



ESD-Net Training Workshop

Thailand, 21 - 24 August 2007

Whole School

Approach to ESD

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ESD APPROACHES – Progress Continuum

(Stephen Sterling – Sustainable Education)

Education <u>about</u> ESD - Accommodating

Emphasis on content, information, knowledge Easily integrated into curricula and existing paradigms May not change values and behaviours

Education <u>for</u> ESD - Adaptive - Learning for change Includes knowledge, values and skills Reform curricula but within existing paradigms Values contradictions between theory & practise

Education <u>as</u> ESD - Transformative – Learning <u>AS</u> change Schools Role Model sustainable practices, values & behaviours Provide transformative, holistic learning experiences Participative, collaborative, shared leadership/decision making

Whole school approach to ESD

ESD Values, Principles & Practices reflected in every aspect of the school's activities:

- the mission/vision, purpose and shared values
- all school policies and guidelines
- behaviour of students, teachers, staff, parents
- curricula & learning materials in all subjects
- teaching/learning process, methodology, pedagogy
- the whole school ethos, culture and environment
- community partnerships and participation

Why do we need to know about a whole school approach to ESD?

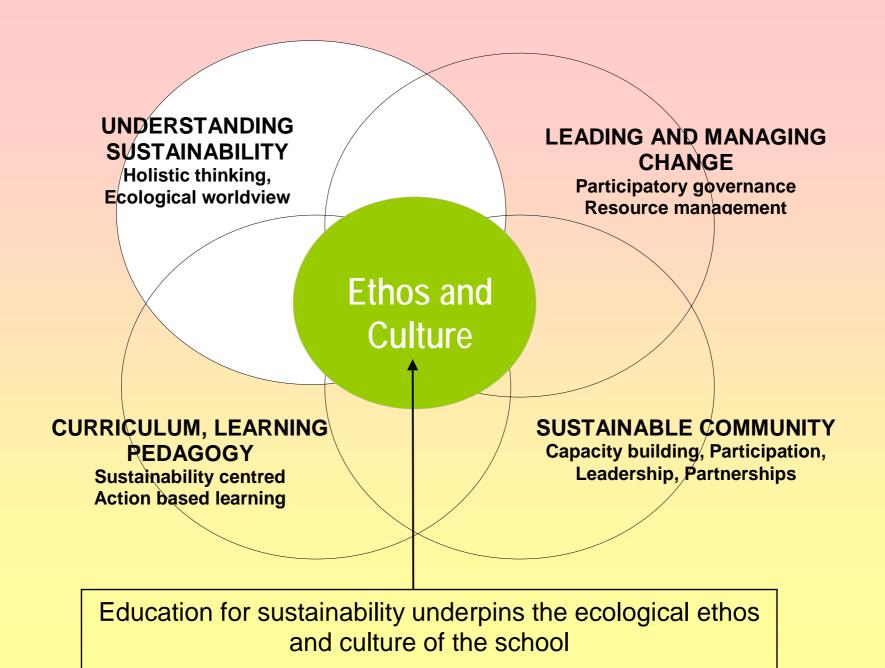
To prepare teacher trainees with the knowledge & skills to work towards a whole school approach to ESD in their schools

To mirror the whole school approach in a whole TEI approach to ESD in your Faculty:

In both formal and non-formal/hidden curriculum

Features of a whole school approach to ESD

- School leadership uses democratic & participatory whole-school decision-making processes & includes ESD in school planning
- Whole-school participation in action & improvement plans
- Reciprocal community, family and stakeholder partnerships
- Participatory learning approaches to develop critical thinking skills, intercultural understanding, participation & citizenship
- Integration of ESD across all curriculum subjects
- Learning occurs both within & outside school context
- Key concepts & values reflected in hidden, non-formal curriculum
- Professional development for teachers, management & partners
- Greening & multiculturing the school environment
- Reducing the school's ecological footprint, use of resources
- Monitoring, reflection & evaluation inform future actions
- The school becomes a 'learning organisation'
- Reflective practice & action research among teachers



SA Sustainable Schools Model & Rubrics

Starting — Challenging — Committing — Transforming School Community Ethos & Culture for sustainable lifestyles Vision and Values – develop & implement shared vision & values Interconnectedness – of social, economic, environmental factors Whole-school approach – community commit to sustainability Understanding Sustainability – by whole school community Learning, inquiry & change for sustainability

Learning, Curriculum & Pedagogy for sustainable lifestyles

Sustainable Community connections, capacity building, and partnerships for sustainable lifestyles

Leading & Managing Change – shared leadership, planning, & governance

Whole School Approach - Guiding Principles

- Develop a whole school culture committed to ESD
- Knowledge, values, skills, understanding, integrated in curriculum & policies
- Involves whole school community teachers, students, staff, parents & community
- Fosters partnerships in local community
- Quality values-based teaching & learning, towards sustainable lifestyles
- Achieve measurable social, environmental, educational & economic outcomes

Infusing ESD into the School Curriculum

- One subject (eg Society & Environment) OR all subjects BY
- Writing learning outcomes & key ideas into curriculum
- Building into the learning processes/methodologies
- Establishing ESD shared values that permeate everything (ie respect, responsibility, care, equity, tolerance, valuing diversity)
- Introducing Service-Learning to the school
- Introduce school-wide sustainability projects that meet local needs, with shared responsibility among student classes, teachers
 & parents, in partnership with business & community
- Integrate in system-wide/school policies (if possible)
- Write into National Goals for Schooling & National Policy

Sample Learning Outcome Statements

Learning outcomes in Curriculum Frameworks enable consistent lesson planning, learner assessment & reporting:

Subject: Society & Environment- Primary (www.sacsa.sa.edu.au)

Key Ideas: Learners examine natural & social environments in local & global communities & analyse patterns, systems & relationships.

