



COVER SHEET

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Study Title: Whole school approaches to sustainability: An international

review of whole-school sustainability programs **Study Authors:** Henderson, K. and Tilbury, D.

Publication Details: 2004 report prepared by the Australian Research Institute in Education for Sustainability (ARIES) for the Department of the

Environment and Heritage, Australian Government.

Reviewer: Dr Julie Davis

Affiliations: Centre for Learning Innovation, QUT

Biographic information: lecturer in early childhood curriculum – Studies of society and Environment and Health education; PhD in 'whole settings' approaches to curriculum/educational change for sustainability

Summary:

What did the research aim to do?

Education for sustainability is an emerging concept encompassing "a new vision of education that seeks to empower people of all ages to assume responsibility for creating a sustainable future" (UNESCO, 2002). With the development of a number of national whole-school initiatives, including in Australia, this report reviews, documents, and identifies lessons from some of these programs to inform future *Sustainable Schools* initiatives.

How was the study designed?

This international review captures a range of 'whole school' sustainability programs, reflecting variety in focus and methodology. It is not a comprehensive study of all programs throughout the world. The selected initiatives were:

- Enviroschools, New Zealand;
- Green School Award, Sweden;
- Green School Project, China;
- Foundation for Environmental Education Eco-schools (FEE), England, Wales and Scotland, South Africa, and Europe; and
- OECDs ENSI Eco-schools.

The research was conducted through a systematic review of a broad range of sources including: data on official and related program websites, academic journals, theses, evaluation documents, promotional material, national policies, frameworks, guidelines and curriculum materials. Additionally, there was correspondence with program coordinators and related stakeholders to further source and/or verify information, documentation and evaluations.

What were the findings?

The report collates the findings of the literature and other evidence into three key themes. These are:

1. Program Frameworks

This includes project features such as funding and management, program partnerships, professional development, internationalisation, national links and indicators, curriculum links, program focus and principles. Long-term,

national approaches were found to offer the best chance for successful implementation of *Sustainable Schools* initiatives.

2. Program support

This theme includes the three broad categories of people, resources and information. Under this theme, the review also examined program evaluation and research, where it was found that there was a limited number of evaluations and research projects conducted worldwide.

3. Achievements

Achievements are categorised under the headings: environmental leadership, student participation; resource management and school grounds; school-community partnerships; pedagogical strategies; and curriculum integration. Schools belonging to a national program were found to be more likely to demonstrate environmental leadership and models of good practice than non0participating schools.

What conclusions were drawn from the research?

These themes were then reassembled into new categories identifying the key features of, and the critical success factors in, the formation of a *Sustainable School*. Key features which characterise a *Sustainable School* are:

- Engaged school leadership that practices sustainability through democratic decision making
- Whole school participation with extensive school-community partnerships
- The school as a 'learning organisation' using participatory learning approaches for students, reflective practice for teachers, and regular professional development for all participants
- Transdisciplinary approaches to curriculum
- 'Greening' of school grounds and extensive use of 'outdoor classrooms'
- Reductions in a school's 'ecological footprint'

The critical success components in the formation of a *Sustainable School* were found to be:

- Effective multi-stakeholder partnerships
- Expertise in environmental education /education for sustainability - focusing on socio-cultural dimensions of sustainability rather than a restricted focus on 'green' agendas
- Political support through national sustainability priorities and program autonomy and flexibility
- Continuous financial support over lengthy timeframes there are no 'quick fixes'
- Program support such as facilitators and coordinators, professional exchanges and networking opportunities
- Professional development of teachers and others involved in the process

- Curriculum practices that are seen as part of core commitments and professional priorities
- Accreditation and certification processes which offer recognition and accolades for schools' efforts and achievements
- Investments in monitoring and evaluation to inform development and effectiveness of initiatives.

The report is a timely addition to the literature on *Sustainable Schools* as it provided a summary of key determinants for success at a time when active interest in *Sustainable Schools* is gaining momentum in Australia. Recognition of these success factors may prevent inappropriate school- and systems-level responses from developing.

The findings of this review appear rigorous and defensible, when considered alongside other studies into school and educational change. In drawing on a range of international examples, it covers large and smaller-scale programs, those that are multi-national and national in scope and, with the inclusion of China's Green School Project, examines programs in countries that are both materially rich as well as not so well endowed. A limitation, recognised in the report itself, is that the study was limited to the use of programs that have publicly available print materials that are also available in English.

What are the implications of the study?

As Queensland considers its own *Sustainable Schools* initiative through the newly-formed *Queensland Environmentally Sustainable Schools Initiative* (QESSI), the following issues, identified in this international review, should be considered:

- Creating Sustainable Schools means changing the culture of schools – this is a slow and erratic process
- A key first stage in whole school approaches to sustainability requires a focus on school governance – especially the active engagement of school management, and the application for distributed decision-making processes, especially the inclusion of students
- Investments must be made to support teachers to understand about sustainability and then to help them implement changes
- Show cases and case studies of local, successful schools are needed to help people get a handle on what works and what is problematic about implementing sustainability into schools
- There is a need to engage a wide range of stake holder and community support – after all, sustainability is an issue for everyone, not just educators and students
- There needs to be alignment with national (and state) government priorities – to make Sustainable Schools a priority and to provide momentum
- There needs to be a coherent program of research and evaluation built into both systems-wide and school-level Sustainable Schools processes.

Where can interested readers find out more?

The report and some of the programs reviewed in it are available online from:

Australian Research Institute in Education for Sustainability (ARIES) at Macquarie University at: http://www.aries.mq.edu.au/pdf/international_review.pdf

Eco-schools: International (Foundation for Environmental Education and European Commission)

http://www.eco-schools.org/countries/countries.htm

ENSI (Environment and School Initiatives) – Organisation for Economic cooperation and Development (OECD)

http://www.ensi.org/default.htm

New Zealand's Enviroschools:

http://www.enviroschools.org.nz/

UNESCO (2002) Education for Sustainability - From Rio to Johannesburg: Lessons Learnt from a Decade of Commitment. Paris, UNESCO Education Sector

Keywords: sustainability, education for sustainability, environmental education, Sustainable Schools, educational change, whole school change