



EDUCATION FOR SUSTAINABILITY

THE ROLE OF EDUCATION
IN ENGAGING AND EQUIPPING
PEOPLE FOR CHANGE



Australian Government
Department of the Environment,
Water, Heritage and the Arts





WHAT IS SUSTAINABILITY?

“ A decade into the twenty-first century, the world faces substantial, complex and interlinked development and lifestyle challenges and problems. The challenges arise from values that have created unsustainable societies... We need a shared commitment to education that empowers people for change. Such education should be of a quality that provides the values, knowledge, skills and competencies for sustainable living and participation in society. ”

Bonn Declaration,
UNESCO World Conference
on Education for Sustainable
Development, Bonn, Germany,
April 2009¹

There are many definitions of sustainability, which are influenced by people's values and culture. The best known of these is the UN definition of sustainable development, now commonly referred to as the Brundtland definition, which states:

*Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.*²

The Australian Government has adapted the Brundtland ideals and objectives to local conditions, to shape its approach to using education and learning as tools for change towards sustainability. In Australia, we generally use the term Education for Sustainability, rather than Education for Sustainable Development.

Some insights that help us to engage more effectively with change for sustainability include:

- There is no proven recipe for success. Sustainability is an ongoing learning-by-doing process that actively involves stakeholders in undertaking change.
- Many of our current practices can be destructive. To achieve sustainability, we need to challenge the way we think by questioning and reflecting upon current activities and decisions, and considering the need for new ways of acting.
- We need to change our behaviour in order to avoid environmental and socio-economic problems, rather than being reactive by acting on symptoms.



UNITED NATIONS DECADE OF EDUCATION FOR SUSTAINABLE DEVELOPMENT

The United Nations has declared the decade from 2005 to 2014, the Decade of Education for Sustainable Development. The founding value of Education for Sustainable Development (ESD) is respect: respect for others, both present and future generations; and respect for the planet and what it provides to us (e.g. resources, fauna and flora). ESD challenges us all to adopt new behaviours and practices to secure our future.

Education has been recognised internationally as fundamentally important to addressing the critical global challenges we all face.

The United Nations Decade of Education for Sustainable Development (UN DESD) is a complex and far-reaching undertaking. The environmental, social, cultural and economic implications are enormous and touch many aspects of life of the world's population. The overall goal of the DESD is to integrate the principles, values, and practices of sustainable development into all aspects of education and learning. This educational effort will encourage changes in behaviour

*that will create a more sustainable future in terms of environmental integrity, economic viability, and a just society for present and future generations.*³

Through education and lifelong learning, we can achieve lifestyles based on economic and social justice, food security, ecological integrity, sustainable livelihoods, respect for all life forms, and strong values that foster social cohesion, democracy and collective action.¹

Australia's approach to the Decade is set out in *Caring for Our Future*, the Australian Government Strategy for the UN DESD.⁴

Priority actions are identified in *Living Sustainably*, the Australian Government's National Action Plan for Education for Sustainability.⁵

Through information and awareness, but more importantly by building people's capacity to innovate and implement solutions, Education for Sustainability is essential to re-orienting the way we live and work, and to Australia becoming a sustainable society.



The UN DESD reorients traditional educational approaches towards:

- interdisciplinary and holistic learning
- values-based learning
- critically reflective thinking
- multi-method approaches such as word, art, drama and debate
- participatory decision-making
- locally relevant information.



WHAT IS EDUCATION FOR SUSTAINABILITY?

“ We must reconsider our tools, methods and approaches, our politics and economics, our relationships and partnerships, and the very foundations and purpose of education and how it relates to the lives we lead ... [EfS] encourages a shift from viewing education as a delivery mechanism to a lifelong, holistic and inclusive process. ”

The 4th International Conference on Environmental Education, The Ahmedabad Declaration 2007: A Call to Action, 28 November 2007.⁶

Creating a sustainable community requires that individuals and organisations have the knowledge, skills, values, capacity and motivation to respond to the complex sustainability issues they encounter in their personal and working lives.

Education for Sustainability in Australia has evolved over the past 30 years. Since the first environmental education conference in Australia in 1970, the focus has shifted from knowledge of natural ecosystems – and the threats posed to them by overuse and depletion of resources – to equipping all people with the knowledge, skills and understanding necessary to make decisions based upon their

full environmental, social and economic implications.

Education for Sustainability facilitates change by:

- working in conjunction with and complementing other approaches
- building capacity in individuals and organisations for transformational change
- fostering new knowledge
- fostering new behaviours, systems and practices
- emphasising creative, critical and innovative approaches.

Components of Education for Sustainability

- **Envisioning a better future** – establishes a link between long term goals and immediate actions, and motivates people to action by harnessing their deep aspirations.
 - Identifies relevance and meaning for different people.
 - Explores how to achieve change.
 - Offers direction and energy to take action.
 - Results in ownership of visions, processes and outcomes.
- **Critical thinking and reflection** – challenges us to examine and question the underlying assumptions that shape our world, knowledge and opinions by looking beneath the symptoms of unsustainable practice.

