheelchair accessible, over time added sensory elements to the ramps and walls, needed vestibular movement - added net swing, wanted kids to be involved in planting, allow manipulation of loose parts etc

## Observing, and talking to, the children, what are the three most enjoyed nature play elements within your playground?

The children love the waterplay, they work as a team to dam the troughs and at the end of recess their aim is to break the dam and allow the water to flow as far as possible - there is a marker at the current record!

## What has been your overall observations of the kids' interaction of the NBP space?

Prior to the nature play areas - play seemed to be more individual and very few games were played. Now we see more imaginative and group play with children of multi-age levels. Noticed improved balance skills from repetitive use of climbing elements and uneven terrain.

# Have you observed a high level of co-operative and collaborative play with the kids moving items and constructing play structures (Loose parts play)?

We occasionally hire loose parts, also have many natural loose parts from plants, or staff will drape blankets, add cardboard boxes, pallets for more interactive play. Setting challenges within this encourages collaborative play.

#### Have you utilised the space as an outdoor classroom, what have your outdoor learning experiences been for teachers and kids?

The outdoor classroom/tiered seating involved explicit teaching around appropriate use. Kids love this area as an outdoor classroom and stage. The aim is to allocate times for classes to play during recess/lunch before opening it up to the whole school. One of the goals was to allow older children a quiet space to sit and chat during breaks without others running/climbing over the space.

## Do you feel that NBP delivered value for money in the design and construction of the NBP space?

Absolutely, the design is very well thought out in all aspects, depending on the discussed ideas/goals for the space the elements have ticked all the boxes

#### What did NBP do well in delivering the NBP project

Excellent communication at all times, even when the spaces were being built the "boys" are always lovely and talk to the children who are very interested in what they are doing!

#### Were there any challenges introducing nature play?

Initially explicit teaching was required as to how to use the different areas and elements. Classes were given scheduled play times in the nature play areas; however, they are now free for all students during recess and lunch.

There were some challenges with staff and parents concerned with safety. However this was eased through KidSafe regularly reviewing the place space. Teachers are also encouraged to use their discretion as to what they are happy to allow children to do, as they are supervising at any given time.

#### NATURE BASED PLAY ELEMENTS ON SITE

Nature Discovery: tree planting; ground logs & rocks; verticals, soft-fall mulch; sand

**Cultural Learning:** enhanced cultural learning area; six seasons learning table

Active (*Physical*): tree swing for two; lattice of logs; steppers; balancing logs; mounded earth; slide; mini monkey bars; stilts; giant steppers;

Rope: balancing rope; ground wharf rope

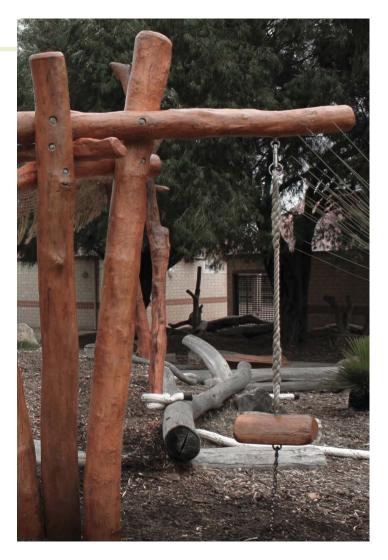
Musical and Sensory: music wall; music log; sensory and

activity wall

**Themed Play:** nature amphitheatre; stage area/deck;

outdoor classroom:

Secretive Play: cubby area



#### MOSMAN PARK SCHOOL FOR DEAF CHILDREN

## By incorporating NBP, what were you trying to achieve overall for your school community?

Prior to the install, the space under the central Moreton Bay Fig was not well utilised, there were lots of small benches and kids would fall off them regularly, teachers would scuff their shins.

Also, the classrooms for the Deaf school are tiny and they wanted more space to use for outdoor classroom activities. The large rope play was in an area that wasn't well utilised.

## Observing, and talking to, the children, what are the three most enjoyed nature play elements within your playground?

Water play. The water play is used daily by the Deaf school students, and open to the whole school on "wet Wednesdays". The classes have a routine for working out who gets to go to the office to turn on the "gold tap", a great opportunity for students to interact with admin/other staff, learn respect for others and respect for the water play.

Using loose parts in the water play (Fig leaves for boats, plates, spoons, potions - in the carved wooden logs). They also love taking the challenging route i.e. balancing on logs and climbing.

## What has been your overall observations of the kids' interaction of the NBP space?

The water play gives a multitude of experience-based learning which in turn builds vocabulary, they are excited to talk about what they are doing, it is a great motivation for language development.

# Have you observed a high level of co-operative and collaborative play with the kids moving items and constructing play structures (Loose parts play)?

They often work together to see how far leaves will float, making potions, setting up shops with leaves and nuts etc.

#### Have you observed any difference in the general behaviour of the students' after having daily access to the nature play space?

Being hearing impaired, the majority of class time is visually based, and we find that students can be visually overstimulated, by coming outside we often see kids just sitting quietly and staring up through the dappled light of the trees/leaves.

"The nature play areas are pleasant spaces to be in and allow staff to get out of stuffy classrooms and breath in the fresh air. They're inviting for staff to participate in play, e.g. stand and stretch while hanging on the ropes."

- Mosman Park School for Deaf Children

#### Have you utilised the space as an outdoor classroom, what have your outdoor learning experiences been for teachers and kids?

Yes, in many ways, incorporating learning into the outdoors, e.g. bringing dinosaurs out into the space, using the space as the setting for the Gruffalo. The space is very inclusive, often encouraging kids to work together. The sensory stimulation of the visual and kinesthetic learning adds a different level of experience for the students e.g. water play, garden beds, using grown herbs in cooking.

#### What did NBP do well in delivering the NBP project?

Amazing vision for the potential of the spaces.

#### Were there any challenges introducing nature play?

Minimal challenges, because kids and teachers were familiar with previous nature play elements throughout the school.

#### **NATURE BASED PLAY ELEMENTS ON SITE**

Water: Water play carved rocks, logs and stumps,

Rope: Rope scramble tunnel

Active (Physical): double tree swing with log seats, steppers

Nature Discovery: ground logs and rocks, verticals,

soft-fall mulch; sand

Loose Parts: Snake head with rope



#### **Horizons Childhood Learning Centre**

## By incorporating NBP, what were you trying to achieve overall for your school community

Prior to NBP there was a lot of AstroTurf and an old climbing frame. I wasn't involved in the design process so couldn't specifically comment on this further. The space is split between a toddler area and kindy area.

#### Observing, and talking to, the children, what are the three most enjoyed nature play elements within your playground?

Water play, in fact they are keen to add a second water play element in the Kindy side because the Kindy kids love playing in the toddler area when they can. They love playing in the cubbies, with the mud kitchen and they also enjoy the swing. The swing is popular and also provides learning opportunities to "be patient and take turns".

## What has been your overall observations of the kids' interaction of the NBP space?

More opportunities for risky play, imaginary play e.g. making potions in the mud kitchen. Improved connection to nature, then links into the community garden. The kids love it!

"Our outdoor play space is a massive selling point when we take prospective families on tours of the centre." - Horizons Childhood Learning Centre

# Have you observed a high level of co-operative and collaborative play with the kids moving items and constructing play structures (Loose parts play)?

The kids love the water play, and play together to make potions. There is less fighting over toys/bikes etc. because there is a lot more to do.

#### Have you observed any difference in the general behaviour of the students' after having daily access to the nature play space?

Occasionally the outdoor space can be used as an opportunity to help children settle if they are upset or demonstrating difficult behaviours.

## Have you utilised the space as an outdoor classroom, what have your outdoor learning experiences been for teachers and kids?

We are keen to add some more elements to the kindy area, specifically a wooden deck that could be used as a stage or seating for outdoor classrooms

## Do you feel that NBP delivered value for money in the design and construction of the NBP space?

Yes, and we are keen to add more elements to the space. The nature play space is a massive selling point.

#### What did NBP do well in delivering the NBP project?

Excellent communication throughout the whole process, and it continues with regular maintenance checks etc.

#### Were there any challenges introducing nature play?

Some parents were hesitant about the number of rocks etc. and we've had to let parents know that their kids will get wet and dirty. We had to do some explicit teaching around climbing trees and taking risks and the educators continue to provide specific coaching to children whilst they are outside playing. In the first few weeks we had a few falls and scrapes but it is very rare now that the kids are familiar with the space.