Learners (L) consider sustainability & care of resources & places as they explore how people's attitudes & values affect their interactions with natural features & cycles.

Learning Outcomes: (L) Explains & communicates how people interact & identify with environments. (Yr 2)

- (L) Shows & reports on understanding of interrelationships between natural & built environments, resources & systems. (Yr 4)
- (L) Identifies & describes significant resources, explains the threats which endanger them, & suggests strategies to combat threats. (Yr 6)

Benefits for Schools

- Integrate in subjects
 eg conducting an environmental audit of the school in Mathematics & English
- Reduced consumption of resources & improved management of the school grounds
- Financial savings for new equipment/resources
- Teachers and students working on real-life problems and outcomes
- Professional development opportunities for the whole school staff
- The school becomes a model for sustainability within the local community

Implications for Teacher Education

- Awareness & knowledge of key ESD issues local & global
- Systems thinking, critical & analytical thinking skills
- Ability to identify, clarify, develop and live the values
- Understand the processes of human development,
 values formation and the process of change/transformation
- Skills in appropriate teaching/learning processes and methodologies to integrate ESD content & values in school curricula, classroom practice & across whole school
- Develop communication, values clarification & consensus skills with students, parents & the school community
- Awareness of appropriate ESD materials and resources & ability to develop own ESD resources

SOURCES

Some information in this presentation was adapted from: www.aries.mq.edu.au

Henderson, K and Tilbury, D. (2004)

Whole school approaches to Sustainability: An international review of whole-school sustainability programs

Report Prepared by the Australian Research Institute in Education for Sustainability (ARIES) for the Australian Government Department of the Environment and Heritage.

CASE STUDY - Global Communities for Sustainability Project

A joint initiative linking 20 school communities in Australia and Gujarat India in communication and exchange to explore sustainability issues that have local & international dimensions, by a guided process.

Local collaborative school-led teams comprise a teacher, students & representatives from the local council & a community organisation.

The project facilitates sharing and learning of:

- Sustainability issues, actions and experiences
- Collaboration and communication
- Community building and community learning
- Ownership of problems and solutions
- Adaptation of action to diverse socio-cultural contexts

http://www.ceeaustralia.org/gcs/about.asp

CASE STUDIES - Whole School Approach

• China's *Green School Project* (1996) - MOE initiative funded by the State EPA. Run by the Centre for Environmental Education & Communications (CEEC)

The program's key focus areas include:

- Whole-school environmental management & protection
- EE curriculum
- Professional development
- Greening of school grounds
- Green School awards at municipal, provincial, national levels (15,000 schools have received awards so far)

CASE STUDIES - Whole School Approach

New Zealand's Enviro schools (2002)

Began with 3 pilot schools, then expanded.

Regional Coordinators support 2 options for schools:

- 1. a three year facilitated program, and/or
- 2. an award scheme for schools

Whole-school approaches to sustainability based on themes of:

- organisational principles
- operational practices
- physical surroundings
- a living curriculum

CASE STUDIES - Whole School Approach

Australian Sustainable Schools – Dept Environment & Heritage

- Sustainable Schools integrate sustainability education into a holistic program with measurable environmental, economic, educational & social outcomes
- Improvement in a school's management of resources & grounds (including energy, waste, water, biodiversity, landscape design, products & materials) & integrates into the existing curriculum & daily running of the school
- Action-based involving whole school community in the sustainable management of the school
- Sustainable Schools link to & complement existing environmental education programs such as *Energy Smart Schools*, *WasteWise*, *Waterwatch*, *Waterwise*, *Landcare*

www.deh.gov.au/education/sustainable-schools/index.html

SPECIFIC SCHOOL CASE STUDY

South Australia – Aldgate Primary School

- Commitment to environmental care & action
- Values & Futures Education focus on being knowing & doing
- In the process of moving from EE to ESD
- Learning together about more sustainable lifestyles through simple, everyday changes that make a real difference
- The 4 strands are: air/energy, water, resource use/waste management, and biodiversity
- Students are partners in decision making, designing their learning activities, deciding school directions & priorities, & participating actively in the ESD focus
- Develop positive, genuine relationships among children, staff & families, supporting each other
- Students actively work in a wide range of learning activities that involve staff, peers, parents, & the community.

www.aldgateps.sa.edu.au/

SPECIFIC SCHOOL CASE STUDY

Antonio Park Primary School

Integrated sustainability into all levels of the curriculum covering 4 sustainability areas (ie energy, water, waste, biodiversity) over 2 years.

- An animal program with chickens & lambs
- A wetland & vegetable garden area
- A 40,000 litre rainwater tank that also serves the toilet system
- A nature trail through remnant bushland
- Possum and bird breeding boxes.
- Environmental activity days teachers work in groups with students of all levels.

SPECIFIC SCHOOL CASE STUDY

Jervois Primary School

- Began by developing shared values & vision statement with school community
- Teachers shared responsibility for different areas (ie air, water, energy, recycling, biodiversity)
- Mapped & integrated sustainability across the curriculum
- