



Frameworks for Sustainability

A National Review of Environmental Education and its Contribution to Sustainability in Australia - Key Findings

'Our vision is a world in which there are many opportunities to learn about sustainable development. A world where a skilled population makes informed decisions in their home, community and working lives and in their leisure activities. A world where people understand and take responsibility for the impact they have on the quality of life of other people, locally and globally.'

Sustainable Development Education Panel (1999, p.11) *First Annual Report 1998*, London: Department of the Environment, Transport and the Regions, UK.

The Series

This summary of key findings is derived from Volume 1 of a five part series entitled '*A National Review of Environmental Education and its Contribution to Sustainability in Australia.*' The purpose of this review is to assess current practice and identify needs across the sectors so that these can be addressed strategically. It has been written to be relevant to all those involved in the design and delivery of Environmental Education (EE) which includes policy makers, funding bodies, educators and researchers.

The research was undertaken by the Australian Research Institute in Education for Sustainability (ARIES) for the Australian Government Department of the Environment and Heritage. The series covers the following areas:

Volume 1: Frameworks for Sustainability

This volume provides the conceptual basis for understanding EE's contribution to sustainability. It attempts to define the components of learning *for* sustainability and describe how these have the potential to transform how people think and act. Through a review of international and national frameworks it provides analysis as well as recommendations to improve strategic planning and actions for sustainability through EE in Australia.

Volume 2: School Education

This volume documents how learning *for* sustainability approaches still struggle to feature in mainstream school education. Whole-school approaches to sustainability are emerging, but are still rare. It is critical to strengthen the presence of EE within school curricula and teacher training to ensure that schools and students develop the capacity to contribute to sustainability. We also need to challenge practices in Early Childhood Education, as well as Environmental Education Centres, to ensure that effective approaches to learning *for* sustainability are developed.

Volume 3: Community Education

In the community, learning *for* sustainability is critical to building partnerships and enabling people to take action. Currently in Australia there are a range of methods and tools used to deliver EE in the community. The motivation and ability of the community to participate in processes for sustainability depends on the type of approach used. This volume documents valuable programs in EE emerging across community groups in Australia which demonstrate the potential for change towards sustainability.

Volume 4: Business and Industry Education

Industry is under ever increasing pressure to engage with, and respond to, sustainability issues. However, many companies, large and small, are struggling with this new broader business agenda. This may be due to a lack of belief in the business case for sustainability and/or a lack of the knowledge, skills and values required to effect the necessary change. Volume 4 documents how EE, and more specifically, learning *for* sustainability approaches can assist.

Volume 5: Further and Higher Education

Sustainability has been identified as one of the most pressing challenges facing further and higher education. Sustainability considerations cut across the core functions of education, research and management operations of these organisations. Volume 5 argues that it has implications for the core of the institutional culture - influencing the decisions, procedures and actions of the further and higher education sector. It documents how EE and learning *for* sustainability initiatives can help achieve organisational change within this sector.

These reports, and summary brochures, are available for download in PDF format from www.aries.mq.edu.au and www.deh.gov.au/education

Current Situation

Since the mid-1980s, thousands of sustainability initiatives have emerged across the globe. These have been a response to international calls for improved quality of life, ecological protection, social justice and economic equity. Despite this increased activity, many experts have pointed out that progress has been modest and there appears to be little evidence of positive achievement.

People have recognised the need to focus, coordinate and direct energies in sustainability towards specific goals. This has resulted in the development of an increasing number of regional and national sustainability strategies. However, the profile of education and learning for sustainability has remained low within national sustainability frameworks.

In Australia, the 'Environmental Education for a Sustainable Future: National Action Plan' has provided the foundations for strategic direction in learning for sustainability. It follows an overseas trend which sees the development of specific education or learning strategies in this area (see box). These strategies promote learning based approaches to change within environmental and sustainability initiatives. They also seek to mainstream sustainability approaches within education, training and capacity building.

What is Needed

No country is sustainable or has come close to becoming sustainable. There is no proven recipe for success. As Prescott-Allen reminds us 'making progress towards (sustainability) is like going to a country we have never been to before. We do not know what the destinations will be like, we cannot tell how to get there'¹.

