



Australian Government
Department of the
Environment and Heritage



A NATIONAL REVIEW OF ENVIRONMENTAL EDUCATION AND ITS CONTRIBUTION TO SUSTAINABILITY IN AUSTRALIA

School Education Stakeholder Forum

Wednesday 28th June 2006
Education Queensland, Brisbane

Report



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Abbreviations

ARIES	Australian Research Institute in Education for Sustainability
DEH	Australian Government Department of the Environment and Heritage
EE	Environmental Education
EfS	Education for Sustainability
ENSI	Environment and Schools Initiative

1.0 EXECUTIVE SUMMARY

The Australian Research Institute in Education for Sustainability (ARIES) recently completed a study entitled '*A National Review of Environmental Education and its Contribution to Sustainability in Australia: School Education*' undertaken for the Australian Government Department of the Environment and Heritage (DEH) and funded through the Natural Heritage Trust. The research was conducted to inform the Australian Government's strategy to mainstream sustainability approaches within education, training and capacity building.

The first of its kind undertaken in Australia, the research provides a snapshot of the current context across the school education sector and identifies a number of key themes to construct a picture of Environmental Education (EE) experiences. The report also makes a number of key policy, practice and research recommendations that could strengthen the contribution of EE towards sustainability within the school education sector.

Key stakeholders from across the school education sector were invited to attend a stakeholder forum held on Wednesday 28 June 2006 in Brisbane to discuss the findings of the report. This forum was hosted by the Queensland Department of Education and the Arts and the Environment and Schools Initiative (ENSI). It provided an opportunity to bring together key decision-makers from the school education sector to explore ways forward in the area of education and learning for sustainability.

This report is a synopsis of the findings from the forum dialogue. It summarises the input of the participants who were asked to identify priorities actions for government, researchers and school educators based upon the report recommendations. Participants also reflected upon next steps and stakeholder responsibilities.

Priority recommendations identified by participants included the need for case studies to support the interpretation of Education for Sustainability (EfS) policy in practice. Case studies of action research and mentoring for sustainability, particularly for teacher education were in demand. Participants saw the need to develop mandatory State and Territory policies in EE and sustainability in schools as the priority for governments. Those who attended the forum highlighted the need for a shared language with agreed foundational principles in EfS. For researchers, the need to explore how States and Territories can shift the practice of EE towards more systemic approaches in schools was considered a priority. Gaps in the research recommendations were identified as participants called for studies into leadership education. This was seen as an important means of strengthening the contribution of school education for sustainability in Australia.

The valuable information arising out of this forum assists ARIES and DEH with the definition of priority actions in the area of policy, practice and research. The forum itself served as a means of advancing EfS in this sector by promoting dialogue surrounding sustainability, facilitating collaborative learning, participation and the development of cross-sectoral partnerships. Stakeholders attending the sessions committed to promoting some of the recommendations and assisting in implementing agreed actions.

2.0 INTRODUCTION

The School Education Stakeholder Forum was commissioned by DEH and facilitated by ARIES. The forum was held on Wednesday 28 June 2006 in Brisbane and was hosted by the Queensland Department of Education and the Arts and the Environment and Schools Initiative (ENSI). It provided a key opportunity to bring together key decision-makers from the school education sector to explore ways forward in the area of education and learning for sustainability.

The **objectives** of the Forum were to:

- Inform the identification of Australian Government priorities. The Forum can assist to ensure that future policy is relevant and reflects the requirements of the school education sector;
- Contribute to the Australian Government's review of the National Action Plan in EE; and
- Assist in identifying future research priorities for ARIES that are relevant and represent stakeholder concerns.

The Forum sought a number of **key outcomes**:

- Engagement of the school education sector in matters of EfS;
- Establishment of relevant and informed strategic policy, practice and research priorities;
- Shared ownership in the output of the Forum organisation and outputs.

In addition, the Forum becomes a means of achieving sustainability outcomes through dialogue, collaborative learning, participation and partnership building.

3.0 EVENT FORMAT AND AGENDA

The Forum was facilitated by ARIES in such a way as to encourage dialogue and the active involvement of all attendees. The facilitation also sought to ensure that its output was relevant to the requirements of DEH and ARIES.

The attendees were sent a copy of the ‘*A National Review of Environmental Education and its Contribution in Australia: School Education*’ key findings prior to the forum and asked if they would read these prior to the event itself.

