

Nature Play

THE EDUCATION WAY

A nature play magazine for education sites part of the Nature Play SA Collective.

NATURE IS FUNDAMENTAL TO CHILDREN'S WELLBEING

*The benefits to mental health from
spending time in nature are not taught –
they are acquired through play*

TERRI AND DANIEL HARRISON, NURTURE NATURE - PAGE 10

No way. The hundred is there.

LORIS MALAGUZZI (1996)

The child
is made of one hundred.
The child has
a hundred languages
a hundred hands
a hundred thoughts
a hundred ways of thinking
of playing, of speaking.

A hundred always a hundred
ways of listening
of marveling, of loving
a hundred joys
for singing and understanding
a hundred worlds
to discover
a hundred worlds
to invent
a hundred worlds
to dream.

The child has
a hundred languages
(and a hundred
hundred hundred more)
but they steal ninety-nine.

The school and the culture
separate the head from the body.
They tell the child:
to think without hands
to do without head
to listen and not to speak
to understand without joy
to love and to marvel
only at Easter and Christmas.

They tell the child:
to discover the world already there
and of the hundred
they steal ninety-nine.

They tell the child:
that work and play
reality and fantasy
science and imagination
sky and earth
season and dream
are things
that do not belong together.

And thus they tell the child
that the hundred is not there.
The child says:
No way. The hundred is there.



Contents

FOREWORD

WE ALL NEED NATURE FOR OUR WELLBEING - Sarah Sutter, CEO
Nature Play SA

RESEARCH AND KNOWLEDGE

THE MUDDY HANDS REPORT: A case for making outdoor learning and play part of every child's life
- Julie Slaghekke

RESILIENCE THROUGH PLAY: Rediscovering and restoring childhood joy
- Terri and Daniel Harrison

WATCH YOUR WORDS: Intentional teaching through our language
- Lisa Burman

"WE DANCE AND WE SING AND WE DO EVERYTHING": Exploring STEM in an authentic context
- Sue Caldicott

A CAUTIONARY TALE: The importance of letting imaginations soar - Paul Johnson

THE ORIGINS OF JUNK PLAY: The benefits of introducing junk loose parts
- A conversation with Glenn Wagland

IDEAS AND INSPIRATION

MENTAL HEALTH AND THE CALMING REFRAINS OF NATURE: Encouraging children to spend more time in nature
- Jason Tyndall

PERFECT BALANCE: The win-win of enhancing learning through nature engagement - Maria Taylor

OUR BIG BACKYARD: Bringing a community together to rediscover their local environment
- Sophie Rogers and Darjana Nikolic

SCHOOL GARDENS CAN BOOST STUDENT WELLBEING: How your school can benefit from a wellbeing garden
- Camille Jenkinson and Rob Wallace

STORIES AND EXAMPLES

MAWSON LAKES SCHOOL STUDENTS LEADING THE WAY: The beginning of nature play at Mawson Lakes School - Phil Parsons

TRINITY GARDENS SCHOOL BIG CHANGES FOR THE GREATER GOOD: The beginnings of Portrush forest
- Anna Kakoschke

MARK OLIPHANT COLLEGE CHILDREN'S CENTRE MAGIC HAPPENS IN THE BUSH : An inquiry into collaborative STEM learning design focused on Aboriginal perspectives - Linda Rich and April Vanderaa

ELIZABETH SOUTH PRIMARY SCHOOL GROWING MINDS: The power of a kitchen garden for wellbeing, resilience and creating a sense of agency - Vanessa Holloway

RENMARK CHILDREN'S CENTRE DIGGING DEEPER: A snapshot into the nature play space development at renmark children's centre through the preschool outdoor learning area (pola) project - Fraser Keegan with Gale Hansen

FLAXMILL PRESCHOOL A PLAYFUL APPROACH TO NATURAL LEARNING: The enhanced dispositions of changing spaces and pedagogical practice - Kylie Stewart

SNOWTOWN PRIMARY SCHOOL NATURE PLAY EVERY DAY, EVERY CHILD: How listening to children can influence authentic outdoor learning experiences
- Trish Boschetti And Daina McCormack

ST PATRICK'S SPECIAL SCHOOL TRANSFORMING A SPACE: An inclusive process for an inclusive space
- Kylie Karvelis

LOBETHAL COMMUNITY KINDERGARTEN FROM BUSH BEGINNINGS BIG THINGS GROW: Forging a path into the world of nature play - Lee Munn and Nicole Wood

KILKENNY PRIMARY SCHOOL MORE THAN JUST SCRUB!: The amazing and exhilarating scrub life at Kilkenny Primary School - Lachlan Halman, Eddie Wood, Ozer Uysal, Amelie Bradley and Peter Dunstan

ST FRANCIS XAVIER'S CATHOLIC SCHOOL A COMMUNITY OF INNOVATORS: A space where free play and outdoor learning builds innovative learners
- Rachael Verringer

HIGHLIGHTS

THE STATE OF EDUCATION FOR NATURE PLAY SA: A few words from the Education Manager of Nature Play SA
- Maria Taylor

GOING REGIONAL: Nature Play SA south east roadshow - Narrah Zollo

THE POWER OF PLAY IN BELAIR NATIONAL PARK: A cubby and buddy building case study - Eric Nicholson

ABOUT THE NATURE PLAY SA TEAM

ABOUT OUR CONTRIBUTORS

HEARTFELT THANK YOU

We all need nature for our wellbeing

SARAH SUTTER, CEO NATURE PLAY SA

I can't believe that by the time you read this magazine we will be approaching the end of the year. For me personally it feels like life is going by so quickly.

And I can't believe I have been the CEO of Nature Play SA for five years: it only seems like yesterday that we ran our first event that saw a hundred people attend – and now we have thousands turn up. What a ride it's been! I cannot put a price on the things I've learned, the families, children and educators we have inspired, the governmental shifts that we have successfully advocated for, the many natural play spaces that have emerged as a result of this nature play groundswell, and the lives that our program has changed.

Amongst all of this, the past five years have had their ups and downs and frustrations along the way, but I can honestly say it has been one of the most rewarding jobs I have ever done, not only because I have seen the positive effects nature has on our children and families, but also because it has taught me so much about myself and the way I parent my own children.

One of the most significant things I've learnt is the positive effect that nature has on our wellbeing and mental health. Personally, I've had a rough six months dealing with family illness

and personal issues, and I have spent many nights awake, feeling stressed, my body aching, wondering how I get myself out of this. When I reflect on my 48 years to date, I realise that life has thrown quite a few things my way. But there's a quality that nature sparks in my children that continues to inspire me and help me continually get back up again in tough times – and that quality is resilience. My children's persistence, their love, their commitment to all their endeavours from climbing trees and exploring national parks to their sporting passions – if we stop to notice and reflect on the qualities that nature brings out in our children, we can learn and gain so much.

One of my daily wellbeing strategies that has been pivotal in grounding myself is the time I spend in the mornings walking on the beach in bare feet. The sound of the waves, the wind in my hair, the gritty sand between my toes and the salty smell of the sea... I recall on one occasion looking behind me at my footprints and coming to the realisation that it's not where we have been that matters but where we're going. Nature provides me with clarity.

My morning walks on the beach provide me with the space to think clearly and give me a sense of calmness. I set out with heavy thoughts and return with a clearer mind, and I know my family see a difference in me. The beach is a place where I don't have technology; I am free to be me; I am not the CEO, wife, mum, friend, netballer, daughter; I am Sarah who just needs to be in nature.

It's much the same for our children. They need a space without expectations, without the stress of achievement, without judgment. They need nature so they can be themselves. The most empowering feeling of all.

I am writing this to reiterate how important it is to provide our children with regular opportunities to spend time in nature and to encourage us all to remember to make time for ourselves. Just as nature continues to save me, it may also save you. 🌿







Research
AND
Knowledge

The Muddy Hands Report

A CASE FOR MAKING OUTDOOR LEARNING AND PLAY PART OF EVERY CHILD'S LIFE

JUIE SLAGHEKKE, NATURE PLAY SA

The Muddy Hands Australia Report was compiled to support the Outdoor Classroom Day (OCD) movement, gathering data from 44 countries and more than 700 teachers (93 Australian). Commencing in the UK in 2011, Outdoor Classroom Day set out to make outdoor learning part of every school day, to advocate for more outdoor play time in schools and to bring consistency to the amount of recess and playtime worldwide. In 2017 Nature Play Australia, with support from Omo, took the lead on the OCD movement to make it an annual Australian fixture teaching essential skills and raising awareness of the importance of outdoor play.

The Muddy Hands Australia Report summarises the findings from the 2017 OCD survey and provides a snapshot of qualitative data on the amount of time children spend playing and learning as part of their school day in Australia and around the world. It also presents an overview of the extensive literature available from experts globally that provides evidence on the importance of outdoor learning and play as a solution to make teachers' lives easier, schools better and children happier.

Australia leads the world on outdoor playtime (free time for self-directed activities) and outdoor learning. Two thirds of primary schools globally have less than one hour of playtime a day, despite the fact that playtime is universally recognised as important. 89% of teachers agree that children are happier after playing outdoors. 99% of Australian teachers believe the playtime outdoors is critical for children to reach their full potential through the development of key life skills – social skills, fine motor skills, imagination, creativity, the ability to focus on a task and a better understanding of the environment. They also recognised that when children return to class after playing outdoors they are more able to concentrate, more engaged with learning, better behaved and happier. Many teachers believe playtime helps children develop resilience, confidence and grit, results reinforced by a 2017 Planet Ark study.

Australia is also one of very few countries around the world (along with Wales, Scotland and UK) where outdoor learning is part of the national curriculum, recognising that any topic, subject area and competence can be taught or learned outdoors. Despite this overwhelming mandate, one in six (17%) Australian schools surveyed take lessons outdoors once a month or less. A 2017 Planet Ark survey found that less than 34% of Australian teachers teach outdoors more than 15 minutes a term.

The benefits for outdoor learning and play are undisputed and compelling:

- Improved educational outcomes across all disciplines. Studies in the UK and Norway reported increased creativity, added wonder and experience to learning, better grasp of difficult concepts, positive student behaviour, improved information retention and better scores on standardised testing. UK evidence showed teachers reporting an improvement in their own health, wellbeing and job satisfaction, and 79% said time spent outdoors improved their teaching practice.

when children return to class after playing outdoors they are more able to concentrate, more engaged with learning, better behaved and happier

- Essential for physical health. Children up to 5 years old need 3 hours a day and children aged 5-17 need 60 minutes a day, yet physical activity is in decline and sedentary behaviour is the leading reason why children today will die younger than their parents. Getting outdoors in all weather improves children's immune systems. Healthy children can concentrate better, sit at their desks for longer, can see better and learn more.
- Key for good mental health. Children's lives today are stressful and studies show mental illness is on the rise. Countless researchers, authors and experts acknowledge that free play outdoors helps children feel calmer, creates opportunities to experiment with uncertainty and develop appropriate responses, and develops resilience and self-reliance. Children learn to regulate emotions, experience joy, make decisions, problem solve, exert self-control and follow rules.

- Connects us to place and the environment. 92% of Australian teachers in the survey said that playing outdoors developed children's connection to the environment. 94% in a UK study found outdoor learning led to a greater understanding of nature. A 1999 study on 1,259 students found that direct experiences with nature had a bigger impact on pro-environmental behaviour than theoretical learning.
- Makes us happy. The survey revealed almost universal agreement that children were happier after playing or learning outside. Even in bad weather, being outdoors makes us feel alive and joyous. This is supported by Planet Ark who found that the more time you spend in nature and the more connected you feel to your community, the happier you are.

Survey after survey in Australia, US, UK and elsewhere reports that parents value play and outdoor learning, teachers see the benefits and children love it. In some countries, like Australia, governments support time outdoors for children's health, wellbeing and education and we have more time for outdoor play than anywhere else in the world.

Yet we are a long way from making outdoor play and learning part of every child's life. Australian schools and learning centres are uniquely placed to be beacons of good practice highlighting to parents and the broader community the overwhelming value of everyday outdoor learning and play for children's wellbeing and development. 🌱



RESOURCES + REFERENCES

Outdoor Classroom Day: [<https://outdoorclassroomday.com.au/about/>]

2017 Planet Ark study: [<https://treeday.planetark.org/documents/doc-1537-ntd17-full-report.pdf>]

The Muddy Hands Australia Report: [<https://outdoorclassroomday.com.au/> <http://outdoorclassroomday.com.au/wp-content/uploads/sites/8/2018/10/Muddy-Hands-Australia-Report-November-01.pdf>]

Outdoor Learning Connections – Australian Curriculum: [<https://www.australiancurriculum.edu.au/resources/curriculum-connections/portfolios/outdoor-learning/>]

Resilience through play

REDISCOVERING AND RESTORING CHILDHOOD JOY

AN INTERVIEW WITH TERRI AND DANIEL HARRISON, NATURE NURTURE

The restorative effects of nature have long been documented and, as kids, we would have unknowingly experienced and benefited from some of these effects ourselves. The sense of pride from climbing a tree. The freedom of wandering creek lines, forests or paddocks. The curiosity sparked by finding something new and different. Then the feeling of escapism – away from the prying eyes of adults. We played in what we believed to be our special places. That sense of belonging and attachment still reigns true for us today. And all this contributed to our resilience. Prepared us for adulthood. But in an age where this type of childhood is diminishing, we are seeing children's mental health issues on the rise. Here **Daniel and Terri Harrison** from Nature Nurture, a nature-based initiative in Scotland, explain why nature is so valuable for the resilience and overall wellbeing for our kids.





ABOUT DANIEL AND TERRI HARRISON

Terri is one of the co-founders of the Nature Nurture Project and has been instrumental in the creation and establishment of the Nature Nurture approach. Currently acting as a project coordinator and group leader, she is also responsible for delivering regular training and CPD sessions for Nature Nurture staff. Terri holds a BA in social pedagogy, a PGDE and Forest School Leader qualifications. She has over 30 years' experience working with children and young adults. Before beginning Nature Nurture, Terri was a teacher and also ran residential units in Camphill School Aberdeen. Alongside her commitments to Nature Nurture, Terri is manager of early childhood services in Camphill School Aberdeen. She runs training in outdoor learning and play throughout the UK and has been a tutor on a Forest School training course for the past three years.

Daniel is a co-founder of the Nature Nurture Project, developing and implementing the Nature Nurture approach with Terri in 2009. Daniel has over 11 years' experience running businesses and has applied this knowledge to the establishment and running of the Nature Nurture Project. Daniel worked as a teacher, residential unit coordinator and workshop instructor in Camphill School Aberdeen for 28 years. He was also an instructor in Behaviour Support Strategies in Camphill for 10 years, and has been a tutor in local Forest School training for the past three years. Daniel, alongside Terri, currently oversees the running of all Nature Nurture Programs and provides training and CPD to staff. He also delivers Nature Nurture training throughout Scotland.

What is Nature Nurture?

Daniel: Nature Nurture in some respects is a simplification of three things that we feel are essential in the life and development of any child: that is, a combination of nature, nurture and play. We have taken that formula and applied it to help us promote in children the resilience they need to deal with whatever life challenges them with, particularly in relation to anxiety and stress. We feel that it is something that is appropriate to all children and even beyond childhood, right across the course of life.

We started out by setting up a group for under fives – some as young as 18 months old. There is very clear evidence of the influencing factors in the growth of anxiety and stress, and for us, developing an early intervention program that was based around nature was key to influencing, or at least buffering, some of what was happening in these children's lives.

Initially, these were children who were particularly affected by parents who were struggling with substance misuse, who very often had mental health problems themselves. There were some very stressed, anxious and distressed children. We set up this program, we developed a framework for how we wanted to deliver it. We got these children out in a minibus, and we made sure that we had a good number of adults involved. It was important to us that the ratio of adults to children was around one adult to every two children because we were keen that the relational aspect of what we were doing was well met. There were children with a lot of fear and anxiety and they needed to work on relationship strategies straight away.

We dressed them all up in waterproof clothing and wellies, then we took them out into the woods. The model that we used was a 10-session program, once a week. In terms of the time spent with those children in that environment, it was just a drop in the ocean, but within ten weeks we began to see some quite phenomenal changes happening for these children with regard to their levels of stress and distress, and their development physically, emotionally and psychologically.

When some of these children first stepped off that minibus, they were almost ghosts of children. Some of them could barely walk if it wasn't an even, flat, surface. They'd take a step and fall flat on their faces but within 10 weeks, the development that we were seeing was just incredible. It really developed from that. We were very keen right from the beginning to make sure that we recorded and evaluated as fully and as accurately as we could the development of resilience in these children because that was our focus.

We knew that these children's lives were not going to change significantly over a short period of time. These were situations where parents were doing the best that they could. They were obviously being supported by other services and so on, but those were the circumstances that these children were living in. For us, the inspiration really came from wanting to be able to give these children whatever it was that they would need to be able to cope and to even thrive in those circumstances because, while we couldn't change those circumstances, we could give these children what they needed.

Terri: It was also very important to us that parents were involved as much as possible, so there is always an open invitation for parents to join us. Not only do we see a big change in the children's wellbeing during a session and over a course of sessions, we also see that it is having an impact on the parents too. Some of these poor parents were so stressed out, and were living in such adversity themselves, that a breath of fresh air, some green space and the chance to walk and talk and be with people who would listen and would care was just having a huge effect. Even though we weren't able to directly influence the child's life beyond Nature Nurture, we could start to work on it in other ways, in subtle ways, as well as build up the inner fortitude of children themselves.

Can you tell us what you see the role of nature in children's lives as being?

Terri: There are lots of different roles on lots of different levels. Nature connectedness is something that is vital. If we want our children to be custodians of the natural world in the future, we have to help them build a relationship with it. How can they care about natural spaces if they don't have any experience of them?

The benefits to mental health from spending time in nature are not taught – they are acquired through play

We see so much disconnect in all children, not just the children we work with in Nature Nurture. That is very easily built up through immersing children in natural spaces, playing and creating, just being in nature.

In a similar vein, feeling that spaces and places belong to you – that sense of belonging is so important. Many children are disconnected from place, they don't feel that anything is permanent or stable, but children generally need a sense of yeah, this is my space, these are the woods where I play and I have some kind of ownership of this space and somewhere to grow and thrive.

How can you understand anything about the world if you don't have a relationship with nature? Everything that is meaningful in children's lives actually begins in nature. They are doing all these subjects in school like forces and geography and sciences. All of it has a base in what they are experiencing through their play in nature.

The benefits to mental health from spending time in nature are not taught – they are acquired through play. Through play children's natural curiosity drives their development and their wish to be capable and resilient learners. Then they start to ask questions and we have

conversations and we can throw in facts and important information, but it is child led.

You can only really do that in nature. From a learning perspective, from a development perspective, from a connectedness, and a feeling of belonging. Then you've got the health and wellbeing. Every individual needs the opportunity to be in a natural space, to be still and to soothe what is going on biologically in the human body. Our kids are stressed. All kids are feeling more stressed now than they ever have, whether it is through having too much disconnect through screen time, or because of the pressures and expectations put on them. Those stress responses, it has been shown scientifically, are soothed by being in green space. There is a huge amount of biology involved but it is something to do with soothing the stress response through the amygdala just by being outside in nature. That is very powerful. It allows children to arrive in a calm, alert state necessary for learning. You can't learn unless you can achieve a calm, alert state. For our super-stressed children, we see nature work very, very quickly. But for all children, just to spend time in nature means "Breathing out, now I can learn."

For our super-stressed children, we see nature work very, very quickly. But for all children, just to spend time in nature means breathing out, now I can learn

The child's self-agency is critical in all that we do. We talk about regulation of emotions, impulses. We always work towards self-regulation so whatever we do, we are helping the child to manage that for themselves. It is co-regulation to begin with because children need the support to

learn how to do that but very quickly we see it become self-regulation. As far as risk-averse conditions go, we are used to that as well in Scotland, but I am very proud that in Scotland we use risk/benefit analysis, we don't just have risk assessment. In educational settings we always weigh up the benefits first before we start to consider the risk and keep that in balance and perspective. That is really important to remember otherwise you are missing vital learning opportunities.

What's our responsibility as educators/parents and carers?

Terri: There is always this thing about duty of care; we need to make sure the children are safe. For me it is also recognising that actually we have a duty of care to ensure that children learn how to look after themselves. They can't do that if all the time we are telling them that they can't do something. We need to have a "you can" approach to this and give them ownership, responsibility and support through risk assessing for themselves so that they can learn how to do this because the world is a risky place. It doesn't matter how much cotton wool you spread around, it is always going to be a risky place. We are actually making it more dangerous for children if we don't give them the opportunity to learn how to deal with that.

Bruce Perry, a rather fine child psychologist who works in the States and deals with childhood trauma, once gave a learning cycle which I constantly share with people because it is so inspiring. It is about curiosity. It begins with the natural curiosity that every child has before it is smothered or pushed out of them. If you start with curiosity you allow the child freedom to explore and develop their curiosity. Eventually, very quickly, the child has a discovery. This is a key moment, the moment of discovery. For every child this is a high point in their childhood. What makes it even stronger is when it is a shared discovery, something that can be shared with a sibling, parent or friend. Once a discovery has been



shared, it creates a wish to repeat. This is a good feeling: I am going to do that again and again. Through this they gain mastery. Through that sense of mastery, they have the impetus to then go on and develop more curiosity, and so it goes on. What breaks that wonderful cycle is when that exploration is met with fear or disgust or disengagement. When the person they want to share it with isn't there – either in their thinking or physically not there. Those are often the things that break down the natural development of curiosity that every child has. The role of adults is to be available and interested, to hold back their fears, their disgust, and try and instill those feelings so that they don't get in the way of children's learning. That, in a nutshell, is what we need to do.

The seven domains from your "Building Blocks of Resilience" approach underpin your model. Can you elaborate on what these domains are?

Terri: First of all, it is important for us that resilience is a holistic thing. You can't look at just emotional resilience, you can't look at just physical resilience. You need to look at the whole child and identify each area that the child needs to feel strong in. We looked at all sorts of different models and realised there wasn't one that worked for us, so we created one. The seven areas that we consider are: Physical Health and Wellbeing; Mental and Emotional Wellbeing; Social Competencies; Positive Values and Attitudes; Talents and Interests; Creativity and Imagination; and Knowledge and Understanding.

The seven identified domains can be developed through exposure to nature, nurturing interactions and free play, leading an individual from a state of vulnerability to one of resilience. The approach used in Nature Nurture is designed to work on the key areas of each domain. The development of each domain is carefully monitored, assessed, recorded, evaluated and reported.

Those seven areas are equally important; there is not one that is more important than the other. As a teacher I always put Knowledge and Understanding last of all because for many years that was the one that had to be the most important for me. Then I realised that actually I need all the others to gain that knowledge and understanding. That is what we track: we observe, record and track the growth in each one of those areas and if one or more of those areas is not showing enough development then we focus on that a bit more in our play in nature. Through our relationships with the children we can build it up as a very solid foundation.

What is your approach to taking children out into nature?

Terri: Nature provides an incredible store cupboard that is full of resources and the children are drawn to the things that they are interested in. We don't plan, saying right, we're going to do this, make this today; we allow the children to show us – we facilitate.

It could be that we have weeks when all the children want to do is play in

Nature provides an incredible store cupboard that is full of resources and the children are drawn to the things that they are interested in

the stream and fish, build dams or just splash about. That is fine, that is what they do. We can bring skills and knowledge into that, but they are exercising each one of those seven areas in stream playing, climbing trees, building dens and learning to use tools. We don't teach tool use: we wait until the children need the tool and then we teach it.

Or they will come and ask. They will see us using a tool and then ask if they can do that. We say yes. Or they might say they need a stick that long for their den. We say, well let's find a stick and I will teach you how to use a saw or I will teach you how to tie a knot. That is learning that stays there and grows.

Daniel: As soon as you start to become over-prescriptive in your approach, you start to limit potential. Who are we to decide what the potential is of a child? It is for them to tell us what their potential is. Our role is to facilitate a nurturing and safe space in terms of their inner experience and environment, so that fruition can take place. As adults we can be so quick to decide that we know, while missing the fact that along the way we have just crushed many different possibilities for that individual, which they are unlikely to ever benefit from. From my experience of a lot of so-called education, it is so over prescriptive.

Terri: There is that lovely quote from Mark Twain: Never let education get in the way of your learning. It is so true! 🌿



RESOURCES + REFERENCES

Nature Nurture website:
[<https://naturenurture.org.uk/what-we-do/>]

Mental Health and the calming refrains of Nature Play SA:
[<https://natureplaysa.org.au/wp-content/uploads/2018/10/NPSA-Mental-Health-List-Digital-1.pdf>]



The Nature Nurture project aims to build the child's resilience, providing an intervention that is sustainable and that combats the effects of trauma, neglect and anxiety. The project's aim is to help vulnerable children develop the fortitude they need to face and overcome the hardships of their lives and to give them the personal strength and motivation to make healthy lifestyle choices when they are older. By giving vulnerable children a program of outdoor experiences in natural environments the program's founders have found that the seeds of resilience are sown and grow quickly and strongly. Through training and ongoing support in their approach, partner organisations have shown that they can make the development sustainable and hopefully help to break the cycles of vulnerability that have existed in families for generation after generation.

The formula is simple but powerful: *Nature + Nurture + Play = Resilience*

The program evaluated the development of resilience in 42 children over four separate programs. Their resilience is broken down into the 7 key areas of Mental and Emotional Wellbeing, Physical Health and Wellbeing, Social Competencies, Talents and Interests, Positive Values, Creativity and Imagination, and finally Knowledge and Understanding. Each area was measured with observation of certain indicators. It found that of the 42 children evaluated after attending Nature Nurture, all showed marked development in nearly all areas of resilience, and approximately 90% of all children and young people who attend Nature Nurture showed an increase in resilience. Following participation in the project, 60% of children and young people showed improved engagement in education and increased school attendance.

Watch your words

INTENTIONAL TEACHING THROUGH OUR LANGUAGE

LISA BURMAN, LISA BURMAN CONSULTANTS

The way we talk to children can influence perceptions they form of themselves – but do we really have a firm grasp on the importance of language and how we should be talking with our children? In this article **Lisa Burman** highlights the need to consider our language and intentional teaching when communicating with children as it has a profound ability to empower strong, self-directed, resilient learners.

One of the most powerful, if not THE most important, tools we have as educators is our language. The words we choose, the tone we use and our non-verbal gestures convey strong messages to children, families and colleagues. Language has the power to build up – or to take down. Our words reveal our values, beliefs and philosophy about learning and our image of the child.

Take a moment to imagine the following scene:

A group of children and their educators are at their local National Park, enjoying their regular Bush Kindy day. Children are engaged playing and exploring in various ways. Several are collecting branches to build their cubby. Others are persisting with tying some branches together with twine as an educator holds them in place for them. One pair have found a quiet place under a tree where they are mixing potions. Five children and an educator are gathered around some fallen logs, using the magnifying glasses to observe the ants busy at work.

Suddenly, the cubby builders explode with noise, arguing about how they should build the cubby. They run through the group of potion-makers and ant-researchers with their sticks in the air.

Educator A responds: "That group, get back to work on your cubbies! This isn't a time for running around."

Educator B: "When you're loud and running around like that, it stops the other groups from learning and I find it hard to hear the children I'm listening to here."

Educator C: "What's the problem here? I've seen you collaborate on cubby-building before. So what's happening this time? What can you do to solve it?"

[adapted from Peter Johnston 2004, Choice Words]

Each of these responses conveys different beliefs about learning.

Educator A's response conveys a feeling that learning is a chore and the children are doing a task. It also reveals





an idea that the teacher is the “boss” and an image of the child who needs to be controlled. The educator might be feeling threatened by the loud and boisterous arguing of the children, feeling like s/he has, or may soon, lose control of the situation.