Given this reality, the international community has come to recognise that sustainability is essentially an **on-going learning process** that actively involves stakeholders in creating their vision, acting and reviewing changes. As a result, education in the context of sustainability is now understood as a change process rather than a message or level which must be achieved.

Another realisation emerging out of the sustainability literature is that major problems cannot be solved from our current way of living but will require a **shift from traditional ways of thinking and acting** upon environmental problems. It has been suggested that environmentalism in the past has been a movement against some things - for example stopping pollution and other harmful activities - while the sustainability approach aims to do things differently in the first place, instead of just cleaning up the symptoms of underlying problems. It moves away from 'doom and gloom' approaches towards futures oriented thinking and action.

To achieve sustainability we need to:

- 1) Change the mental models which have driven communities to unsustainable development. This involves questioning and reflecting upon our actions and decisions, so we can re-think and re-design our activities.
- 2) Use new learning approaches that help us explore sustainability and build skills that enable change, such as mentoring, facilitation, participative inquiry, action learning and action research.

This approach is called **learning for sustainability**, for further details of these components and approaches refer to the 'Focus on: What is Learning for Sustainability?'

Strategic Frameworks

- Government of Canada (2002) *A Framework for Environmental Learning and Sustainability in Canada*. Ottawa: Government of Canada.
- Ministerie van LNV, The Netherlands (2004) *Learning for Sustainable Development : from Margin to the Mainstream: Dutch National Program 2004-2007*. Bezuidenhoutseweg: The government of The Netherlands.
- United Nations Educational Scientific and Cultural Organisation Asia and Pacific Regional Bureau for Education (2005) Working paper: *Asia-Pacific Regional Strategy for Education for Sustainable Development*. Bangkok: UNESCO.
- United Nations Economic Commission for Europe (2005) *UNECE Strategy For Education For Sustainable Development. CEP/AC.13/2005/3/Rev.1*. Vilnius, 17-18 March 2005: UN Economic and Social Council.

¹ Prescott-Allen, R. (2001, p2) *The Wellbeing of Nations: A country-by-country index of quality of life and the environment*, Covelo, CA: IDRC/Island Press

Need to be More Strategic

The release of the '*Environmental Education for a Sustainable Future: National Action Plan*' in 2000 provided the foundation for greater coordination of Environmental Education across government through the establishment of important structures and consultative bodies. The strategic national initiatives which resulted from this action plan are well positioned to influence practice in Australia. However, as international experience has shown, maintaining existing structures will not be enough to address the new approaches to Environmental Education prompted by the sustainability agenda.

Many countries have turned to using strategic frameworks in order to help the reorientation of environmental and Environmental Education practice towards sustainability and provide guidance for current and future initiatives. It is therefore recommended that Australia build on current experience to develop a *strategic framework in learning for sustainability*. This would be used to map out a vision and provide a coordinated framework for consistent and coherent action plans that involve multiple stakeholders in change across every aspect of society. It would help:

- reorient current practice towards the new model (based upon capacity building and learning based change);
- assist in identifying gaps in practice; and
- strategically align initiatives so that they contribute to common goals.

Learning for Sustainability Frameworks

Government agencies are generally responsible for coordinating the development of national strategic frameworks in learning for

sustainability. The process is mostly led by environmental agencies and less frequently by their education counterparts. The sophistication of learning for sustainability frameworks has progressed over the years with each successive document building upon the lessons learnt from its predecessor. However, there is no one national strategic framework that stands alone as best practice in learning for sustainability.

The strategies that seek to develop not just environmentally literate citizens but a society capable of change generally promote the following concepts:

- cross-sectoral involvement in education;
- opportunities so that people can learn in a variety of contexts and throughout their lives;
- the development of change skills;
- futures thinking;
- participation in decision-making;
- partnerships; and
- critical and systemic thinking.

What underpins a good Learning for Sustainability Framework?

The development and implementation of learning for sustainability frameworks is still in its early days. Although lessons can be drawn from the emerging experiences there has not yet been a systematic effort to evaluate or assess the impact of these policy frameworks.