The three hour Forum was largely devoted to two tasks completed by participants in collaborative working groups. The first task involved participants engaging with the report recommendations to identify policy, practice and research priority actions. The second task involved participants identifying next steps to be taken to address these priority recommendations and the stakeholders responsible for implementation.

Dialogue following these activities led to the identification of a number of specific issues and priority actions (see 5.0 Key outcomes from Forum Dialogue).

Table 1 Agenda

Time	Item
12.30	Lunch
13.00	Forum introduction and welcome
13.10	Presentation – What is ARIES and overview of research findings
13.30	Group activity 1 – Using recommendations to identify priority actions
14.00	Break
14.10	Group activity 2 – Identifying first steps and stakeholders commitments
14.40	General discussion
15.10	Closing remarks and thanks
15.25	Participant feedback
15.30	Finish

4.0 PARTICIPANTS

Eighteen stakeholders attended the Forum from the school education sector. This included State agency, teacher education, school education and Environmental Education Centre representatives. A number of representatives from Early Childhood Education were invited but were unable to attend. The selection of the participants was guided by DEH, ENSI and Education Queensland.

Table 2 List of participants

Name	Title	Organisation
David Butler	Policy & Program Officer	Dept Education & Children's Services, SA
Sue Coad	Sustainability Education Curriculum Officer	DEH, South Australia
Tony Cook	General Manager, Student Learning Division	Dept of Education and Training, Melbourne
Louise Erbacher		Earth Charter Australia
Jo-Anne Ferreira	Convenor, Master of Environmental Education	Griffith University
Doug Hammond	Teacher	Bulimba State School, Queensland
Dr Debbie Heck	Lecturer	Griffith University
Barbara Henderson	Manager, Curriculum Branch	Education Queensland
Tony Kitchen	Executive Officer – Education	Queensland Catholic Education Commission
Cam MacKenzie	Principal Advisor, Environmental Sustainability	Education Queensland /ENSi Representative
Pamela Macklin	Deputy CEO (Professional Resources)	Australian Council for Educational Research
A/Prof Ken Purnell	Faculty of Arts, Humanities & Education	Central Queensland University
Jenene Rosser	Senior Education Officer	Independent Schools Queensland
Marica Rouen	Senior Education Officer	Education Queensland
Lisa Ryan	QESSI	University of Sunshine Coast
Darren Shepherd	Principal	Toohey Forest EE Centre, Griffith University
Dr Jeff Su	Business Development Manager	The Gould League
Claire Wynter	Future Schooling and Teacher Workforce	Dept Education, Science and Training

Forum Facilitator, Associate Professor Daniella Tilbury - ARIES Director (Also ENSI Australian pedagogical representative)

Forum Researcher, Rebecca Pearson - ARIES Researcher and Scribe

DEH Representative, Angela Colliver - Sustainability Education Section and presenter

5.0 KEY OUTCOMES FROM FORUM DIALOGUE

The following section is a summary of the key findings from the Stakeholder Forum. These findings are based upon the dialogue of participants. This information was collected through the notes of the scribe taken during plenary discussions, group discussions and from the notes collected made by participants during the two tasks.

5.1 Priority policy, practice and research recommendations

In light of the discussion surrounding needs in learning for sustainability and the various government, school educator and research recommendations made by the ‘*A National Review of Environmental Education and its Contribution in Australia: School Education*’ report, the following have been identified by attendees as priority actions.

5.1.1. Actions for Government:

Providing States and Territories with **incentives** to develop their own mandatory State school policies in EE and sustainability was seen as a priority. It was suggested that the Department of Education, Science and Training could possibly take some responsibility for raising this issue with State agencies but it was questionable as to how positively this would be received and therefore how beneficial this would be.

The following recommendations in particular were also considered a priority for action by government:

- Federal Government, in collaboration with teacher education and registration boards in each State and Territory, to provide a **framework for teacher education** in learning for sustainability approaches;
- Provide a case to boards of studies and curriculum / examination authorities for a **stronger curriculum and syllabus focus** on EE. This should focus on Key Learning Areas, core senior secondary courses and learning *for* sustainability approaches to EE, and also indicate accountability mechanisms to ensure its adoption by teachers; and
- A **national grant scheme** should be established for schools to develop programs (such as *sustainable schools*) that adopt whole-school approaches to EE and model sustainability in their management and operations.