Educator B’s response speaks more about a belief that learning happens in a social context, where the rights of others are respected. The words communicate to children that they have a responsibility to others.

Educator C’s words reveal an image of the competent child who can collaborate and solve their own social problems. “I’ve seen you collaborate before,” communicates a belief in their ability to think and act. They can be trusted. They have the skills and intelligence. The words say, “I know you can do this.”

INTENTIONAL TEACHING

So what words can we intentionally choose when working alongside children as they engage with and explore nature?

We can start by asking ourselves, “What kind of learning culture do we want to create?” I encourage you to make the time to journal and/or discuss this and the following questions. This would make a great agenda for a team/staff meeting:

- How do we want children to see themselves as learners in nature?
- How do we want children to see and feel about nature?
- What do we want them to believe about learning?
- What do we believe makes a strong, competent learner?

RESILIENT, SELF-DIRECTED LEARNERS

One of the reasons many educators feel connected to nature play and to nature-based learning and exploration is that they know it empowers children to be strong, self-directed, resilient learners. The words we use go a long way in creating this. It’s not enough to provide children with a natural environment like the bush, a digging pit, a climbing tree or a beach. Intentional teaching is required to support children to build a view of themselves as self-directed,

interdependent learners. This is what learner-agency is about.

Intentionally using the language of agency means we do not rescue children from their struggles. When they can’t zip up their rain-suit or the roof of their cubby continues to collapse, what do you say? A response such as “Let me help you with that,” might come from thoughtful intentions and offer a quick way out of the struggle, but it will not support the child to develop a strategy to use the next time they encounter a struggle.

When we say, “Try this...” or, “You need to put a lighter roof on your cubby,” we only rescue children from the struggle that is essential for learning. We’re actually taking away the gift that an authentic and purposeful struggle is to building strong learning dispositions and a sense of achievement.

When we want to communicate a belief in the capacity of the child to be an active problem-solver and help them understand the importance of persistence and flexible thinking when learning, we are wiser to use words such as:

“I can see you’re a bit stuck. What are you going to try next?”

“You look like you’re a bit stuck. Can you see a (strong branch/big stone/what might help) close by?”

“What could you do about that, do you think?”

“What have you tried already? Why do you think that didn’t work?”

“I can see you’re not giving up on that. You’re persisting and trying different ways to figure it out.”

“You’ll get there! I can see you’re not giving up.”

PRAISE VERSUS ENCOURAGEMENT

Everyone likes a bit of praise. It makes us feel good. It’s just that it’s not all that helpful in creating the kind of learning culture we’re interested in. At its worst, praise can create a dependency, like any reward system. Children can become dependent on getting praise from the adult. They begin to see value in their learning only when it has been validated by an adult and not for any intrinsic satisfaction it might bring.

INTENTIONAL TEACHING THROUGH OUR LANGUAGE

More of...

Tell me about this!

You look happy/proud/
excited. It feels good to...
(swing/climb the tree ...)

Hmmm...and smile

You did it!

What did you learn
from this?

I can see that you...

You look proud. Are you?

When you keep trying new
things, it gives you ideas
about what you like to do.

How did you do that?

How did you come up
with that idea?

I noticed that...

Hmmm...I wonder what
you'll come up with next?

What was the hardest/
easiest part?

Would you show me/
Jessie (another child)
how you did/made that?

Less of...

Great job!

WOW! That's beautiful

Well done!

I love it when you...

I like your...



I can tell a lot about a learning culture when I visit a learning setting, whether it be a Primary classroom, the mud patch in a child-care centre or a Bush Kindy. If children frequently seek the adult's praise with questions such as, "Do you like my potion/painting/pattern?" it tells me that they are used to being validated with some version of, "Yes! I love it" or, "Yes! It's beautiful", no matter the effort that has been applied. These children seem to create their learning only for the teacher to give it a big virtual tick of approval. And they waste time that could be spent engaged in exploration by seeking the adult's approval.

We need to be careful to not create a culture of learning where children believe they need to show the adult everything for it to be worthy. No one sets out to create this kind of culture: it happens by accident, really. Instead, our words and actions need to intentionally show children that the endeavour of learning is satisfying in itself – struggles and all. The strong learning culture envelops children in ways of being that make their own evaluation and satisfaction important. So the next time a child shows you something they have achieved or created, instead of praising it with, "I love it!" or, "Well done!", try one of the suggestions opposite.

BRAVE LEARNERS

Another reason many of us love learning in nature is that it gives children opportunities to stretch themselves physically as well as intellectually. They can climb, scramble, crawl, tie, place, jump, balance and roll – all in authentic and engaging contexts. This also means that sometimes the physical risk is scary for them – and sometimes it is scary for us.

I remember watching my niece climb higher and higher up a tree that was unfamiliar to her. My internal conversation went something like this: "Will she be okay? Yes, I think she'll know when to stop. But what if she doesn't? Should I step in? Am I over-reacting? If I step in will I stop her agency? I think she's got it – it will be okay." It was so difficult to know what I should do!

So what words could we use in this situation (or others where we feel a little nervous about the safety of the children)? One of the first things we think of is, "Be careful!" But that's

probably not the best choice. "Be careful!" doesn't support the child to build self-awareness. If they always hear these words, the danger is they'll begin to monitor their decisions only when given this cue. We want children to be constantly aware and self-monitoring their actions and decisions when involved in something that challenges them. A frightening statistic comes from a study in *The Journal of Pediatric Psychology* (O'Neal, Plumert, Peterson, 2016): parents are "four times more likely to tell girls than boys to be more careful". I wonder if we unconsciously do this as educators too? Are we also unconsciously using a "language of fear" that may stop them from trying challenging physical pursuits outside their comfort zone in the future?

Here are some other suggestions:

"Stay focused on what you're doing. You're doing well."

"I can see you're taking your time and not rushing."

"Do you feel...stable/secure/safe/strong on that...rock/branch?"

"How are you feeling?"

"I noticed how safely you picked up the saw, so I know you'll be using it safely too."

"Sticks need space. Look around you. Do you have enough space to swing that big stick?"

"Ask him if he's still having fun."

"Check in with your friends to see if that's okay with them."

BUT SOMETIMES, THE BEST WORDS TO USE ARE SILENT.

Often our words are beneficial to a child's learning processes, but sometimes they just interrupt the child's focus and concentration. We stop their flow by speaking when it isn't necessary. So sometimes, just practise saying the words in your head. They'll reinforce your intentional teaching AND they won't steal from the child's moment. 🌿

REFERENCES

Journal of Pediatric Psychology, Volume 41, Issue 2, 1
March 2016, Pages 256–264.

» *Director and Principal Consultant at Lisa Burman Consultants, Lisa Burman is an educator who sees herself as an "every-day researcher", fascinated with childhood and learning. After a number of years teaching in and leading primary schools in Australia, she consulted in and around New York for 10 years. Her highly regarded consultancy business is now based in Adelaide. Lisa's interests include early childhood education and care, embedding the principles of the Reggio Emilia educational project within learning environments, play, literacy learning, inquiry learning and strengthening children's connections to nature.*

www.lisaburman.com.au



“We dance and we sing and we do everything”

EXPLORING STEM IN AN AUTHENTIC CONTEXT

SUE CALDICOTT, STIRLING DISTRICT KINDERGARTEN

Few would deny that STEM is one of the key buzzwords of today’s pedagogy. In this article, early years educator **Sue Caldicott** draws on her experience of a particular nature kindy program to demonstrate how time spent in nature not only affords a wealth of STEM opportunities but enhances wellbeing at the same time.

There are so many great things about being an educator of preschoolers, but on the mornings when I get appropriately dressed, warm my thermos and pack my lunch for a day of Kindergarten in the National Park, I always feel an extra buzz of excitement. When I reflect with children on how they feel about their nature kindergarten experiences, I hear emphatic pronouncements such as, “I feel good,” “I feel happy,” “I feel great.”

Yes! Our educator team has done it, raising the wellbeing of our children and addressing those vulnerabilities showing up in our AEDC scores. We have observed the strengthening of positive learning dispositions encouraged in the bush and nurtured in our kindergarten. Our families are now choosing to engage with natural spaces for weekend exploration and play. The research findings we read about nature engagement improving wellbeing are being supported by our own evidence. These reflections should be leaving us feeling very satisfied as educators.

As educators who critically reflect, however, we always dig deeper. Why are our learners feeling increased wellbeing through nature play? Why is learning in the bush different from learning at kindy? When critically reflecting on our own pedagogy, what can we do differently to connect learning and wellbeing across the different learning environments of our children?

In my conversations with preschool leaders across the state, I hear a growing shift from emphasising wellbeing for learning to educators thinking deeply about how engaging children in satisfying learning can increase children’s wellbeing.

I see a growing shift to educators becoming co-researchers alongside children, empowering children to lead the learning, document and assess their own learning and increase their wellbeing through this autonomy.

There is a growing shift to planning for intellectual learning rather than academic learning, in areas often referred to as “21st century learning” skills. These skills underpin STEM learning, increasingly emphasised as a way of growing learner capacity in critical thinking and creativity.

I see a growing shift to educators becoming co-researchers alongside children, empowering children to lead the learning, document and assess their own learning and increase their wellbeing through this autonomy.

“Future innovation will require STEM-related knowledge, problem-solving, critical and creative thinking skills, and the ability to work collaboratively and solve emerging world problems. A 2015 PricewaterhouseCoopers report noted that there is a growing





need for the broad skills that are fostered through STEM education: critical thinking and problem-solving, analytic capabilities, curiosity and imagination have all been identified as critical 'survival skills' in the workplace of the future."

STEM Learning Strategy for DECD
Preschool to Year 12 2017 to 2020 p.4

"Play provides opportunities for children to learn as they discover, create, improvise and imagine. When children play with other children they create social groups, test out ideas, challenge each other's thinking and build new understandings. Play provides a supportive environment where children can ask questions, solve problems, and engage in critical thinking. Play can expand children's thinking and enrich their learning."

Early Years Learning Framework
DEEWR 2009 p.15

When learners are collaboratively solving authentic problems, self-motivated by curiosity or need, they are engaging their thinking, language, senses, knowledge, skills and dispositions. Preschoolers engage in this kind of holistic STEM learning through play and in particular the type of play inspired by natural environments.

STEM is an acronym for the interconnected disciplines of Science, Technology, Engineering and Mathematics, but is also evolving as an approach to integrated learning. However, planning for an activity based on just one of the STEM disciplines is not STEM learning. For example, matching a quantity of gumnuts to a numeral is a mathematical exercise, sorting magnetic from non-magnetic objects is a science-based exercise, but neither of these activities can be described as STEM.

STEM learning and thinking has a focus on identifying and solving authentic (or "real world") problems by integrating two or more STEM disciplines. Strategies to solve a new problem/need or to improve a system, process or design are created (engineered) using tools (technology) and based on how we organise our thinking and what we know about the world (mathematical or scientific knowledge and skills).

There are varying degrees of research and critical thinking involved before a creative "Aha!" moment may occur. Collaboration with others to share skills, knowledge and strengths is often key to working towards a STEM solution and requires good communication skills.

In today's society there are increasingly strong political and economic spotlights on future job skills, identifying problems as opportunities, and being able to sell a vision or idea to others (linking STEM and entrepreneurship). In a present and future where the consequences of industrial decision making and climate change matter, there is a stronger need to model empathy and ethics in our work with children. You may explore questions such as, "How will our STEM learning experiences or 'solutions' impact on our immediate and wider environment, community or culture? How are we honouring what has gone before, e.g. Aboriginal sciences? How are children considering the natural world in their play?"

Let's now take STEM learning and dispositions into the preschool outdoor context.

Our Early Years Learning Framework guides our educator philosophy, decision making and pedagogy and asks us to recognise the connectedness of mind, body and spirit in our work with children. The framework informs our practice to be holistic, to pay attention to children's physical, personal, social, emotional and spiritual wellbeing as well as to the cognitive aspects



of learning: "An integrated, holistic approach to teaching and learning also focuses on connections to the natural world." (p.14) Our framework speaks of natural play environments that "invite open-ended interactions, spontaneity, risk taking, exploration, discovery and connection with nature". (p.16)

A natural play space allows children of all ages to be part of the daily changes brought by the cycle of seasons and to immerse themselves in sensory play.

A natural play space allows children of all ages to be part of the daily changes brought by the cycle of seasons and to immerse themselves in sensory play.



Sensory play outdoors is a process of scientific inquiry in which children are collecting data about their world using their whole bodies. You can't discover the myriad scents of the earth and plants released by rain by looking at a rainy day photograph. You can't discover which tree canopies give you the best shelter from rain when you do a tree puzzle. Mobilo will never stretch children's imagination and creativity as much as stick play will. Sensory play with others builds communication, social and dramatic play skills as children negotiate the natural environment, resources and tools available to investigate their questions arising through play.

Einstein once said, "I have no special talent. I am only passionately curious." Curiosity, the desire to know the what, why and how of their world, is innate in children. This drive, together with the processes of experimentation and discovery, leads to questioning ('How does it...?', "When does it?", "Why does it?") creating and testing a hypothesis ("What if...?") and forming a theory



("A because B"). Seeking and solving these questions about the world is STEM in play. My favourite Einstein quote is his belief that "play is the highest form of research". The role of the educator is not to shut down children's inquiry by giving them the answer to their questions but to let the children do the thinking, even if they are grappling with the "wrong" answers. As a co-researcher working alongside children, it is OK for an educator to say, "I don't know; let's find out," ...but not by jumping onto Google. Children's research is hands-on research, is asking more questions, is dialogue with others, is learning-linked concepts over time.

It is OK to slow down, to support children in pursuing their own research over time, where it is part of learning that we don't always get it right first time. Teaching children about the concepts of design – thinking, planning and creating prototypes – is one way children can reflect on problem-solving processes and develop persistence and resilience. For example, during my time overseeing a nature kindy that involved regularly visiting a National Park, the solution to the problem "how do you build a cubby?" was developed over many weeks. Children experimented and failed, and learned to use forked branches, to make a frame of bigger branches first, to take land gradient and the

number of players into account when measuring branches, and trying various ways to build structurally sound walls as they designed and redesigned prototypes. Positively dealing with setbacks contributes to strong wellbeing and if you are a keen observer of cubby building, you will have noticed that the process is usually more rewarding than the product. How much time do children spend engaged in cubbies purchased from "Prefabricated Cubbyland" compared with the time engaged in building a cubby from loose parts?

Teaching children about the concepts of design – thinking, planning and creating prototypes – is one way children can reflect on problem-solving processes and develop persistence and resilience

The answer to the inquiry "what plants do we plant to feed butterflies?" came over months of observing butterflies and which plants they favoured in our garden, documenting with iPad photos, drawing butterflies, sharing books and identification charts to discover

which butterflies were indigenous to our area, finding out about local butterflies which were becoming extinct and talking about habitats being destroyed, observing the lifecycle of real caterpillars to butterflies to eggs, and visiting a native plant nursery so children could choose plants with the expertise of the horticulturalist. Children checked how big the plants would grow and if they suited our garden conditions. They checked the information on labels, measured the plot before planting and cared for the plants back at kindy. Children danced around the garden with butterfly wings and crushed flowers to smell the nectar. Over time, children observed the new butterfly visitors and used the identification chart painted by a local high school art student. There was so much more richness to this STEM learning than looking up plants on the internet. And as they explored and discovered, they became more confident as learners, eager to share their understandings and curiously posing more questions.

The following reflections were gathered from a group of preschoolers after 10 kindergarten sessions in a National Park. I have added some context about the STEM learning in this natural setting and the children's reflections about their own wellbeing as well as analysis of learning and dispositions.

CHILD'S COMMENT (NATURE PLAY)	EDUCATOR'S COMMENT	STEM ANALYSIS	CHILD'S COMMENT (WELLBEING)
"I like to collect clay. It was really fun. We mixed it and we made stuff with it. S made and mixed and C digged."	The problem identified and solved was how to play shops without any adjuncts. Children discovered and dug the clay and created items to sell in their "shop". They used gum nuts and pebbles as coins.	Science: Discovering properties of clay soil when adding water. Tech: Using sticks as tools. Engineering: Learning how to join clay when creating various items. Collaboration to create systems of manufacture and trade. Maths: Symbolic play, monetary system. Entrepreneurial skills. Communication.	"I'm usually a video game person but I like Nature Kindy. It makes me feel good." (C) Satisfaction of working together and solving the need. Socio-dramatic play with own adjuncts very satisfying, particularly when others joined in the shop play. Executive functions of emotional and self-regulation develop through socio-dramatic play.

CHILD'S COMMENT (NATURE PLAY)	EDUCATOR'S COMMENT	STEM ANALYSIS	CHILD'S COMMENT (WELLBEING)
<p>"I liked the walks – especially to get plants for the butterflies. I liked walking up the hill."</p>	<p>Making links between the park and kindy was important for continuity of learning. We engaged community expertise for authentic problem solving... replenishing plants for our butterfly garden from the State Flora Nursery.</p>	<p>Science: Learning about habitat and food sources for indigenous butterflies. Transferring knowledge to different contexts. Ecosystems.</p> <p>Tech: identifying butterflies and plants through digital and non-digital means.</p> <p>Engineering: designing the garden planting pattern.</p> <p>Math: spatial awareness of size and distance when choosing plants and in planting them at kindy. Connecting with local community scientific expertise.</p> <p>Ethical: indigenous planting.</p>	<p>"I feel good at Nature Kindy." (E) Children felt positively empowered in choosing the plants and understanding their contribution to sustain native butterfly populations. Persistence and resilience as well as physical fitness developed by long walks.</p>
<p>"We were all playing detectives under a tree. Detectives look for things that are lost like mushrooms."</p>	<p>Noticing is a key skill (for science, maths and art) encouraged by educators and honed by all the children over time. Children learned about seasonal changes. Discovering different fungi in different habitats was a strong interest. Children were keen to find a rare blue Pixie toadstool on their walks.</p>	<p>Science: Exploring and discovering. Curiosity. Persistence in pursuing theories.</p> <p>Maths: Observing similarities and differences, patterns and using data to predict when/where fungi will be found.</p> <p>Language: Vocabulary development and reading using NRM identification charts. Connecting with community scientific expertise.</p>	<p>"I feel really happy and I feel like seeing all the nature." (A) Emotional connection to the natural environment. Confidence in "reading". Collaboration and shared goals.</p>
<p>"I made (the letter) 'A' with sticks. I liked walking in the rain and seeing the emu. I liked floating leaves in the water in the creek. I liked walking on the logs, hunting for toadstools. I found some the first day. I love seeing the kangaroos. I like the rope swings. I ate some Johnny cakes with jam and honey. Yummy!"</p>	<p>Communication and writing: Connecting to literature, bringing texts alive. Following a recipe. Cultural connecting to Aboriginal stories. Identifying fungi with charts and reading maps.</p>	<p>Exploration, discovery, classification. Cooking is STEM. Delayed gratification between cooking and eating helps develop executive function.</p>	<p>"It felt nice to be at Nature Kindy. It's Spring." (A) Emotional connection: A parent composed a nature kindy song with the children, using their words, and this was shared with families as well as sung by children as they played both at the centre and in the park. When children sing spontaneously, it is a great indicator of wellbeing.</p>

CHILD'S COMMENT (NATURE PLAY)	EDUCATOR'S COMMENT	STEM ANALYSIS	CHILD'S COMMENT (WELLBEING)
<p>"I liked making my boat to float in the water. I like playing on the rainbow snake - the big log, the tree that fell down. I learnt no pulling things off the trees. I said, "Josh you cannot do this!" I like testing how deep the puddles are. You can use things from nature to make things not using glue or sticky tape. Nature needs protecting or else animals won't have anywhere to live or sit under. We have to look after nature so we don't hurt animals. Turtles get hurt by rubbish like straws. Only rain down the drain."</p>	<p>One "problem" solved was creating a boat that would float on the creek. Children chose their own materials found on the ground. String and rubber bands were made available.</p> <p>Cultural connections: Aboriginal dreaming stories come alive in natural settings. The long log became the "Rainbow Serpent". The lorikeet and other feathers found connected children with the story of "How the birds got their colours". Our Aboriginal child shared his stories of being on the Lands.</p>	<p>Science: Which natural items float, what sinks, and does size impact this? How the force of water currents moves objects. Sustainable practices.</p> <p>Tech: What tools are needed/available? Some children used a stick to make holes in leaves and then threaded these sails onto a mast.</p> <p>Engineering: designing a plan using the available resources. What type of boat? How will the parts stay together? Can the boat be transported to the creek?</p> <p>Maths: Using data, spatial knowledge.</p> <p>Ethics: We made sure all rubber bands were collected afterwards, sticks returned where found, and we collected and disposed of broken glass we discovered in the creek.</p> <p>Citizenship: We stencilled drains with the "Only rain down the drain" message. There were lots of conversations about how the Belair creek we played in ended up at West Beach in the sea.</p>	<p>"I feel good at Nature Kindy." (S) Resilience and persistence when boats fell apart or didn't float as expected. Satisfaction of success. Developing working memory and flexibility as executive functions for learning. Risk taking in learning. Wellbeing that comes from doing something proactive for others. Wellbeing from cultural sense of belonging.</p>
<p>"I was hunting for birds and wolves and foxes. I like to keep building the cabin, play under the pine trees, swing on the (rope) swing and walk along the logs. I liked walking in the rain. We saw a big log. I liked splashing in the big muddy puddles and floating my boat in the creek. It was a good floater."</p>	<p>Cubby building or making shelters is an inherent part of human play. Children collaborated in the problem solving of how to make cubbies out of fallen branches only. It was both a short term and long term endeavour for different groups of children.</p>	<p>Science: properties of dry/greener branches.</p> <p>Maths: measurement, spatial awareness when building.</p> <p>Collaboration: Designing and following a plan.</p> <p>Ethics: Only use fallen branches.</p>	<p>"I feel great at Nature Kindy. My dad stayed lots of times." (Ch) Pro-social executive functions develop through collaborative play. Engaging community and building adult wellbeing through connections to nature. Families began to visit the park on weekends.</p>



CHILD'S COMMENT (NATURE PLAY)	EDUCATOR'S COMMENT	STEM ANALYSIS	CHILD'S COMMENT (WELLBEING)
<p>"I went on the tree & I found a toadstool. I played with clay. I made a dinosaur. We went walking in the woods. We saw 2 dead rabbits. We were finding things. I found a nut, a feather and moss. I jumped in a puddle. I had Spiderman boots on. I saw a kangaroo. I liked looking in the hollow log."</p>	<p>The "big rat" someone spotted turned out to be a kangaroo, seen in real life for the first time. We also discovered a dead kangaroo which sparked children's curiosity about the processes of decay.</p>	<p>Science: lifecycles, pests, fauna and flora first-hand observations and ethical conversations about authentic issues like rabbits being pests as well as pets.</p> <p>Tech and Engineering: Making a representative model of an animal from found resources.</p> <p>Maths: noticing, counting, sorting and categorising.</p>	<p>"I felt happy at Nature Kindy." (J)</p>
<p>"I know you never hurt nature. Never never never scrape a tree's skin off. It's like humans."</p>		<p>Critical thinking and empathy.</p>	<p>"I feel great at nature kindy." (J)</p>

As well as observations and analysis by educators and children, parent voice is also a strong indicator of successful learning and positive wellbeing. Family feedback about sessions in the park indicated children developing a greater appreciation, knowledge and understanding about nature, and learning about nature being food and shelter. When we look at parents' comments about children's wellbeing in nature, a typical response is that their child was "so happy to go", that they "always enjoyed their nature play", and that they came home "tired but quite happy". Other comments told us their child felt "free", "courageous", "more inquisitive and independent" and "grounded in nature". For a child with vision impairment, nature play was "an awesome experience, learning about wide open spaces and really learning to enjoy it". Wellbeing was developed through engagement.

Through contributing to collaborative projects and shared experiences that integrate sensory, physical and cognitive systems for purpose and

enjoyment, children strengthen their wellbeing as well as make meaning of their world through scientific, mathematical and symbolic explorations, and increasingly complex language.

Through nature play and engaging in sustained, ethical conversations with sensitive educators as co-researchers, children develop their identity as capable and confident explorers, creative STEM problem solvers. They develop their identity as citizens that respect the environment, follow sustainable practices and have a positive impact on the wider zones of their community.

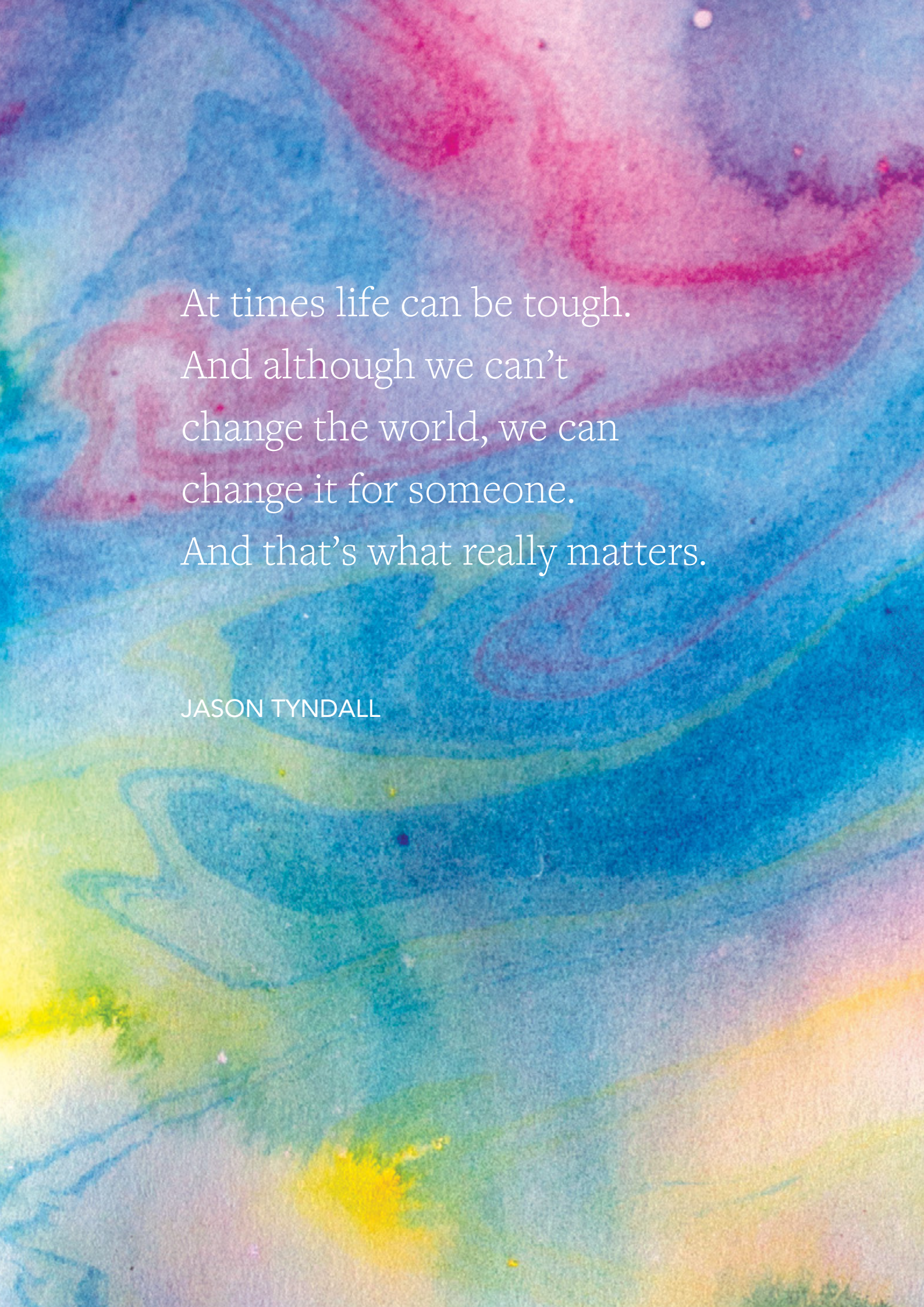
You may recognise the indicators of all five EYLF outcomes in the examples I have shared. Whether nature play happens at the centre or beyond the gate, these active learning environments will involve children in deep STEM learning, especially if educators intentionally and ethically engage children with problem-solving in the wider community, enable cultural

understanding, encourage personal and social skills through teamwork, and model empathy and global citizenship. Nature provides an open environment of ever-changing possibilities that allow children to lead learning and to develop creative and critical thinking through STEM problem seeking and solving. Engagement in positive playful nature learning experiences develops positive wellbeing. Wellbeing and positive dispositions developing through play will motivate further learning. Next time you are casting a critically reflective eye over your outdoor play space or exploring beyond the gate you may ask yourself, "Do our children dance and sing and do everything? Have we hit that holistic note of belonging, being and becoming?"

