



From muddy hands and dirty faces...  
to higher grades and happy places

Transforming outdoor learning and play at schools in Australia  
and around the world.

Cath Prisk and Dr Harry Cusworth

*'Happy hearts and happy faces  
Happy play in grassy places –  
That was how, in ancient ages,  
Children grew to kings and sages.'*

*Robert Louis Stevenson, A Child's Garden of Verses, 1888*

This review looks at how much time children in Australia and around the world spend playing and learning outside as part of the school day. It includes a summary of the wide-ranging literature about why outdoor learning and play are important and an overview of the impact of the Outdoor Classroom Day movement.

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Sign up and find out more about Outdoor Classroom Day Australia by visiting: <https://outdoorclassroomday.com.au/>

# Foreword

## Childhood, play, education and the gradual disappearance of time outdoors

Our childhood memories are made of play and discovery outdoors. They are the bursts of colour that catch our eye as we look backward; the moments of movement that stitch together the narrative of our childhoods.

That time outdoors playing and learning is critical to a happy and healthy childhood is something we all feel, if not know. It's so much a part of most adults' experience of childhood it risks becoming a wallpaper-truth – so obvious, we forget it's there.

But the time has come to remind ourselves of just how important it is. We need reminding because the world of childhood, of families, of schools and of communities is changing so fast that outdoor learning and play risks being relegated to nostalgia.

And that would be a terrible loss.

Outdoor Classroom Day is part of the global movement to remember, and to act; to make sure our kids get outside more. It isn't a revolution. There are no big scary ideas here. It isn't about digging deeper into the wellspring of parental guilt or loading yet more expectation on teachers.

It is a campaign of common sense and fun. It doesn't focus on what is wrong in the world. Yes, we face challenges in health, environment, politics, and more. But the movement to connect children with the outdoors is about identifying what is right for kids and finding ways to give them more of it.

It is about gifting that great human inheritance of an outdoor childhood to new generations. At its core is the simple and deliberate act of prioritising outdoor play and learning in this ever more complicated world. To do that, we need to recognise and cast aside some false divisions.

The first is the false division between learning and play. They are not opposites. Treating them as though they are does a disservice to children. Albert Einstein said play is the deepest form of research (and he turned out alright).

Learning and play are part of the same process and continuum of discovery, of testing, of forming connections and inventing. The best outcome for our kids is time and space for playful learning and meaningful play.

The second false division is between nature and humanity. We are not only surrounded by nature, we are part of it. We suffer by nature's absence as we suffer by the absence of family. The good news is that nature is everywhere, we just need to choose to find it.

It should be no surprise that being in the outdoors is good for kids. The survival of our species has depended on being attuned to the world around us for millennia. We have evolved to be at our best outdoors. The sensory-rich nature of the outdoors reduces stress, increases our attention, and promotes co-operation.

Is it a coincidence that Isaac Newton discovered gravity under an apple tree? That Darwin developed his theory of evolution in the field? Or that so many of our religious traditions have evolved from contemplation of the divine in the outdoors?

In this document, created by Cath Prisk of the UK not-for-profit Project Dirt, you will find research compiled and referenced in sections to build the case for outdoor learning and play. It is an important piece of work, standing on the shoulders of writers and researchers from around the world, that pulls together some of the many reasons that outdoor learning and play are too fundamentally important to be lost to childhood.

Like the best research, it reflects our lived experience. I know time outdoors playing and learning shaped me, for one. I spent countless hours mucking around with my brothers among the tea-trees and the caves at the base of the Roundhouse- a colonial-era jail in Fremantle. We fished, swam, rode bikes, climbed roofs and made up worlds.

As a dad, I raised my daughters with the beach, the backyard, the neighbourhood and camping trips as mainstays. As a journalist, the cultural shift from outdoor childhoods to something more akin to protective house arrest became the subject of countless columns. And now as the CEO of Nature Play, an organisation dedicated to increasing children's time outdoors, I see the great impact the outdoors can have on kids from all walks of life.

