

sustainable settlement

green infrastructure

SCHOOL LANDSCAPES



Australian Institute
of Landscape Architects

National Policy Statement

School landscapes play an essential role in children's learning and development - providing opportunities for healthy exercise, creative play, social interaction, learning through doing and getting in touch with the natural world.

The Australian Institute of Landscape Architects believes that all children have the right to enjoy and benefit from well designed, managed and used school grounds.

Intelligent Landscape Strategies Can Boost School Performance

There are many measurable benefits to be gained from integrated landscape design in schools which extend far beyond the more obvious & immediate payoffs such as increased visual amenity and community pride.

In an educational context, strategically designed and managed landscapes can:

- significantly value-add to building energy efficiency gains
- improve environmental quality within and beyond the immediate school precinct
- impact positively on children's physical and mental health, and
- enhance both opportunity and quality of social interactions.

Landscape & heat stress - shading and cooling impacts of vegetation

In the future, health-related impacts of the urban heat island are likely to increase due to climate change, and children have been identified as one of the most vulnerable groups to heat stress. This has important implications for the design of their educational environment, in terms of physical and mental health outcomes. Recent studies have found that vegetation is the most effective tool to reduce surface temperatures of buildings and adjacent areas.

Trees can intercept up to 90% of direct summer sun heat loads on buildings. In terms of evaporative cooling capacity, a single isolated tree is functionally equivalent to 5 room airconditioners running 20 hours a day.

Strategic landscaping can significantly reduce building cooling costs in summer (via shading & evapotranspiration), and heating costs in winter (via reducing wind speeds) – producing typical air conditioning savings of 25-50%, and even up to 80%, for individual buildings.

Amelioration of heat stress via landscaping results in increased physical health and comfort – which in children directly translates to increased levels of physical activity and cognitive functioning, alertness and concentration.

Landscape & learning outcomes

Contact with nature is vitally important in children's physical and mental development, and integrated outdoor educational areas can measurably enhance learning opportunities.

There is an extensive body of research demonstrating the range of social and educational benefits available to children with access to high-quality school landscapes. Children who experience school grounds with well-designed, diverse, natural play areas are significantly more physically active, more aware of nutrition, more civil to one another, and more creative.

High-quality landscaping in school grounds is also closely correlated with increased involvement by adults and members of the nearby community.

Landscape & cognitive functioning

Daily exposure and access to quality green play spaces for children has been shown to measurably reduce stress, increase ability to focus, and enhance cognitive functioning.

Furthermore, these benefits can be demonstrated to accrue proportionally to quality and extent of landscape provision – the more plants, green views and access to natural play areas, the more positive the results.

Research has also shown that for children diagnosed with Attention Deficit Hyperactivity Disorder (ADHD), access to high quality landscapes can provide significant relief of symptoms - and the greener a child's everyday environment, the more manageable their symptoms were found to be in general.

Landscape & social interaction

Proximity to nature has been demonstrated to have a positive effect on children's levels of concentration, inhibition of impulsive behaviour, and delay of gratification.

Learning to control aggression and anti-social behaviour is essential for developing self-discipline and effective socialization skills.

Intelligent landscape strategies can assist children to develop self-esteem and confidence in a stimulating, supportive & non-threatening environment – equipping them with vital attributes for success within the classroom as well as the wider world.

Designing intelligent school landscapes

AILA advocates the value of integrated building and landscape design in the development of all new educational environments, as well as the refurbishing and retrofitting of existing school buildings and grounds.

Intelligently designed school landscapes:

- Consider outdoor spaces to be as important as the indoors in overall school development.
- Respect the capacity of the school grounds to function as a learning environment as well as a setting for social and recreational activity.
- Maximise opportunities for connection between indoor and outdoor spaces, to enhance learning outcomes.
- Creatively accommodate a broad range of learning and recreational activities, to support a diversity of physical and social needs.
- Are ecologically sustainable, linked to the curriculum and integrated into the school planning processes.
- Employ collaborative, inclusive strategies to allow students, teachers and the local community to participate in the planning, design and management of the school landscape.
- Respect the value of interaction with the natural environment for human health and well-being.
- Provide a resource for the local community – e.g. recreation, sports and social events.

Key Actions

AILA recommends that the Australian federal and state governments support educational policy & school development initiatives which:

- Promote the value of integrated building and landscape design strategies to maximize environmental, social and economic outcomes.
- Encourage schools to incorporate the use of gardens, schoolgrounds and neighbourhood landscapes as a regular & integrated component of the curriculum.
- Employ evidence-based research on the impacts of outdoor play and nature-based education opportunities to improve children's long term health and cognitive capacity.

This Policy statement is part of the AILA's Sustainable Settlement suite of Policy Statements on Australian Landscape Architecture, the profession committed to the creation of meaningful and enjoyable outdoor places and to the sustainable management of our built and natural environment.

More details on AILA National Policy Statements: www.aila.org.au/policies

All queries on National Policy should be directed to the AILA's CEO.

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