["We dance and we sing and we do everything" is the first line of a nature kindy song written collaboratively by Blackwood Kindy children and one of our parents, a singer-songwriter. Reissen 2016.] 🌿


» Sue has 36 years' teaching experience with ten of those in various Director roles. In 2016 to 2018 she worked as an early years STEM Project Officer with the Department for Education and has since returned to a Director role at Stirling District Kindy. She is currently implementing a bush kindy program that is seeing similar benefits for students and parents.





At times life can be tough.
And although we can't
change the world, we can
change it for someone.
And that's what really matters.

JASON TYNDALL



A child,
more than anyone else
is a spontaneous observer
of nature.

MARIA MONTESSORI



A cautionary tale

THE IMPORTANCE OF LETTING IMAGINATIONS SOAR

PAUL JOHNSON, ARBURY PARK OUTDOOR SCHOOL

Outdoor learning and play have benefits that transcend a child's schooling experience. Their emotional and physical wellbeing can be significantly impacted. For the most part, the effects on wellbeing (and learning) are extremely positive. However, in this reflective account **Paul Johnson** offers a cautionary note on ensuring that critical elements of a child's play experience are not missed – and warns that should they be missed it can potentially be counterproductive to positive outcomes for a child's wellbeing.

In this piece I offer a cautionary tale that draws attention to how even well designed learning environments can become settings for experiences that set back or even block wellbeing and development.

The basis for my observations is what Hiroto and Seligman (1975) first identified as learned helplessness, a state of being that emerges when individuals feel that they have little or no control over what happens to them.

Learning environments (including nature play places) that are well

designed, maintained and regulated offer learners rich opportunities to experience: a sense of agency, being with others (other people and the other-than-human parts of our world), self-efficacy and, through them, to develop a sense of wellbeing. However, when one or more of these elements is missing or out of balance experiences can be problematic.

When my daughter started school she and two friends shared a place they called "the cooking tree" ... It was an overgrown myoporum bush with a leaning trunk about 20cm in

diameter. By an accident of long-ago pruning the trunk had a dent that was about a centimetre deep at just about the height of a small girl's waist. In fact the irregularity formed a small bowl. A bowl that was, for five-year-olds, just about perfect for mixing leaves, petals and water. During the first few weeks of their first school summer my daughter and her friends inhabited that bush, they talked and "cooked" and learned what it was to be successful at playtimes. Then, one day the cooking tree was gone. No tree. No explanation. No sorry. Later in the year, when cold nights

and winter rains brought forth a field of sour sob weeds at an edge of the oval, the same friends played “flower shops” with the bright yellow sour-sob flowers. At the end of the school day anyone with eyes could see bunches of sour sobs hanging limp in the lower forks of the trees at that oval’s edge. Sour sobs are an ideal flower for play: being a winter weed they can grow thickly in almost any damp place and in summer they die back to an underground bulb which will re-shoot when the rains come. They are a persistent weed that generations of children have used. But not my daughter and her friends – at the height of her interest in “flower shops” the whole patch was mowed. No more flowers.

Clearly the staff at my daughter’s school hadn’t fully understood that children create their own worlds. The poet Dylan Thomas (1992, p.17) knew this, however; he reminisced that, although his childhood place “was a little park, it held within its borders of old tall trees, notched with our names and shabby from our climbing, as many secret places, caverns and forests, prairies and deserts, as a country somewhere at the end of the sea. . . . And though we could explore it one day . . . yet still the next day, it remained as unexplored as the Poles.”

Later, I spoke with staff at my daughter’s school about how children might interpret their schoolyard and how children might read the choices adults make. The answer was fundamentally “this is how we do things” - I’m sure it’s an answer that my daughter and her friends

heard too! For them, adult actions were random events over which they had no control. In effect, school was giving lessons in learning to be helpless.

In another school, one that had been lauded for its provision of “nature play”, I observed older students who were also learning they had little or no control over what happened to them. This school had promoted ideas and practices that were intended to (and indeed did) show students they were competent, trustworthy human beings. Then one day and without warning, students were prohibited from playing in ways to which they had become accustomed. When they asked “why” the answer they received was essentially, “to keep everyone safe”. When they explained that they were their own safety monitors they were told, “the staff have decided”. These students were being taught to be helpless too.

As a PhD student and consultant I’ve had opportunities to visit and observe play in many schools. I’ve met educators who do great work but the choices of others leave me puzzled. I don’t know what some were they thinking when they placed the school’s meagre nature play resources at the far edge of the oval. Didn’t they want to bring imaginative, relational play into the centre of the school’s being? I don’t know what were others thinking when they prohibited every child from running with sticks. Did they intend to stop the Year 4s decorating sticks and riding them as if they were ponies? Truthfully, I don’t know the whys

for these and many other puzzles. Sadly neither did the students, most of whom had given up. They had learned their lessons well and, in the face of seemingly random events that just happened to them, had embraced helplessness.

These tales are not intended as an end, however, rather a caution and a beginning. As Dylan Thomas’s prose demonstrates, children will create cultures if we allow them the freedoms to play. Some time ago I witnessed one teacher make all the difference. She had the courage to define an area where children could create imaginary worlds in half wine barrels that contained tough native plants. In a period of weeks her students had created languages and practices of generosity, respect and growth. I believe our challenge as educators is also to design, maintain and contribute to environments that encourage children to imagine and create cultures they have reason to value. 🌱

REFERENCES

Hiroto, D. S. & Seligman, M. E. (1975). *Generality of learned helplessness in man*, *Journal of Personality and Social Psychology*, Vol. 31, No. 2, pp.311-327.

Thomas, D. (1992), *Reminiscences of Childhood 1945*, pp.15-20. In *On The Air With Dylan Thomas: The broadcasts*, R. Maud (Ed.). New York: New Directions Publishing.

» Paul’s 30-year career spans early childhood to tertiary education contexts in rural and urban areas. From 2007 Paul taught and researched at Galilee Catholic Learning community where he played a formative role shaping and growing the school’s learning environments.

His PhD thesis, *Grounds for Learning: Schoolyard activities and provocations, scaffolds and mediators for childhood learning*, presents a synthesis of social constructivism and ecological psychology to describe how schoolyard activities influence learning. Paul has presented, written and consulted on schoolyard design and professional learning. He is currently curriculum coordinator at DECD’s Arbury Park Outdoor School.







The origins of junk play

THE BENEFITS OF INTRODUCING JUNK LOOSE PARTS

A CONVERSATION WITH GLENN WAGLAND, MOBILE JUNK AND NATURE PLAYGROUNDS

The Mobile Junk And Nature Playground evolved from a small travelling performance troupe promoting a love of nature with awareness of sustainability to schools with the help of hands-on nature play using clay, mud, sticks and “junk” to help cement the messages. In this interview founder Glenn explains the benefits to children of unstructured junk play.

Glenn, can you tell us where your nature play journey began?

My nature play journey began the day I was born. I started off in the city, in the suburbs next to a river where I have some fond childhood memories. We moved out into the country where we lived on a farm with bushland all around us. We played in the bush for hours on end. My siblings, friends and I did that right up until our teenage years. That is where the junk thing came into it. Every farm had a giant junk pile and it was magical to us. We loved going deep into nature and finding old ruins. We grabbed galvanised iron, bits of steel, put it high in a tree then tied it down with old twine and whatever else we could find. If we discovered an old fence line dangling across a creek, that would be the place where we would play because we could use it as a bridge. As an adult, I lived in the city for a little while but then I moved back out into the country and that is how my kids grew up, doing the same things. We still go through the bush, even today, and look for those places where nature and junk meet.

What is junk play and what are the benefits?

It's basically kids playing and learning with junk loose parts. Planks of

wood, milk crates, material, rope, pvc pipe, tyres and all that stuff. These things offer affordances for children's learning. They allow them to problem solve, take risks, design and construct, hypothesise and experiment, socialise and work as team, and reap a whole range of other benefits.

With junk play, children are really moving. That is one of the biggest issues we have these days, that children aren't moving. When you see them playing with this stuff, you can see that children are being physically active. It piques their interest and lets them share the ideas they have. They might like stuff that is big and heavy, where they've got to use a lot of different gross motor skills from those required for typical activities such as playing chasey, ball games or climbing playground ladders – these activities can be quite limiting so having big loose parts adds a whole new dynamic.

Research shows that these loose part environments afford more learning than the static environments that are available to most children. What some sites have done is start off with a small area that is perhaps underutilised. They start off with something more nature-based because nature does not look as

ugly as junk. They have some sticks and rocks, then they slowly introduce a few pallets, barrels and planks of wood. This provides educators with an opportunity to see the value of junk play, through documenting learning and outcomes that are happening in these environments. Then they get leadership on board who can see that this is a highly valued learning area.

Everywhere I go, educators and teachers are completely amazed by children's abilities in these environments, how simple the resources really are, and how complex the play is from such simplicity – I think that is one of the best things about it all. I think it was John Holt who said the best teacher is the child, the worst is the teacher who tries to get in front of that. As teachers, we get caught up in thinking we have to be directing, guiding and manipulating children's play when really it is knowing when to pull back and then observe, float around and throw a few more provocations in there that matters. Some of the best stuff happens in those sorts of environments.

And of course you have the sustainability angle too. Sustainability is an important cross-curricular priority. I often ask students I meet what sustainability means. Out of 60 kids you might see about five hands go up. I think it must be really hard with a full curriculum to squeeze sustainability in there. Sustainability means that we need the Earth forever, but we have not been living that way. It's everybody's business. It's not just about worm farms and giving scraps to chooks, it is about every single thing we do and how it is making an impact.

In addition to all of that, one of the significant differences in play today is adult perception of play – would you agree?

Absolutely. One of the perceptions is fear. I think we need to get adults over their fears. That is all it is. The world isn't as dangerous as we often hear from the media. A lot of people believe it is and they are



inadvertently putting restrictions on kid's experiences. Kids have so much potential and most of it is seen through play, and we can't let our fear get in the way of that. Playing in nature or with junk is a risky activity but it's a good risk, a risk that kids need. We also need to remember that kids don't want to get hurt. But how will they learn if they don't explore these things without us putting restrictions on them? I have always said, let them go, let them build and fall, and they will learn.

Play is also undervalued. So many kids have packed schedules. Footy on one night, tennis the next. Then weekends are packed with sporting events leaving little time for free play – the important stuff. Kids are as tied up as any adult in their working life, but they shouldn't be – they're kids. They don't have many windows of time to be resourceful or inventive, to be bored – that time isn't given to them. I think a lot of parents think their kids need to have all this structure because that's how they will learn to kick a footy or be a good team member. A lot of parents believe children will reach their highest outcomes by being pushed. Vygotsky said, "In play a child always behaves beyond his average age, above his daily behaviour; in play it is as though he were a head taller than himself." That is one of my main philosophies. In play, children are greater than they can ever be with

us pushing them along. If we are pushing them along, we are actually hindering them compared to how they would end up. Kids come up with amazing things if given the time. If we keep throwing all these structured activities at them, we won't know what their potential truly is because they are working within structures we design for them.

I guess the alternative way to balance some of those over-structured activities in a child's life would be free play – would you agree?

Yes, absolutely. I think you have to look at what your measurements of achievement are. Are they leadership skills? Are they academic? Or is it dispositions such as creativity and wanting to be a learner and identifying as a learner? Free play, especially in nature – just experiencing the social side of it is so valuable. We can all have our academic pursuits and our career pursuits or whatever goals we have, but when you look at it all, it still has to be what we enjoy doing so that we can get the most out of life. We need other things that give meaning to who we truly are. Nature is one of those things.

When I meet somebody, I hold off on asking, "What's your name and what do you do?" People usually ask your name and occupation. I

always like to ask someone's name and then I ask what things they like getting into. To me, that's what we are, what we do that we love. I have always been driven by the socialist view that the world has to be rich in art and connection but we also need academics, technology and drive. We just need to balance the cost to human values.

Academics, drive and technology are not more important than art, expression and connection. These are the things that we get from free play. With free play you can totally develop connection with the people you are with. In free play, you choose who you connect with. You choose how you connect with them, you choose what you do with them. In a sports match, on the other hand, you haven't chosen the team, you haven't chosen the goal of beating some other team, you haven't chosen the way it is delivered; this

is just what you have been put into. In a match what you are learning from is a manifestation created by somebody else – recognising, of course, that there is value in these types of activities. In contrast, if you are building a cubby with somebody, you choose who is going to be the constructor, who's going to be the creator, who is going to lead the design or think of other possibilities – all the different roles flow and intermingle. That sort of existence is missing from a lot of what we do – that connection and the love and intent to do these things.

People choose what they do for a living, but if they had no responsibilities they would probably be doing something else. I love what I am doing but there are times that you say to yourself, right now I'd like to not have to wake up this morning and do that. You'd love to just go and do something else. That

thing that you really, really want to do, that's what I find interesting in people. I think "that thing" really needs to have a space, and by devaluing free play and devaluing unconstructed time you are devaluing the person who wants to be free.

What's your take home message for educators?

It would be that nature play and junk play diversify play experiences for children and accommodate more affordances and dispositions for learning. We need to diversify the way children are playing – it should be more than a sports field and equipment. By incorporating junk play, loose parts play or any nature play concept at all, you are inviting children to express their play in a different way. Loose parts play changes your whole concept of what resources are and how capable children can be. 🌱

Glenn's tips for junk play

Put up a sign up for your school community explaining the learning benefits offered by your environment. When people see the sign they will understand that there is a pedagogical reason for why the area can sometimes look untidy.

Always have natural loose parts as they have a wild feel, and integrate the junk in a way that it doesn't look like a junk pile – and have conversations with your learning community about the benefits of it.

You really have to have a mindset change about expectations, what is untidy and what is not. Reconsider your perception of what a place should look like. Keep the children's developmental needs front and centre.

Setting an area aside and having storage containers can help maintain junk play at your site.

Put a call out to your school community to see what they may be able to donate.

» *Wagland is the director of the Mobile Junk and Nature Playground. For the last six years he has taken the loose parts playground to education sites all over South Australia advocating for natural and sustainably sourced (junk) loose parts play. With a long history in early childhood education, and a longer history of living in the bush, Glenn combines learning theories and current research with personal experiences gathered from 18 years of working with children and five years of visiting over a thousand schools and kindergartens with the loose parts playground.*





Ideas
AND
Inspiration



Mental health and the calming refrains of nature

ENCOURAGING CHILDREN TO SPEND MORE TIME IN NATURE

JASON TYNDALL, NATURE PLAY SA

The rise in mental health statistics in Australia, for both adults and children, is alarming and indicates a need for greater intervention across all facets of our lives. Strategies to approach mental health and wellbeing vary greatly; however, extensive research is emerging that demonstrates spending time in nature improves the mental health of children and adults. In this practical piece Nature Play SA's General Manager **Jason Tyndall** provides some practical ideas to encourage children to spend more time in nature within an education context.

Whether it be in a school, work or home environment, time in nature is often seen as a lesser priority across our lives and the lives of our children. But if we cast our minds back to how we played as children and the contact we had with nature – and compare that to the experience of today's children – we had, generally speaking, far more time in nature than they do. We have to ask ourselves: what is the flow-on effect in a child's life when they are having less time in nature than any other generation? There are some instances today when a child can have no contact with nature for days on end, illustrating the significant shift from the daily contact with nature that we had in years gone by. Is this a problem? In short, yes it is. We are now at point in time where we see an emerging body of research that is causing leaders and practitioners to shift their focus and perspective to integrate nature into pedagogical practice, and furthermore, inviting their communities along for the journey, demonstrating a holistic approach to incorporating nature into a child's life. We are getting there. There is much work to be done but the future is hopeful, as these powerful words from Margaret Mead attest:

Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it is the only thing that ever has.

From an education perspective, having a natural space characterised by plants, logs, rocks, paths coupled with outdoor learning and strong pedagogical practice is not only good for facilitating authentic learning experiences but research from around the globe continues to find that nature has a positive impact on children's mental health. For example according to the American Academy of Paediatrics, "Sixty minutes of daily unstructured free play is essential to children's physical and mental health." (2007). In addition research from the Journal of Paediatric Nursing found "access to natural environments can benefit children in various ways, including improvements in confidence, social interactions, cognitive development, academic achievement, and emotional wellbeing" (McCormick, 2017).

Given that research has demonstrated that nature can improve mental health, creating opportunities for children to spend time in nature (both structured and unstructured) has become increasingly important. Here are some ideas that educators can consider incorporating into their daily/weekly routines, lessons and during times of free play. 🌿

A SNAPSHOT OF MENTAL HEALTH IN AUSTRALIA

- 1 in 7 (14%) young people aged 4-17 experience a mental health condition in any given year.
- 50% of mental health conditions emerge by age 14.
- Children are less likely to seek help for mental health conditions than adults.
- In any one year, around 1million Australian adults have depression and over 2 million suffer anxiety.
- Depression is the leading case of disability worldwide. In Australia, 45% of people will experience a mental health condition in their lifetime.

Source: *Beyond Blue Building resilience in children aged 0-12: A practice guide*

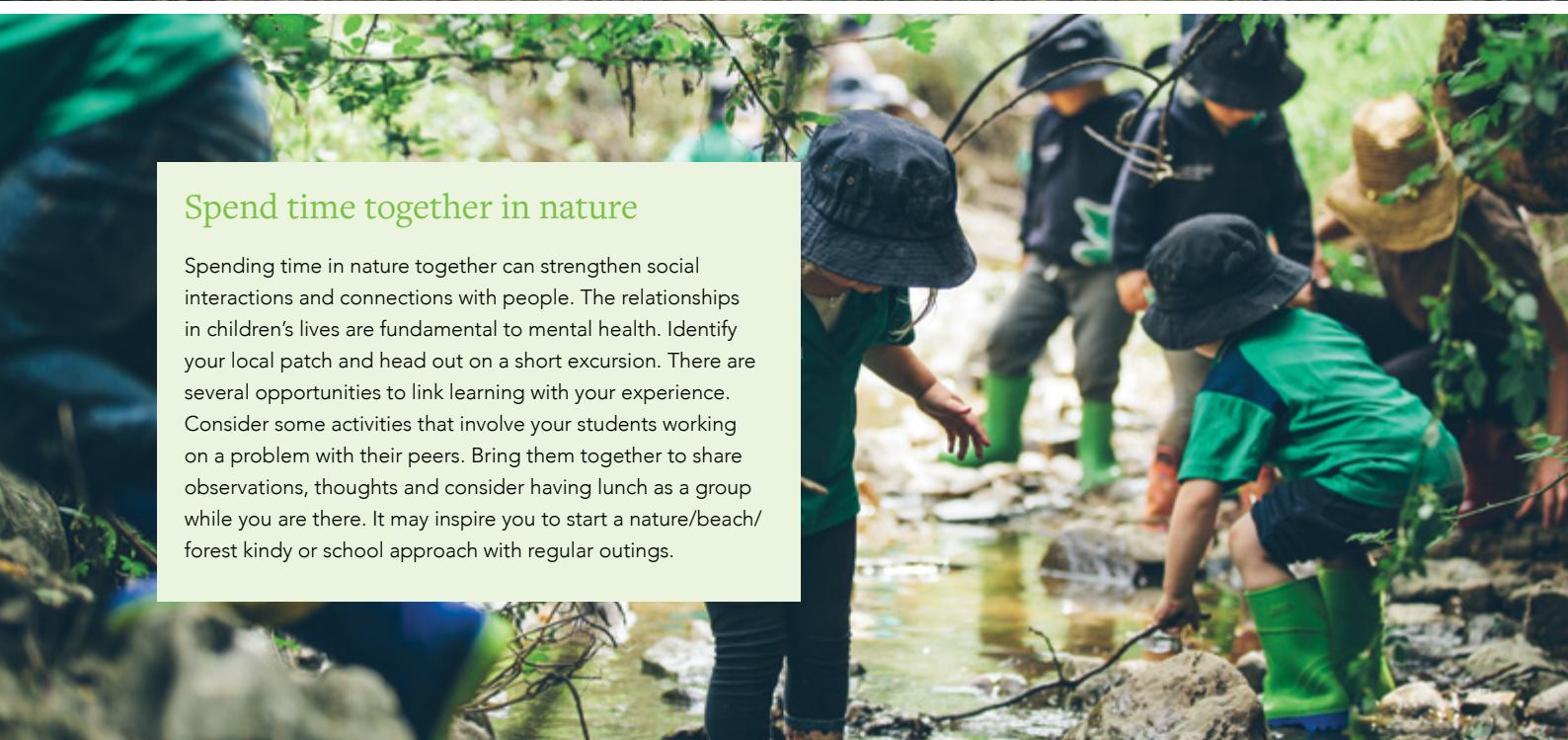
Take a class walk in nature

Spending time in nature has been found to reduce stress, improve concentration and translate to better academic performance. Take a slow and quiet morning/afternoon walk as a class once or twice a week. Encourage students to notice and observe. As a class reflect on how walking made them feel and what they noticed. You can consider taking along provocations to invite their curiosity: Plant and animal ID charts can also contribute to the experience - however make time to just wonder and explore without expectation.



Spend time together in nature


Spending time in nature together can strengthen social interactions and connections with people. The relationships in children's lives are fundamental to mental health. Identify your local patch and head out on a short excursion. There are several opportunities to link learning with your experience. Consider some activities that involve your students working on a problem with their peers. Bring them together to share observations, thoughts and consider having lunch as a group while you are there. It may inspire you to start a nature/beach/forest kindy or school approach with regular outings.



Create something inspired by nature

Nature can be a source of inspiration and curiosity. Its colours, patterns, sounds, textures and smells, as well as the feelings it evokes, can lead to spontaneous learning and creative opportunities. Whether it be writing, recording or sketching thoughts and observations, painting, singing, dancing or making, nature can promote sustained learning and involvement. Consider having a nature journal for your students to write their reflections, wonderings or creatively depict the world as they see it.



A child with long blonde hair, wearing a dark blue bucket hat and a green t-shirt, stands with their back to the camera in a lush green field. The child's hands are behind their back, and they appear to be looking out over the grass.

Find a sit spot

A sit spot can provide an important window of relaxation and can slow the world down for a child. It can be challenging to ask a whole class of students to sit quietly for a few minutes. Like all mindfulness activities, however, it may take time but it also offers significant reward. Start with short stints of time such as a minute then progressively increase by one minute intervals - find the balance for your children.

A child is sitting on the ground in a forest, surrounded by tall trees and a carpet of brown pine needles. The child is wearing a blue and white striped shirt and is focused on reading an open book.

Read to the sounds of nature

Reading can immerse children's minds in imaginary worlds whilst helping with focus and concentration. When reading in nature, the sounds and sensations can further help with relaxation and composure. Identify an area in the school grounds that is quiet, has natural features and make it a reading spot. Consider taking cushions and mats out to the space and create an atmosphere of learning and comfort. Consider exploring links with reading texts and outdoor lessons or provocations.

A close-up shot of two hands holding several fresh green leaves. The leaves are vibrant and appear to be from a herb plant. The background is a soft-focus green, suggesting an outdoor garden setting.

Prepare seasonal food and share it

Cooking is an ideal opportunity to work together, learn new skills and build confidence. It provides a sense of achievement and pride. By using homegrown/school grown and/or seasonal produce children can tune into the seasons and be more likely to eat healthy, actively garden and spend more time outside. If you don't have a veggie patch, consider starting something small as a class - perhaps potted herbs - or fundraise for raised garden beds and plant some leafy greens. Whatever you do, involve the children in the planning, planting, cooking, eating and sharing, and invite the parent community in to participate in some way too.

Observe the birds

Taking the time to observe birds is a powerful form of mindfulness. It slows down the mind and helps children and adults be present in a moment. Birds are not only beautiful but their lives are fascinating and children can gain insight from simply watching them. Questions and lines of inquiry will naturally evolve from watching birds. Wonderings about nests, behaviour, breeding and diet will often emerge. Mornings are the best time for bird watching and NRM Education have ideal bird watching charts to support the children and adults identify local birds.



MENTAL HEALTH , WELLBEING AND NATURE IDEAS

Here are some ideas that educators can consider incorporating into their daily/weekly routines, lessons and during times of free play. Trim them out and display them in your classroom to draw inspiration from.



REFERENCES + RESOURCES

McCormick, R. (2017). Does access to green space impact the mental well-being of children: A systematic review. *Journal of Pediatric Nursing* [<https://www.childrenandnature.org/research/access-to-nature-can-promote-the-mental-well-being-of-children/>]

Ginsburg, K. R., MD, MEd, and the Committee on Communications and the Committee on Psychosocial Aspects of Child and Family Health, The Importance of Play in Promoting Healthy Child Development and Maintaining Strong Parent-Child Bonds article from *American Academy of Pediatrics*, VOL. 19, ISSUE 1, 2007 [<https://pediatrics.aappublications.org/content/119/1/182>]

Beyond Blue, Building Resilience in Children aged 0-12: A practical Guide [<https://www.beyondblue.org.au/who-does-it-affect/children/building-resilience-in-children-aged-0-12>]

Want Creative, Curious, Healthier Children with 21st Century Skills? Let Them Play article from *American Academy of Pediatrics* 2018 [<https://www.aap.org/en-us/about-the-aap/aap-press-room/Pages/Want-Creative-Curious-Healthier-Children-with-21st-Century-Skills-Let-Them-Play.aspx>]

Mental health and the calming refrains of nature (Nature Play SA) - one page resource that can be distributed to parents, staff and other members of the school community [<https://natureplaysa.org.au/wp-content/uploads/2018/10/NPSA-Mental-Health-List-Digital-1.pdf>]

Go Wild with Nature Play SA a resource pack that contains a series of nature and wild space inspiration cards to print off and use with your class. [<https://natureplaysa.org.au/go-wild-with-nature-play-sa/>]

NRM Bird Watching Charts [<https://www.naturalresources.sa.gov.au/adelaidemtloftyranges/education/for-educators/plants-and-animals/land-based-environments>]



Perfect balance

THE WIN-WIN OF ENHANCING LEARNING THROUGH NATURE ENGAGEMENT

MARIA TAYLOR, NATURE PLAY SA

For many of us, it's a given that time spent in nature enhances wellbeing, but too often it is squeezed out in the belief that indoor learning is more important in terms of meeting curriculum objectives. Recent research indicates, however, that nature-based learning actually enhances classroom learning. In this Curriculum Connections article, **Maria Taylor** shares a wealth of ideas of how educators and students can harness the wellbeing benefits of nature engagement and enhance student attainment at the same time.



“Do experiences with nature — from wilderness backpacking to plants in a preschool, to a wetland lesson on frogs — promote learning?” Until recently, claims outstripped evidence on this question... and converging evidence strongly suggests that experiences of nature boost academic learning, personal development, and environmental stewardship.