The good news is that the global movement to get kids playing and learning outdoors more is growing at an astonishing rate. Last year more than 2 million kids worldwide, including more than 200,000 in Australia, took part in Outdoor Classroom Day. That is an extraordinary number – and it's growing.

We know from the survey of schools that took part in Outdoor Classroom Day 2017 – the biggest survey of its kind to date – that 99% of Australian teachers<sup>1</sup> believe children need playtime outdoors throughout the day to reach their full potential, identifying outdoors time, both playing and learning as helping with concentration, social skills, imagination, creativity and overall happiness.

We also know from the same survey that 85% of teachers want to take their classes outside more often. The research in this review should help them do that. For the rest of us, this review is full of yet more reasons to support our schools in those efforts, and for us to prioritise outdoor learning and play in our family and community life.

**Griffin Longley**

*CEO Nature Play Australia  
Lead NGO for the Australia Campaign*

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<sup>1</sup> 97% worldwide



‘Teachers now know that all things we are doing indoors, we can do outdoors as well, the difference is that children love to be outdoors, they like to learn, to experiment to play outdoors’

*Teacher, Outdoor Classroom Day Survey 2017*

# The Outdoor Classroom Day Movement

## Building a community to help children get outdoors more

‘Too many of London’s children have little or no meaningful contact with natural places in the city. As a result, they may be denied the many and varied benefits that experiences in nature bring: experiences that many adults understand at a deep emotional level from their own childhood memories.’

*Tim Gill, Sowing the Seeds report for the London Sustainable Development Commission, 2011*

In 2011, London’s Sustainable Development Commission asked Tim Gill, an expert in childhood, to produce a report on how best to reconnect children with nature, in order to grow the next generation of environmentally-conscious young people.

*Sowing the Seeds* offered a depressing analysis. Across the UK, 1 in 10 children rarely or never went to a green space – a park, woods or beach – and in London this was less than 1 in 7<sup>2</sup>. In a similar study in Australia, Planet Ark reported that 72% of adults surveyed played outside every day as children, compared to only 35% of their children, and that 1 in 10 Australian children today play outside once a week or less<sup>3</sup>. Two thirds of Australian parents said they liked climbing trees as children; only 19% of Australian children climb trees today.

Anna Portch, an environmental educator, was in the audience at the launch of *Sowing the Seeds*. She was particularly struck by the finding that possibly as few as 4% of London’s 1.1million children under the age of 12 were being ‘engaged in nature’ through their schools. Enlisting the help of other nature-based organisations, Anna started a campaign to encourage schools to celebrate how they connect children to the outdoors and to inspire other schools to have a go.

The campaign started small, just a few schools in South London, celebrating what was then called ‘Empty Classroom Day’. By 2015, over 600 schools in 15 countries were involved. The following year, Project Dirt, one of the founding organisations, partnered with Unilever’s Dirt is Good team to grow the campaign. The campaign became ‘Outdoor Classroom Day’ and in 2017 Project Dirt joined forces with Nature Play to bring the movement to Australia.

Outdoor Classroom Day is a global movement to inspire and celebrate outdoor learning and play. The movement has two campaign days, one in May and one in November, so schools in different countries can participate on a day that suits their climate and fits with their term times. In Australia, the focus is on the November date.

On Outdoor Classroom Day thousands of schools around the world take lessons outside and prioritise playtime. As well as being a lot of fun, it shows teachers and parents how easy it is to give children more time outdoors.

The campaign days raise awareness about the importance of playing and learning outdoors, highlighting the benefits it brings to children, families and whole communities. They aim to show that longer and more enriching playtime at school is as important as healthy food. They act as a catalyst to inspire more time outdoors every day, both at school and at home.

From the Outdoor Classroom Day 2017 survey of teachers who have taken part in the campaign, it is evident that the campaign is already making some headway to achieving its longer-term goals. Over one fifth (22%) of respondents to the survey worldwide said they have increased playtime since getting involved; and more than two fifths (44%) said they have increased the frequency of outdoor learning. Thousands of schools are involving parents and volunteers from their communities – and that spreads the messages that outdoors is an essential part of every day even further.