In addition, the need for an accompanying framework to the recently released **National Environmental Education statement**, for schools, early childhood centres and teacher education institutions was recommended so that steps can be taken to ensure that students receive quality and consistent learning experiences in EE and sustainability. Participants agreed that whilst the National Statement is important, there is also a need to examine common practice. Similarly there was also discussion about the need to look to the future and where we really need to be rather than looking at where we currently stand.

All participants agreed that the development of **guidelines for schools on partnerships** was a low priority within an immediate agenda. This is primarily due to the fact that there are already a number of successful partnerships developing within the school education sector. Although the development of other partnerships is important it is regarded by participants as a longer-term priority. The Queensland Environmentally Sustainable Schools Initiative (QESSI) hubs were mentioned here as an example of an effective partnership.

5.1.2. Actions **for Schools and Educators**:

The **need to capture and document case studies of action research and mentoring for sustainability** for use in teacher education was identified. It was also suggested that there is a need to look closely at the way in which learning *for* sustainability can be implemented across the schools system as it tends to be practiced in isolated at present. Case studies that demonstrate the ‘how to’ will empower teachers and other school stakeholders to take steps towards sustainability. There were a number of key stakeholders suggested who could support the implementation of this recommendation including AAEE, the Gould Group, QESSI and the Youth Environment Council.

The following recommendations were also considered a priority for action by schools and educators:

- Through action research processes, develop a set of **criteria for the evaluation of effective EE** programs, resources and professional development courses offered by outdoor and nature based EE providers including EE Centres;
- Develop and offer **short courses for teachers and early childhood educators** in learning *for* sustainability approaches, as well as for others associated with this area including government agencies, parents and carers, teacher educators and early childhood educators;
- Fund a national program in **learning for sustainability approaches to EE** for teacher educators who are environmental educators who specialise in EE;
- Provide incentives and support for teachers in the Key Learning Areas of English, Maths, the Arts, Health and Physical Education as well as Science and Studies of the Society so that **cross-curricular infusion is strengthened**;
- Develop a **mentoring program for teachers and managers working in EE Centre’s** to help them explore learning *for* sustainability approaches and how it influences their work. A national network that links those working on the issue together could support the mentoring; and
- Allocate resources for **strengthening multi-stakeholder networks or hubs** on Learning for Sustainability including government agencies, parents and carers, teachers, teacher educators and early childhood educators.

The majority of the report recommendations for school educators were considered to be either high or medium priority actions. Developing a **guide to assist citizen science programs** to make the shift from promoting environmental awareness to learning *for* sustainability was considered a low priority by all participants.

5.1.3. Actions **for researchers**:

The need to **explore how States and schools can shift the practice of EE towards more systemic approaches** was discussed as a priority by participants. It was suggested once again that the Department of Education, Science and Training could look at work being done across all States through a scoping study. There is a need however with such research to ensure that it does not simply remain ‘on the shelf’ and that it leads to practice and implementation.

The following recommendations were also considered a priority for action by researchers:

- Commission research to explore the development and implementation of an **accountability mechanism/tool for EE in schools**. School principals will use the tool as a framework to report against in their school’s annual report.

- Commission **action research that engages outdoor and nature based EE** providers, exploring the outcomes of current nature-based EE programs, and the potential of experiential learning and action learning approaches to sustainability.
- Commission research, which builds upon the work undertaken by *Environment and Schools Initiative*, on the potential of **EE as a catalyst for school development and quality education** outcomes.
- Undertake meta-evaluation research that identifies lessons learnt on the variety of processes developed in Australia in the area of **school buildings and grounds, and document examples of good practice**.
- Undertake longitudinal research into the **impact of pedagogical approaches** in school-based and early childhood education on learning *for* sustainability.

There were a number of research recommendations considered as low priority by all attendees. These include the need for research that identifies **core competencies** for teachers in learning for sustainability as well as research that outlines the types of **partnerships necessary** to bring about change for sustainability. Interestingly, this again reflects the general consensus of the attendees about the lack of priority for the development of partnerships due to the view that this is an area that is currently strong within the school education sector.

5.2 Next steps and stakeholder roles and responsibilities

Following the discussion surrounding needs in learning for sustainability and the various government, school educator and research recommendations made by the ARIES report, participants were given an opportunity to assess next steps and to identify the roles and responsibilities of stakeholders in taking these. This activity allowed participants to commit to promoting some of the recommendations and to assisting in implementing agreed actions. These are summarised in Tables 3 to 5 below.