KUO, BARNES AND JORDAN 2019

We know that engaging with nature is good for children’s brains and even better for their bodies. From supporting healthy child development to offering a place for contemplation, reflection and adventure, spending time outdoors is proven to offer the perfect balance of calming minds and igniting the senses.

There is a growing acceptance and understanding that nature is inherently good for children and childhood. Having experiences related to nature and incorporating nature-based instruction into kids’ daily school lives promotes better learning via eight distinct pathways, according to recent research published in *Frontiers in Psychology* (2019).

PAVING THE PATHWAY TO SUCCESS

A critical review of nature-based learning research by Kuo et al. (2019) identified eight distinct pathways through which experiences with nature benefit students.

1. Nature has rejuvenating effects on attention
2. Nature relieves stress
3. Contact with nature (and animals) boosts self-discipline
4. Student motivation, enjoyment, and engagement are better in natural settings

5. Time outdoors is tied to higher levels of physical activity and fitness
6. Nature may boost learning by providing a more supportive context for learning
7. Vegetated settings tend to provide calmer, quieter, safer contexts for learning
8. Natural settings seem to foster warmer, more cooperative relations

WHAT DOES THIS LOOK LIKE IN PRACTICE?

Nature-based learning takes on many forms. We know that there is no “one size fits all” approach to guarantee success and positive outcomes. The challenge is firmly placed at an individual site level to explore what nature-based learning looks like for their learning community. The challenge sits firmly alongside opportunity.

SMALL STEPS TO BEGIN

Starting small sounds easy but is often such a hurdle. One way (and just one of many, I might add) is to consider: what would it feel like to take learning outside and do something wild every day? What might your class investigate, explore and create?



Go Wild

WITH NATURE PLAY SA

Recently our education team created a resource to showcase daily challenges that encourage students and teachers to:

- explore their senses
- take notice of their surroundings
- share the wonder of the natural world
- create in nature
- connect with the "wild at their fingertips" and
- spend time in natural settings

There are many natural links that can be drawn between these daily challenges and curriculum learning, whether it be through unplanned connections made by children, the application of specific concepts or rich conversations between peers or teachers and students. An example of potential curriculum connections has been woven into each section to support teachers to take their learning outside with confidence.

EXPLORING SENSES IN NATURE

The nature engagement challenges for the "exploring senses in nature" Go Wild card set are perfectly placed to develop vocabulary and to support writing. Each of these could be linked to the writing of poetry or exploring the use of grammar such as the use of nouns, verbs, adjectives or metaphors.



NOTICING NATURE

Why not link some challenges to your Science curriculum? Some perfect links for inquiry and study of the natural world can be found on the "noticing nature" Go Wild card set.



SHARING NATURE

Many of the challenges in the "sharing nature" Go Wild card set provide a wonderful segue to developing lines of inquiry. Where do these treasures come from? How do these leaves change over time? What DID this place look like long, long ago? At times, the questions are more important than the answers.



NATURE ART

One avenue for recording time spent "noticing" nature and exploring outdoor environments is through a nature journal. A nature journal provides a great structure to exploring the nuances of natural environments and recording these findings to share with others and revisit. The "nature art" Go Wild cards offer many ideas for recording and exploring findings in nature.



FINDING NATURE

The opportunity for mathematical learning in nature is immense. When completing the challenges within the "finding nature" Go Wild cards, data collection, mapping skills and number facts can be front and centre while students are engaged through exploration and discovery.



TIME IN NATURE

Wellbeing is paramount to success in a learning environment and research around the world continues to find that nature is good for us. All of the challenges in the "time in nature" Go Wild cards can be woven into the day to give adults and children the opportunity to connect with natural environments, slow down and improve concentration – ultimately benefiting learning indoors!



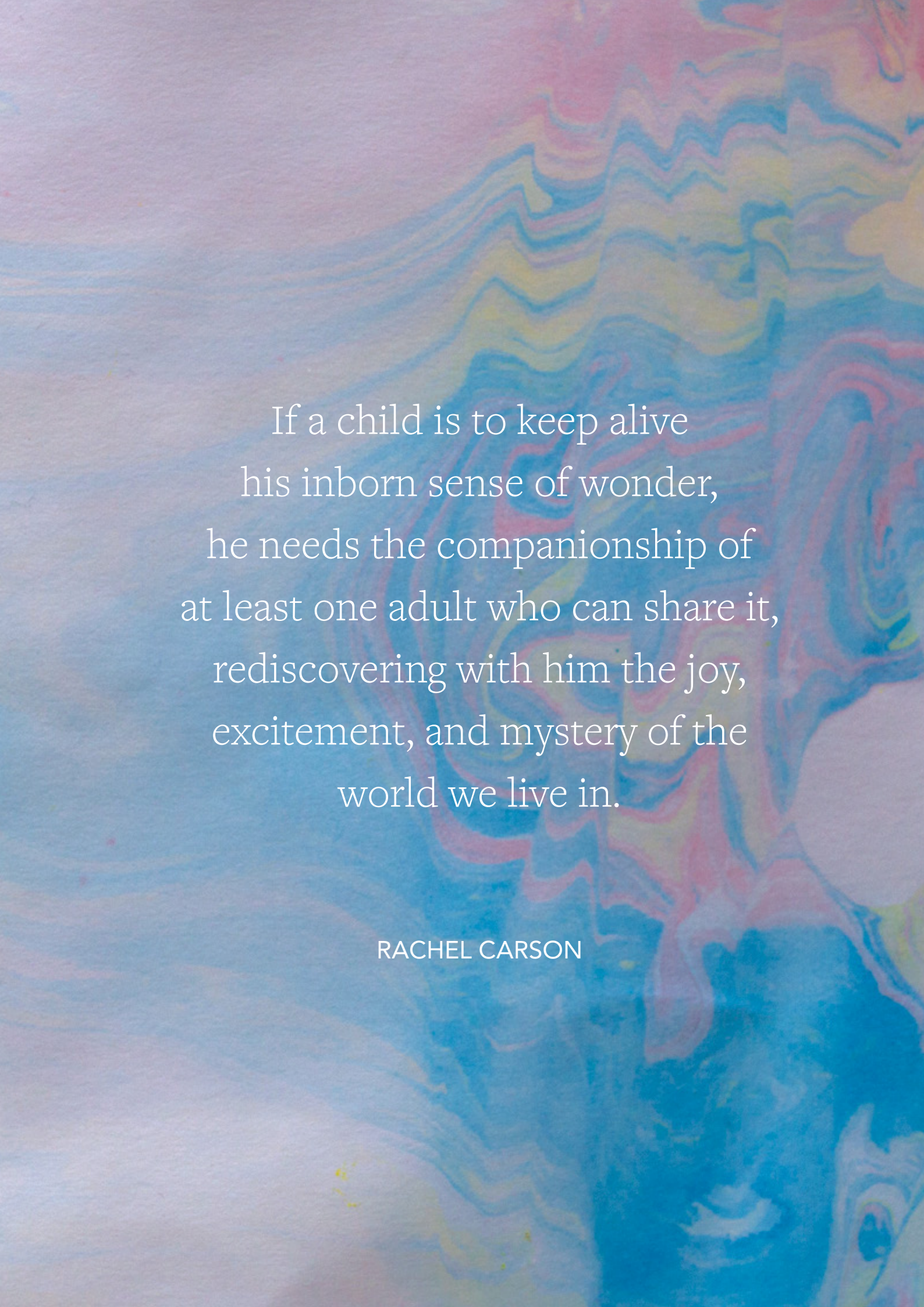
IN SUMMARY

We know it takes time to create new habits, routines and rituals. These fun, engaging and simple challenges might just create the healthiest habit for you and your learning community. We encourage you to give some of them a go. 🌱



The Go Wild card set is available for purchase or via free download on our website natureplaysa.org.au.





If a child is to keep alive
his inborn sense of wonder,
he needs the companionship of
at least one adult who can share it,
rediscovering with him the joy,
excitement, and mystery of the
world we live in.

RACHEL CARSON

Our Big Backyard

BRINGING A COMMUNITY TOGETHER TO REDISCOVER THEIR LOCAL ENVIRONMENT

SOPHIE ROGERS, NRM EDUCATION OFFICER, ADELAIDE AND MOUNT LOFTY RANGES NATURAL RESOURCES
DARJANA NIKOLIC, TAIKURRENDI CHILDREN'S CENTRE

What's great about where you live? What would it be like if we all knew more about the local history - and natural history - of the places and spaces on our doorstep? How might that change how we feel about our community? In this article **Sophie Rogers** and **Darjana Nikolic** take us through a collaborative project that has seen a community come together to identify their local spaces through nature play events and the development of accessible and free resources. And their purpose is simple – to engage more families in their local natural spaces.

WHERE IT ALL BEGAN

The Our Big Backyard (OBBY) Project aims to connect families with their local area through a range of local resources and, in turn, connect them more strongly to each other and their community through shared experiences, creative play and a deeper understanding of the natural world.

Through the creation of a network of community champions comprising both children and adults, the local community were involved in every stage of the project. A major component of the project was the development of a neighbourhood map that identifies significant local places and series of nature play activity sheets for families to begin exploring their local area.

The initial project was developed by the City of Onkaparinga, *NRM Education, Aldinga Beach Children's Centre and Anglicare SA Communities for Children Onkaparinga. In 2014 the program in Aldinga Beach and Sellicks region was awarded the Children's Week Award from the Children's Week Association of SA, recognising its contribution to the needs, interests and welfare of children.

The original Aldinga/Sellicks project saw a range of benefits that continue today, such as:

- an increase in children and adults visiting their local areas and spending quality time together
- a greater sense of place
- a deeper connection to nature
- opportunities to meet other local community members and develop their relationship with their community

As part of the Aldinga/Sellicks OBBY project, a number of templates and guidelines were developed for other regions to adapt to their local context. There was interest in developing an OBBY project for the Christies and O'Sullivan Beach area where a small team formed – and so it began.

STARTING WITH A SMALL TEAM

Our Christies adventure began in 2015 with a group of passionate classroom educators, environmental educators and community development officers coming together to form a small project team in response to an open call for anybody interested in finding out more about the Aldinga/Sellicks OBBY and how it could translate to the Christies community.

All members of the team were excited about the potential of having an Our Big Backyard project in the Christies area. We identified multiple benefits for the community such as:

- increased pride, community identity, belonging, and ownership in the local Christies area
- young people having quality time and experiences with their caregivers
- more frequent and positive experiences in our local natural environment
- community members feeling confident and comfortable going to public spaces (which helps with natural surveillance and crime prevention)
- families connecting with their own communities through shared experiences and events
- prioritising the knowledge and experiences of local children and families throughout the consultation and development process of the project

Through working together, we all brought different perspectives that enhanced the development of the initiative as well as further strengthening partnerships and increased networking. The first few meetings were spent discussing shared values which became guiding principles in developing the project. These included:

- genuinely consulting, involving and engaging with local families from the very beginning of the project and



Through working together, we all brought different perspectives that enhanced the development of the initiative as well as further strengthened partnerships and increased networking

allowing this to inform the development of the Christies OBBY project

- valuing and privileging children's voices in the development of an OBBY "family kit"
- ensuring that the recommended activities were as accessible as possible e.g. empty hands, local free places, bus routes identified on maps
- valuing parents/caregivers as the first educators by giving adults the confidence to visit, engage with and play in nature

- learning through play and nature as an organic and spontaneous teacher

Having a shared understanding of the benefits and values that guided the project was critical to the project team being so productive.

CONSULTING OUR COMMUNITY

The first step on our journey was to let the community know that we were starting an Our Big Backyard project in the Christies area and to invite their contribution. We sent out information on the project and started a Facebook page. We distributed a questionnaire to adults and young people in the local area. Our aim was to consult with the local community and gather their knowledge, history and stories to help us identify and understand the natural places across the area. The questions were also designed to allow us to collect baseline data about what is happening now and to gather nature play ideas and details of places the community were familiar with. The voice of children was

critical and we viewed children as our partners. We collected 260 surveys – 180 from young people and 80 from adults. As a result of the survey and discussions with local families we realised that many young people were going beyond their local area to play; very few families went to the local creek or bush land area to play. When asked, “Are there things that stop you from playing outside?” the main theme was the adults in their lives not letting them due to safety concerns.

The project team then set out to explore the places people had identified and to find other safe and interesting places to play in the local area. We decided on six local places: the beach; your own backyard; Christie Creek; Brodie Road Wetland; the boat ramp; and the “Little Forest”. We then came up with a list of 50 things that could be done at one

The voice of children was critical and we viewed children as our partners

or more of the locations. The ideas of things to do came from the survey, by the project team visiting the location and feedback from our initial “come-and-try” days.

DEVELOPING OUR RESOURCES

In addition to the 50 things, we created “nature adventure sheets” that provided more information about six of the activities that families could do at a particular local place. We wanted to do this to help alleviate adult concerns. Information included how to do the activity, important safety information, ways to protect the local environment as well as questions to ask children. We hoped that once adults felt comfortable in the local place, greater confidence would ensue, leading children to do what they do best – creating their own play.

Once the draft nature adventure sheets were developed, we sat down with local groups, including Aboriginal Elders, and asked for feedback. We also ran a series of trial “come-and-try” sessions at the local places in order to get direct feedback. The feedback was mainly around how we can make the language as accessible as possible and identify practical things like the closest toilet, bus stop and other relevant places nearby, e.g. schools, on our maps.

This project was as much about the journey as the final product and is a living, breathing and evolving initiative. The collaborative partnership approach teamed with being led by children and privileging their voices (over adults’) were the significant factors that tells this project apart from others

AMANDA KEMPERMAN, CITY OF ONKAPARINGA

Once the draft kit was finalised, we worked with Heath Riggs from Mono Design. He produced illustrations and simplified the design of the nature adventure sheets. As we were all so passionate about the project, we were volunteering our time; however, design comes at a cost so we needed to pursue funding to move forward. We were fortunate to receive a grant for the design work from the Adelaide and Mount Lofty Ranges Natural Resources and the City of Onkaparinga. Although an enjoyable process, the graphic design work was relatively time consuming as we worked hard to ensure accuracy and consistency across the resource kit.

Once we had the completed kit in 2017, we wanted to celebrate and thank the local community for their involvement in the project. We planned a Family Fun Day at a local park that proved to be an all-encompassing celebration of community on multiple levels. Over 300 local families attending the day and immersing themselves in nature play activities including making nature crowns, painting pet rocks, concocting nature perfumes and cubby building; many of the nature play activities were organised by local schools and early learning sites; and the event was made possible through a Together in the South Collective Impact Grant. To ensure the community had access to resources, 1,000 OBBY Christies Kits were distributed at the Family Fun Day and via local organisations, schools and early learning sites just before the end of Term 4 in order to equip families for the summer school holidays. Nature Play and a renewed appreciation of our natural environment had truly arrived in Our Big Backyard. 🌿

OVERCOMING CHALLENGES

Our biggest challenge was connecting and consulting with everyone, and having a facilitator (in our case, Sophie Rogers from NRM Education) is beneficial to this kind of project. The topics we needed to address were:

- finding the local stakeholders and identifying how to capture local knowledge
- changing perspectives
- challenging notions of risk and breaking down barriers to playing in nature
- trying to convince parents to prioritise nature/ outings in their lives
- maintaining momentum within the project
- securing funding (the City of Onkaparinga played an important role with this)
- coordinating partners (21 people were actively involved in the project team)

**NRM Education is the education component of the Adelaide and Mt Lofty Ranges NRM Board*

By exploring the local neighbourhood, we chanced upon a small reserve in the middle of suburbia that was a swale (ditched area) for flood management. It was full of local native plants. We decided to call it the Little Forest. We had a Come-and-Try day with children from Taikurrendi Children's Centre and Noarlunga Community Children's Centre who loved exploring the space; making mini cubbies, noticing the flowers on trees and collecting sheoak cones from the ground. A man walked past and said, 'Hey, what are you all up to?' A family explained to him the Our Big Backyard Christies project and he thought it was wonderful. He then shared that he created the Little Forest! It was originally a gravelled area with a few exotic trees and he collected seeds and plants from the local area and planted it all over several years. He was so happy to hear that families are enjoying the space. Since then a few families walk through the Little Forest to go to the shops rather than walking along the footpath.

DARJANA NIKOLIC

WHAT THE KINDY CHILDREN WHO WERE INVOLVED SAID:

I'm going to pick up the rubbish with a stick.

We are building a dragon's house.

It was fun because its great exercise for us

If you are quiet and listen you can hear the frogs that live here.

We are making a wardli for our family.

I learnt that trees are different, they are smooth and bumpy and leaves can be smooth or bumpy too.



Photo by: Sophie Rogers

WHAT THE ATTENDEES AT OUR FAMILY FUN DAY SAID:

It was so great. We've been recreating the art at home and looking forward to venturing out and visiting the areas on the card handouts. Really hope there is another like this where people come together for children and nature play. | Parent

I think all of the stalls being run by volunteers says a lot about how many people are on board with the common goal of getting children out into natural spaces. | Morgyn Davis, Noarlunga Community Children's Centre

I learnt so much and the kids had a ball. | Parent

I had a conversation with a mother and son that had just made their very first pet rock together. The mum was proud of him and they had come up with a name for it together. | Darjana Nikolic, Taikurrendi Children's Centre

School gardens can boost student wellbeing

HOW YOUR SCHOOL CAN BENEFIT FROM A WELLBEING GARDEN

CAMILLE JENKINSON WITH EXPERT ADVICE FROM ROB WALLACE, ADELAIDE AND MOUNT LOFTY RANGES NATURAL RESOURCES MANAGEMENT BOARD (NRM EDUCATION)

The healing nature of plants for physical ailments is well documented, but what about the power of plants to enhance wellbeing? In this article former NRM Education officer **Camille Jenkinson** explores the nurturing and healing potential of school wellbeing gardens and considers the benefits to individual students and whole school communities alike.



Photo by: Camille Jenkinson

A school wellbeing garden can provide a peaceful and healing environment for all students and the entire school community to enjoy. Carefully designed wellbeing gardens can also meet the specific needs of individual students, such as for emotional self-regulation, sensory integration, interoceptive awareness, mindfulness or simply the option to have a calming break from the classroom environment. Native plants, with their unique shapes, sizes and textures, are ideal for creating areas that evoke feelings of safety and calm while also creating habitat for biodiversity. Many native plants

as well as food plants have sensory qualities that can be harnessed for specific wellbeing activities.

HOW CAN A WELLBEING GARDEN SUPPORT CHILDREN AT SCHOOL?

Gardens designed to support student wellbeing have a number of benefits that include the following:

- Gardens provide an ideal calm space for mindfulness activities.
- Food garden plots provide the opportunity for horticultural

therapy. By tending to a garden, children take on a care-giving role and may receive an increased sense of responsibility and purpose, leading to increased self-esteem (Mental Health Association of Australia and New Zealand).

- Sensory plants and natural objects can be used for sensory-integration activities, particularly beneficial for children with Autism Spectrum Disorder (ASD). Plants and natural objects can be selected to stimulate the senses of those who are hyposensitive to sensory stimuli and require sensory stimulation. Simple

areas with low sensory input can be used for those who are hypersensitive to sensory stimuli and require a calm, quiet space.

- Natural objects such as large log balances scattered around the garden can provide opportunities for physical activity, which can release energy and frustration build-up. They can also be used for activities that improve the vestibular system which is responsible for the body's sense of movement and gravity.
- Gardens can provide opportunities to practise fine and gross motor skills.
- Increased community connections may be fostered via the garden through community working bees and the sharing of seedlings and produce.

CASE STUDY: CHRISTIES BEACH PRIMARY SCHOOL

Christies Beach Primary School wellbeing garden for interoception. Interoception is an element of wellbeing that many schools are now focusing on. While it's common for a school to have an interoception room, at Christies Beach Primary School Student Engagement and Wellbeing Leader Greg Hollick had a vision to complement their interoception room with a wellbeing garden for students to practise interoceptive awareness in nature.

This vision came to life in 2018 when, following the loss of a significant and beautiful old gum tree, the school community wanted to create a space that would respectfully honour the tree that had always been a part of the school and had been loved by the local community. The remains of the tree now form the foundation of the wellbeing garden, with climbing logs scattered through the undulating space and the original tree trunk carved into a unique seat.

To achieve his vision and turn the space into a wellbeing garden, Greg worked with staff from Natural Resources Adelaide and Mount Lofty Ranges' NRM Education team

and the City of Onkaparinga. The NRM Education team works with school and preschool communities to embed sustainability principles into their learning and management practices, linking them to the Australian Curriculum.

NRM Education provided support in selecting native plants of therapeutic and landscaping value while linking the project to broader biodiversity and sustainability goals. The City of Onkaparinga provided a Community Environment Grant to support the initiative. The garden now has a variety of locally native plants amongst fallen logs, open spaces and a rocky "creekline", and a plan to develop small vegetable plots for horticultural therapy. While the primary purpose of the garden is wellbeing, NRM Education supported the school to select native plants that will provide habitat for native birds and butterflies, increasing the overall biodiversity of the school.

The garden has been carefully designed to fulfil multiple purposes around student and community wellbeing. During recess and lunch times it is available for all children to enjoy the well-known benefits of nature-based play. Outside of school hours, its purpose is to provide a platform for the wider school community to connect with one another; sharing knowledge, skills and resources relating to biodiversity and food gardens. During class-time, the garden has been designed to fulfil a very specific goal: to provide an environment for children to learn interoceptive awareness (see below), a skill that is key to emotional regulation.

WHAT IS INTEROCEPTIVE AWARENESS?

Interoception is the perception of sensations from inside the body. It includes the perception of physical sensations such as heartbeat and respiration, as well as autonomic nervous system activity related to emotions. Interoceptive awareness is the ability to both notice and

understand these internal sensations and how they link to emotions or bodily needs (Price & Hooven 2018) – for example, being able to feel sensations such as a fast heartbeat and understand that these feelings may be due to nervousness, or that a pain in the stomach may be due to hunger (Goodall 2016).

Current research suggests that interoceptive awareness is strongly linked to emotional self-regulation (Price & Hooven 2018). Research also suggests that children with sensory processing issues such as Autism Spectrum Disorder (ASD) may be more prone to difficulties in interoceptive awareness; however, there is a lack of research in this area (Autism Awareness Centre 2016).

HOW CAN A WELLBEING GARDEN SUPPORT THE DEVELOPMENT OF INTEROCEPTIVE AWARENESS?

- Well-designed gardens can provide a space that is quiet, relaxing and free of distractions, a retreat from the highly stimulating indoor classroom. This can provide children with a space to reduce sensory overload and check in with their internal state.
- A garden can provide an alternative space to an interoception room, for children to work on sensory integration activities for interoceptive awareness.
- Gardens are an ideal place to practise mindfulness; by engaging the senses it helps children to come into full awareness of their surroundings as well as their internal state. Mindfulness has been closely linked to improved interoceptive awareness (Price & Hooven 2018).

NRM EDUCATION'S TOP 12 SENSORY PLANTS FOR WELLBEING GARDENS:

TREES



Drooping Sheoak *Allocasuarina verticillata* has needle-like branchlets that create a gentle whooshing sound in the breeze as well as textured cones that are interesting to touch.



Totem Poles *Melaleuca decussata* can be pruned to create a screen-like hedge to border off areas and give a feel of privacy.



Native Apricot *Pittosporum angustifolium* has attractive orange fruit and abundant foliage which can screen off areas.

Photos by: Jeremy Gramp

SHRUBS



Twigg daisy bush *Olearia ramulosa* has a strong, sweet scent and can be easily pruned to create areas of privacy or natural tunnels.



Ruby saltbush *Enchylaena tomentosa* has an abundance of sweet red berries that can be picked and eaten.



Cushion Bush *Leucophyta brownii* has a unique appearance and interesting texture, with rigid, scaly, silver stems and yellow, button-like heads.

GRASSES AND SEDGES



Elegant Spear Grass *Austrostipa elegantissima* has a wispy feathery feel that is soft to touch.



Native Lemon Grass *Cymbopogon ambiguus* has a strong citrus scent.



Flat Sedge *Cyperus vaginatus* can be used for weaving, a tactile activity to engage fine motor skills.

Photo by: Jason Tyndall

GROUNDCOVERS



Yellow Tails *Ptilotus nobilis* have a soft, fluffy texture.



Common Everlasting *Chrysocephalum apiculatum* has eye-catching, bright yellow flowers and is also an important caterpillar food plant for the Australian Painted Lady Butterfly.



Muntries *Kunzea pomifera* have an abundance of sweet, edible berries to pick and taste.

**Plants should never be eaten without expert guidance*

Photo by: Jason Tyndall

Tips from NRM Education for developing a school wellbeing garden:

1. Select a variety of native plants local to your area

NRM Education can support you to select and source plants that are locally native and those which are guaranteed to attract native birds, butterflies and other insects. It is important to select a diversity of plant types including groundcovers, grasses, small and large shrubs and trees to create maximum habitat and biodiversity. This also creates an interesting, dynamic and varied feel to the garden.

2. Choose native plants that will stimulate the five senses

The Adelaide and Mt Lofty Ranges region host an incredible array of unique native plant species, many of which engage multiple senses. For example, Greg chose Yellow Tails (*Ptilotus nobilis*) due to their soft and fluffy texture, Twiggy Daisy Bush (*Olearia ramulosa*) for its strong scent and Ruby Saltbush (*Enchylaena tomentosa*) for its sweet, edible berries.

3. Consider screening plants that provide a feeling of privacy

When using a garden as a therapeutic space, it's important for children to feel a sense of privacy where they can work with a Student Support Officer or other staff, away from the hustle and bustle of everyday school life. Some native plants, for example, the Twiggy Daisy Bush (*Olearia ramulosa*) and Totem Poles (*Melaleuca decussata*), can be pruned as hedge screening whilst having a gap at the base to see children's feet (for supervision). Other plants provide abundant foliage which can create a natural boundary. Greg chose the Native Apricot (*Pittosporum angustifolium*) to plant next to the nearby classrooms to block the view from the classrooms and allow for a more private feel in the garden.

REFERENCES + RESOURCES

Autism Awareness Centre (2016). What Is Interoception and How Does It Impact Those With Autism?, viewed 10 January 2019, [<https://autismawarenesscentre.com/what-is-interoception-and-how-does-it-impact-autism/>]

Goodall, E. (2016). Interoception 101, Department for Education and Child Development South Australia, [<http://web.seru.sa.edu.au/pdfs/Introception.pdf>]

Mental Health Association of Australia and New Zealand (2018). What is horticultural therapy and how does it work?, viewed 10 January 2019, [<https://anzmh.asn.au/2018/06/19/horticultural-therapy/>]

Price, C. J., & Hooven (C 2018). Interoceptive Awareness Skills for Emotion Regulation: Theory and Approach of Mindful Awareness in Body-Oriented Therapy (MABT), *Frontiers in Psychology*, vol. 9, article 798

For information on how your school can be involved in education for sustainability, please visit: [<https://www.naturalresources.sa.gov.au/adelaidemtlofyranges/education/for-educators>]

NRM Curriculum resources and local identification charts [<https://www.naturalresources.sa.gov.au/adelaidemtlofyranges/education/for-educators/plants-and-animals/land-based-environments>]

Balanced and Barefoot, Angela Hanscom [<https://natureplaysa.org.au/product/balanced-and-barefoot-how-unrestricted-outdoor-play-makes-for-strong-confident-and-capable-children/>]

» *Camille Jenkinson is an Education Officer with the Adelaide and Mount Lofty Natural Resources Management Board and is part of a large team of educators who offer support to education sites on how to improve their environmental sustainability. A key part of their endeavours is empowering school communities to improve and engage with their natural environment goals.*





Stories
AND
Examples



Students leading the way

THE BEGINNING OF NATURE PLAY AT MAWSON LAKES SCHOOL

PHIL PARSONS

Engaging students in designing their own spaces is an essential part of the success of outdoor learning and play. In this case study **Phil Parsons** describes the way students at Mawson Lakes School have been front and centre in designing their own play space.