Almost every teacher surveyed – 97% globally – said that time to play outdoors is critical for children to reach their full potential.

With the increasing pressures on our time from all angles, it’s vital that we allow children the space to experiment, understand the world around them, and express themselves. Access to the outdoors helps our youngest generations to develop into creative, healthy and socially responsible adults... who in turn will become active participants in the development of healthy and productive societies across local communities everywhere.

There are tens of thousands of teachers, playworkers, youth workers and environmental educators across the world already showing how getting outdoors every day makes a huge difference to the lives of the children. Outdoor Classroom Day gives them a community where they can join together, share what works and encourage others to have a go.

Project Dirt has been proud to be a part of this campaign from the outset, and I hope this review will help the movement build so that getting outdoors at school becomes part of the new normal.

**Nick Gardner**

*Co-founder & CEO Project Dirt  
Global Lead Organisation Outdoor Classroom Day*

<sup>2</sup> Gill (2011)

<sup>3</sup> Planet Ark, (2011); Planet Ark, (2017)

# Executive Summary

## Outdoor Classroom Day movement goals

**Outdoor learning part of every school day.** Outdoor learning is part of every school day for every child.

**A consistent minimum target for recess/playtime.** Every child has great recess/playtime at school every day for at least 60 minutes, with the longer-term aim of 90 minutes.

**Schools to advocate for more time outdoors.** Schools act as advocates for more time outdoors, so that outdoor play becomes part of every child's everyday life.

Outdoor Classroom Day is a global movement to inspire and celebrate outdoor learning and play. It was created to raise awareness about the importance of playing and learning outdoors, highlighting the benefits it brings to children, families and whole communities.

In this review, we set out the goals, impact and evidence base for the campaign and the wider case for getting outdoors 'every day and often'. Australian schools already lead the way in the amount of time that children spend outdoors, but it's still far less than we would like them to have. Outdoor Classroom Day is gathering a community of schools stretching across our country and around the world who are looking to redress this balance.

The first part of the review summarises findings from the Outdoor Classroom Day 2017 survey, which set out to collect data on the amount of time children spend playing and learning outdoors as part of the school day. The second part presents an overview of the wide-ranging literature about outdoor learning and play, highlighting why it is important. In the concluding section we discuss how schools can act as catalysts in their communities to help increase opportunities for children to play when outside of the school gates. The intention is to make the case for more time to be spent outdoors on a daily basis, as a recommended prescription for all children both at school and beyond<sup>4</sup>.

The Outdoor Classroom Day goals support the World Health Organisation's guidance on time needed per day for physical activity<sup>5</sup>, the Sustainable Development Goals<sup>6</sup> and the UN Convention on the Rights of the Child (UNCRC)<sup>7</sup>, which expects States to ensure children connect to nature, have access to good quality schooling, and have time to play.

The campaign started in the UK in 2011, with just a few schools from Australia joining in from 2014. In 2017 Nature Play took the lead, with support from Omo, and have since made Outdoor Classroom Day a truly Australian movement.

We are now seeing more playtime and more outdoor learning in the schools involved. Survey results showed that:

- 22% of primary schools worldwide, and 18% in Australia, said they have increased playtime since taking part in Outdoor Classroom Day
- 33% of Australian schools (44% around the world) have increased the frequency of outdoor learning
- Over 70% of schools involved before 2016 have now increased the frequency of outdoor learning.

More schools are joining every day, more parents are supporting the campaign, encouraging their schools to get involved. More NGOs, businesses and politicians are showing their support too. This is just about common sense: kids need to get outdoors often.