Experience to date suggests that good learning for sustainability frameworks are underpinned by some common features:

- a. Alignment** - Education and learning for sustainability plans which are closely aligned to national sustainability strategies and/or national priorities are most effective.

- b. Vision** - Learning for sustainability frameworks which are guided by a clearly articulated national vision for sustainability have driven communities to embrace learning as part of the change process.

- c. Focus** - Frameworks that adopt a focus on capacity building and learning based change for sustainability (as against awareness raising, transmission of key messages and behavior change goals) appear to have made a more effective contribution to environmental and sustainability outcomes.

- d. Objectives** - Good practice frameworks have clear and identifiable objectives which are measurable and achievable.

- e. Key Components** - Frameworks based on the key components of learning for sustainability (see Focus on: What is Learning for Sustainability?) are more likely to build capacity for change towards sustainability.

- f. Targets** - Frameworks which include targets and reporting structures and timeframes have enabled progress to be monitored. There is value in developing an action plan which outlines stages and responsibilities as well as the financial and human resources allocated to achieve the goals set out in the framework.

- g. Process** - To date, all learning for sustainability frameworks have incorporated opportunities for the development of partnerships and capacity building of stakeholders. Best practice frameworks include these not only in the content of the document but have adopted these in the process of developing the framework. This has led to greater ownership and commitment and increased the likelihood of effective implementation of the strategy.



What is Learning *for* Sustainability?

Learning *for* sustainability (also referred to as ‘education for sustainability’ or ‘education for sustainable development’) provides a new approach to Environmental Education. This new approach attempts to move beyond education *in* and *about* the environment approaches to focus on equipping learners with the necessary skills to be able to take positive action to address a range of sustainability issues. Learning *for* sustainability motivates, equips and involves both individuals and institutions in reflecting on how they currently live and work. This assists them in making informed decisions and creating ways to work towards a more sustainable world.

Learning *for* sustainability aims to go beyond individual behaviour change or single actions often associated with education for the environment. It seeks to implement systemic change within the community, institutions, government and industry.

Key Components of Learning *for* Sustainability

Envisioning a better future is a process that engages people in conceiving and capturing a vision of their ideal future. Envisioning, also known as ‘futures thinking’, helps people to discover their possible and preferred futures, and to uncover the beliefs and assumptions that underlie these visions and choices. It helps learners establish a link between their long term goals and their immediate actions. Envisioning offers direction and provides impetus for action by harnessing peoples’ deep aspirations which motivate what people do in the present.

Systemic thinking is a way of thinking based upon a critical understanding of how complex systems, such as environments and ecosystems, function by considering the whole rather than the sum of the parts. Systemic thinking offers a better way to understand and manage complex situations as it emphasises holistic, integrative approaches, which take into account the relationships between system components. Systemic thinking works toward long-term solutions that are vital to addressing issues of sustainability.

Critical thinking and reflection challenges us to examine the way we interpret the world and how our knowledge and opinions are shaped by those around us. Critical thinking leads us to a deeper understanding of the range of community interests and the influences of media and advertising in our lives.

Participation aligned with sustainability goes beyond mere consultation processes to involve people in joint analysis, planning and control of local decisions. In its ‘truest’ form it can be self-initiated and directed with participants having full control of the process, decision and outcomes.

Partnerships for change provide both formal and informal opportunities for learning. Learning can take place during a meeting or through structured exchanges which allow reflection, development of understanding and questioning of mental models. Partnerships also strengthen ownership and commitment to sustainability actions.

Learning *for* Sustainability Approaches

Mentoring provides individuals and groups, who are grappling with sustainability with support, advice and understanding so they can engage with this concept. The process allows people to critically examine opportunities for change within their home, community or workplace.

Facilitation encourages learning to be driven by the learner. It equips the learner with the necessary skills and knowledge to take action and participate in change and decision-making. It develops the ability of people to ‘critically’ reflect on their existing practice and identify the changes necessary. The process encourages people to engage in open dialogue and eliminates inequitable power hierarchies as it does not rely on expert knowledge.