Photos by: Phil Parsons

about unsafe play that was occurring. Students respected the rep and were able to take on board what she was saying and change their behaviour accordingly.

A number of ideas and concepts were trialled initially for students to use materials such as tarpaulins, hessian, pine logs, rope, Hebbel rocks, and gardening tools. As time went on we were fortunate enough to obtain donated logs, branches and palm fronds from the community to help stock the area with resources students could use to construct forts and cubbies. Our observations were that students loved to hide in small structures built successfully from resources they had gathered together. In addition we observed students working collaboratively, sharing resources and negotiating for space and resources. The students have taken ownership of this area and are proactive in terms of making sure the area is respected and cared for by all stakeholders.

This area has now evolved into an area where up to 100 students enjoy trading items such as pine cones, gum nuts, twigs, and branches etc to construct new cubbies and forts. Along the way there have been some issues around sharing and playing safely; however, the issues have been resolved through student consultation with yard duty teachers, students and the leadership team. We believe the success of this area is down to student voice/agency where the students feel they have had a stake in the development of the area right from the beginning and more importantly in sustaining it for the future. 🌿

In 2017 a group of students approached the leadership team to chat about an underutilised area within our site. The students were keen to build cubbies and forts within an area designated as “the forest”. Following several meetings with the students an interest group was formed to discuss how they could turn the area into an outdoor learning space as well as an extra area in which to play during recess and lunch.

The group consisted of a budget manager, a WHS rep, designers, a resource manager, promotions officer, chairperson and helpers. This group was student driven and their input was key to its success. This group worked closely with our Deputy and Assistant

Principal once a week to meet and plan how the nature play area was going to evolve. Students were able to visit other schools and observe their different outdoor areas and asked valuable questions to gain information for their own nature play area.

Students initiated a meeting with the Principal to present and gain approval for their proposed budget, and the student WHS rep met with our staff WHS committee to discuss the risks and benefits and to make sure they understood the purpose and safety precautions that were in place. They were then able to purchase resources to make a start. The WHS rep took her role so seriously that she stopped recess times to talk with students in the area



Big changes for the greater good

THE BEGINNINGS OF PORTRUSH FOREST

ANNA KAKOSCHKE

Over the past several years research has begun to emerge that has drawn a strong correlation between children spending time in nature and improvements in their overall wellbeing. At Trinity Gardens School some of these benefits are coming to fruition. In this article Science teacher **Anna Kakoschke** takes us on the incredible nature play journey of Trinity Gardens School from wide-open spaces with little opportunity to engage with nature to a nature-rich sanctuary affectionately known to the school community as “Portrush Forest”.

In 2014, Trinity Gardens School (TGS) made a fundamental commitment to developing play spaces that focused on nature and learning. The parents of the school's grounds committee had, for several years, explored various possibilities to expand children's contact with “authentic” natural spaces. These parents understood the benefits of such contact for health and wellbeing as well as the need to address concerns around long-term global sustainability which have weakened our social sense of wellbeing in recent decades.

Our school exists in an urban landscape of increasing population density and declining biodiversity. The school endures the additional imposition of noise and air pollution associated with its location on Portrush Road. Parents of this committee felt driven to address these issues, seeking to provide a more harmonious environment that would add value to a greater number of students than just the few who previously claimed the two bare ovals with roped-off cricket pitches that existed before. The long-term vision, associated with the creation of this multipurpose green space, helps to offset these issues and is highly valued by both the school and surrounding communities.



Photos by: Anna Kakoschke

THE ADVANTAGES THAT SHAPED THE CHANGE TO NATURE PLAY

The mental health benefits of a connection to nature are well understood in different cultures. Australia, as a predominately urban nation, has a deteriorating connection to the natural environment. Parents increasingly understand that this urbanisation in many cases denies their children this connection to nature. Nature Play SA was established because society now better understands and values our connection to, and reliance on, natural, biodiverse landscapes and the need to connect children to these spaces.

We have evolved in and with nature. Research is now confirming that this connection has the potential to alter our DNA in our formative years, influencing later health and wellbeing outcomes (Lorena Infante Lara 2017). We have come to appreciate the deep interdependence between organisms and the environment they exist in. At TGS, while we can't quantify the benefits for our children's mental and general health, we have been approached by researchers who are interested in using data from the school to explore such benefits.

Around the time that the school began to develop nature play spaces, school staff began training and implementing the KidsMatter program. The program focuses on improving students' mental health and wellbeing and supporting parent communities to better understand the links between mental health, wellbeing and learning.

It is widely acknowledged that playing in nature has major benefits in terms of reduced interpersonal conflict. This has been observed at TGS in the form of significantly fewer behavioural issues for yard duty staff in nature play areas. Better behaviour reduces children's stress levels and allows for student growth in other observable ways. Students who are

often unable to settle to basic tasks within the confines of classroom walls benefit from these diverse natural areas: they are more willing to accept and attempt learning activities in the Outdoor Learning Environment (OLE).

CREATING A FOCUS ON NATURAL SPACES

In mid-2014 our Principal and then School Council Chairperson made an extraordinary decision to commit significant funding to focus on adding natural features across both major play spaces. TGS is a complex school site with four distinct educational units beside the 23 mainstream primary school classes. When designing the nature play and learning areas, a range of interaction opportunities needed to be considered. By November 2014 extensive plans had been drafted by Evette Sunset, a landscape artist with a deep understanding of wellness of mind and body. Students, parents, staff and grounds committee members were involved in the planning process. Evette asked the students the types of natural play spaces and activities that made them feel happy and calm, while from the adults she asked for a description of memorable childhood play spaces that created the same sense of wellbeing.

By May 2015 Evette had project-managed those plans into reality, with extensive reworking of both oval spaces, redesigned to support both nature play and outdoor learning experiences. These spaces were extensively planted with 2500 irrigated seedlings and saplings. Land surfaces were reshaped to include a creek line for water management, all weather pathways, frog ponds, log and rock features. Food and health were addressed with the establishment of an extensive orchard, vegetable beds and fitness circuit. Everything placed, constructed or planted in these areas was there for a reason, for different student groups, allowing for varied potential social and learning outcomes, but always with

the underlying purpose of increasing contact with and understanding of nature. TGS students chose to name the main nature space Portrush Forest, for that is what they hoped to play in. The vision for this forest is a long-term one, spanning 15 years, as the original project was named "Classroom 2030".

FUNDAMENTAL BENEFITS TO WELLBEING AND LEARNING OBSERVED IN PORTRUSH FOREST

The benefits and opportunities that accrue from activities or learning tasks focused on Portrush Forest have been many and varied. They have evolved as more time spent in contact with nature is now possible at TGS. Beneficial outcomes are still dependent on each child's personality and interest. Those children who start school with positive past experiences tend to respond immediately to Portrush Forest opportunities. Where children are reluctant or inexperienced, teachers can influence attitudes and interests simply through learning activities set in the OLE.

At TGS we have teachers who are increasingly finding new and exciting ways to provide their students with this positive attitude and interest in nature. Yet, like their students, a teacher's personal connection to, attitude to and understanding of nature as well as their attitude to risk management, their time allocation and their ability to integrate OLEs into their class curriculum all influence their ability to engage their students. Some teachers still feel more comfortable and confident in their own classroom space. We at TGS ask our students to "Be brave – participate to progress". In order to fully embrace the benefits possible from contact with nature, we have to challenge teachers via the same mantra to maximise benefits for our students. Focusing on building the confidence of teachers in the use of natural areas during classtime brings benefits not only in terms

of student learning and behaviour during classtime but also through children then choosing to connect comfortably with these areas during playtime. Children will readily adopt the attitudes of enthusiastic teachers who can explain the benefits that come from engaging with nature.

At TGS, the commitment to connect with nature is especially strong in the early years. It is understood that if this connection is made well before adolescence then it is likely to endure into adulthood (Masher, Cox & Salina 2016). TGS children enrolled in the ELC spend scheduled time each week in Portrush Forest with more time outdoors in the ELC yard. In the forest they meander and explore, constantly expanding their knowledge, language and mathematical skills. By the time they start school at TGS most of our Reception students have a good connection to and understanding of the forest area, interact confidently with bugs and beetles, look closely at and play comfortably amongst the plants, explore and utilise the features, both fixed and loose, that are available.

TGS has a Steiner student stream of eight classes. The parents from this section of our school community were the main drivers of the Classroom 2030 project, applying their strong pedagogical understanding to



wellbeing and learning outside of the classroom's four walls.

A Steiner-focused preschool group meets in Portrush Forest each week. Toddlers from the Children's

Centre often visit, crawling under the growing forest canopy, exploring the climbing and perching features and examining the biodiversity present. Despite heavy interactive use by hundreds of TGS students during term time, the forest is home to a biodiverse range of permanent residents. Students starting in the Steiner Reception class spend much of their day engaged in a social and emotional "curriculum" focused on outdoor spaces, where connection with the natural environment and the sense of calm learning it engenders is the desired outcome. Parents

Children will readily adopt the attitudes of enthusiastic teachers who can explain the benefits that come from engaging with nature

choose this education for their children for the sake of their child's wellbeing as well as the educational outcomes associated with this type of curriculum.

The forest was also designed to provide opportunities for students in our St Morris Unit, our unit for students with severe multiple disabilities, to interact with nature. With wheelchair-accessible pathways, areas designed to stimulate the senses are now reachable where these students previously could only watch from the veranda. Physically being in play spaces used by other students enhances the St Morris Unit students' sense of belonging, a major component of wellbeing.

Portrush Forest provides our physical education specialists with varied physical environments in which to operate, allowing opportunities to develop different aspects of students' physical development. It is now understood that running through obstacles over the uneven ground improves eyesight, physical

coordination, strength and agility. Risks are better managed by children who understand their physical capabilities.

The forest is also a superb resource allowing the science specialists to provide STEM-enhanced learning experiences. Children sent on searches for specific biological or earth science-focused items or tasks come away with an enhanced level of wonder and amazement at what is "discoverable" there, how nature supports us and how caring for such places meets our needs in so many different ways. To hold a skink for the first time in your life, to discover the existence of mole crickets, to rescue an abandoned koala joey, to create mandalas from plant matter are all tiny snapshots of the happy memories created in the forest. These experiences add a level of authenticity to learning outcomes. Students can be challenged to attempt and process new skills, attitudes and understandings in meaningful learning tasks.

ACCEPTING DIFFERENT OUTCOMES FROM THOSE ENVISAGED

Four years of observing nature play and learning at TGS has revealed interesting, varied and evolving outcomes. Often these are different from the "desired or intended outcomes" envisaged and designed for by adults when a nature play area such as that at TGS is developed. Weekend vandalism has been a challenge, and occasional inappropriate community use another, yet for our students, who are the children of our wider community, the benefits are unquestionable.

Perhaps most surprising is the natural desire of some children to deconstruct built features. Children seem to be either constructors – putting together objects for a purpose – or deconstructors – taking structures apart to facilitate play. This should not be viewed as a reason for giving up on the concept of creating "beautiful" nature play spaces. Children do not share the





same concept of perfect spaces as adults. They revel in a space that has components that they can utilise to create with or challenge themselves in. They will reconfigure within their capability and we, as adults, must provide them with the skills, equipment and opportunities to recreate new and varied social and learning opportunities.

We have found that loose objects are the interface between the fixed features of plants and rocks and logs and the real world that children exist in. In our various nature play areas they practise the skills they observe and understand that belong to the real world. Plants provide ingredients when picked and mixed, the rocks become base materials for paints or fairy dust when ground up and long poles create cubbies, goals or hurdling tracks. Pots, pans, earthenware and wooden bowls, cane baskets and hessian allow for enhanced interaction between children. These items are the focus of shared activities and constructed stories – the social aspect of life’s fabric that underpins wellbeing. When understanding children’s

need to deconstruct and grind up the bricks of a built play feature, it was obvious we needed more rock and brick materials. However, there also existed an opportunity for a class to rebuild for ongoing use - or further deconstruction. Plants suffer the worst of this "deconstruction" yet, with the help of an NRM grant, new opportunities will flow from our recently developed plant nursery. An abundant and ongoing supply of loose logs, long poles and stones is needed and plans for new permanent features need to meet "indestructibility criteria" before they can be approved for inclusion to support nature play or OLE outcomes.

Understanding how children play and learn in nature means dealing with different student behaviours and with risk management. Nature play supports the mental health and wellbeing outcomes we seek as a KidsMatter school. The longer term benefits include understanding our planet and what it provides us with both personally and collectively – a global sense of wellbeing.

One final story amongst many, from our nature play journey:

As we approach four years of nature play spaces at Trinity Gardens School, following the May 2015 opening, surprisingly, most of the 2015 plantings of trees, shrubs and groundcovers have survived. Despite the heavy foot traffic and ongoing use or misuse by 900 students, with open access at weekends for community use and the challenges

We have found that loose objects are the interface between the fixed features of plants and rocks and logs and the real world that children exist in

of an outgrown irrigation system, we now have trees approaching 4 metres in height, happy and currently healthy in a warming climate. Portrush



Forest is now a forest to our children. Regeneration is occurring, lifecycles are evident, new and exciting living creatures can still be discovered and long-term animal residents stay as it is the perfect place to live. TGS has a better environment in which to educate our students. Time for personal exploration and discovery in nature allows a child to go away with new accomplishments, physical skills tested or practised, exposure to new learning or questions needing answers. The personal thinking that follows such exposure allows for more gentle and durable character building, social connectivity through shared experiences and new goals or activities to explore next visit.

TGS children have grown with this area over the last five years and will continue to do so. One TGS student planted a *Eucalyptus camaldulensis* (River Red Gum) seedling that she held to show the school at her first assembly in her first week as a Reception student. This

tree is the signature stately tree of Portrush Forest and of the eastern Adelaide Plains of the past. It was specially chosen and specifically placed. Eliza and her tree have been photographed each year that they have journeyed through life at this school. Her tree no longer needs the supporting and protective stakes of its first three years, just as Eliza, now, as a happy and assured Year 4

student, understands the importance, benefits and strengths of her tree. A natural play area provides tangible and opportune resources on so many different levels, but a human understanding and appreciation of nature is a deep and necessary gift to be nurtured – fundamental to the life and wellbeing of our children. 🌿

Time for personal exploration and discovery in nature allows a child to go away with new accomplishments, physical skills tested or practised, exposure to new learning or questions needing answers

REFERENCES

Infante Lara, L. (2017). Your Childhood Experiences Can Permanently Change Your DNA, Smithsonian.com, 14 September, 2017. [<https://www.smithsonianmag.com/science-nature/your-childhood-environment-can-permanently-change-DNA-180964869/>]

Sharman, Dr R. (2016). Free-range kids could become healthier, happier adults. [<http://www.abc.net.au/news/2016-04-07/sharman-free-range-kids-could-become-healthier,-happier-adults/7306740?pfm=ms#comments>]

Mascher, F., Cox, J., Salina, C. (2016). A While in the Wild: Educating for Environmental Empathy, Clearing Magazine, 18 January 2016. [<https://clearingmagazine.org/archives/2727>]

Magic Happens in the Bush

AN INQUIRY INTO COLLABORATIVE STEM LEARNING DESIGN FOCUSED ON ABORIGINAL PERSPECTIVES

LINDA RICH AND APRIL VANDERAA

In this case study, **Linda Rich** and **April Vanderaa** reflect on the extraordinary power of Bush Kindy to enhance children's development, strengthen family bonds and heighten the sensory and cultural awareness of both children and adults alike as they share the positive experience of introducing a Bush Kindy program at Mark Oliphant College Children's Centre.



Photos by: Linda Rich

Mark Oliphant College Children's Centre is a Category 1 site located in Munno Para. We have 80 children who access our preschool program and an additional 200+ attending the various playgroups and occasional care programs. For the past three years, the Centre has embarked upon a Bush Kindy program, and has also established a

Bush Playgroup for children aged 0-5 years and their families.

When we first decided to venture into the unknown of nature immersion through the establishment of a Bush Kindy program, the opportunities seemed to unfold for our educators, families and children. The stumbling blocks seemed to knock themselves over as we paved our way towards

a "beyond" space at Para Wirra Conservation Park. We were able to look at the resources available to us within our wider school to make such a venture accessible to children whose families may not be able to drive their children the 45km roundtrip to Bush Kindy. We approached leadership for use of the onsite buses to take our children

to Para Wirra once a fortnight per session (weekly for staff) during terms 2 and 3, and they were excited to support this project for our children and their families.

Throughout this process we consulted “sister kindies” (Adams Road Children’s Centre and Lobethal Community Kindergarten) who had already begun their journeys into rich nature spaces. Staff attended training on, and spent hours researching, nature pedagogy, and we developed a partnership with the Ranger at Para Wirra. Our ongoing partnership with our Aboriginal Community Education Officer, and Kaurna Elder, supported us to draw on the resources of our Aboriginal families to develop a program that connects our highly urbanised community with the Australian bush.

We have noticed that these experiences offer opportunities for children to lead their learning as competent researchers and give our families a partnering role in the direction and delivery of our program



This endeavour quickly became a deep-seated passion for our entire team and overlapped with our Responsive Relationships inquiry with UniSA, our Assessment and Rating visit, and our involvement in the Peachey Partnership Wellbeing Project. Everything we did became interwoven into our STEM inquiry and Bush Kindy program. We found that our Responsive Relationships training and reflection coupled with high quality interactions enabled improved STEM learning outcomes and learning dispositions for our children (as well as our educators). Our assessor wondered with us whether we may venture beyond the bush in term 4, and to the beach.

As we approached our Aboriginal Community Education Officer with the idea, she explained that historically Aboriginal families would travel from the bush to the beach as the weather heated up, and so Beach Kindy emerged. Our involvement in the Wellbeing Project gave our team the space to reflect deeply on the wellbeing of our children and their families who volunteer through their involvement in Bush and Beach Kindy.

We have noticed that these experiences offer opportunities for children to lead their learning as competent researchers and give our families a partnering role in the direction and delivery of our

Newfound love of outside. Enjoys pointing out the names of things she has seen in the bush. She would prefer outside to inside now

PARENT

program. We have found that this inclusion of families has empowered them as active contributors to our program and their children’s learning at Bush Kindy, as well as volunteering onsite. We have enjoyed hearing



A TYPICAL DAY AT BUSH KINDY

We depart on our buses around 9.30/10am. Once arrived and settled, we do a welcome and acknowledgment of country and from then our day largely consists of exploration. The types of activities that children engage in include:

- following their own interests
- engaging in planned experiences if they choose to do so
- exploring through bushwalking
- continuing their own research
- documenting in journals and using digital technology
- building, climbing, and engaging in a range of play opportunities (i.e. dramatic, sensory and physical)
- spending time with our Kaurna Elder learning about flora and fauna
- spending time around our campfire

stories from our families and children of the many extended learning opportunities that have occurred as they have revisited our Bush Kindy base camp in their own time together.

Our Bush Kindy initiative has unfolded learning opportunities for our children and their families where partnerships, exploration, investigation, risk taking and creative thinking are at the core. It has challenged our educators, families and children alike to engage in deep intellectual thinking and improved our connection to the land and Aboriginal cultural learning. Together, our community is developing strong learning dispositions and respectful connections with families and country as part of a holistic early childhood learning environment. Through our Bush and Beach Kindy Aboriginal perspectives we are strengthening a deeply spiritual connection to our Earth, uniting in genuine, respectful relationships with parents as co-educators, and generating a shared respect for empowered STEM learning together.

Yes! Magical things happen in the bush! In the bush, our educators discover a heightened ability to be present, in the moment with and for our children, in a natural environment with endless loose parts and possibilities. In the bush, our children's wellbeing for learning improves and our families discover new possibilities for themselves and their children alike. In the bush, our children begin to notice, wonder, hypothesise, take risks.... and even begin to talk! 🌿



We don't stop playing
because we grow old,
we grow old because
we stop playing.

GEORGE BERNARD SHAW



ELIZABETH SOUTH PRIMARY SCHOOL

Growing Minds

THE POWER OF A KITCHEN GARDEN FOR WELLBEING, RESILIENCE AND CREATING A SENSE OF AGENCY

VANESSA HOLLOWAY

Elizabeth South Primary is a Category 1 school that has embarked on a kitchen garden program that is seeing a multitude of benefits for its students and school community. In this article **Vanessa Holloway** reflects on the program and how it is seeing students develop more persistence, resilience and a sense of agency.

OUR BEGINNINGS

Elizabeth South Primary School was the first public school established in Elizabeth, opening in 1956. It is a Category 1 site serving a community that currently has long-term and inter-generational disadvantage with high levels of transience and unemployment. The social, emotional

and educational challenges these complexities bring mean that individualised and differentiated education for the “whole child” is imperative in order to achieve success for every student. For some of our students, this means looking outside the box for additional learning programs to increase engagement and provide them with

valuable life skills.

In 2014 we had a change of leadership and, with that, new priorities for the site. It was in the final term of that year that I was tasked with the creation of a kitchen and garden for our site.

We started with nothing other



than a bare patch in the middle of our concrete yard and a disused classroom. We spent quite some time in the planning phase for this project. We consulted other sites, students, Governing Council and the wider community. When we had finally settled on a design, we began the process of building it.

GETTING STARTED

The next task was to get started on our raised beds. We decided that we could build these ourselves. We involved our whole school community in the construction of the garden space: teachers, SSOs, parents (including my own), the principal, deputy, junior primary and upper primary students.

Construction of the raised beds took us a little longer than anticipated, despite many hands, both big and small, being involved. In the meantime, we began what would turn into a very generous relationship with Stratco. Our first donation from them

included large round pots, potting mix and a bootful of seedlings. This was the beginning of our garden. The students delighted in planting them out and tending to them... and these seedlings gave rise to our first harvest.

REFLECTING ON PROGRESS

We are now in our fourth year and, as with any garden, nothing is ever quite finished – it continues to be a work in progress. We have established a chicken coop, a garden shed, a potato patch and compost bays. We are constantly looking at how we can maximise the space we have and how we can create new spaces.

In the kitchen we have gone from making basic breads to cooking five-course meals. This part of the program has also evolved as time has gone on. We were quite unsure as to what we were getting ourselves into at the beginning and, as such, we weren't aware of the best way to resource this program. We now

run the program as a NIT subject inclusive of all students R-7 (including our Special Option Classes). The addition of a Kitchen Garden SSO and a few precious volunteers has ensured the program's ongoing success.

Our students are so engaged with this program and it has had a widespread positive impact across our site. The kitchen garden has become embedded in our site's culture with many aspects spreading into the classroom. Classes use the



Photos by: Vanessa Holloway



area for Inquiry learning and many classes have now taken on the task of composting and even creating and managing worm farms.

At times, the question of why schools would implement a kitchen garden program arises. The fact that it ties in with the Australian Curriculum so well is a great reason to begin a kitchen garden program, but when working with some of our most vulnerable and at-risk students, it is certainly not the only reason. Outdoor learning is capable of meeting all of our students' "grounding" needs.

REFLECTING ON THE BENEFITS

PERSISTENCE AND PATIENCE

Gardening teaches our students patience and persistence. A plant does not grow overnight. It needs time, care, water, sunlight, and to be weed-free. This is a process that cannot be rushed or dismissed. You can't forget to care for your plants and expect them to survive. Gardening also teaches the students to be resilient: they may do everything right and their plant may

still die or not produce anything. That is just the way it is sometimes, but it's all part of the learning process.

CHANGES IN BEHAVIOUR

Over the last four years we have seen when in the kitchen garden a dramatic reduction in behaviour issues for a NIT class. The students are so engaged in these lessons that they have no need to act up. So many triggers are removed – there are no academic expectations – so students who normally choose to make inappropriate choices in order to hide their lack of understanding feel no need to do so. We have also noted that grounding helps our students detach from emotional pain by providing them with a connection to the present moment. Therapeutic horticulture is a powerful way to put them in contact with nature and other people and gets their bodies moving.

Both the kitchen and garden are great places in which to develop fine and gross motor skills. Often students are encouraged to repeat the same task over the course of a term to develop mastery in these skills.

SENSE OF INDEPENDENCE AND AGENCY

Our students are empowered to make choices and decisions and have a greater sense of agency. They gain an understanding of how they can feed themselves nutritious meals within capabilities, circumstances and budget. They are learning that moderation is the key to all things and that all foods can be homemade. We learn about seasonality and how this affects what we eat, but also how we can preserve foods to be enjoyed later in the year when they are no longer in season.

Our students feel empowered by the trust that is placed in them in kitchen garden lessons. They are taught the correct way to use tools and then they are trusted to use them appropriately. They know that they are thought of as capable and competent and they rise to this expectation of them.

RESILIENCE

We are seeing greater levels of resilience in our students. We research a lot of the garden information – because I just don't know all the answers. I point out my failures to the students and I let them fail. I don't save them. If I can see them making a mistake with a recipe I will prompt them to reread the recipe card; however, if they miss a step I don't fix it. Failure is fine in the kitchen: sometimes it's not a disaster; sometimes it is. I talk a lot about "what is the worst that can happen?" If the food is not edible, it is not the end of the world. These are all valuable life lessons around resilience.

CONNECTIONS WITH NATURE

Learning in the garden provides our students with an opportunity to immerse themselves in nature as they nurture and care for our plants and the outside environment. They learn about the individual requirements of different plants and the need for crop rotation. They have the opportunity to become budding entomologists, to research

the minibeasts they discover and decide whether they are friend or foe. They learn that nothing is wasted in nature. Our scraps and cuttings from this season's harvest will be composted and used to provide nutrients for next season's crop. The cycle of life is never clearer than when students harvest the dried seeds from a plant to save and plant again next year.

BREAKING DOWN STEREOTYPES

In addition, our students often bring with them some very strong gender stereotypes. In a lesson where girls are out digging in the garden and boys are expected to wash dishes and hang out the clean washing, it has been very interesting to see these stereotypes slowly break down. This example represents some of the unique learning opportunities associated with a kitchen garden.

EXTENDING INTO THE FAMILY HOME

One of the other significant benefits we have seen is the roll-out into family homes. Our students are gardening at home (we have started sending seeds home as prizes) and many parents are speaking to us about the things they are growing and asking for (or giving) advice. They are cooking at home and are always excited to share stories with me about recipes they have taken home and tried with their families. Publishing our own cookbook has

been a great way to encourage our families to take this program home with them.

OUR FUTURE DIRECTIONS

We can clearly see at Elizabeth South that our students have a desire to connect with nature. They are flourishing in both our food garden and our nature play area. The garden has brought a feeling of calm to our site and with every year that passes it becomes more embedded in the

culture of Elizabeth South Primary School.

Moving forward, we are looking to invest in a greenhouse and increase our worm farm capacity. We have just made a commitment to a market once a term in the hope of getting fresh produce into more homes. I am hoping to extend the reach of our kitchen garden program into the wider community by hosting events and we are investigating adult cooking classes to assist our families with cooking on a budget. 🌱



Tips for starting your own kitchen garden:

Start Small

Plant pots on a windowsill or begin with a couple of raised garden beds. It doesn't need to be an expensive venture to be a rewarding one. If all you grow is a couple of tomatoes and a basil bush, all of a sudden you have the makings of a delicious bruschetta, a pasta sauce or a pesto.

Involve students and the community in the decision-making process

Our students have such ownership of the garden space that in the last four years there has not been one incident of wilful damage to it. The gardening and cooking skills have also translated to the family home.

Ask for help

Our experience was that the larger businesses that we approached already had their fundraising allocated. We had a lot more success seeking donations from small businesses and even more success when we were specific in our requests.

Start now

"The best time to plant a tree is 20 years ago; the second best time is now" – Chinese Proverb.