## Part 1: A snapshot of outdoor learning and play at school in Australia and beyond

The Outdoor Classroom Day 2017 survey<sup>8</sup> asked teachers about their experience of taking lessons outdoors and the availability of opportunities for outdoor play within their school, that is, free-time outdoors where children can enjoy self-directed activities, for example, during recess. We received sufficient responses to compare Australia with the UK, the US, Canada and the rest of the world. The survey highlighted some key features of Australian schools:

- Australian primary schools make the most time for play: 58% have more than 1 hour per day.
- 72% of Australian teachers said they take lessons outdoors at least once a week, more than any other country represented in the survey.
- Almost all (97% or more) Australian teachers think playing outdoors develops key skills for life, including: social skills, imagination and creativity, ability to focus on a task, and fine motor skills.
- 92% of Australian teachers think playing outdoors helps children develop a better understanding of the environment.
- In addition, two thirds (65%) of Australian teachers think that by including time for outdoor play as part of the school day, children are better behaved.
- 84% think children who learn outdoors are more engaged in learning.
- Almost nine out ten teachers think children are happier when they learn outdoors and after playing outside.
- Despite our weather and the pressures of curriculum, more than one in five (21%) of Australian teachers say that nothing stops children having outdoor playtime, compared to just 6% of US schools.

However, despite the fact that outdoor learning and play are recognised as important in the Australian curriculum, and the

<sup>4</sup> Yogman et al. (2018).

<sup>5</sup> <http://www.who.int/mediacentre/factsheets/fs385/en/>

<sup>6</sup> <https://sustainabledevelopment.un.org/sdgs>

<sup>7</sup> <https://www.unicef.org/uk/what-we-do/un-convention-child-rights/>

<sup>8</sup> Data collected from 713 teachers, (93 Australian) on learning outdoors and 629 teachers about outdoor play (91 Australian), from 44 countries.



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survey targeted teachers already interested in the outdoors one in six (17%) of Australian teachers who responded take lessons outdoors less than once a month. Moreover, the data show there are big differences between schools regarding what is offered.

Although Australia leads the world on time to play at school, there is much to be done to ensure every Australian child gets outdoors for lessons and playtime every day.

## Part 2: Why outdoor learning and play should be part of every school day

The literature reviewed shows that outdoor learning and play has a huge range of benefits for children. Being out in fresh air, whatever the weather, has been shown to improve mood, reduce stress, improve eyesight and increase physical activity<sup>9</sup>. We have referenced a number of robust research studies which show that encouraging children to play freely can improve their educational outcomes<sup>10</sup>. The fun that comes from play is a crucial part of childhood, and is essential to health, wellbeing and learning.

Outdoor learning and play creates healthier kids, who can come to school more often, can concentrate better, physically sit at their desks for longer, can see better and can learn more<sup>11</sup>. Active free play is also critical in helping children develop balance, co-ordination and improved motor fitness<sup>12</sup>, and children who are outdoors in nearby spaces often love their environment and grow up wanting to protect it.<sup>13</sup>

9 Gill, (2011) & (2014b); Children and Nature Network, (2018); Dowdell et al, (2011); Herrington & Brussoni (2015); Kellert (2013); Maller, C et al, (2006).

10 Sobel, D, (2004).

11 Langford et al, (2014), Brussoni et al, (2015); Robinson & Aronica, (2018); Strauss & Hanscom, (2014).

12 Fjørtoft (2004).

13 Louv, (2008); Gill, (2014a).

## Better learning, across the board

The Australian Curriculum<sup>14</sup> recognises that outdoor learning can help kids in everything from leadership skills to developing an adventurous spirit. When it comes to what they learn, it's not just about better understanding of subjects such as science. Research shows that outdoor learning can create improvements across all academic disciplines<sup>15</sup>.

In the USA, a study of 40 schools showed that using natural surroundings as a context for learning – combined with best-practice education – had a positive effect for students learning a range of subjects, including social science, language, arts and maths. It also helped with problem-solving, enthusiasm for learning and even test scores and grade averages<sup>16</sup>.

In the revised Australian Curriculum<sup>17</sup>, it states that outdoor learning can be instrumental in:

- the teaching and learning of self-reliance, interdependence and leadership
- the development of an adventurous spirit
- managing personal risks
- experiencing safe journeys in nature
- learning the value of lifelong outdoor recreation for enjoyment, health and wellbeing
- understanding nature through direct experience; leading to deeper human- nature relationships.