Participative Inquiry is the engagement with, and deep exploration of, sustainability questions, which stimulate new ideas for further interrogation and action. Participatory inquiry offers a new way of understanding and engaging with the community and organisational change. It requires participants to collectively strive to understand a question that is important to them by freely examining their existing ideas and practices.

Action Learning is a process designed to build capacity using a form of reflection and assessment. The ultimate goal is the improvement of practice. The process involves the participants developing an action plan, implementing the plan and reflecting on what they have learnt from this. A facilitator or mentor assists the participants to develop their plan and learn from their experiences.

Action Research is a research method that pursues action (change) and research (understanding) at the same time, through a cyclical process of planning, action, observation and reflection. It aims not just to improve, but to innovate practice. Action Research provides a valuable process for exploring ways in which sustainability is relevant to the participants’ workplaces and/or lifestyles. It views change as the desired outcome and involves participants in investigating their own practice.

h. Cross-sectoral - Good practice frameworks have acknowledged the importance of involving a broad range of stakeholders in the development of the strategic framework as well as the need to identify specific targets which cut across the sectors and take learning *for* sustainability beyond the boundaries of formal education.

i. Coordination not duplication
- Frameworks which seek to leverage upon the work of previous and existing initiatives are most effective. They support convergence of existing initiatives and planning frameworks.

j. Government mandate/support
- Successful strategies have been led by government agencies. Their policy and financial commitment assures results.

A Strategic Framework for Australia

This review acknowledges the recent experience of the States in developing strategic frameworks in learning *for* sustainability and the success of Australia's National Action Plan. To accelerate progress to a more sustainable Australia it suggests that Environmental Education in Australia would benefit from an overarching and targeted framework with broad ownership across government and the community, in order to co-ordinate efforts, provide a consistent sense of direction and focus skills and resources.

In order to strengthen Environmental Education's contribution to sustainability, there is a need for the government to:

- Establish a national vision and action plan through a learning *for* sustainability strategy for Australia. The national strategy would guide future efforts within and across sectors;

- Encourage the development of strategic frameworks for each state and territory as well as their alignment with the national strategy so that efforts are congruent and working towards the same overarching goals;
- Build the capacity of policy makers and stakeholder groups in learning *for* sustainability approaches so that they can effectively contribute to development of strategic frameworks in this area; and
- Develop strategic networks within the sectors so that goals identified by strategic frameworks can be effectively implemented. The National Environmental Education Network is a good example of a strategic network involving decision-makers across Australian and State/Territory government agencies.

Recommendations

The research undertaken by ARIES has revealed a number of key needs with respect to strategic frameworks in learning *for* sustainability. The following recommendations have been derived from these key needs. The recommendations identify practical steps at a policy, practice and research level that could strengthen the contribution of Environmental Education towards sustainability within Australia. It is recommended that the federal government undertake the following actions.

For Government:

1. Prepare a brief National Statement which highlights the learning *for* sustainability approach and its implications for strategic planning and practice. To be aligned with good practice, learning *for* sustainability strategies need to be based on capacity building and learning based change rather than

awareness raising, transmission of key messages or behaviour change models. The statement should be developed in the preliminary stages of strategy development as it would be used as an overarching document to inform the development of the strategies and action plans at the various levels.

2. Use the National Statement (see recommendation 1) as the basis for developing whole-of-government understanding and endorsement of learning *for* sustainability approaches.
3. Facilitate the development of a *Learning for Sustainability Strategy for Australia*. The strategy needs to provide: a vision for how education can contribute to change for sustainability; guidance on what constitutes effective practice; as well as outline actions, timelines and responsibilities for implementing this vision.
4. Provide incentives (e.g. funding) and support (via collaborative workshops) to the States and Territories which are yet to develop a learning *for* sustainability framework and/or action plan. A similar approach to that used in the Australian Sustainable Schools Initiatives is advocated.
5. Provide incentives (e.g. collaborative research support) to the States which have developed learning for sustainability frameworks and/or action plans to encourage their close monitoring and evaluation. This can provide a valuable learning and capacity building experience which could influence the revision of such frameworks and alignment with the national learning for sustainability strategy.

