

F O C U S



Learning to change

It's early days in the UN Decade of Education for Sustainable Development, but change is already underway to have sustainability high on the agenda across a wide range of industry, business and educational endeavours by the decade's end in 2014. **Christine Williams** reports.

A nationally agreed 'vision' for environmental education has been introduced into schools with a comprehensive blueprint document, *Educating for a Sustainable Future*, sent out to school curriculum developers and teachers across the country late last year.

It is just one part, albeit a major strand, of a concerted research project under way that is being funded principally by the Department of the Environment and

Heritage to address an inadequate body of knowledge about effective environmental education and learning for sustainability across business, industry, community, schools and tertiary education.

The Minister for the Environment and Heritage, Senator Ian Campbell, says the paper provides a consistent approach to educating students throughout their schooling about the environment and the importance of living sustainably.

'It is important that students receive science-based quality information on environmental issues,' he said.

As Chair of Education for Sustainable Development at the World Conservation Union, Daniella Tilbury is also involved nationally as Associate Professor in Sustainable Development at Macquarie University.

Professor Tilbury heads up the Australian Research Institute in Education for Sustainability (ARIES), a Macquarie University-based, federally funded project to track and encourage the success of the UN Decade of Education for Sustainable Development uptake in Australia. Professor Tilbury carries responsibility for coordinating the ARIES research, in particular the five-volume *National Review of Environmental Education and its Contribution to Sustainability in Australia*

Left: Secondary school students in Queensland participate in some hands-on learning during a water quality assessment project. Courtesy DEH

published late last year.

She says there have been teams of specialists involved in every volume of the project published, with validation provided by experts internationally and nationally.

'Practitioners, researchers, academics and established sustainability experts took more than two years to pull together the comprehensive report, the first of its kind in the world,' Professor Tilbury says.

'The National Environmental Educational Council was very much involved in framing the process.'

In order to build on the report's volumes across a range of sectors, from business and industry education to community and school education, Professor Tilbury says seminars will be organised across the country to 'present the key findings and engage in dialogue with key stakeholders.'

'The dialogue will review the priorities identified in the report and seek commitments and actions to address them.'

The volume *Frameworks for Sustainability* explains that what is needed is an 'ongoing learning process' of creating a vision, then acting and reviewing changes 'as a change process rather than a message or level that must be achieved'. It's important to move away from 'doom and gloom' and to 'change the mental models which have driven communities to unsustainable development' and 'use new learning approaches that help us explore sustainability and build skills that enable change'. The volume recommends a national *Learning for Sustainability Strategy*.

The *School Education* volume identifies gaps such as environmental education being non-mandatory and largely absent in early childhood, while teachers' education and professional development courses generally are not adequately preparing teachers to effectively use learning for sustainability approaches in the classroom. Among its recommendations is a national grant scheme for schools to develop 'whole-school' programs.

In *Community Education*, resources, including a website and interpreters, are recommended to 'highlight the processes used to engage citizens in "critical" and action-oriented interpretation aligned with learning for sustainability'.

Among the 19 recommendations for

Business and Industry Education are government policy for a 'corporate action plan', support for informal learning and enlisting educators to mentor managers.

A national strategy and action plan is also recommended in the *Further and Higher Education* volume for 'institutional

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strengthening and professional development' to develop 'shared understandings and consistent approaches' as 'a holistic process of institutional learning for change is considered best practice'.

According to Professor Tilbury, 'there's no road map to effective education for sustainability as no country has yet achieved it'.

'We need to be quick at learning – education is being increasingly valued as a process that can achieve changes.'

Delivery into classrooms

Geography teachers in particular are well placed to incorporate the thrust of the *Educating for a Sustainable Future* blueprint into their courses.

Nick Hutchinson, Chair of the

Australian Geography Teachers' Association, talks about 'embedding' the statement in a mandatory stage of the geography syllabus.¹

He acknowledges that South Australia is the state most advanced in incorporating education about sustainability into curriculum planning, but says he's generally hopeful that the trend will follow on in other states.

'Geography is perfectly placed to deliver education for sustainable futures,' he says.

'Fieldwork is an essential part of the study because it caters for a variety of teaching and learning styles. The idea, "about, in and for the environment", is clearly congruent with this emphasis on fieldwork and student-centred research,' he explains.

In one mandatory course, students undertake fieldwork that can include air quality, coastal management, land and water management, spatial inequality, urban growth and decline, and waste management.

Hutchinson is hopeful about the success of the Decade in educating the bulk of our future population while they're still young. However, he expressed concern that the rhetoric must match the reality, aware of what he described as complacency and a political climate not conducive to change for sustainable development.

'For example, the Federal Government is presenting a counter case to signing up to the Kyoto Protocol, couched through an

¹ Hutchinson N (2005) Different perspectives. *EQ Australia* (Spring 2005), www.curriculum.edu.au/eq/summer2005/contents.html.



Adults across tertiary, government and industry training programs are already experiencing Australia's early education for sustainability initiatives under the UN decade. John Archer

F O C U S

economic lens, with arguments in favour of the coal industry and tree felling,' he says.

In line with the *Educating for a Sustainable Future* vision, the Australian Sustainable Schools Initiative (AuSSI), which began in NSW and Victoria in 2002, now implements efficiencies in the management of schools' resources, such as energy, waste, water, products and materials, and the management of school grounds. Most states are now involved in the initiative, and all states and territories have also agreed to participate in a program facilitated through the National Environmental Education Network (NEEN).²

Emphasis is laid on a 'whole-school approach' with active participation of a school's leadership team from planning through to implementation. A vision of a school's future direction is to be shared with the school community and sustainability principles built into school policies.

