



The myriad effects of surroundings on wellbeing make green schools more necessary now than ever.
By Dan French

Grounds for success



Photos: Green School



The wheels screech as they hit the tarmac, and as we pile off the plane into the thick, soup-like atmosphere of Bali, I feel excited and alive. We pile into our taxi and wind our way through the streets to our lodges – hotel rooms. I gaze out the window and can't believe how quickly it's all changed since I was last here, three years ago.

Each time I visit, I'm overcome with both hope for one of the most resilient civilisations I have encountered, and despair as I witness the effects of our obsession with convenience and consumerism at the expense of culture and environment. I see paradise hanging on for dear life. Amongst the bright lights, garbage and pollution that at times are hard to escape, I often find myself asking, 'Is this the fate of the world? Is this what we want our children to accept as the norm? Is there a better way?'

Later, we wind down a quiet back street in central Bali, about 20 minutes to the south of Ubud, Bali's creative capital. The intense buzz of traffic fades. Tension, blaring horns and shopping madness are replaced by the gentle waft of easterly trade winds passing through a mesmerising repetition of rice paddies and the smiling faces of passing locals.

Suddenly we are there. Looking down a long pathway lined with lush vegetation that is the entrance to Green School Bali. Ten minutes later, I am standing in a wooden cathedral-like building made entirely of locally grown bamboo, and it's magnificent.



There are no walls, posts half a metre or more wide grow dramatically skywards and the roof spirals around them like off-kilter Chinamen's hats. In front of me there are curved wooden desks facing whiteboards with remnants of today's lessons inscribed over them. As I lean closer, I notice the numbers, patterns and diagrams are written on old car windscreens, painted white from behind. Classrooms are open, creative and fun and are filled with natural light and fresh air as a result of their seamless connection with the outdoors.

Just like the buildings and the outdoors, education here and global citizenship are inextricably linked. Students drive projects in which their academic and leadership skills are developed for the benefit of the community and environment. Within the schools' giant aviary, The Begawan Foundation enlists student help to bring the local endangered Bali Starling back from the brink of extinction. The school's solar and hydro-powered electricity plant teaches students and visitors that schools can generate more power than they consume, while the tropical food garden provides both lessons and lunch, feeding students and their community. It's all educational, creative and fun.

What strikes me most about Green School is that it feels like a school of both the future and the past. The inner-child is jolted to life here, as remembrances of treehouse fantasies and the youthful enthusiasm to learn and discover the whole wide world is rekindled. I wish all children spent their formative years in a similarly beautiful, imaginative environment, where their surroundings reflected what was taught, and academic excellence was valued equally alongside sustainability, culture and leadership. For I agree with Baba Dioum, the Senegalese conservationist, that "In the end, we will conserve only what we love, we will love only what we understand, and we will understand only what we are taught."

SPROUTING EVERYWHERE

Elsewhere across the globe, schools are taking note. Reconnecting children with nature is being recognised as a priority and preparing them for a future where resources are scarcer and require careful management is paramount. As a result, sustainability has been embedded into the Australian Curriculum. Already some schools are teaching kids how to audit and control waste water and energy. Food gardens reportedly exist in more than 50 per cent of schools nationally and nature play-based learning environments are becoming more common. It's inspiring but what often doesn't happen is the integration of these initiatives at a whole-of-school level.

The inherent risk when projects such as nature-play spaces, vegetable gardens and solar installations are put together randomly is that these areas are underused. This is usually because the interactions between projects has not been fully considered or sustainability is not a part of a school's core business and philosophy. In that case, schools risk implying or, worse, teaching that only special areas can be reserved for interactions with nature or sustainably developed, while the rest has to be managed along conventional lines. Embedding sustainability into strategic development and management plans addresses these types of shortfalls and multiplies the benefits by providing more opportunity to engage students in hands on learning while improving school culture.

School ground developments can often be seen as a lower priority but they are key to developing well-rounded students. Green School shows us how dramatically people respond to their physical environment, a phenomenon that is being increasingly studied. Contact with nature has positive effects on developing and restoring brain function, reducing stress, improving attention, coping with attention deficits and general health. It has also been





shown to improve academic performance and increase happiness, which is of arresting concern when you consider that 3 in 4 adults played outdoors more than indoors when young one generation ago, compared with just 1 in 10 children today.

In contrast, highly engineered and unnatural environments can have the opposite effect on wellbeing, a disturbing notion given that so many school grounds are throwbacks from an industrial era and have more in common with prisons than utopian halls of learning. Ignoring the impact of physical environments while teaching environmental importance to students can cause cognitive dissonance that undermines the message and devalues skills taught to students that would stand them in good stead to better shape our collective future.

STANDING IN THE WAY

So why is there a lack of well-integrated adoption of sustainability practices and teachings in the average Australian school? I have encountered a few commonly held ideas that act as barriers to change. Let me share the top three and why they are, for the most part, rubbish.

1 We can't afford it. In the US, green schools reduce energy-related expenses by an average of 35 per cent, equating to nearly US\$3 billion dollars saved every year. We can do the same or better.

In general, 70–80 per cent of water in schools is used outdoors. Improving onsite water and energy efficiency can require moderate upfront investment but up to 30–40 per cent reductions in energy

and water consumption are achievable, meaning that a positive return on investment in many cases can be realised in three to five years. Additional money saved can then be reinvested in other greening projects, which may have a slower financial payback but generate big dividends in regards to improving education, building social capital, attracting enrolments and increasing the school's resilience to fluctuating resource prices.

2 Diverse landscapes result in a greater risk of injury and physical harm. There is a huge emphasis placed on reducing risk in schools, homes and workplaces. What is becoming more obvious is the impact this is having on the development of our young people. Increasing evidence suggests that a lack of exposure to risk is affecting the development of basic life skills. The ability to judge risk is being hampered and many children are showing a decline in strength, agility and endurance compared with previous generations.

The argument becomes even more clear when we consider that average Australian children are spending considerably more time sedentary and indoors, and that a range of mental and physical health conditions such as obesity, anxiety and depression are steeply on the rise – in children and adults. The conversation around risk is changing and engaging students and the community to help shape plans and contribute to building a culture of risk awareness and better judgement would increase our tolerance in a healthy way.

3 We don't have the space. Small spaces have a large scope for creative, high-impact projects on a limited budget. Buildings can be greened and insulated by planting vertical and rooftop gardens. Food gardening can be taught alongside ecology, chemistry and physics using approaches such as aquaponics, which combines fish and vegetable production in a compact, closed-loop system. Waste can be recycled or upcycled, energy efficiency can be measured and improved and water can be captured for indoor use year round.

It could be argued that adopting many sustainability initiatives in space-restricted urban schools is almost more important than anywhere else, as this is where the majority of us live and can make the biggest impact.

Schools are living organisms, which need a comprehensive approach to build a healthy culture and develop happy, prosperous students. Outdoor learning and sustainability projects can link to most of the curriculum and have been shown to generate in students renewed pride, greater confidence, stronger motivation to learn and a greater sense of belonging. Creating green schools is the future. It's about planning, training, collaboration and support and recognition that these new approaches take time but are worth adopting because schools that don't act will be left behind. ■

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