However when Planet Ark asked Australian teachers about teaching outdoors, less than 34% said they taught outdoors

14 <https://www.australiancurriculum.edu.au/resources/curriculum-connections/portfolios/outdoor-learning/>

15 Sobel, (2004).

16 In Sobel, (2004) p36.

17 <https://www.australiancurriculum.edu.au/resources/curriculum-connections/portfolios/outdoor-learning/>

for 15 minutes or more in a 10-week term (excluding lunch, recess and physical education). Our survey of schools that have signed up to Outdoor Classroom Day – and are therefore presumably positive about outdoor learning – still had 17% going outdoors for lessons less than once a month. Some schools such as Upper Sturt Primary in South Australia are turning that around, showing that children can learn more and be happier by being outside almost all the time, all year round<sup>18</sup>.

### Benefits that last beyond early education

A Norwegian study showed that pre-school children who enjoyed large amounts of outdoor time consistently scored better on standardised tests for executive function, attention and short-term memory compared to children who attended pre-schools with fewer outdoor hours.

The study also showed that even after the children started at primary school, those who had more outdoors time during pre-school continued to score better on standardised testing<sup>19</sup>. A five-year survey conducted by Natural England across 125 primary schools<sup>20</sup>, the largest-ever trial run of an outdoor education programme, arrived at a similar conclusion.

A 2011 study by Kellie Dowdell, Tonia Gray and Karen Malone compared two kindergartens. Both offered good-quality childcare and education, but one allowed children more access to outdoors. The children who were outdoors and

18 Robertson (2018).

19 Ulset et al. (2017).

20 Waite et al. (2016).

had a richer, more ever-changing environment were more engaged with their activities, paid more attention and stayed on-task for longer. This mirrored outcomes of the Liink project in Texas, USA, which showed how increased recess can reduce fidgets and increase on-task behaviour<sup>21</sup>.

### Outdoor play gets kids more active...

In one generation, children have reduced their physical activity rates in Australia and worldwide<sup>22</sup>. However, when engaged in play, children will stay active for long periods of time<sup>23</sup> and they're more active outdoors than indoors<sup>24</sup>. A study by the Department of Health Services, University of Washington, found that children aged 6-11 were active for 41% of the time while engaged in outdoor free play as opposed to 18% of the time during indoor free play<sup>25</sup>.

### ...and boosts mental health

Today's children have more recognised mental health problems than any previous generation. Study after study shows an increase in anxiety, self-harming and depression<sup>26</sup>.

Children's lives today can be stressful: there are higher academic expectations, as well as intense peer pressure which is exerted almost 24/7 through social media.

21 Rhea & Rivchun, (2018).

22 Active Healthy Kids Australia, (2016).

23 Active Healthy Kids Australia, (2016); Baines & Blatchford, (2011); Beresin, (2016); Centers for Disease Control and Prevention, (2010) .

24 Cooper et al, (2010).

25 Herrington & Brussoni, (2015).

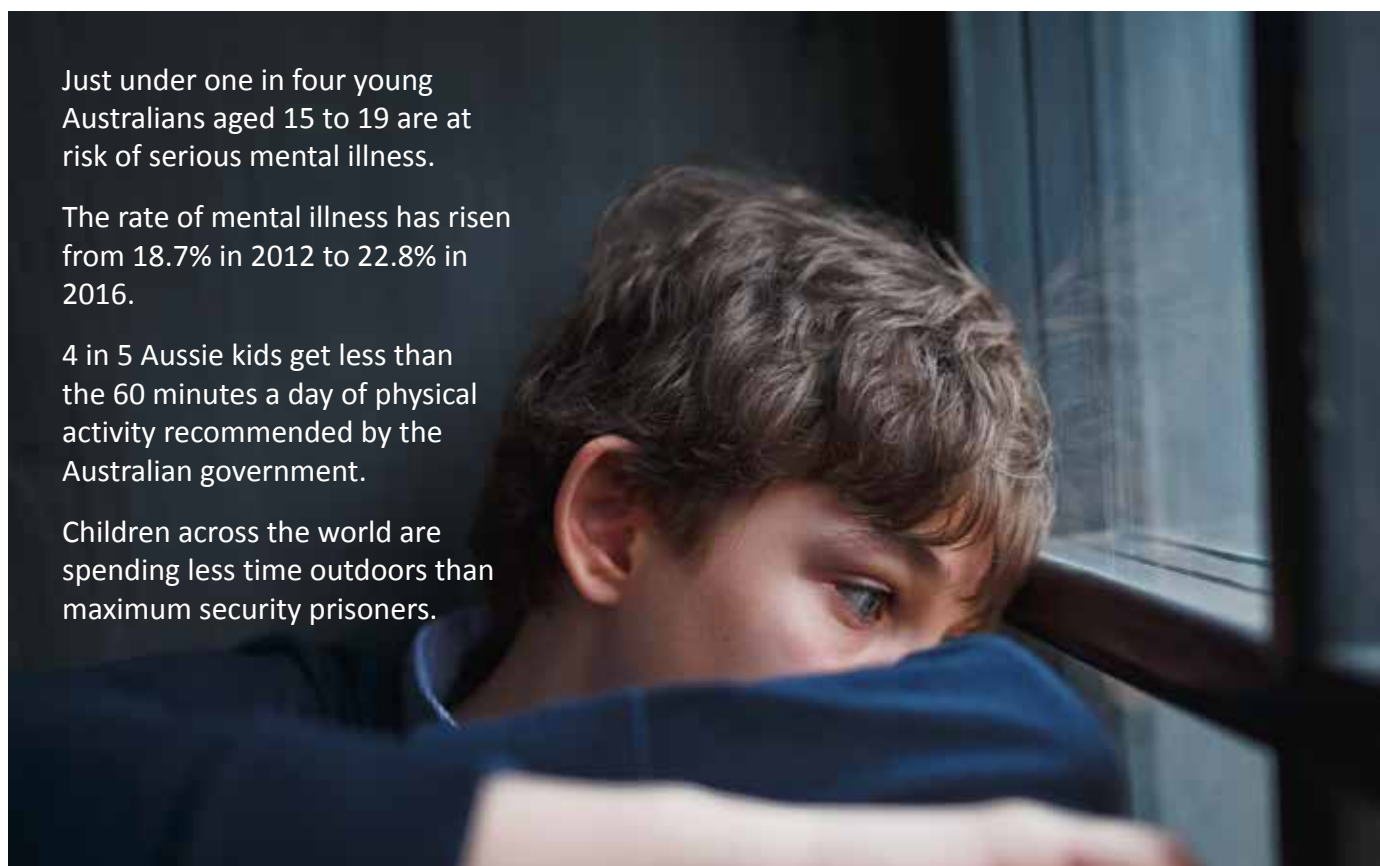
26 Mission Australia & The Black Dog Institute, 2017.

Just under one in four young Australians aged 15 to 19 are at risk of serious mental illness.

The rate of mental illness has risen from 18.7% in 2012 to 22.8% in 2016.

4 in 5 Aussie kids get less than the 60 minutes a day of physical activity recommended by the Australian government.

Children across the world are spending less time outdoors than maximum security prisoners.





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Meanwhile, research from around the world points to the ability of nature to restore our sense of wellbeing<sup>31</sup>.

In Australia, an Adelaide study showed that people living in green neighbourhoods rated their mental and physical wellbeing 1.37 to 1.60 times higher than those in neighbourhoods where there was less green space<sup>32</sup>. Principals and teachers in Melbourne have perceived the benefits to children's mental health and wellbeing through participation in hands-on nature-based activities at school<sup>33</sup>. Students learn and perform best in environments that offer high challenge and low threat<sup>34</sup>. As Stixrud and Johnson (2018) state: children feel better and perform better after they have been outdoors<sup>35</sup>.

## Getting outdoors connects us to the places we live and the environments we will want to protect

There is a wealth of literature to suggest that environmental stewardship and connection with place is strongly connected with the amount of time we are immersed in nature as children<sup>36</sup>.