Digging deeper

A SNAPSHOT INTO THE NATURE PLAY SPACE DEVELOPMENT AT RENMARK CHILDREN'S CENTRE THROUGH THE PRESCHOOL OUTDOOR LEARNING AREA (POLA) PROJECT

FRASER KEEGAN WITH GALE HANSEN

In this article **Fraser Keegan** draws on the experiences and thoughts of Renmark Children's Centre as they embarked on significant upgrades to their centre through the Preschool Outdoor Learning Area (POLA) project. The process enabled the centre to explore their school community's thoughts and feelings on a deeper level. Through reflection, research and professional development they were able to develop a space rich in outdoor learning and play.



A generation ago playing in and amongst nature was regarded as a normal part of being a kid, with the community understanding the importance of risk taking, imagination and outdoor play as a critical and non-negotiable part of a healthy childhood. Most adults of today

will readily associate their greatest childhood memories with being outdoors, being with others and being in control of their play destiny.

But times have changed. In an era where screens of all sizes dominate the leisure-time landscape, children are becoming increasingly exposed

to passive, two-dimensional experiences that science says are not as beneficial for them as interacting with the real world.

The Department for Education has embraced the value of outdoor play in the natural environment, and encourages pre-schools,

kindergartens, primary and high schools to explore the opportunities, large and small, to have students interacting with nature as part of their overall learning experience.

Between 2014 and 2018 the Preschool Outdoor Learning Area (POLA) Project completely overhauled 20 outdoor play spaces, introducing a breadth of challenging elements that encourage children and staff to modify their daily routines to include more outdoor play and learning.

Renmark Children's Centre was selected to receive funding in 2017 as part of the final round of projects, and embarked on an ambitious journey of design, construction and management that has come to revolutionise how they work with children and families in their community.

Director Gale Hansen reports, "We were always eager to explore nature play and how this would support the children's overall development, and the opportunity to be a part of the POLA Project enabled us to take our exploration even deeper. At the start we were cautious about making such a huge change to our site. In particular, we were concerned about the safety of the children and the thought of making the space more dangerous generated a lot of emotional conversations between staff and families."

However, by researching the benefits of natural play to children the Renmark team challenged themselves to think about children's learning through the filters of exploration, navigation and contemplation and to design new ways of educating and engaging children. All the while, they embraced the notion of risk but found the likely spread of benefits far outweighed any risks.

A key element of the POLA project was the desire to represent the local culture and community, with the team from JPE Design Studios responding with water elements, a fire pit, river beds, a hand water pump, a pond, rock climbing walls and natural timber climbing structures. It also included

the installation of hand-carved "characters" [by local artist Garry Hoffman] including an oversized yabby and four native fish, as well as a canoe hollowed out from an old local log. "We also celebrated our official opening with the installation of a pelican sculpture completed by another local artist."

...the Renmark team challenged themselves to think about children's learning through the filters of exploration, navigation and contemplation and to design new ways of educating and engaging children

GALE HANSEN

More traditional elements of swings, slides and sand pits also feature amongst the more challenging elements, providing children with an endless supply of opportunities to

test themselves physically, socially, creatively and cognitively.

Embracing this ambitious undertaking, the construction team from SUMMIT Landscaping worked closely with the Department for Education and Department for Planning, Transport and Infrastructure to bring to life a superb outdoor learning area that has had an instant impact on staff, children and their families.

Following completion of construction, staff participated in a series of training sessions to build confidence, skills and knowledge about how to maximise the positive impact of the space and to challenge themselves to include more outdoor experiences for the children in their daily program.

"At first, we were obviously most interested in assessing the potential risks of building such a large and potentially dangerous learning area, but our fears were soon allayed once we saw how children were negotiating the terrain and continually assessing their capabilities against the challenges as they encountered them. Of course we still need to be vigilant with our supervision, but since the play space has been completed we have actually had fewer injuries than before. We



are also noticing that previously a little bump or scrape would cause the child to stop what they were doing and find an educator to help, whereas now they are too keen to keep playing and so dust themselves off and keep going."

Staff are also reporting that children are more dispersed across the space and there are no incidents of large groups of children "fighting" over a particular piece of equipment, which had once been an issue. "There also appears to be a 'more harmonious' spirit to the site, so it would be fair to say that there has definitely been a calming effect across the site."

Being outside has also had an impact on the connections between children, with staff observing that children are "calmer" and are building more positive peer relationships, in particular between children who would not normally associate as part of their regular friendship groupings. The children in this group are aged between two and five years old. "The natural environment seems to guide children to work together to solve problems, to invent games and to create new things, all of which has created a positive social fabric between children of all ages."

"The environment doesn't have a bias towards boys or girls, but rather allows children to express themselves in a variety of ways that contribute to their overall identity and sense of self." Children are utilising the different elements to learn from other children and to build nurturing and supportive connections with children of different ages and ability levels.

A great equaliser and leveller, the outdoor area offers a continuum of challenges where children progress in capability at their own pace, as they continue to amaze staff with successful attempts at conquering progressively more challenging elements and activities.

Families have also been surprised by the degree of impact the outdoor area has had on their children, with

Being outside has also had an impact on the connections between children, with staff observing that children are "calmer" and are building more positive peer relationships

parents and carers indicating that their children are more enthusiastic about coming to the site and many are more inclined to want to play outside when they are home.

"Supporting our staff has been a key feature of the overall project. Our team regularly comes together to explore new ways to stimulate the children through changing our education program to maximise the breadth of learning opportunities in the outdoor area," said Gale.

By looking at the outdoor learning area through a range of different "filters" educators can modify their

interactions with children to tailor their approach towards meeting a particular need or achieving a particular developmental outcome.

As an example, the team started by considering how to deliver a multi-sensory experience for children where they can see, smell, touch, taste and hear their environment first hand as part of the learning experience. "We have embarked on a professional learning journey that has changed the way we see and interact with our children, giving us greater insight into how the outdoor environment can be a teaching tool in and of itself."

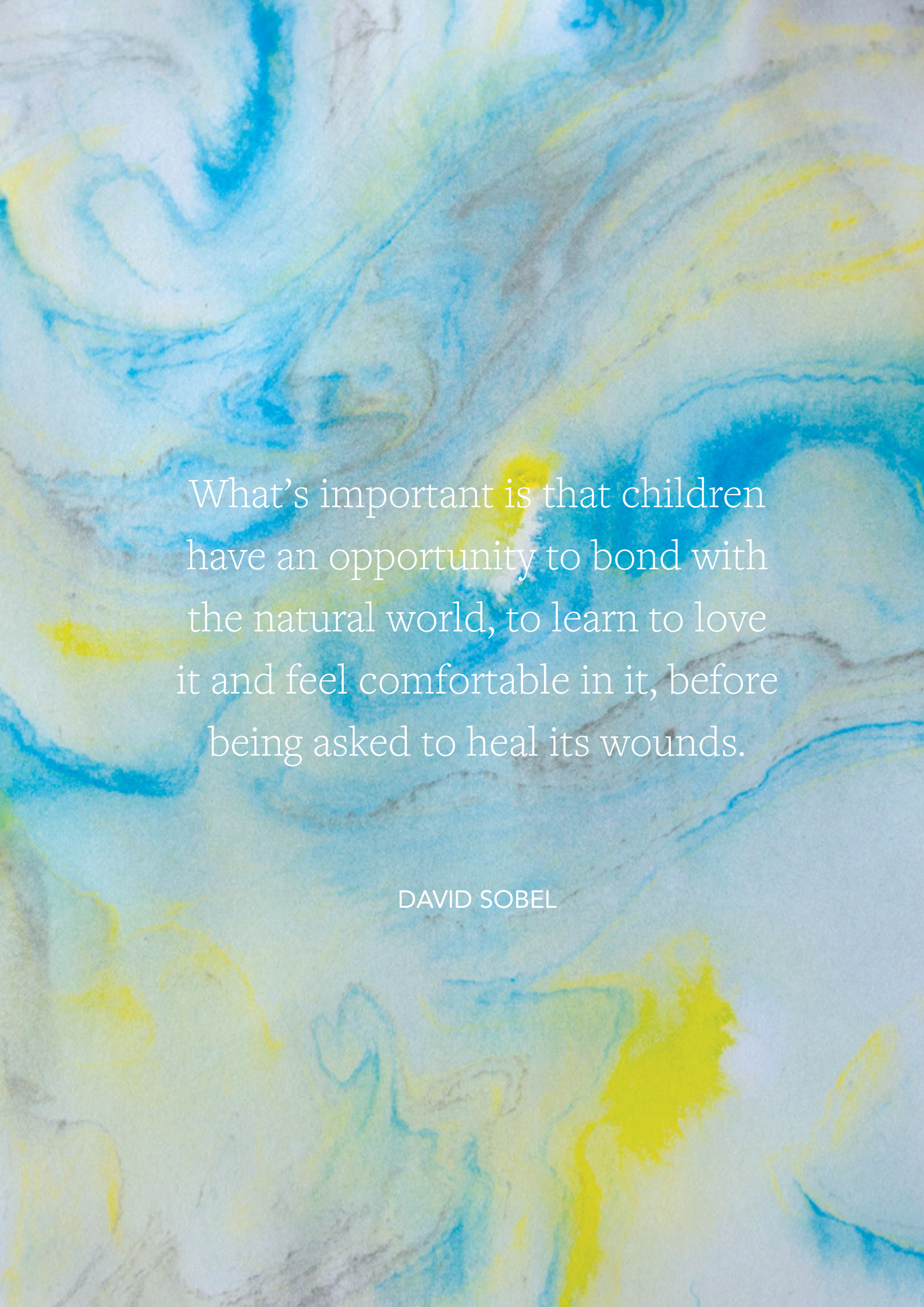
From here the team is keen to explore other themes outdoors which may include colours, shapes, sizes, seasons, letters, numbers, music, flora, fauna, history and storytelling. The options are endless and all provide an enticing backdrop against which staff and children can thrive.

Of course, in addition to the educational value of the outdoor space, it is also a wonderful context in which the kids can have fun. They love being creative, curious and chaotic as they take control of their own play destiny without having to take a cue from an adult. This is an extremely empowering experience for young children as they grow in confidence as a result of gaining increased mastery over their world. 🌱

RESOURCES

Demonstration outdoor learning sites: [<https://www.education.sa.gov.au/teaching/projects-and-programs/outdoor-learning-environments/demonstration-outdoor-learning-environments>]

Resources for creating outdoor learning environments: [<https://www.education.sa.gov.au/teaching/projects-and-programs/outdoor-learning-environments/resources-creating-outdoor-learning-environments>]



What's important is that children have an opportunity to bond with the natural world, to learn to love it and feel comfortable in it, before being asked to heal its wounds.

DAVID SOBEL



FLAXMILL PRESCHOOL

A playful approach to natural learning

THE ENHANCED DISPOSITIONS OF CHANGING SPACES AND PEDAGOGICAL PRACTICE

KYLIE STEWART

In this case study, preschool educator **Kylie Stewart** shares with us the powerful and transformative journey undergone at Flaxmill Preschool and details the rich disposition she has observed as a result of changing the site's space and pedagogical practice.

I will never forget the feeling of shock I experienced when, on my first visit to the site of Flaxmill Preschool, I was presented with the outdoor play space. After subsequently winning a job at the site, I took it upon myself to begin a journey that would dramatically change our preschool play spaces, and those of our neighbouring school, as well as our site's pedagogical beliefs around how children learn best, and would lead us to critically reflect on the learning environments and experiences we provide for our children.

Flaxmill Preschool is a Category 1 Department preschool situated in Morphett Vale and is co-located with Flaxmill Primary School. We currently have 49 children who come from a variety of socio-economic, cultural and family backgrounds, many presenting with a high degree of vulnerability.

After getting over my initial shock at the sterile, unattractive, limited natural environment and fixed state of the play space, I approached our principal at the time to see if I could go about making changes to the

outdoor play environment. With the help of a play consultant and designer, the consulting process commenced between children, staff and families. The redevelopment began in 2013 and it was broken into three stages, with work being completed in 2014.

There is so much literature around the decline in the amount of time children are spending connected to nature and engaged in unstructured and uninterrupted play. This was a key reason why we believed it was so important to provide a nature-



Photos by: Kylie Stewart

based learning environment for our preschool children. We are constantly shown the daily benefits of providing such an environment not only for some of our most vulnerable children but for ALL children.

DISPOSITIONS AND PLAY AT FLAXMILL PRESCHOOL

Over the past five years we have seen the children building and developing many learning dispositions through their use of the nature play space. The most striking are the following.

CONFIDENCE

In our space we provide opportunities for risk taking such as climbing trees, balancing on a slack line, jumping off high ladders and electrical wheels, all of which encourage children's gross motor skills and coordination as well as

their ability to experience a sense of achievement. A natural environment is often changing which affords children multiple opportunities to challenge themselves, practise and master a new skill in different forms and, in doing so, allows their confidence to grow.

PERSISTENCE

In our space we provide materials for building cubbies such as long sticks, ropes, fabric and sheets for children to manipulate and build with. Children demonstrate their persistence and work out where to place the knots and ropes in order for the cubby to stay upright.

CREATIVITY

In our space we provide loose parts for children to manipulate and use as resources in their own learning. Children make various recipes, perfumes and potions

using flowers, leaves, water and mud. Children also enjoy making mandalas, patterns and artworks using the natural materials. Children also enjoy engaging in dramatic play and made-up games in multiple spaces throughout the environment including the hut, play platform and mud kitchen. Children use their imaginations to come up with many child-led games and set rules and boundaries for each other.

PROBLEM SOLVERS

In our space children have opportunities to be critical thinkers and problem solvers as they move large logs from one end of the yard to the other or make long rivers in the sand pit using bamboo channels and pipes. When children engage deeply in their nature play environment they learn to ask questions, research, hypothesise and act as scientists and engineers.

RESILIENCE/WELLBEING

In our space children have choice and freedom to make their own decisions and overcome problems, which builds their resilience, self-esteem, sense of calmness and overall wellbeing.

SOCIAL SKILLS

In our space we view the learning environment as the children's third teacher as it supports children's social skills through communicating, listening and turn taking. Children are establishing relationships with peers and educators as they help one another, whether searching for millipedes under logs and sticks or planning a menu in the mud kitchen for their restaurant.

JOY

Our outdoor environment also provides a huge amount of enjoyment and fun as the children engage in it. Constant laughter can often be heard as the children jump and splash in puddles and balance on

continue to be custodians for the environment well into the future.

Redeveloping our preschool play space has not been without its challenges. It was our builders' first preschool redevelopment and there were a few building hiccups along the way, and even today we are needing to redesign a few areas in our outdoor play space. Getting parents on board can also present its own challenges. We are very upfront with any new families about our philosophies around nature play and why we spend the majority of our day outside engaged in playful learning with numerous natural elements and experiences.

While the process of making changes to the physical play space began in the preschool, Flaxmill Primary School has also gone through some changes as we create more opportunities to allow children to engage with loose parts and nature elements through the front of the school play yard, an almond grove, and the kitchen garden and outdoor classroom complete with pizza oven.

As well as this annual event, the school has employed a nature play coordinator who takes children from Reception to Year 7 for a lesson once a week. This ensures that the children transition their love of nature and their ability to play from the preschool to the school and their hands-on multi-sensory learning is continued and developed as they mature. I am so proud that we are continuing to be advocates for our vulnerable children and provide them with learning environments and nature play experiences that support their wellbeing and learning.

In conclusion, there are going to be challenges but if you have the passion, drive and heart to provide children with the best learning environments possible and are lucky enough to have supportive leadership at your site, the benefits will far outweigh the risks and challenges. There are so many resources and sites that area doing such great things in South Australia and I feel very proud to be one of these, as we act as nature advocates



upside-down pots in the mud pit.

FUTURE CUSTODIANS

In our space children are learning to respect and look after the environment and to be mindful of the impact they can have on it. If they learn to care, appreciate and respect nature now, then we hope they will

We hold an annual whole-site "Reconcile with Nature Day" where children and staff from preschool to Year 7 have engaged in various nature play spaces and activities for the whole day. These include play in an epic mud pit, cubby building, cooking damper and engaging with loose parts play.

I am so proud that we are continuing to be advocates for our vulnerable children and provide them with learning environments and nature play experiences that support their wellbeing and learning.

for our young children. My advice to other sites is: be brave and take a risk; you don't need to start big but you do need to start somewhere. You will be amazed at what the children can teach us and what they learn. Ultimately we are helping to assist their overall wellbeing by providing a playful approach to nature learning.









Photos by: Daina McCormack

Nature play every day, every child

HOW LISTENING TO CHILDREN CAN INFLUENCE AUTHENTIC OUTDOOR LEARNING EXPERIENCES

TRISH BOSCHETTI AND DAINA McCORMACK

With a whole-school approach in mind and an active student voice, Snowtown Primary School principal **Trish Boschetti** and upper primary teacher **Daina McCormack** share their school's nature play journey and explain how the site has evolved into a hub for outdoor learning. 2019 has seen collaborative learning across sites to evolve our nature play space. We have collaborated with Bute Primary School for Junk-Yard play sessions. The sessions have allowed our students, teachers and school community members to collaborate with other nature play focused schools and inspire an evolving nature play space. We have added rhythmic drums, rock crushing/digging stations, canvas mats and motorbike tyres. Collaborating with other sites focused in nature play can increase school community inspiration and evolution of the nature play space.

OUR NATURE PLAY AREA

Our whole-school nature play area has evolved over a long period of time. It is nestled within a small pine forest with shade, a sand pit, a cubby structure, a frog pond (made by the Young Environmental Leaders), a mud kitchen, natural loose parts (such as pine cones, sticks, bamboo and other natural debris), and junk loose parts (such as crates, tyres, plastic chains, rope, material and pipes). Every year it takes on a different form with new elements added, new games invented and learning opportunities enhanced. The space is open for free play at lunch and recess where children of all year levels play together from kindy to year 7. We also involve our parent community who donate items to help our space grow and evolve.

The space was inspired by a staff member, Anne Jones, and professional development via a Nature Play SA Conference in 2016. Tim Gill, an advocate for risky play, was a keynote. Of particular interest to us was his focus on the benefit/risk approach which really enabled us to reflect on our spaces and perceptions. Initially we set up guidelines with the students that aimed to create awareness around safety such as knowing the boundaries, using sticks safely, dragging large materials, creation ownership and snake awareness.

As a staff group we nominated the first loose parts to go into the nature play area. These were then introduced by the Yard Action Learning Team – a team of volunteer students who dedicate their playtime to assisting with new additions to the space such as loose parts. They

help with governing the usual rush to the area when new things such as bamboo, rope and calico are introduced.

OUR STUDENTS AS DECISION MAKERS

Our students are very active and have a strong voice in our school community. Students submit proposals to staff about new items they would like to see in the nature play area. In addition they have also attended staff meetings to discuss nature play options.

In 2018 we added a mud kitchen as a result of a proposal put to staff by students that included its location and items with which to equip the kitchen. They researched other mud kitchens and worked with our groundsperson on the design and plumbing.

OUR APPROACH TO CURRICULUM THROUGH OUTDOOR LEARNING

The nature play area is open for free play every recess and lunchtime. We believe that free play in a nature play space is essential to ensure students have ownership and can utilise it to its full potential.

In addition to free play, we actively encourage intentional teaching in the space and want staff to celebrate nature play every day. The space has become a hub for curriculum-based learning in Design and Technology, Literacy, Numeracy, Health and Wellbeing and Arts across all year levels.

Nature-based learning at the school has included collaborative cubby building by the upper primary students with school-based preschool children, creating poetry visuals and props, using nature and being in nature for persuasive writing, mathematical problem solving, mindfulness strategies and visual art projects.

The benefits we have observed in our students as a result of the play space include:

- Increased collaboration and effective communication: we have noticed that activities such

as cubby building in free play and intentional learning have prompted a higher level of teamwork and communication. In these instances children work towards a common goal. As a result of their collaboration, effective communication and achievements they can confidently use collaboration, negotiating and communication skills in their classroom environments.

- Confident creativity with no boundaries: students have increased their ability to be imaginative, creative and inventive, for example using items such as sticks, pallets and tyres to create lunch-time musical performances.
- Inclusive social construction and play: In the nature play area age is not a barrier nor is physical ability. Students use the space as a common ground – they let go of perceived barriers and just play. Friendships are built and emotional regulation is improved as the children work through problems and, more often than not, find a collective solution. The group dynamics in the cubby-building space changes daily due to students feeling comfortable enough to join in and interact with others.

One of our main challenges was navigating what safety actually meant in the context of play and finding a balance between benefits and risk. For example, lifting heavy materials and introducing high-risk loose parts (i.e. sticks, chains, rope and bamboo). We have established some simple guidelines for the area and these are explicitly communicated to everyone who uses the area. Although it constantly evolves we continue to address issues or concerns as a staff unit to ensure we are all on the same page – this type of communication has been paramount to our site's culture of play.

Another challenge was the expense of introducing new materials to an ever-evolving space such as bamboo, crates, wooden reels, pvc pipe, a mud kitchen and loose parts. A constantly evolving, student-designed space means a high turnover of new materials and therefore high cost. The fact that funds are limited has created the opportunity to continually

involve our local community and to enhance our student nature space voice to help source new materials. This local community involvement has made it possible for student designs to become reality.


OUR ADVICE FOR INTRODUCING A NATURE PLAY AREA

From our perspective there are a few things that have assisted us greatly:

- A whole-school approach: a whole-school approach ensures that we are exploring and sharing the same values around nature play.
- Developing a good play culture amongst staff: having staff buy-in and support is extremely important. Strong and meaningful PD around nature play as well as staff discussions is a good starting point.
- Involving the children and local community in decision-making: our children and local community have a great sense of pride and ownership in their space as they are able to determine and control how it changes. Sharing a constant student voice at staff meetings is powerful.

OUR FUTURE DIRECTIONS

What we hope to achieve in the space is children reaping the benefits as they grow a connection to and appreciation of the natural environment. Children also develop their resilience, self-confidence, imagination, teamwork skills, initiative and creativity which aligns strongly with our approach to shaping conditions to develop powerful learners.

We hope to further enhance the area through the organisation by the Yard Action Learning Team of some themed approaches at break times and the increase of sensory items into the area. It is important for us to keep a flexible and fluid space with parts that can be configured in a multitude of ways to keep the area adaptive and responsive to inspired creativity. We will continue to collaborate with our children and the community about the development of the area and also provide professional learning for new staff each year. 



It's fun because you get to be outside and build a lot of cubbies.
| *Saffy, Year 4*

I like it because you can make mud balls. | *Jaxson, Year 3*

It's fun because you get to be outside. | *Ocea, Year 5*

It's leafy outside because of all the trees. | *April, Year 6*

I like building the cubbies because I like being creative. | *Austin, Year 5*

We have helped with the bamboo and other things. | *Kartia and Gracie S, Year 2*

Everyone uses their imagination to make things. | *Hazel, Year 1*

We help other people build out there. | *Addison, Year 2*

Nature is beautiful because it helps you survive. | *Madison, Year 5*

I like nature because I get to play with mud. | *Jasmine, Year 5*

Nature is fun to play in because it's beautiful. | *Chloe, Year 6*

I really like the mud kitchen area and make mud pies. I enjoy making cubbies with other people.
| *Madison Year 5*

I like building cubbies because you can relax in them. it's good to work with others making cubbies.
| *Austin, Year 5*

I like building cubbies with my friends. | *Austin, Year 5*

It's a good experience for kids to go outside into nature and build and just get into the wild. | *Heath, Year 4*

We like it because it keeps people occupied and it makes people use their brain when they make things.
| *Jack H, Year 2*

It's a good thing. It keeps you busy. If you didn't have it, it would be boring. | *Riley and Blake, Year 2*

I like the cubby and mud kitchen. People have fun out there. We cooperate out there when we make things. | *Naevia, Gurusavek, Gracie M, Reception*

Everybody can play there. | *Claire, Year 1*

You can use your imagination outside. | *Harper and Claire, Reception*

I like the nature play because you can build things and play in the mud kitchen. | *Meisha, Year 3*

There's a lot of things you can build with. | *Trinity, Year 4*

Nature Play is awesome because you get to build and allow your imagination to come true.
| *Paige, Year 3*

It's fantastic that we have so much stuff to play with and I like it because I get to make cubby houses we get to sit on the roof.
| *Saxon, Year 3*

You can play with everyone from the whole school, not just your class.
| *Kartia, Year 2*



ST PATRICK'S SPECIAL SCHOOL

Transforming a space

AN INCLUSIVE PROCESS FOR AN INCLUSIVE SPACE

KYLIE KARVELIS

As a special school, St Patrick's has always been acutely aware of the need to provide sensitively for the special needs of its students. As this case study shows, working together to create a stimulating and nurturing outdoor play space has proved enriching not just for the students but for the whole St Patrick's community.

During Term 2 2018, the journey towards creating a new outdoor play environment in the junior yard at St Patrick's Special School began. It all started with discussions around the current needs of the students and their engagement with the outdoor environment. The first step in this journey was prompted by a reallocation of internal learning spaces: in 2018 the classroom spaces for junior primary and senior students

were swapped around for the first time and as a result an area of the school that had previously been occupied by the senior students of the school became the junior primary yard. The change in learning areas allowed the senior class to have two classroom spaces, a larger yard and to be visually and physically connected with the middle and upper primary students of the school. In addition, the new location of the

junior primary students created a unique, age-appropriate space that allows junior primary students and their parents the appropriate transition before and after school. The larger classroom, the design of the kitchen, the quiet space and teacher office all complemented each other to create an effective learning environment for the junior primary students. However, despite the junior primary classroom now being



fit for purpose, we felt the outdoor environment was not meaningful or accessible for the junior primary students – and so a challenge remained.

We were quickly able to describe what wasn't working for the outdoor space and why. The next step was to develop a plan of what we wanted and why. We filed these discussions and began our research. Our research confirmed the need for students to have access to appropriate natural materials that would provide the right challenge and level of risk taking for cognitive and physical development whilst also stimulating their senses. It validated our thoughts of wanting to create spaces that encouraged students to engage in social interactions and independent play. And our research also confirmed the need for students to have the opportunity to engage in play spaces and loose parts in a way that is appropriate and respectful of their physical, sensory and cognitive needs.

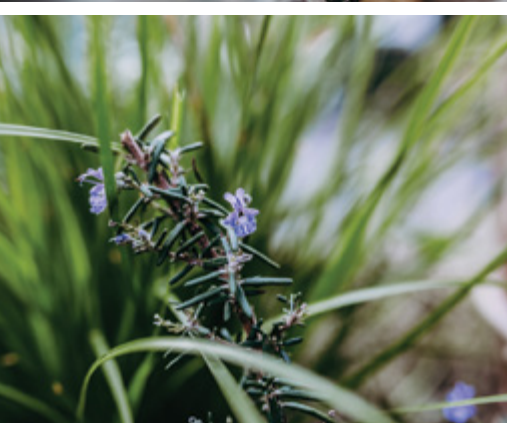
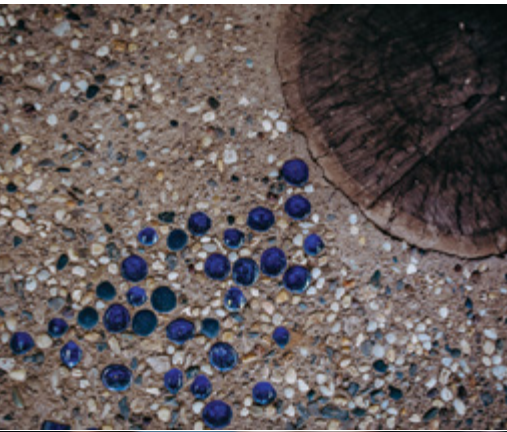
As a team we developed a set of criteria that we believed would be the most appropriate for the students of

St Patrick's 2019 and for the students of the future. This included:

- play opportunities that involve risk taking
- play opportunities that are understanding of all students' care plans (including transfer and positioning, oral, eating and drinking and continence care plans)
- play stories that can be left to be continued and built upon when the student returns
- play that challenges the physical body with regard to balance, motor planning, depth perception and spatial awareness
- play that challenges the sensory body through touching different tactile surfaces with hands and feet, smelling the environment around them, listening to the wildlife, experiencing and engaging with flowing water, and tasting edible plants
- play that encourages students to self-regulate through opportunities to withdraw into a corner or nook for a moment, reflect, process and rejoin when ready

Our research validated our thoughts in wanting to create spaces that encouraged students to engage in social interactions and independent play





- play that encourages social interactions and communication through placement of tables, swings and double seat benches

Working together, we began to develop a concept of what this may look like. We developed a board book that was a resource for collating our research and ideas. We frequently met with our classes to clarify, question and reflect upon our progress. We developed resources to give the students a voice and asked them what they would like to use, feel and see in their outdoor space. Our final meetings with Simon Hutchinson from Climbing Tree and Peter Semple from PSLA were fantastic opportunities to tell a story about our students, their strengths and what they find challenging. We shared our ideas for the space with the students and they were able to turn thoughts into drawings. Plans were signed off and the construction of the new outdoor play space took place over the Christmas school holidays 2018.

