



Photo: Steve Parrish, National Tree Day Ambassador

Learning from Trees



Life Lessons for Future Generations

2017 National Tree Day Report Key Findings

The Learning from Trees: Life Lessons for Future Generations report, commissioned by Planet Ark and sponsored by Toyota Australia, examines how prepared the next generation is to tackle the biggest future challenges facing humanity, and the skills and attributes they will need most, as identified by teachers.

The United Nations has identified these challenges as: food security, access to clean water, refugees and population increase, with climate change the biggest single challenge. The Australian government said in 2010 that Australia would be one of the countries hardest and fastest hit by climate change, threatening economic sustainability. Preparing future generations to confront these is therefore critical.

More people are living in cities, adapting their lives to faster and more uncertain economic, social and cultural change. In Australia, the backyard is shrinking; toddlers are using digital devices; parents are working longer hours; and heightened fears of child safety, coupled with a pressure to engage in extracurricular

activities, mean the next generation is losing touch with nature in a way that's never been experienced before. This also means they are missing out on the long-term benefits of spending time in nature.

How prepared is the next generation to face the greatest challenges of our time?

How will the next generation of environmental stewards confront climate change when they have little connection to nature?

Australian and international peer-reviewed research shows that time in nature not only improves mental and physical health, but also helps nurture the many interrelated soft skills that teachers and others identify as important.

The report combines previous academic research with the results of a snapshot survey of 200 Australian teachers, who were asked how prepared students were to tackle the major challenges facing humanity, and what skills and attributes they need to develop.

At a glance

Teachers were asked to rank the following skills and attributes in order of importance:

- STEM skills (science, technology, engineering and mathematics)
- Problem solving and critical thinking
- Creativity and innovation
- Compassion
- Grit (determination, resilience and perseverance)
- Emotional intelligence
- Trade skills

Only 4% of Australian teachers ranked STEM (science, technology, engineering and mathematics) skills as one of the top 3 qualities needed to tackle the world's challenges

60% of teachers ranked critical thinking and problem solving, grit and emotional intelligence as the most important skills for the future

60% of teachers identified these same skills as their students' weakest, with grit being the weakest overall

Less than 34%

of Australian teachers taught outdoors for 15 minutes or more in a 10-week term (excluding lunch, recess and physical education)

4%

of teachers surveyed considered outdoor learning as most important for fostering inspiration, creativity and problem solving

Research shows outdoor learning helps grow problem solving, grit, emotional intelligence and key educational outcomes

The best primary school system in the world is Finland who performs highest on international benchmarks.

Finnish school students spend 15 minutes every hour outdoors

Nature is home to thousands of species, including human beings. It's time to be wise like an owl – the future of the planet depends on it.

COMPASSION ABILITY
 WELLBEING GENEROSITY CONFIDENCE
HEALTH & PHYSICAL EDUCATION
 COMPREHENSION VOCABULARY
 NEGOTIATION OPTIMISM **GRIT** ENJOYMENT MEMORY ENGLISH OUTDOORS
 PHYSICAL FITNESS PERSEVERANCE RESILIENCE
HUMANITIES NUMERACY CONCENTRATION MOTIVATION **PROBLEM**
CRITICAL THINKING EMPATHY LITERACY **SOLVING** CONNECTION
 VITALITY HOMEWORK RELAXATION FOCUS ATTENTIVENESS READING
 SYNTHESISE THE ARTS COLLABORATION MENTAL HEALTH MATURITY LEADERSHIP
 WRITING **EMOTIONAL** INSPIRATION TEAM BUILDING FRIENDSHIPS
 ENRICHMENT OUTSIDE SCIENCE
INTELLIGENCE FRIENDLINESS HEALING TECHNOLOGY
 ADAPTABILITY
ENGINEERING
MATHEMATICS EVALUATION
 CONFIDENCE GROWTH DETERMINATION PRODUCTIVITY PERFORMANCE EXPLORATION
 COMMUNICATION EDUCATION ATTENTION OUTDOOR RECREATION COGNITION
 LANGUAGES INTERPRETATION NATURE GROUNDING HOPE CALM PLAY LOGIC HEALTH ANALYSE
 KINDNESS HAPPINESS **CREATIVITY** THRIVE
 BRILLIANCE DRIVE CONNECTION PASSION PRIDE JOY
 OBSERVATION RESPONSIBILITY
 FULFILMENT
 PURPOSE STILLNESS **OUTDOOR** FOCUS SELF-ESTEEM
LEARNING AUSTRALIAN CURRICULUM

Think Outside the Box – Outdoor Learning Can Grow So Much

Outdoor learning was introduced as part of the Australian Curriculum in 2015



More about Learning from Trees: Life Lessons for Future Generations

The above results are a snapshot of the *Learning from Trees: Life Lessons for Future Generations* report which examines how prepared future generations are to confront the biggest challenges of our time, and the key skills and attributes they will need for this, as identified by teachers.

The independent snapshot survey of 200 (100 primary and 100 secondary) Australian teachers included in the report was designed and commissioned by Planet Ark and conducted by research consultancy group Kimberlin Education in April 2017.

The results show 60% of surveyed teachers ranked critical thinking and problem solving, grit and emotional intelligence as the most important skills needed to tackle major challenges like climate change. Interestingly 60% also ranked these skills as their students' weakest, with grit the weakest overall. Only 4% of Australian teachers considered STEM skills (science, technology, engineering and mathematics) in the top three most necessary skills.

Schools Tree Day and National Tree Day are great ways to get your nature fix. Every year they take place on the last Friday and Sunday in July, so mark your calendar!

Research cited in the report shows how children can develop these key skills by learning outdoors, both during and outside of school hours, so providing opportunities for outdoor learning is a critical priority for parents, teachers and the wider community.

Outdoor learning was added to the Australian Curriculum in 2015, however just 34% of teachers surveyed taught outdoors for 15 minutes or more in the first term of 2017, and 1 in 3 respondents spent no time teaching outside at all. Teachers cited insufficient infrastructure, time pressures, conflicting demands and weather as the main barriers to getting outside. Only 4% of teachers surveyed considered outdoor learning as most important for fostering inspiration, creativity and problem solving.

Planet Ark's evidence-based view is that more time in nature – whether during or outside of school hours – would help better prepare children for the challenges they will face. Australian and international peer-reviewed research, referred to in this report, shows that time in nature not only improves mental and physical health, but also helps nurture the many interrelated soft skills that teachers and others identify as important.

How nature fixes like National Tree Day help

Nature ignites passion, inspiration, creativity and purpose, and it also plays an important role in the cognitive, emotional and physical development of children.

Teachers, parents and carers all have an important role to play in increasing the amount of time children spend outdoors, and there are many ways to imbed nature time into a child's daily routine.

For the month of July Planet Ark and National Tree Day partner Cool Australia have created over 150 curriculum aligned lessons especially for Schools Tree Day and outdoor learning.

Parents and carers can also encourage children to go outdoors by doing activities with them, such as riding a bike, going for a bushwalk, or doing homework or eating a meal outside. Or take part in a community-based event like National Tree Day (30 July) or Schools Tree Day (28 July).

These simple acts help nature thrive, have far reaching benefits for children, families and communities, and can be the first step in building a lifelong connection to nature.

For more information and to find your nearest Tree Day site, please visit treeday.planetark.org or call the National Tree Day Hotline on 1300 88 5000.

For more information on Planet Ark's nature-related research, please visit: TreeDay.PlanetArk.org/research