In Practice:

6. Provide opportunities through roundtable discussions and participatory seminars to develop a national learning for sustainability strategy in a way that involves a broad range of sectors, so that the value of learning in achieving sustainability goals is recognised by others who are not in the field of education. If effectively facilitated, informal learning and networking opportunities would arise out of these exchanges.
7. Provide opportunities to involve State and Territories government agencies from around the country in the development of the strategic plan. This could be achieved through facilitated forums and participatory workshops which include opportunities for informal learning and networking.
8. Fund a networking and mentoring program in learning for sustainability programs for government departments at the federal level. This will enable a whole-of-government approach, maximise cooperation and enhance the delivery and value of the learning for sustainability strategy in Australia. This could be framed and guided by the 'Building Government Capacity Towards Sustainability' project currently being undertaken by ARIES.

For Researchers:

9. Undertake a needs analysis based on the findings and recommendations identified in volumes 2-5 of this series. This research would be used to inform the development of the strategy.
10. Fund an action research approach to strategy development and implementation of the national learning *for* sustainability strategy for Australia. This approach would enable learning from the experience as well as more effective implementation of the strategy.
11. Commission a review to document the experiences of developing the existing state learning *for* sustainability strategies (e.g. NSW and WA) in support of recommendation 3. This review should identify lessons learnt from these processes and also identify ways to use and build on the partnerships and initiatives that currently exist.

■ A Strategic Framework for Australia

The role and power of learning for sustainability approaches in achieving sustainability through Environmental Education across the sectors have been documented in this volume. The challenge now is for the development of a national framework which is aligned with the principles of learning *for* sustainability and incorporates the lessons learnt from strategic frameworks both in Australia and across the globe:

- It is important to **recognise and build on the existing work in the area** initiated by the Australian National Action Plan, as well as by the experience of the States and Territories in implementing frameworks in this area.
- As an example and role model to all the sectors, a first step is to ensure **endorsement and commitment by the whole of government** to the development and implementation of the strategy.
- The role of the coordinating agency or group is to **facilitate the process** rather than to direct the process. Option to have an independent facilitator or representative stakeholder group to drive the process.
- The strategic framework should provide an **overall vision** which creates the motivation and inspiration for all stakeholders to incorporate learning *for* sustainability into **all education systems: formal; non-formal; and informal**.
- During both the strategy development and implementation stages **target key multipliers to spread and maximise the impact**.
- Focus on developing a process which encourages and allows participants to **build partnerships and strategic alliances**.
- The strategic framework needs to include **cross-sectoral participation** to show support for the strategy, embrace the diversity of learning opportunities and build the capacity of reluctant sectors to incorporate learning *for* sustainability approaches into their current practice.
- Outline why and how **learners at all levels need to be encouraged to use systemic, and creative thinking as well as critical reflection** in both local and global contexts.
- Providing **opportunities for participants to be involved in the decision-making process** is key to actively engaging stakeholders and ensuring the achievement of greater support and commitment for the strategy.
- Support the development of **systems to monitor and evaluate the effectiveness** of both learning *for* sustainability initiatives as well as the strategic framework.

‘The outcomes of the Johannesburg Summit and the establishment of a Decade of Education for Sustainable Development affirm the need to integrate sustainable development into education systems at all levels in order for education to be a key agent for change. The Decade aims to promote education as the basis for sustainable human society and to strengthen international cooperation towards the development of innovative policies, programmes and practices of education for sustainable development.’

United Nations Educational Scientific and Cultural Organisation (2003, p.1) *UNESCO and the International Decade of Education for Sustainable Development (2005-2015) Connect* Vol. XXVIII No.1-2.

■ **Disclaimer:**

The views expressed herein are not necessarily the views of the Australian Government, and the Government does not accept responsibility for any information or advice contained herein.

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■ **Full Report:**

This is an executive summary derived from a research report titled ‘*A National Review of Environmental Education and its Contribution to Sustainability in Australia: Frameworks for Sustainability.*’

The report is available for download in PDF format from www.aries.mq.edu.au and www.deh.gov.au/education or contact the Australian Research Institute in Education for Sustainability to obtain a hard copy.

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