Now as we reach the mid-year point of the 2019 school year, we have been delighted to observe students in their new outdoor play space. The interactions we have observed between students, the calculated risks that students are taking in their exploration and the development of new skills have been just a few of the observations made by staff in the few months of its use. We are grateful for the opportunity to provide an outdoor play experience that is student-centred, inspiring and challenging all at the same time.

It is our common belief that all students have the right to experience the benefits that nature has to offer and it is our job to present it to them in an appropriate way. I can confidently say that we have successfully achieved this in the junior primary yard. Every structure and learning zone has been carefully considered in both its purpose and its design and provides new opportunities for both current and future junior primary students.

Before our space was transformed it had limited opportunities to stimulate

creative play. It was surrounded by artificial surfaces and textures that did not provide any challenge or learning potential for students. The ground surfaces included soft fall rubber, brick and concrete and the space was divided by a fence that was no longer meeting an educational purpose for students. The environment before the transformation did not have any diversity in planting, natural colour or materials.

Now, on the other hand, our space is characterised by endless opportunities for students not only to be "met where they are at" but also to be challenged in their play, their planning, their social interactions and their sensory exploration. The variation in texture and height used along borders and ground coverings provides interest as well as increased sensory input. When they are walking without shoes they are continuously learning about their environment and what is under their feet, and they are considering where their next step might be. This inconsistency of natural elements encourages students to integrate information from their senses, providing a strong foundation for learning.

Redesigning the outdoor play space at St Patrick's in line with nature play principles has been transformational not only for the space itself but for the whole school community. Moving forward, we plan to continue our learning about using outdoor spaces and making a meaningful connection with the Australian Curriculum, and to develop even stronger connections between the indoor and the outdoor learning spaces. We look forward to continuing on what is proving to be an exciting and inspirational journey for all involved. 🌱



FLORAL CREATIONS BY
St Patrick's Special School

From bush beginnings big things grow

FORGING A PATH INTO THE WORLD OF NATURE PLAY

LEE MUNN AND NICOLE WOOD

In this case study **Lee Munn and Nicole Wood** share the nature play journey of Lobethal Community Kindergarten, from its first self-guided steps as pioneers of the bush kindy movement to its emergence as a role model for other sites keen to follow the same path. Their enthusiasm is infectious, encouraging others to take their first steps. The quality of their approach was rewarded in 2018 when they received an excellent rating from ACECSA



Photo by: Jason Tyndall

Lobethal Community Kindergarten is located in the picturesque Adelaide Hills of South Australia. Settled in 1842 and steeped in history, the town was known during the second world war as "The Valley of Praise". We are nestled amongst orchards, vineyards, dairy farms and lush farming land where various fruit and vegetables are grown and grass-fed livestock are bred and raised. Originally a predominantly white, Anglo-Saxon

Lutheran community, the Lobethal of today comprises around 3,000 residents and is developing a much broader scope of cultural diversity than it ever had in its past.

We are a full-time centre with a capacity of 30 children per session and have always prided ourselves as being a place in which families and the community come together. A space where all families, regardless

of background or circumstance, are accepted and supported, and the wellbeing and rights of every child are at the centre of all that we do.

Our journey began at a time when the pedagogy surrounding nature play was just a quiet whisper, and the exploration of the potential benefits of children's regular and ongoing access to nature-based experiences were only in their

infancy in an Australian educational context. There were a few programs in their early development around the nation but accessing information and staff professional development opportunities was nowhere near as simple as it has subsequently become.

Our journey has been a little different to many of those beginning today. There were no real guidelines to follow or helpful suggestions of what to embrace or what to avoid. We relied heavily on research around the important benefits of children's exposure to the natural world, and we had faith in our own pedagogical understandings of child development and the trustful reciprocal relationships we had with our families and children. We have always had an embedded culture of reflective practice and engaging in ongoing professional development as a whole

We had faith in our own pedagogical understandings of child development and the trustful reciprocal relationships we had with our families and children.

staff team, which continues to give us the courage and tenacity to give it a go and learn from all that we do.

We didn't just decide to start a bush kindy program; our program developed, and gained depth and richness throughout our journey as we based it upon our experiences and reflections. Our initial "toe in the water" was far from tentative: it felt as though we didn't even pause on the edge; we planned frantically, took a deep breath as we jumped, and just kept on paddling – and the initial 2013 "Outdoor Kindy Week Challenge" became a reality. One full week outdoors, tools replaced



Photo by: Jason Tyndall

the toys, hay bales were used to fashion ever-changing playscapes, a fire cooked our food and kept us warm, and we embraced whatever conditions mother nature provided us with – including torrential rain.

After two years of enjoying and learning from our outdoor kindy weeks, a staff trip to New Zealand in 2015 for a nature pedagogy conference was the impetus for change, and so began the development of our Nature Connect bush kindy program. Once again, the program was based on research, predominantly sourced from the nature-based programs throughout the northern hemisphere. The concept of full days spent off site at a local bushland setting was developed in collaboration with our parent and wider community, and the program has continued to evolve, going from strength to strength as each new cohort of families are involved in making it their own.

As pioneers of the early nature play movement, we immediately attracted a lot of attention, and from the outset have always endeavoured to share our journey with others. Blog posts, media coverage, running our own conferences, presenting at other conferences, mentoring other leaders and sites, magazine submissions and creating our own artefacts to record our journey have all been important ways we have embraced this opportunity. Our aim

has always been to highlight and share the learning that children are engaged in across all settings. We have never professed to have all the answers, to have a simple or easy set of guidelines and risk assessments, or even that our way could or should be transferable to another site. We have sought to share the pedagogy of nature play with others, to inspire them to discover their own paths, to be thought provoking, to share our journey and to support others in ways tailored to meet their individual needs.

During 2017 and 2018 Lobethal Kindergarten applied to be a part of, and was selected as one of two preschools for, a Department for Education STEM Lead Learning project. This project was an initiative deriving from the 2017-2020 DECD STEM learning strategy (2016) with the imperative to improve STEM outcomes for children to support their future. Schools and preschools were selected across SA based on proven exemplary practice and leadership in STEM education across educational sectors.

Our involvement in this project has provided a vehicle for us to delve more deeply into what STEM looks like for our four-year-old learners in the bush. It has also provided an amazing opportunity to be involved in customising a professional learning experience that will broaden the capacity of other educators to

recognise and explore the remarkable STEM capabilities of children in a nature play context. Based heavily around the development of children's learning dispositions, the program recognises that many of the jobs our children will one day hold do not yet exist. It will be through the ongoing development of these powerful and highly transferable dispositions that our children are best supported to continue to be competent and capable 21st century learners.

Based heavily around the development of children's learning dispositions, the program recognises that many of the jobs our children will one day hold do not yet exist

Observing children at play in our bush kindy program, it quickly became obvious that the scope of truly authentic child-led play experiences, which have been recognised as the most powerful way to develop children's deep understanding, are immeasurable. When we acknowledge children as competent and capable, show them real trust, work with them collaboratively and view them equally as learners and as teachers, when we get the "slow dance" of when to stand back and let them be or when to step in and help scaffold the learning just right, it becomes magical and we all thrive on the challenge and the adventure. Learning occurs naturally at the rate that is right for each child, about

the topics that engage each child; it becomes a truly child-led program and the dispositional development is an integral component of every part of that experience.

Children's STEM exploration is an innate part of all their play, particularly at bush kindy. Developing educator capacity to observe and recognise the learning that is occurring involves rethinking the traditional definition of what STEM looks like. When most people think of science, technology, engineering and mathematics, they envisage computers, laboratories, robotics, drafting tables, and complicated equations. STEM for a four-year-old learner in the bush challenges these preconceptions. A child's learning as they explore and compare the size and weight of the handful of leaves or rocks they have discovered and collected, and then proceed to classify them into groups using different attributes and counting the number in each group as they go, provides an engaging, self-chosen, authentic and meaningful exploration of mathematical concepts relevant to that particular child at that particular time. Another child just metres away is using a magnifying glass to examine the gills of a fungi they have never noticed before, comparing it to the partially decomposed one nearby and yet another that looks as though something may have been eating it, wondering why it only grows in this part of the park, and why it only appears at a particular time of the year. Both children extend their oral language skills as they discuss their discoveries with a friend and excitedly record their findings in their journal. Up the hill a little further a group of three work together to drag heavy fallen branches one after the other through the bush, navigating around trees and ditches before carefully placing

each one against a specially chosen tree, smiling as the plans envisaged in their heads of a magnificent castle come to fruition. They glance up, the sounds of excited squeals catching their attention as a friend comes running down the hill, their speed and trajectory being directly affected by the angle of the ground they are traversing. Everywhere you look there are busy and engaged learners discovering and exploring.

Another child just metres away is using a magnifying glass to examine the gills of a fungi they have never noticed before

This is what STEM looks like in the bush; it is everywhere, it is integral to all that is occurring, it is a child's natural exploration of the world around them, it is play. These are the scientists, mathematicians and engineers of bush kindy. They explore, discover, create, imagine, communicate, cooperate, risk take, persevere, problem solve, resource their own learning, show purposefulness, and build resilience and confidence, yet, to the casual observer they may look to be just children at play. Current research provides unequivocal evidence that nature play is a crucial component in providing optimal learning outcomes for all children and that it provides a plethora of rich, meaningful and authentic experiences that simply cannot be replicated within the walls of a building. 🌱

RESOURCES

Short film on Lobethal's bush kindy [<http://lobethalkgn.sa.edu.au/bush-kindy-short-film-2016/>]

Child's Play article on the Weekender Herald [http://www.weekenderherald.com.au/article.php?ID_Article=664]



More than just scrub!

THE AMAZING AND EXHILARATING SCRUB LIFE AT KILKENNY PRIMARY SCHOOL

LACHLAN HALMAN, EDDIE WOOD, OZER UYSAL, AMELIE BRADLEY AND PETER DUNSTAN

Many of us are familiar with the extensive research, presented to us by academics and educators from across the globe, confirming the importance of nature play for children's emotional, social and cognitive development and overall wellbeing. In this case study from Kilkenny Primary School, we hear from arguably the most invested researchers and practitioners – children themselves.



Our scrub is a significant area within Kilkenny Primary School. It is characterised by local vegetation, native and weedy exotic species with large gum trees, the remnants of earlier plantings some 30 years ago.

It is a space that is used during lessons, recess, lunch and after school OSHC. During these times it becomes a wide-ranging space

for different students and groups. It becomes a cubby building site for construction companies; a tree climbing amphitheatre for mountaineers; a scrub buck trading floor for stock exchange investors; a quiet space for people escaping; a pond investigation site for aquatic limnologists; a resource-rich rock grinding and collecting site for natural artists; a clay quarry

for earthworks evacuators; and a playground for adventurers.

It is a multitude of places and spaces for explorers and entrepreneurs. It is an ever-changing world of activity.

Some of our students have shared their perspectives that demonstrate the use and significance of our scrub life.

PONDERING ON NATURE

BY EDDIE WOOD (Year 7)

Every part of our scrub is precious and valued, but no one can disagree that the pond is the most widely appreciated part of our pleasant mini-forest. A pool of water enclosed in rocks, the pond is delightfully attractive, and can have you staring in awe for hours. Even before the pond's makeover, it was pleasantly striking, lacking a border of rocks, but instead accompanied by an array of reeds, which made it seem effectively more interesting and wilder. Kids really enjoy sitting in trees and talking near the pond, and even dip their feet in on a warm summer's day. Many kids and their groups of friends play games involving the pond.

This just goes to show that everybody enjoys our pond, not to mention the rest of the scrub, which is one of the most liked parts of our school. And now, for a history lesson:

Construction for the pond first began in 2010 and was essentially the highlight of the school. The scrub was flooded with students at recess and lunch, all wanting to see the new addition to the scrub. The pond was then renovated eight years later, in early 2018, for water sustainability, as the water was slowly draining away, and had to constantly get refilled. So, the school purchased an all-new sustainable pond, took away the reeds, and replaced them with a rock filtration system, which was also what bordered the main body of water.

This year (2019), a group of Kilkenny Primary School parents put forward a suggestion for a program to revegetate the scrub, add more loose part for kids to play with, and arrange additional learning programs involving the scrub.

In conclusion, our already-beautiful scrub is completed with the pond, a nicely placed body of water and rocks that fills kids all over the school with delightful thoughts about our scrub and urges them to respect and care for our nature and environment.

UP TO TRADE

BY OZER UYSAL (Year 7)

Giving something to get something: that's what we used to do, starting thousands of years ago and eventually fading out into the ever-growing age of money. There are some groups and companies that still use trading such as Gumtree or groups of friends that give and get something.

Another big group of people are the people that are writing this piece of text, people from Kilkenny Primary School and the people who use the system of trading to increase financial status and decorate parts of their cubby. This also trains children's creativity and imagination, assisting them with tasks during lesson time. Our scrub facility also supports children if they want to own a business involving trades by teaching them to become moneywise from an early age.

Our scrublands are really helpful as anyone big or small, R-7, amateur or professional, can come on in and learn while having fun at the same time. Trading in our school was brought to life in 2013 when the scrublands were open to our school during break times so students could become traders during their break times. Many of these children who adapted to the ways of trading traded things like sticks for pipes and bricks for logs. These materials were used to construct cubbies or just to pretend they were someone from their favourite TV show, book or movie.

Our scrub is a fascinating space and if you are near Kilkenny Primary School, please come on in as a visitor so we can show you our amazing and educational scrub facility.





ARTISTS IN THE SCRUB

BY AMELIE BRADLEY (Year 7)

Starting in 2017 in the KPS scrub, students began to make a type of natural paint like the Australian Aboriginal paint ochre. Students smash rocks such as charcoal, red rocks, sandstone, quartz and clay to create powders of different colours. After the students have the powder of choice they then add some water to make the paste. With the paste students create art on trees, rocks, bark and even on others' hands. The artwork students do on others' hands is quite amazing. Students even add little flower petals to their designs. These art pieces are like little tattoos that students create and sell, with scrub bucks being used as payment. These scrub bucks are properly explained by Lachlan Halman if you wish to know more. As I was saying students would get quite rich in this business because everyone likes the artwork. The good thing about these tattoos is that they are not permanent and can be washed off quite easily with a bit of soap and water. Students developed the idea of this paint from the history of Aboriginal cave paintings that they have learnt about during class. The original ochre made by Indigenous Australians was made by mixing different ingredients such as:

- Red/white/yellow/black Ochre;
- Fresh or rain water, saliva;
- Plus one of the following: egg white, orchids, turtle eggs and blood.

SCRUB COIN

BY LACHLAN HALMAN (Year 7)

Our school works hard to keep our scrub fun, interesting and neat, and on top of all this is the concept of the currency of the beautiful area. Our school brands this as scrub bucks. Scrub bucks are gumnuts that have fallen off gumtrees and are collected off the ground. These are then used to buy items from self-made shops. It doesn't end there, as the value of scrub bucks isn't just determined by their size and shape. They are determined by the children at Kilkenny trusting one another and figuring out a price for each scrub buck. Yes, this takes a long time but it is a way of building trust between the children here at Kilkenny. Scrub bucks also teach children how to use and save money. By having a limited budget of 500 gumnuts (scrub bucks) kids learn budgetting and finance so that when they are older they already know all the tricks.

Gabes Christopher and Gabbi Veanie started the idea of scrub bucks in Grade 3, 2013. Back then scrub bucks were extremely unpopular and were not known to many. In 2015 when Gabes and Gabbi were in Grade 5 scrub bucks were becoming something that children would talk about in their free time. Gabes and Gabbi are now in Grade 9 as of 2019 and have started a movement that people use every day in our wonderful nature area and talk about all the time. Scrub bucks are one of Kilkenny's scrub key features that stands out in our school. Scrub bucks not only became something that is respected in our school but also became a tradition that kids in future will learn to respect and nurture.

Recently we have added two natural playgrounds to add excitement and adventure for our students. Our future plans for our natural spaces are encapsulated in a Vegetation Restoration Plan recently compiled by one of our parents, Sabine Koolen.

It comprehensively details how we will develop aspects of revegetation, loose parts play, lesson planning and sustainability into the future. Along with our students, we are excited to see how our space continues to evolve. 🌱



Nature is a tool
to get children
to experience
not just the
wider world
but themselves.

STEPHEN MOSS

A community of innovators

A SPACE WHERE FREE PLAY AND OUTDOOR LEARNING
BUILDS INNOVATIVE LEARNERS

RACHAEL VERRINGER

The mission statement of St Francis Xavier's Catholic School describes it as a "child-centred, future-focused and dynamic Catholic school" and states, "In partnership with the community and our unique environment, we flourish in a culture of learning." In this case study, **Rachael Verringer** shows how the school community takes this promise seriously, encouraging all within the school community to connect with and celebrate the rich learning resources of their local natural environment.

OUR PLACE

St Francis Xavier's (SFX) is a Catholic parish school, located in the leafy suburb of Wynn Vale. Together with Catholic Education South Australia, "where every child matters", we at SFX seek to inspire and ignite an innovative community.

We challenge children, aiming for them to question, explore and imagine as they become self-motivated learners who will view with critical eyes the society in which they live. We are constantly evolving to meet the needs of our children, families and staff, and make a commitment to contribute to the growth of a more peaceful and forgiving society. We have an open approach to decision making, and value relationships that are based on trust, respect and cooperation.

We embrace our unique environment by engaging children to connect with nature, by accessing the nearby Wynn Vale Dam, encouraging nature play and cubby-building experiences, and caring for our established indigenous garden, our Kaurna Garden, in living out Pope Francis' message of "Caring for Creation". With the child placed at the centre of all that we do at SFX, we are going to explore, reflect on and describe our nature play journey so far, heavily through the voice of our children.



OUR BEGINNINGS

Our nature play journey began alongside our journey towards creating our new logo, vision and mission statement so that we could ensure our values and beliefs about children and learning were reflected clearly to the wider community. A long process of collaboration with key stakeholders led us to: Inspiring a community of innovators.

Leading SFX into the future by inviting all our community – children, parents and staff – to dream of and wonder about new ideas for learning and living into the future. We wish to inspire and encourage our children not to be afraid of mastering new skills – and to see a future that none of us can imagine! Our vision is actively lived out across our school community through our learning principles: inquiry, collaboration, creativity and connections.

We wish to inspire and encourage our children not to be afraid of mastering new skills.

Our logo also reflects the strong emphasis that we as a community

place on our unique environment as a key element in driving who we are, reflected through the green (present in our logo) in which we flourish each day.

Our nature play journey started when our current Year 6 children were new to our school, with an incursion facilitated by Simon Hutchinson from Climbing Tree. During this experience, the children engaged in play that was based around trees and small dirt mounds in an unused space on the other side of our oval. Through this experience, and the conversations that followed amongst children and staff, some things stood out to us.

- The children were highly engaged and focused during their session.
- The countless and rich opportunities to build on oral language, collaboration, creativity, critical thinking and problem solving were a strong motivator in connecting with our philosophy around teaching and learning for children, especially in the early years.
- The space used lent itself well to cubby building due to the established trees and sparse dirt in between, allowing us to expand on the play spaces for children at our school.
- Cubby building (and broader

nature play) was something to explore further.

- The children had fun, and were immediately asking for the next time they could make cubbies.

In the weeks, terms and years that followed we worked in partnership with our staff, children and parent community on different levels to explore and expand our connection to the environment. During this time, we have been supported by a number of organisations, national and global actions and celebrations, research and professional learning sourced from the wider community in order to explore the opportunities that our unique site provided for authentic connections with our environment through both play and curriculum. In addition to continued play and outdoor learning opportunities guided by our teaching staff, this has also seen children engaging in a range of experiences including incursions on-site facilitated by Nature Play SA and the growing team at Climbing Tree, and excursions to Belair National Park, beaches, camps, the Botanic Gardens and Adelaide Zoo in order to explore a range of different connections. These experiences led us to transform and adapt spaces in our school. It allowed us to gradually build capacity in order to develop a culture of play which spread from activities scaffolded with teacher support in classes or



year levels to self-directed free play taking places at recess and lunch times with children collaborating and cubby building across year levels when exploring, constructing and playing. This in itself has been an evolving journey, and has relied on collaboration, creativity and problem solving in order to respond to, and overcome, challenges as they may arise.

It is through the development of these strong connections as a community that we see the outdoors have its greatest impact on our children, fostering positive relationships with the world around them which inspires care, love and joy for the environment and being in it. It is these strong relationships with the environment that have led us to taking part in regular events and celebrations including Clean Up Australia Day, Outdoor Classroom Day, World Environment Day and EnviroWeek as opportunities to celebrate, share and emphasise the unique environment that we are lucky enough to have at our finger tips.

Our journey has been strongly driven and shaped by the children in our community and their experiences, and this is something that we strongly value as an integral ingredient in creating change.

Our journey has been strongly driven and shaped by the children in our community and their experiences, and this is something that we strongly value as an integral ingredient in creating change. We have therefore called on the voices of our children in sharing our journey so far and the progression of free play and outdoor learning that is continuing today at St Francis Xavier's.

OUR BEGINNINGS AS RECALLED BY SOME OF THE VOICES WHO HELPED SHAPE OUR EARLY DAYS...

First I remember there was sticks and we went and built walls and then tried to make them into cubbies. Then I remember we got to add grass and hessian to build huge, giant cubbies. We used to pretend we were in the wild and we had to survive so we made food and fires and stuff. We used to do nature play with our buddies too so we could build bigger cubbies and work together too. Then we started our own nature survival adventures when we got older and did more imagining. | *Cristian, Year 6*

I remember it was fun. We made lots of cubbies and we were like a little family... we were a real team. | *Marcus, Year 6*

We built cubbies and me and my friends would hide and play in them together. | *Guiseppe, Year 6*

We had special rules about how to use sticks and move them so we could be safe. | *Imogen, Year 5*

Making cubbies was fun... the good old times. We could do stuff in groups and catch up with our friends that weren't in our class too. | *Bella and Laura, Year 5*

When we started the nature spaces had an imaginary boundary and most kids still stick to it. They play games and pretend no one can see them. They climb trees. We used to have ropes on the trees to mark where we could climb to but now we all know where to climb. We are just lucky. | *Yasmin, year 7 2018*

WHAT OUR INNOVATORS SAY

NATURE PLAY IS...

Fun, exploring and exciting. | *Erika, Year 3*

Wonderful, creative and colourful. | *Abby, Year 3*

Carry big sticks. | *Braxton, Year 1*

Fun, creative, caring. | *Marcus, Year 6*

Fun, outdoors ... | *Guiseppe, Year 6*

Nature, peace, cubbies. | *Hadi, Year 6*

Fun, green, exploring. | *Matilda, Year 6*

Peace, Exploring, Experience. | *Laura, Year 5*

Nature Play in the Kaurna Garden helps us learn about Aboriginal People and have fun. | *Chase, Year 3*

I love nature play. You build things with nature, like big sticks and other things. And my favourite thing about nature play is building cubbies. | *Ryder, Year 3*

I think nature play is an opportunity to learn more about the environment. | *Amity, Year 3*

In nature play you build cubbies, You climb trees, and, When you climb trees, you can swing on the branches. | *Reception children*

WHY DO WE THINK IT IS IMPORTANT?

You get to have fresh air, and it's some good fitness. | *Ryder, Year 3*

To get warm in winter and cool off in summer. | *Chase, Year 3*

You can explain to others how you make your creations. | *Chase, Year 3*

If someone can't put their stick up or make their cubby you can help show them and solve the problem together. | *Ryder, Year 3*

My important thing about nature is getting outside and having a break.
| *Erika, Year 3*

Probably because kids need some fresh air and some space sometimes. When you can go outside and relax and play and still learn, it's really good.
| *Liam, Year 4*

I think it's beneficial because we learn how to build things, sometimes you get stuck in a classroom and don't get to learn this way. | *Yasmin, Year 7 2018*

THROUGH NATURE PLAY WE...

The best bit is to build cubbies, because they're fun to build. We learn to use sticks as more than just that: it can be a weapon. We learn to drag the big sticks safely so you don't get hurt and to build and make stuff with them. We also learn how to make new friends too. | *Harley, Year 4*

Hmm... making cubbies with your friends. It's lots of mostly fun building with sticks and sitting with your friends in the grass and the shade you made and talking. We learn to solve problems by sharing and caring and helping each other. | *Sienna, Year 4*

We learnt that you can't just do anything... but you can make amazing cubbies, work together, practice building, take turns, have contests and challenges together that help you use your imagination to imagine you were really in the wild. | *Cristian, Year 6*

Kids gather sticks and other things and they just build. Every Friday we take them down and that way everyone gets an opportunity to build something.
| *Yasmin, year 7 2018*

Building, like how to use sticks to make stuff. | *Guiseppe, Year 6*

We make mud pies and potions in our mud kitchen. We made a rule that you can't break anything from trees – only gathered things except flowers, we can pick some of those. | *Yasmin, Year 7 2018*

SOME OF OUR NATURE PLAY HIGHLIGHTS...

Because I like to spend lots of time with my friends building our creations.
| *Chase, Year 3*

I think I like all the beautiful colours. I like collaborating with people and making teamwork as a cubby. It's all beautiful and I think it's making one creation together that makes people happy. | *Ashlee, Year 3*

My favourite thing about Nature Play is that I get to spend time with my friends, and we sometimes make cubbies together. | *Amity, Year 3*

NATURE PLAY SPACES (BACK AND SIDE OF OVAL + CO- CONSTRUCTED SPACE)

The back of the oval was the first space identified in our site as an opportunity in waiting. Since the first cubby building incursion took place, this space has become a favourite with our children when seeking to build, create, collaborate and explore. Initially, setting up the space involved gathering basic materials including sticks and hessian. We also introduced children in scaffolded ways to the notion of exploration and potential of cubby building.

This involved supporting staff and children to analyse play opportunities through a range of processes: assessing risks and benefits; determining ways to carry and move materials; collaborating, sharing and playing in flexible, changing play spaces; and building a common language and understanding for all stakeholders to ensure consistency and a common understanding for the purpose and type of play within the space. A key part of this was to explore skills (like how to carry a stick), language (shifting from building bases to building cubbies) and expectations to pave the way for positive play experiences. A key feature of the space is the fluidity in which structures and materials can be shared, changed and recreated, something that took time and exploration to establish.

This also led to the establishment of a co-constructed play space that provided children with the opportunity to balance, climb and perform. Tree climbing also began in the space - initially in a scaffolded manner, where children could climb up to a ribbon placed at a particular height to establish an induction period to support children and adults alike in becoming comfortable with the idea. Previously an unutilised space between our specialist buildings and reception learning spaces, there were two sturdy trees, surrounded by bark.