- Develops the ability to participate in change.
- Provides a new perspective.
- Promotes alternative ways of thinking.
- **Participation** – goes beyond consultation, involving people in joint analysis, planning, and control of local decisions.
 - Puts decision-making and responsibility for outcomes in the hands of the participants.
 - Creates a greater sense of ownership and commitment to action.
 - Builds capacity for self-reliance and self-organisation.
 - Empowers individuals to take action.
- **Partnerships for change** – strengthens ownership and commitment to sustainability actions through formal and informal opportunities for learning.

- Builds a shared vision amongst a diverse range of stakeholders.
- Motivates and adds value to initiatives.
- **Systemic thinking** – recognises that the whole is more than the sum of its parts, and is a better way to understand and manage complex situations.
 - Identifies connections and relationships.
 - Shifts thinking from ‘things’ to ‘processes’.
 - Integrates decision-making and adaptive management techniques.

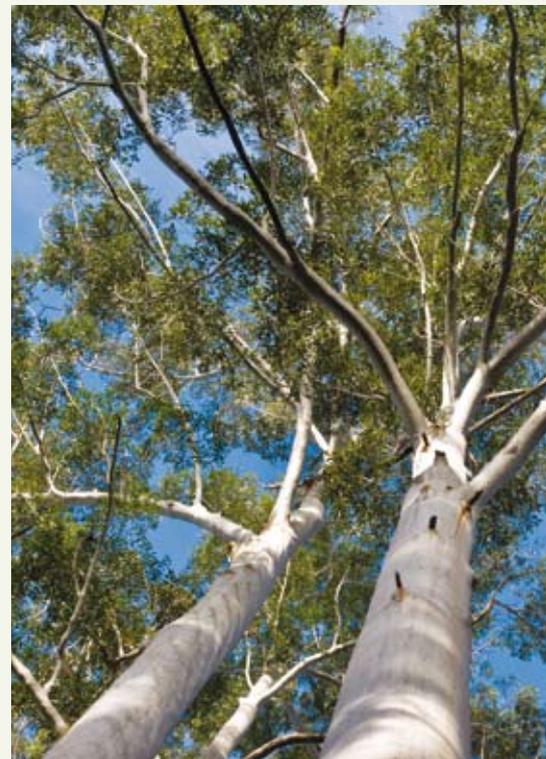


A learning-for-sustainability approach moves away from being constrained by 'doom and gloom' scenarios towards futures-oriented thinking that motivates for action. It advocates questioning and reflection on our actions and decisions, in order to re-think and re-design our activities.

To help Australians achieve environmental and quality-of-life outcomes, and contribute as responsible global citizens, it is important that we incorporate learning-based approaches to change within environmental and sustainability initiatives.

We also need to mainstream sustainability approaches within education, training and capacity building activities.

Education for Sustainability goes beyond providing information about the environment. It is seen as a process which motivates and engages people in creating sustainable futures. It is not only a process which builds competence but also a change strategy which will assist people and organisations to move towards sustainability.



Education for Sustainability promotes⁷:

Understanding	by going beyond awareness raising to address the underlying issues causing the unsustainable practices.
Values clarification	by creating a sense of personal relevance in, and connection to, change for sustainability.
People as the key to change	by promoting capacity-building opportunities that harness the ability of individuals to act as agents of change.
Systemic change	by helping learners develop skills that influence change within a system, organisation or wider society.
Integration and innovation	EfS considers that integration, transformation and innovation are needed to change organisational and individual behaviour.
Alternative futures	by using positive methods such as futures thinking to create alternatives to the current situation that lead to action plans for change.
Reflection, negotiation and participation	by challenging the role of the educator as the conveyor of information. By encouraging a collaborative learning process using critical reflection, negotiating ideas and building trust, EfS builds the capacity of the learner with life skills for sustainability.



WHAT HAS EDUCATION FOR SUSTAINABILITY ACHIEVED?

Education for Sustainability Initiatives

Nationally, Education for Sustainability approaches have been used in many areas, from industry to community-based programs directed at change for sustainability. The following examples highlight the penetration of Education for Sustainability across diverse sectors of society. The success of each initiative came from applying the core Education for Sustainability skills: taking a holistic view of the current situation; challenging the assumptions that underpin day-to-day practices; creating a new systemic view around which to organise new practices; and drawing on the strengths of collaboration and action learning.

“ The success of each initiative came from applying the core Education for Sustainability skills: taking a holistic view of the current situation; challenging the assumptions that underpin day-to-day practices. ”

The Australian Sustainable Schools Initiative (AuSSI)

This is a partnership of the Australian Government, states and territories that seeks to support schools and their communities to become sustainable. AuSSI provides a framework for Education for Sustainability activities in schools and complements existing programs. It gives effect to the concepts and actions identified in *Educating for a Sustainable Future: A National Environmental Education Statement for Australian Schools*.⁸

There are now more than 2500 schools participating, which represents 25% of schools nationally. The initiative has assisted students and teachers to develop the skills and knowledge to make effective sustainability decisions, and for schools to implement sustainability as part of their everyday operations. Through the integration of these issues across the curriculum within a whole-school plan, AuSSI continues to become more embedded within each jurisdiction's schooling system.