Table 3: Group One - Next steps and stakeholder roles, responsibilities and commitments.

Priority Recommendation	Actions that can be taken to implement this recommendation	What support would you need to be able to take this action(s)?
Schools should be provided with incentives to develop their own school policy and action plan for Environmental Education and sustainability .	<ul style="list-style-type: none"> * Would need to engage the whole community in development of policy and action plans * Explore the values and beliefs of the community (e.g Earth Charter) * Explore the various partnerships that can be developed to support this process * Ensure the process is documented so it can be monitored, reflected upon and changed as necessary 	<ul style="list-style-type: none"> * Access to mentoring and peer support * Access to case studies and experiences of others * Information on the 'how to' in terms of involving the community * Long term support to maintain change

Table 4: Group Two - Next steps and stakeholder roles, responsibilities and commitments.

Priority Recommendation	Actions that can be taken to implement this recommendation	What support would you need to be able to take this action(s)?
<p>Develop and offer short courses for teachers and early childhood educators in learning for sustainability approaches.</p>	<ul style="list-style-type: none"> * Would have to negotiate with teacher registration authorities on how to get such courses recognised by the certifying bodies' * Explore whether short courses should be offered separately or be embedded into other priorities? * DEH and ARIES could assist with development of these courses in addition to State Education Departments and short course providers like Education Queensland * QESSI hubs looking into this 	<ul style="list-style-type: none"> * Funding
<p>Provide a case to boards of studies and curriculum and examination authorities for a stronger curriculum and syllabus focus on Environmental Education</p>	<ul style="list-style-type: none"> * Research would have to be undertaken into what the most effective approach to this would be – stand alone or integrated? * Explore what mechanisms are in place in each State and Territory. Which ones are aligned with EfS? * Recognition of the gaps that currently exist * Introduce a mandatory EE unit in Years 6 and 9 * Longitudinal research on schools that are involved in EfS * Cluster schools could work on a particular issue with sustainability as the focus 	<ul style="list-style-type: none"> * More partnerships developed * More promotion of EfS as good practice.
<p>Commission research that explores how States and schools can shift the practice of Environmental Education towards more systemic approaches to school curriculum, pedagogy, teacher education and school-community partnerships</p>	<ul style="list-style-type: none"> * DEST could conduct a scoping study across States and Territories * Set up a reference group 	<ul style="list-style-type: none"> * Support and access to case studies of good practice * ARC linkage as a possibility for funding?

Table 5: Group Three - Next steps and stakeholder roles, responsibilities and commitments.

Priority Recommendation	Actions that can be taken to implement this recommendation	What support would you need to be able to take this action(s)?
Provide incentives and support for teachers in the Key Learning Areas of English, Mathematics, the Arts, Health and Physical Education as well as Science and Studies of the Society so that cross-curricular infusion is strengthened	* Australian Principals Associations Professional Development Councils (APAPDC) and other related organisations could be involved in this.	* Annual leadership forums could provide an important source of information and support * Grants for teachers * Adequate time for teachers
Develop a mentoring program for teachers and managers working in EE Centres to help them explore learning for sustainability approaches and how it influences their work.	* Identify champions for teachers and teacher educators * Engage with teacher training institutions and school authorities such as Education Queensland to partner with schools to develop program	* Provision of adequate resources for teachers and their institutions
All State and Territories should be provided with incentives to develop their own mandatory State policies for Environmental Education and sustainability in schools.	* Develop communication strategies * Develop a whole of school approach	* DEST provide support by approaching State agencies regarding provision of incentives.

5.3 In addition

In addition, the stakeholder dialogue identified other issues and made recommendations not captured in the ARIES national review report. These include:

- Participants identified a **need for indicators to measure accountability** and discussed the notion of providing educators with some form of tool they can use to report back on progress and achievement.
- **Language** was a key issue discussed during this forum. Participants discussed the need to define and clarify language which is often open to varying interpretation. There is a need to examine further the kind of language we need if we are to ‘reach’ people. It was noted that there may be a value in looking at the use of language by different religions, such as Buddhism, in relation to the environment. In addition, indigenous ways of thinking in terms of language, the environment and sustainability may be of value. It was also noted by participants that a certain level of acceptance was required of peoples’ different use of language during any dialogue on learning for sustainability and the environment.
- Participants suggested that if sustainability is to be achieved we must support the efforts of the rest of the world and there needs to be **greater reference to our relationship with the planet**. We need to consider ourselves stewards rather than exploiters and the language and terminology

used around EE should reflect this focusing on words such as ‘cyclical’ rather than ‘lineal’ for example. Participants also agreed that there also tends to be too much focus on Australia and we need to adopt a **more global perspective**.