We worked together with our children to explore opportunities to convert this space into a play space providing opportunities for gross motor development, critical thinking and risk taking, as well as creative play to take place close to our Early Years learning spaces. The reception children were involved in both the planning and some of the construction, including laying the bark. This space has continued to evolve and change as time goes on. One of the standout elements is the opportunity for children to climb trees.

A little later in our journey, it became clear that the children enjoyed playing in these spaces, and a second co-constructed space was established to flow on from the free play cubby building with additional opportunities for climbing, balancing and constructing.

Playing in the cubby house. We play games. I play with my friend (Ellie). | *Archer, Curious Xavier's*

Playing in the cubby house we play hide and seek. | *Ellie, Curious Xavier's*

I climb the tree. I was holding onto it and I put my feet on the

tree. I climbed a little bit high. It was good. | *Ellie, Curious Xavier's*

You can jump on the logs and walk on them. It's easy. I just balanced. | *Archer, Curious Xavier's*

Going in the tree... I get to go upside down. | *Tully, Reception*

I like playing with my friend (Jayden) and we play super heroes and sing in our band. We sing and make a drum – it's a log. And it's near the stage. The log is a good drum 'cos it makes a drum sound. | *Charlie, Reception*

At the back of the oval we climb trees. Sometimes I go really high so I just got to jump down. | *Tully, Reception*

I jump down too but sometimes I get a bit scared so I just climb down too. | *Charlie, Reception*

I love touching trees, and I love playing in them. | *Davin, Reception*

I like building campfires and we sit on logs around it. We pretend the rocks are marshmallows. | *Girl, Reception*

THE SENSORY GARDEN

When we began our Nature Play journey and started transforming and repurposing spaces in our school, some Year 1 and 2 children came up with a question: "What can we do with the space at the end of Room 10?" At the time it was an overgrown garden bed that children passed on their way to the courts, hall or specialist lessons each day.

Over the next two years, the children in Years 1 and 2 began thinking about their ideas, recording possibilities for the things they thought could enhance this space.

In 2017, the children in Room 12 and 13 decided it was time for ACTION! After exploring our existing play spaces and then referring back to the previous designs that had been created, the children decided we were in need of an outdoor space that could be used for learning, play, relaxing and connecting with the outdoors.

In consultation with Mr Thacker (Groundsman) and Mrs DeGaris (our Principal) the plans were created for a Sensory Garden. On World Environment Day that year,

the children began clearing and preparing the space as part of Outdoor Classroom Day. Since then, the space has continued to develop and evolve to include spaces to sit, a mud kitchen, sand pit, sensory path, naughts and crosses game, a black board, succulents and most recently two custom made tee-pees which were created using recycled materials from our school environment. This year, the children are still thinking about ways to add to this space. At this stage they are exploring ways to incorporate a small herb or veggie patch to continue to develop the sensory aspect of the space.

We like to draw with chalk on the black board, it's really fun! | *Year 2 children during play*

Sit on the edge of the sandpit and I sit in them (points to teepees). I like to sit in the sun. I like the sand pit best because it's fun. | *Lucas, Year 2*

Sometimes we make a band using these (showed pots, pans and sticks) or relax and talk in the big tents. | *Patrick and Year 1 boys whilst drumming at lunch time*

THE KAURNA GARDEN

"Bulturro Parri"

In 2004, SFX established a Kaurna Garden in recognition of the indigenous people of the area. The garden was designed to enhance the existing Indigenous Studies programme. An area adjacent to the back of the school, known as Jubilee Reserve, was leased from Tea Tree Gully Council. In Stage One of the garden development, the students planted over 700 local plants, including varieties of bush tucker, to recreate the habitat experienced by the Kaurna people pre-European colonisation, with plant placement reflecting naturally occurring growth. Pathways were incorporated into the design to minimise damage to groundcover and other plants as students explored the garden. A central meeting area was established, large enough to accommodate two classes, along with two smaller areas.

The students added a further 700 plants the next year in Stage Two to complete the second half of the garden. Kaurna elders were consulted regarding a name for the garden and "Bulturro Parri" was chosen due to the school's close proximity to Dry Creek. Further planting took place in subsequent years to maintain the garden's diversity. Most recently, our groundsman supported our Reception to Year 3 children to see the children from each class rejuvenate a different area in the Kaurna Garden with native plants. This allowed the children to form strong connections to the space, and has renewed the children's excitement and inspiration for being in this space. As part of this latest addition, we also had a welcome plaque created, which shares a traditional Kaurna welcome with all who enter the space.

I love when we do rock collections. And I like it because I haven't touched them for a long time before. | *Girl, Reception*

The Kaurna Garden is our favourite place! | *Jake, Steven, Emilia, Year 3*

I like the Kaurna Garden because it is part of Kaurna Land. | *Emilia, Year 3*

I like the Kaurna Garden because it has pretty trees. | *Emilia, Year 3*

The Kaurna Garden is special because of the fresh trees. | *Steven, Year 3*

I like the Kaurna Garden because it is nice, and there is lots of trees so that we can play. | *Jake, Year 3*

The Kaurna Garden is special because we get to water our plants. | *Jake, Year 3*

OUTDOOR LEARNING

Outdoor learning at St Francis Xavier's comes in many shapes and sizes, from cubby building and fairy gardens to taking learning experiences outside into different spaces in our environment, as well as vegetable gardening and learning

about global sustainability issues so that we can take action in order to encourage change.

AN EXAMPLE

From Luke Ferguson, Upper Primary Teacher and POR for Leading Learning

I have seen how nature is able to capture the children's natural sense of wonder and inquiry about the world which often grows into stewardship for the environment. I have been able to use outdoor learning opportunities to teach core curriculum concepts and skills to upper primary students.

One specific example that comes to mind is our succulent plant stall that my Year 7 class ran last year. We began the year by asking the children to find succulents in their gardens at home, using the Science curriculum to classify plants into different categories. We then identified what plants we received, giving deep inquiry learning and



research opportunities to all children, especially those that struggled to adapt to a traditional curriculum. We examined natural art through the drawing of our plants and used our artwork to communicate the information we had learnt about our plants, such as scientific name, care instructions, environmental considerations, etc. Finally, through the Business and Economics curriculum, we designed a business model and created a brand called "Sweet Home Succulents". The children then ran stalls before and after school selling the plants that we

had been caring for all year, raising money for charity. The learning was deep and rich and gave the children purpose in what they were doing. I am confident in saying that it is through these outdoor learning opportunities that students are able to thrive, not only as learners but as citizens for the world.

Our unique setting is a fundamental element of who we are at St Francis Xavier's and therefore is a key aspect that we connect with and celebrate through the early experiences and communication we share with new and existing families. Sharing learning via our newsletter, individual class SeeSaw posts, emails and social media is of high importance to us, as well as sharing resources, ideas and information with families to support and foster understanding and growth in our partnership. This includes sharing the plethora of resources that Nature Play SA, along with KESAB and other community, national and international organisations and researchers, have created at relevant times during the journey of our year. A particular favourite recently has been the range of scavenger hunts and various "25 things to do before..." lists, as they encourage families to speak, explore and play together in their local environment, supporting them to turn play inside, out!

OUR FUTURE

At St Francis Xavier's we have a strong culture of valuing each child as capable and competent. We have been able to see the positive impact of opportunities that openly and meaningfully connect us with our outdoor environment on many occasions and in different ways, as well as the impact that it has on those in our community. This is something that we look forward to continuing to explore and strengthen in the future in a number of ways, such as:

- Following our Early Years staff participating collaboratively in a series of modules of professional learning last year, we are in the beginning stages of introducing and establishing loose parts



play opportunities alongside our existing cubby building. Recently our Year 2 children had the pleasure of working alongside the Climbing Tree team to explore their creative side using loose parts. This is not the first and definitely won't be the last opportunity that our children have had to be collaborative, creative, connected explorers and problem solvers. The incursion gave us the opportunity to trial a new use for an underutilised space in our school environment that we are excited to pursue with the continued support of Simon Hutchinson and Climbing Tree in order to continue to grow and develop our capacity for connecting our children with our environment through different play-based and learning opportunities.

- Aligning with the value and emphasis that we as a school place on play, this will also become a key component in the building process and landscaping for the Early Learning Centre and Reception learning space, the construction of which will begin later this year ready for another innovative shift in our early years ready for 2020.
- In continuation of our progress over the last three years, and connected with our strengthening relationship with our environment, we will also continue to strive towards zero waste as a school community, supported by NRM and KESAB. Through relevant

local indigenous organisations we are also hoping to deepen our knowledge and understanding of the cultural significance of our Kaurua Garden. It is already evident that our children keen to explore and learn more about the way of life and tradition of the Kaurua people. At this stage this initiative will look to delve deeper into our understanding and use of our bush food trail (linking with Aboriginal and Torres Strait Islander cross curricular priorities) as well as exploring the native plants that inhabit this space, supported by Nature Play SA. Through a recent site visit, we were able to find out that some of the plants include totem poles, Christmas bush, senna, wattles, dianellas and ruby saltbush, all of which we are hoping our inquirers will have the chance to research and understand, and share their findings with each other.

As a school community we are eager to explore options to continue to reflect on and utilise the many opportunities that our school environment offers in order to continue to build and foster a strong connection for all in our community to outdoor learning and play as key elements of the learning experiences that we share with our children in our journey towards "inspiring a community of innovators". 🌱

The background is a soft, abstract watercolor wash. It features a mix of light blue, pale pink, and off-white tones. The colors are blended together, creating a dreamy, ethereal atmosphere. There are some darker, more saturated patches of blue and pink, particularly towards the bottom right, which add depth and texture to the overall composition.

Play is the
highest form
of research.

ALBERT EINSTEIN



Highlights

FROM THE NATURE PLAY SA
EDUCATION PROGRAM



The State of Education for Nature Play SA

A FEW WORDS FROM THE EDUCATION MANAGER OF NATURE PLAY SA

MARIA TAYLOR, NATURE PLAY SA

The need to connect young people to nature and to help educators facilitate effective outdoor learning is just as pressing in the rural areas of our state as metropolitan ones. In this article, NPSA Education Manager **Maria Taylor** shares her passion for bringing the organisation's resources and support to educators all across South Australia.

The Nature Play SA education team are committed to working with education communities across our state. It's a big task for a small team... we love a challenge!

Did you know that South Australian schools are spread out over an area of more 983,482 square kilometres? Our landscapes, our communities, our challenges and our opportunities are as diverse as the students in our care.

Whether it be arid lands, the suburban grid, coastal communities, grape-growing regions or wide-open farming landscapes, our state's schools have unique backyards and lands beyond their school gate.

To that end, learning outside your classroom requires an approach that is just right for you. Not everyone can engage in "forest school" days or a "coastal classroom" but everyone can broaden their thinking and their classroom to include a natural space in some way.

Recognising that space and the potential for learning within it are what we are all about.

This year, alongside a strong school incursion program, we have risen to the challenge of connecting with schools across our state and on a local level, ensuring that professional learning reflects site-specific needs.

Our first regional roadshow grew from a proposed two-day visit to a full week jam-packed with school visits and after-school sessions. The most rewarding aspect of this visit was hearing about what happened after we left and the dust had settled. Students taking daily walks in their surrounding scrub lands, nature play days in coastal kindies, daily practice being transformed with the smallest tweaks to include elements of outdoor learning. It is all music to our ears back at Nature Play HQ.

Professional learning is also taking a new twist, with programs delivered to partnership hub groups to support oral language, literacy, maths and LDAR projects. Our

work is largely practical: upskilling teachers with outdoor learning designed to achieve project aims, supporting new pedagogies and helping teachers with the "easy wins" of engaging students in real-life learning. We are also working with staff teams and supporting weekly outdoor learning sessions with on-site mentoring – fun, practical and meaningful professional learning delivered on-site!

Another exciting new venture has been the rise of Nature Play Retreat days held on site in our beautiful homestead with quality catering and nature connection sessions woven into the day. These retreat days focus on bringing staff teams together with time to talk, connect, plan and reflect. How often do your staff team gather and engage in professional conversations without an agenda? How many times in a year do you get to sit still and simply think about your "world" of teaching and learning?

These carefully crafted days embrace time: time to walk, time to connect with others, time to enjoy the natural surrounds and time to realise the next steps in your professional journey (as individuals or teams). These powerful days address wellbeing and work-life balance with a focus on working efficiently and coherently. So far, the results have been significant, and we can't wait to see what's in store for 2020.

The appetite for learning is strong within our state and we are so excited to be a part of growing movement to engage children in outdoor learning and play. Teachers of SA, wherever you call home, thank you for the work you do and for continuing to advocate for teaching practice that has the child firmly at its heart. 🌱

» For updates and current info, be sure to subscribe to our *Educators mailing list*. Information on our offerings can be found online at natureplaysa.org.au/educators

Going Regional

NATURE PLAY SA SOUTH EAST ROADSHOW

NARRAH ZOLLO, NATURE PLAY SA

Opportunities for access to professional development across SA on outdoor learning and pedagogy can be few and far between. Every year Nature Play SA heads out to regional SA with the aim of empowering a broad range of educators. Here **Narrah Zollo** from Nature Play SA provides a beautiful insight to our most recent regional trip.

A crisp morning offset by warm autumnal tones of leaves tenuously clinging to otherwise bare branches met the Nature Play SA education team as we arrived in Mount Gambier to commence the first leg of our South East Roadshow.

After a number of requests from teachers in regional areas, this Roadshow, the first of its kind, was born out of enthusiasm for ensuring that outdoor learning and nature connection is available to all children and educators, regardless of geography or demographic.

Over the next five days our knowledgeable staff shared 11 programs with 450 students at schools and kindergartens in the Mount Gambier District, Millicent, Naracoorte and Kingston SE. These incursions were a mix of whittling and weaving, geocaching, exploring natural elements, den building, storytelling, ephemeral art, potions, pigments and mask making, often using locally foraged materials and free resources.

With a number of incursions scheduled at different sites each day, we were looking forward to “staying put” at our early years Nature Play festival gathering at McArthur Park where over 100 of our young nature players brought their joyful enthusiasm, despite a splash of rain, to eight rotating stations of immersive outdoor play and learning – testament to the old adage, “There is no such thing as bad weather, only inappropriate clothing.”

At the conclusion of each school day we began our after-hours Professional Development Workshops, presenting three sessions to 100 educators on the topics of STEM in Nature-Based Early-Learning Environments and Connected Curriculum: Outdoor Learning in a South Australian Context. This was a heavy schedule for the Nature Play SA team and those brief moments of stillness over morning coffee were indeed savoured.

Our STEM workshops explored nature-based STEM inquiry for early learners with Nature Play SA Education Manager Maria Taylor sharing practical ideas to engage students in deep and meaningful connections to the natural world.

Geared more towards primary school teachers, the Connected Curriculum workshops offered a practical examination of how outdoor learning environments can be used to deliver Australian Curriculum content. These workshops explored, among other things, fire and natural pigment making, practical numeracy and literacy activities using natural materials and tips for structuring outdoor class time regularly and successfully.

Educators in the South East brought their humour and energy to each session and demonstrated a sincere interest in taking learning outdoors at their sites.

There was no shortage of beautifully presented and well-designed outdoor playspaces in the South East and we congratulate those hard-working educators and leaders who help make inspiring outdoor play and learning possible for their students.

Most of all, we would like to thank the children we met along the way for their warmth, energy and interest in what we shared. It is these young people’s smiles, struggles and laughter that have stayed with me the most.

The team at Nature Play SA is committed to making outdoor learning accessible to all children and we welcome the opportunity to bring our programs to regional areas. We invite you to get in touch if you would like to experience a Nature Play SA Roadshow in your town. 🌿

» *To keep in the loop, be sure to subscribe to our Educators mailing list. All the information on our offerings can also be found online at natureplaysa.org.au/educators/regional-offerings or contact us at schools@natureplaysa.org.au*

The Power of Play in Belair National Park

A CUBBY AND BUDDY BUILDING CASE STUDY

ERIC NICHOLSON, NATURE PLAY SA

If you've ventured to Belair National Park lately you may have seen a bus load of students eagerly looking out of the window as they make their way to greet our friendly staff – equipped with little more than passion and sticks. Here **Eric Nicholson** shares some insights into one of our most popular excursions – cubby building in Belair National Park.

I recently ran a cubby-building program at Belair National Park that stands out in mind as a particularly successful excursion. There were a number of things outside my control that certainly helped on the day. Firstly, it was a wonderfully warm and sunny winter's day. Plus, everyone got a chance to see a koala high up in a nearby tree (a typical occurrence in the Park, but by no means guaranteed). There's such wonder on a child's face when, as you patiently point it out and guide their gaze, they finally work out where the cute creature is, nestled in the fork of a tree. Even the adults' eyes light up as they make the discovery.

What really made this day stand out was the interaction between two very differently aged classes of students – a Reception class with a buddy class of Year 5/6 students. The maturity of the older students was fully evident as they took responsibility for helping the younger students with all of the challenges I gave them throughout the day.

The first challenge occurred immediately after arrival. I regularly get my groups to cross a dry creek bed adjacent to the bus drop-off area before making our way to the cubby building site. However, this day was a bit different in that recent rainfall meant the creek was running with water and only a few sections would have been suitable for trying to get across. The teachers were very supportive of this challenge, so everyone proceeded to find a safe crossing point. It was pleasing to observe older students assisting younger students, as necessary, and every single person crossed safely.

Following a short recess upon arrival at the cubby-building site, the next challenge ensued. Working in groups, the students made mini-cubbies to practise their cubby-building skills and to experiment with construction designs. The older students in each group demonstrated their great maturity in not taking over the building process, but instead actively encouraging their younger colleagues to share ideas and participate equally. As various designs failed or had to be reconsidered, everyone persisted. In only a short


amount of time, a wonderful collection of mini-cubbies were constructed as inspiration for the next challenge: making large cubbies!

As usual, the students took to this final challenge with gusto. Working safely under the watchful – but not interfering – presence of teachers and adult helpers, the students proceeded to dutifully heed my regular refrain: stay safe (i.e. stick safety), work well with your group members (collaborate), and use your imagination (you can never be bored if you have an active imagination!).

It was lovely to see the group cohesion. Even at lunch, the students sat in their cubbies quietly enjoying their engineering achievements, within the tranquillity of the Park's natural surrounds, big kids sitting next to little kids.

Having witnessed such wonderful student interaction, I'm somewhat surprised that this was the first time I'd had a school group do this excursion with mixed aged groups. Clearly having regular buddy class interaction at school helps with making such an excursion work well. Perhaps other schools will do this more regularly now and get the same thrill from watching their students fulfil their potential while enjoying a great day out in nature. 🌿

» For more information on our cubby building excursions visit natureplaysa.org.au/educators/incursions-and-excursions

A watercolor illustration of a child's face in profile, facing right. The colors are warm and soft, with shades of orange, yellow, and light brown. The texture is soft and painterly, with visible brushstrokes and blending. The child's features are gently defined with dark outlines.

Teaching children
about the natural world
should be treated as one
of the most important
events in their lives.

THOMAS BERRY

About the Nature Play SA team

WE'RE A SMALL TEAM, DRIVEN BY OUR PASSION TO GET KIDS OUTSIDE

Nature Play SA began in 2014 as part of an election commitment from the South Australian Government with the aim to make outdoor play an everyday part of children's lives. We were provided with four years of funding with the intention that we should be a fully self-funded, not-for-profit organisation by 1 July 2018. And with the support of government organisations, international and industry experts, educators, families and a range of other individuals and organisations, here we are, a successful and proud organisation with a clear vision: To empower the South Australian community to engage children with nature through outdoor learning and play.



SARAH SUTTER, CEO

Sarah is a qualified teacher, former Commonwealth Games gold medallist, and mum of two school-aged children who can always be found scaling up the tallest trees. Sarah's role is to lead our team and advocate change across all levels of government, the business community, and with any association or group to ensure nature play is on everyone's agenda. Sarah also delivers presentations and workshops to educators and parents across SA.

JASON TYNDALL, GENERAL MANAGER

Jason is artist, naturalist and father to two nature-seeking daughters. His career includes 10 years in local government where he worked as a horticulturist, arborist, and environmental manager, and a further four years as an environmental educator with NRM Education. Jason's role involves creative and strategic direction of key projects and also delivers workshops to educators and parents across the state.

MARIA TAYLOR, MANAGER, EDUCATION

Maria is qualified teacher with 20 years' teaching experience and has a Master's in Education. She has worked in a range of local and international educational settings within early learning and primary education. Maria has two young children who love to discover their own wild places, make potions in the backyard and collect eggs from their chooks. Maria's role is to support educators to connect children with nature and facilitate authentic outdoor learning opportunities for all students.

JODEE DELLOW, EVENTS COORDINATOR

Jodee is a nature-loving mum to four adventurous children who love exploring the Adelaide Hills. Her children are often found building cubbies, making flying foxes, collecting and identifying native seeds and nuts and planting trees on the family property. As a passionate events manager with over 10 years experience in the industry, Jodee brings her love for events, play-based learning, and the great outdoors to the Nature Play SA team.

ERIC NICOLSON, SCHOOLS OFFICER

Eric is a trained ecologist and teacher with a passion for conservation education and connecting children with nature. When not chasing after his two young nature explorers or tending to his garden and myriad fruit trees, he is actively involved with several environmental groups, particularly relating to permaculture. Eric coordinates the school programs offered by Nature Play SA; coming to your school or meeting you at a National Park to build cubbies.

NARRAH ZOLLO, EXECUTIVE ASSISTANT

Narrah is a qualified educator, garden enthusiast and mum of two adventurous girls who love tending to their produce-rich garden. Narrah has always played an active volunteer role in her school community helping write grants, fundraise and establish playgroups. Narrah provides administrative support to our strategic directions, managing correspondence with our Board and membership organisations.

CANDICE GRAY, EXECUTIVE ASSISTANT

Candice has experience in retail management and marketing and is a mum to two school-aged children with whom she is off on an adventure at any opportunity. Summer days are always spent at the beach (Port Noarlunga) snorkelling, paddle boarding and exploring the Fleurieu Peninsula.

About our contributors

JULIE SLAGHEKKE: Julie is an advocate for Nature Play SA and contributes to various programs across the team with her knowledge and expertise.

SOPHIE ROGERS AND DARJARNA NIKOLIC: Sophie is an NRM Education Officer for Natural Resources Adelaide & Mt Lofty Ranges. Darjarna is the Community Development Coordinator, Taikurrendi Children and Family Centre / Department for Education.

CAMILLE JENKINSON: Camille is an Education Officer with the Adelaide and Mount Lofty Natural Resources Management Board and is part of a large team of educators who offer support to education sites on how to improve their environmental sustainability.

PHIL PARSONS: Phil is the Assistant Principal of Mawson Lakes School and has been a key part of mentoring students through the development of their nature play space.

ANNA KAKOSCHKE: Anna is the Science Teacher at Trinity Gardens School and has played a key role in creating a strong culture of outdoor learning and play.

LINDA RICH AND APRIL VANDERAA: Linda is the Head of

Mark Oliphant College Children's Centre and April is a preschool teacher at the Children's Centre.

VANESSA HOLLOWAY: Vanessa has 17 years of experience teaching in a range of contexts including the past 11 years at a Category 1 site. She is a passionate cook and an enthusiastic gardener who runs a program that supports the wellbeing of all students while arming them with a range of valuable life skills.

FRASER KEEGAN AND GALE HANSEN: Fraser is the Manager for the Right Bite Program and the Preschool Outdoor Learning Area (POLA) Project, Early Years and Child Development, and has worked closely with Renmark Children's Centre throughout their POLA journey. Gale is the Director at Renmark Children's Centre.

KYLIE STEWART: Kylie is the Preschool Coordinator at Flaxmill Preschool and has been at the site for the past 7 years. She has always had a passion for nature and being outdoors since growing up in the country. As an early childhood educator her pedagogical beliefs around how children learn best sparked the need to create changes in the outdoor learning environment at Flaxmill.

TRISH BOSCHETTI AND DAINA McCORMACK: Trish is the principal of Snowtown Primary School in the Mid-North. Daina is a teacher at Snowtown Primary.

KYLIE KARVELIS: Kylie is the School Occupational Therapist at St Patrick's Special School in Dulwich.

LEE MUNN AND NICOLE WOOD: Alongside her innovative team at Lobethal Community Kindergarten, Lee Munn has been on a Nature Education journey for almost a decade. Lee is passionate about cultivating powerful learning dispositions through a Nature Connect Bush Kindergarten program (now in its fifth year at Bushland Park). Lee is a dynamic and inspirational leader with a strong focus on reflective practice and Nature Pedagogy. Nicole is a passionate Early Childhood Worker who has been part of the Lobethal Journey for several years.

PETER DUNSTAN AND STUDENTS: Peter is the Principal for Kilkenny Primary School.

RACHAEL VERRINGER: Year Two Teacher and POR for Innovation in Sustainability.



A HEARTFELT *Thank you* TO ALL OF OUR CONTRIBUTORS:

IN ORDER OF APPEARANCE: Julie Slaghekke (*Nature Play SA*), Terri and Daniel Harrison (*Nature Nurture*), Lisa Burman (*Director and Principal Consultant, Lisa Burman Consultants*), Sue Caldicott (*Stirling District Kindergarten*), Paul Johnson (*Arbury Park Outdoor School*), Glenn Wagland (*Mobile Junk and Nature Playgrounds*), Sophie Rogers (*NRM Education Officer, Adelaide and Mount Lofty Ranges Natural Resources Management Board*), Darjana Nikolic (*Taikurendi Children's Centre*), Camille Jenkinson with expert advice from Rob Wallace (*Adelaide and Mount Lofty Ranges Natural Resources Management Board*), Phil Parsons (*Mawson Lakes School*), Anna Kakoschke (*Trinity Gardens School*), Linda Rich and April Vanderaa (*Mark Oliphant College Children's Centre*), Vanessa Holloway (*Elizabeth South Primary School*), Fraser Keegan and Gale Hansen (*Renmark Children's Centre*), Kylie Stewart (*Flaxmill Preschool*), Trish Boschetti and Daina McCormack (*Snowtown Primary School*), Kylie Karvelis (*St Patrick's Special School*), Lee Munn and Nicole Wood (*Lobethal Community Kindergarten*), Peter Dunstan and students (*Kilkenny Primary School*), Racheal Verringer (*St Francis Xavier's Catholic School*).

For the beautiful artwork provided by St Patrick's Special School – their staff, parents and students are on an inspiring journey which we are grateful to be part of.

TO THE TEAM BEHIND THE MAGAZINE:

Executive Editor: Jason Tyndall

Copy Editor: Elizabeth Blumer

Writers: Elizabeth Blumer and Jason Tyndall

Design: Jessica Abell and team at Minka Creative Studio

Images: Unless otherwise credited, by Jason Tyndall (copyright).

Artwork: St Patrick's Special School

SUBMISSIONS

To inquire about submitting articles, stories, a collection of student art works, or any other ideas please [email us here](#).

DISCLAIMER:

All rights in materials and images published or displayed within this publication are reserved. No express or implied assignment or licence of copyright is intended or given in respect of any image, work or other material used or displayed in this publication, certain items of which may be used here under license from the original owner.

No part of any image, work or material may be used, copied, or reproduced for any purpose whatever without the prior written consent of Nature Play SA, any such act being expressly prohibited. Any act which constitutes a fair dealing only as permitted under the Copyright Act 1968, must be accompanied by full, proper, and reasonably prominent attribution of the original source and the copyright owner.

Requests for any licences or permission to use, copy, reproduce, re-purpose or reuse any image, work or other material may be made to Nature Play SA at info@natureplaysa.org.au.

COPYRIGHT: ALL WORKS UNLESS OTHERWISE STATED REMAIN COPYRIGHT OF NATURE PLAY SA.