A 1999 study<sup>37</sup> of 1,259 students from nine countries, including Australia, found that direct experiences with nature had a bigger impact on subsequent development of pro-environmental behaviour compared to formal education – reflecting feedback from the Outdoor Classroom Day 2017 survey, where nine out of ten (92%) of Australian teachers reported that playing outdoors developed children's connection to the environment. This is supported by the outcomes of a study by Natural England<sup>38</sup>, where 94% of the teachers involved reported that outdoor learning resulted in a greater understanding of nature among children.

27 Mission Australia & The Black Dog Institute, (2017).

28 Mission Australia & The Black Dog Institute, (2017) p5.

29 Active Healthy Kids Australia, (2016).

30 Robinson & Aronica (2018) quoting research conducted for Dirt is Good.

31 Williams, (2017).

32 Townsend & Weerasuriya, (2010).

33 Maller & Townsend, (2005) in Townsend & Weerasuriya, (2010).

34 Stixrud & Johnson, (2018).

35 *ibid*, p209

36 Louv, (2008); Dowdell, Gray & Malone (2011); Williams, (2017); Ballantyne & Packer, (2009).

37 Packer (1999) in Ballantyne & Packer, (2009).

38 Waite et al, (2016).

Tim Gill's 2014 literature review of the benefits of children's engagement with nature<sup>39</sup> found strong evidence of a range of benefits arising from children spending time in nature, both through learning ('less playful activities') and through playing ('more playful activities'). Uniquely, he compared outcomes as reported by the most robust studies which would seem to indicate that more playful interventions – free play or playful learning – are more likely to result in greater concern for the environment and connection to nature, while less playful interventions are arguably most effective for building scientific knowledge.

## Schools as influencers: making outdoor learning and play part of every child's life

The Australian Government, alongside several others worldwide, has embedded learning outdoors and play in the national curriculum, but there is a lot to do to make this a reality in every school. The latest Planet Ark report<sup>40</sup> rightly says:

*'The more time you spend in nature and the more connected you feel to your community, the happier you are.'*<sup>41</sup>

They go on to report that 3 in 4 Australians say they are not spending enough time in nature.

In the UK a recent survey found that 35% of parents think that a day of outdoor play is just as important as a day at school<sup>42</sup>, and yet the Natural England's 'Monitoring Engagement with the Natural Environment' research shows that while 50% of visits to parks and green spaces are with dogs, less than 10% are with children<sup>43</sup>.

Schools, by sending a clear message that getting outdoors is important to children's wellbeing and development, can help make outdoor learning and play part of every child's every day life.

Schools are extremely well placed to not only make use of the outdoors to improve engagement with learning, love of the environment and to develop healthier and happier kids in schools, but become beacons of good practice, highlighting the importance of getting outdoors to parents and the wider community.

Some schools are already leading the way. For those that want to offer more outdoor play and learning, there is plenty of support out there to just have a go.

It's now time for every school, every parent and every politician to back this move and make outdoors time – for learning and for play – just a normal part of every Australian child's day.

Get involved in Outdoor Classroom Day Australia and find out more by visiting: <https://outdoorclassroomday.com.au/>

39 Gill, (2014).

40 Planet Ark, (2018).

41 *Ibid* p7

42 Microsoft, (2018).

43 Hunt et al., (2016).

# Get involved in Outdoor Classroom Day Australia!

Outdoor Classroom Day is a global campaign to celebrate and inspire learning and play outside the classroom, led in Australia by Nature Play and supported by Omo as part of the global campaign led by Project Dirt and supported by Unilever's Dirt is Good brands.

On the day schools across the world take at least one class outdoors, teaching essential skills and raising awareness of the importance of play. We hope this will inspire schools everywhere to make outdoor learning and play a part of their school every day! With everyone's support, we can make sure children everywhere enjoy their childhood and have the foundations they need for the life they want to live. Play for today, prepared for tomorrow!

Find out how you can get involved and access all the resources at: [www.outdoorclassroomday.com.au](http://www.outdoorclassroomday.com.au)

**Do be aware you get involved at your own risk! Be prepared to be amazed...**