- It was noted by participants that there needs to be **greater recognition of the value of system leadership** focusing on the collective responsibility for transforming the system and the schools that are in it. The development of system leaders increases commitment to and understanding of the need for collaboration, empowerment, capacity building and continuous learning. Engaging school councils and principals in systems leadership was noted as being particularly important as a means of encouraging school leaders to look beyond their own school and to work collaboratively with other school leaders to drive system improvement. It was noted that this would be an effective means of ensuring greater accountability. There is a need to tap into the work being done on system leadership as this has not been done effectively to date.
- Participants recognised the importance of looking at **EfS as part of the larger human purpose for learning**. EfS should be the responsibility of every educator not just a select few.

5.4 Summary of outcomes

The School Education Stakeholder Forum not only helped to identify critical policy, practice and research priorities in School EfS but also produced a range of other positive outcomes which will all contribute to the advancement of EfS in the school education sector. The Forum’s outcomes, based on a shared sense of ownership in the inputs, included:

- A review of the ‘*A National Review of Environmental Education and its Contribution in Australia: School Education*’ research report recommendations to assess next steps and identify roles and responsibilities in taking these
- Input into the Australian Government’s review of the National Action Plan in Environmental Education
- Informed dialogue amongst participants advancing the EfS debate in the school education sector;
- Increased understanding of the status, barriers and needs relating to EfS in the school education sector was shared among stakeholders;
- Development of cross-sectoral networking and partnering to pursue EfS in school education; and

A further outcome of this Forum is a meeting on 1st September 2006 between Daniella Tilbury, ARIES Director and Pamela Macklin, Deputy Chief Executive Officer, Australian Council for Educational Research (ACER) in Sydney. ACER has a commitment to supporting EE programs in schools. Pamela will meet with Daniella to discuss opportunities for collaborative work in the area of leadership, which was identified by participants as a key priority.

6.0 NEXT STAGE

This report will be used to provide input into the Australian Government's review of the National Action Plan in EE. The report will be forwarded to Urbis JHD for consideration. The face-to-face engagement with stakeholders assisted ARIES to better understand research and training needs in this area. Further, it will help ensure that future ARIES research is relevant, reflects the requirements of the school education sector and represents the concerns of sector stakeholders.

7.0 APPENDIX

7.1 Priority recommendations identified during group activity two

Group One

The priority recommendation was identified as:

- Schools should be provided with incentives to develop their own **school policy and action plan for EE and sustainability**. These documents should adopt a whole-school approach and be developed in partnership with its stakeholders. Incentives could range from providing guidelines on how to develop school policy and actions plans in this area to professional development for executive staff and principals.

Group Two

The priority recommendations were identified as:

- Develop and offer **short courses for teachers and early childhood educators** in learning *for* sustainability approaches, as well as for others associated with this area including government agencies, parents and carers, teacher educators and early childhood educators;
- Provide a case to boards of studies and curriculum and examination authorities for a **stronger curriculum and syllabus focus** on EE. This should focus particularly in Key Learning Areas, core senior secondary courses and learning for sustainability approaches to EE, and also indicate **accountability mechanisms** to ensure its adoption by teachers in class; and
- Commission research that explores how States and schools can **shift the practice of EE towards more systemic approaches** to school curriculum, pedagogy, teacher education and school-community partnerships.

Group Three

The priority recommendations were identified as:

- Provide incentives and support for teachers in the Key Learning Areas of English, Maths, the Arts, Health and Physical Education as well as Science and Studies of the Society so that **cross-curricular infusion is strengthened**. Incentives could include resource materials, which identify specific learning outcomes within Key Learning Areas and have the potential to contribute to learning *for* sustainability;
- Develop a **mentoring program for teachers and managers working in EEC's** to help them explore learning *for* sustainability approaches and how it influences their work. A national network that links those working on the issue together could support the mentoring; and
- All State and Territories should be provided with incentives to develop their own **mandatory State policies for EE and sustainability in schools**. The State policies should reflect the school and curriculum objectives as well as pedagogical principles outlined in the national framework for EE in schools.