#### NATURE BASED PLAY ELEMENTS ON SITE

Active (*Physical*): bubble pod assorted balancing and climbing; vestibular motion swing, balance ropes

Water: carved top stump, carved top log, dry creek,

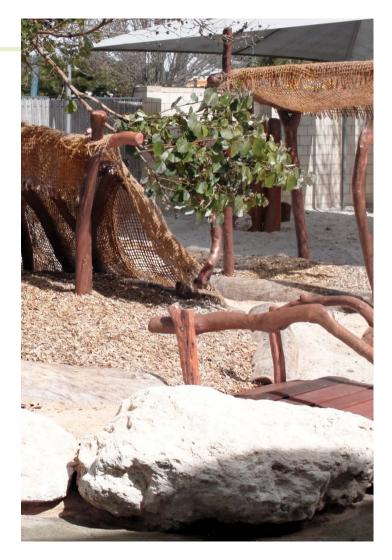
feature water rocks cluster

Secretive Play: lean to cubby(2); stick hut fort with rope

Musical and Sensory: drum, log abacus(2)

**Themed Play:** mud kitchen (doubled sided), fairy bridge **Nature Discovery:** ground logs, timber steppers, large rocks,

timber verticals; soft-fall mulch; sand



# NATURE PLAY DEFINITION

(as per Jeavons & Robbe, 2021)

#### NATURE BASED PLAY INTENT, OBJECTIVE AND DESIGN ELEMENTS

In 2021, a Play Australia discussion on "Nature Play – What it is and What it isn't", by Mary Jeavons (Jeavons Landscape Architecture) and Fiona Robbe (Fiona Robbe Landscape Architects) referred to this continuum.

They also defined "Nature Play" as being characterised by five features:

- Being outdoors,
- 2. Providing loose and manipulable materials
- 3. Integrating living things made from materials sourced from nature
- 4. Allowing for decision making
- 5. Autonomy

#### **BEING OUTDOORS**

#### Intent and Objective

**NBP** play spaces are situated outdoors, with designs maximising or transforming the existing site and outdoor areas.

This encourages different types of play and learning experiences in the outdoors

- Integrating the play space with existing trees, waterways, landscapes, to maximise integration with the existing outdoor elements.
- Adapting designs to natural shades, winds, landscapes and plantings.



#### INTEGRATING LIVING THINGS

#### Intent and Objective

**NBP** play spaces include natural plantings and subtle habitats for natural wildlife

We encourage clients to include natural flowering plantings and raw natural materials

The 'discovery' of natural bark, leaves, insects and birds is a very important aspect of nature play.

- Plantings of shrubs and trees that in long term provide flowers, leaves and habitat
- Grassed areas vs artificial surfaces
- Raw logs and rocks, with hidey holes which provide homes for living insects and bugs
- Sensory bushes which provide flowers and fragrances which are attractors for birds and insects



#### ALLOWING FOR DECISION MAKING AND AUTONOMY

#### Intent and Objective

**NBP** play spaces are designed to provide certain elements and play experiences which support autonomous decision making for children.

The organic nature of our play spaces lends itself to providing this type of challenges and decision making.

- Challenging and risky play through uneven climbers, balancing challenges, and rope play
- Interactive and problem-solving play such as water play, loose parts and deciding best climbing options
- Hideaways and secretive places through cubbies and plantings for autonomy
- Quiet spaces and nooks to sit and reflect
- Natural and cultural spaces for discovery, learning and inquiry into nature and culture



#### MADE FROM MATERIALS SOURCED FROM NATURE

#### Intent and Objective

**NBP** is committed to utilising raw and natural materials in our construction, to maximise the organic nature of our play spaces.

With an emphasis on naturally formed logs, sticks and rocks, which form basis of play elements and structures, along with natural softfalls such as mulch and sand.

- · Raw and natural shaped logs and rocks
- Limited milled and straight timbers and rocks
- Natural ropes and raw based metals for accessories
- Natural mulch or sand used as soft-fall
- Ground crushed limestone for paths



#### PROVIDING LOOSE MANIPULATABLE MATERIALS

#### Intent and Objective

Most of **NBP** designs provide an area and/or "bones" structures for Loose Parts Play.

We encourage clients to include Loose Parts as we understand the high play value of these elements.

- Cubby Bones structure, with supplied rope sticks and natural sticks to create cubbies
- Movable larger nature play items such as smaller steppers, balance logs, rocks, tunnels, timber trays
- Water/sand play with natural loose parts such as seeds, sticks, pebbles, shells.
- Movable larger ropes, such as snake heads
- Mud kitchens with loose parts.
- Piles of mulch to play in





It is imperative that children and families are supported to have ongoing access to *natural environments*, and **well designed nature-based spaces**, within their local communities.



naturebasedplay.com.au