Encouraging change in government practice

The ARIES project is also looking at sustainability in government, with a nine-month project due to complete its report in June. Departmental and agency leaders taking part reflect on their knowledge and practical experiences of how to enhance sustainability awareness, as well as work collaboratively to identify opportunities for change.

Among the recommendations and potential outcomes expected is the recognition of a need to build increased cross-departmental/agency networks to

'It's about working with partners, visioning out the future, critically examining how change for sustainability occurs...'

develop better solutions for sustainability, to be followed by plans to create and maintain the networks and implement actions for change.

Empowering industry re-thinking

In an Industry Sustainability Toolkit Project completed in 2004, ARIES found that rather than a lack of tools or resources existing for industry to implement sustainability programs, what industry was lacking was knowledge of processes for people to work together in new ways of thinking on sustainability.

According to ARIES Corporate Projects Director, SallyAnn Hunting, it wasn't a 'one size fits all' solution that was necessary.

'Instead, what ARIES has needed to do in Stage 2 is to work with those companies taking part in a highly participative process for exploring new ways of looking at change,' she explains. The research project involves bi-monthly workshops and monthly one-on-one mentoring, with completion due mid-year and a report out in October.

'It's a process that's not so prescriptive in achieving a result, and although the outcomes may be similar, the process of

change is quite different,' Hunting says.

Rather than a company executive thinking that they must implement a specific end result relating to a sustainable development process being adopted, the focus changes to a more systemic process of thinking about the process of change itself, even though the outcome might be the same. Or learning *for* sustainability rather than *about* sustainability.

'It's about working with partners, visioning out the future, critically examining how change for sustainability occurs and thinking holistically about the office or work environment and the external impact the organisation has,' Hunting says.

'Key themes are: empowering and participation of staff; thinking holistically; reflecting critically on your own and others' inputs; working together to form a solution; and trying to imagine the organisation's place in creating a better, more sustainable future.'

BHP Billiton is one of 11 organisations taking an active part in the ARIES Industry Sustainability Project.

Manager, Sustainability Development, Jacinta Spottiswood, says she's found the process most impressive as she now has a much better understanding of the breadth of the sustainable development issue.

'It's often about bringing your employees along with you; or moving from training and telling to engaging,' she says.

Spottiswood says she's learned there are many ways to look at issues. 'It's a collective process and strong on forcing you to reflect every step of the way, which is alien to most business practice.'



Alexandra Bay Primary in North Queensland is one of hundreds of campuses now participating in the national Sustainable Schools initiative. Courtesy DEH



With no precursor to go by, group discussion and workshoping concepts are important to understanding the new tenets of sustainable practice. ARIES research identified that industry generally lacked knowledge of processes in which people can work together in new ways of thinking on sustainability. Graduate School of the Environment, Macquarie University

Young students of Wonga Beach Primary watch as a new wetland learning centre is constructed near their school. Courtesy DEH

According to Spottiswood, participants have found common issues – such as how to bring sustainability thinking to supply chain issues – despite having come together from very different industry sectors.

‘Another issue was how to engage on sustainability through the development of positive performance indicators, where most companies look at quantitative rather than qualitative factors.’

Educating business decision-makers

Another vital ARIES research project has been ‘Education about and for Sustainability in Australian Business Schools’. The research summary of findings in 2004 found business schools showed little evidence that business and industry were communicating a need for graduates that could ‘understand and operationalise sustainability’, or that they were providing input on associated curriculum improvements.³

Among the aims for Stage 2 of the project are:

- Identifying and building relationships with champions in the corporate sector to provide mentoring, work placements and a critical link between the sustainability needs of business and curriculum offerings.
- Raising student demand and facility support for sustainability courses.
- Encouraging the integration of international experience to promote change/research.

The signs are growing that the corporate world is at last picking up on the language of sustainability, and it is hoped that practical actions follow.

The latest survey of the top 500 Australian companies released at the end of March in a report, *The State of Sustainability Reporting in Australia 2005*, shows about 25 per cent of these companies engaged in sustainability or non-financial reporting. Yet, of the top Standard & Poor’s/ASX 300 index, there had been just a slight increase (about 3 per cent) in the number reporting over the previous year, to roughly 14 per cent of companies prepared to look at the triple bottom line.⁴

The rate of reporting was highest among manufacturers and mining companies, and benefits cited included the ability to attract and retain employees, brand dominance, innovation, new business opportunities, enhanced reputation and increased market share.

Meanwhile, UNESCO’s International Implementation Scheme⁵ for the Decade of Education for Sustainable Development, drafted two years ago, reiterated that unsustainable patterns of production and consumption, especially in developed countries, is threatening the fragility of the natural environment and intensifying poverty elsewhere.

‘It is the emphasis on the economic side of development that has led to growing

threats to the earth’s resource base,’ the Scheme’s draft report stated.

The adage that actions speak louder than words, then, will be the ultimate test at the end of the decade when it is hoped that business will generally judge itself and others according to the triple bottom line – economic, social and environmental reporting – in being both profitable and green.

Efforts on several fronts – most importantly in the ARIES research and the schools’ vision, *Educating for a Sustainable Future* – are expected to result in radical changes in thinking.

More information:

A National Review of Environmental Education and its Contribution to Sustainability, Executive Summary (2005). Department of the Environment and Heritage & ARIES. www.aries.mq.edu.au

Educating for a Sustainable Future: A National Environmental Education Statement for Australian Schools (2005). Australian Government Department of the Environment and Heritage. www.deh.gov.au/education/publications/sustainable-future.html

Australian Sustainable Schools Initiative: www.deh.gov.au/education/sustainable-schools/index.html

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³ www.aries.mq.edu.au/project.htm

⁴ www.deh.gov.au/minister/env/2006/mr24mar06.html

⁵ DESD Draft International Implementation Scheme (IIS), October 2004.