Embedding Sustainability in Universities

Universities Australia has declared a clear commitment to sustainability⁹, which encompasses teaching and learning, facilities management and research. Universities have been active in changing their operational processes in recent years, and are also moving to have sustainability included in the curriculum of various courses.

A specific project within the higher education sector involved the Australian Research Institute in Education for Sustainability (ARIES) in building partnerships between seven leading Australian business schools and corporations, and

engaging a range of stakeholders to develop their understanding of sustainability and accelerate change to achieve tangible sustainability outcomes.

Business schools, in collaboration with the corporations, mainstreamed subject content about sustainability and experiential learning processes into their core and elective courses. Some even introduced new degree programs in sustainability. They also created opportunities for students to undertake practical sustainability projects with corporate partners.

Local Government

ARIES has undertaken a project involving nine local government councils across Australia (including Noosa, City of South Perth and Pittwater). Training and mentoring services were provided to council staff to build their capacity to deliver improved sustainability outcomes.

By approaching the council and community interface systemically, councils were able to rethink their traditional ways of working and establish support for innovation in operations and services that better aligned to sustainability.

Another outcome of this project was the collation of tools and techniques that support the delivery of Education for Sustainability into an 'online handbook'.

Industry Sustainability Project

Ten major corporate and government organisations (including Westpac, Amcor, VISY, Toyota Australia, National Australia Bank and BHP Billiton) collaborated on this project, using a learning-based Education for Sustainability approach, to incorporate changes for sustainability practices into their operations.

WHAT ARE THE WAYS FORWARD FOR EDUCATION FOR SUSTAINABILITY?

Education for Sustainability is still in its infancy. Whilst it is demonstrably successful in particular projects and sectors, its application over the remainder of the UN DESD will see a more strategic and coordinated framework guiding the use of education and learning, to embed systemic change within the community, institutions, government and industry.

Approaches need to encompass consideration of the environment, society and the economy rather than focus on the environment alone. A large effort needs to be applied to develop the capacity of educators and change agents to adopt approaches that stimulate learning and debate in society, and develop trust and skills to work collaboratively.

Education for Sustainability can be a process for:

- developing and implementing policy as a whole-of-government approach
- facilitating the shift to sustainability thinking throughout the education sector, both within the curricula and in the governance of the institutions themselves
- enabling communities to develop strategies for a sustainable future in partnership with local government
- developing change programs for all organisations, government and private, including business and industry (from small businesses, to multi-nationals), local government and community organisations.



This level of integration is needed if Education for Sustainability is to achieve the aim of helping individuals and organisations shift to sustainability thinking and action. The Australian Government's National Action Plan for Education for Sustainability, *Living Sustainably*⁵, provides a framework for national action to work towards this objective.

References

1. Bonn Declaration, World Conference on Education for Sustainable Development, Bonn, Germany, April 2009, www.esd-world-conference-2009.org/en/whats-new/news-detail/item/bonn-declaration-adopted.html
2. Report of the World Commission on Environment and Development: Our Common Future, www.un-documents.net/wced-ocf.htm
3. UN DESD website: http://portal.unesco.org/education/en/ev.php-URL_ID=23279&URL_DO=DO_TOPIC&URL_SECTION=201.html
4. Caring for Our Future: The Australian Government Strategy for the United Nations Decade of Education for Sustainable Development, 2005–2014, www.environment.gov.au/education/publications/caring.html
5. Living Sustainably: The Australian Government's National Action Plan for Education for Sustainability, www.environment.gov.au/education/nap/index.html
6. The Ahmedabad Declaration 2007: A Call to Action, 4th International Conference on Environmental Education, 28 November 2007, www.tbilisiplus30.org/Ahmedabad%20Declaration.pdf
7. Adapted from Tilbury D and Cooke K (2005) *A National Review of Environmental Education and its Contribution to Sustainability in Australia: Vol 1 Frameworks for Sustainability*. Canberra: DEWHA and ARIES (p. 16) www.aries.mq.edu.au/projects/national_review/index.php#Vol1
8. Educating for A Sustainable Future: A National Environmental Education Statement for Australian Schools, www.environment.gov.au/education/publications/sustainable-future.html
9. Universities Australia Policy on Education for Sustainable Development (www.universitiesaustralia.edu.au/documents/publications/policy/statements/Policy-on-Education-for-Sustainable-Development-Aug2006.pdf)

Useful Websites

- DEWHA Sustainability Education: www.environment.gov.au/education
- Australian Sustainable Schools Initiative: www.environment.gov.au/education/aussi
- Australian Research Institute in Education for Sustainability: www.aries.mq.edu.au
- Education for Sustainability Portal: www.aries.mq.edu.au/portal

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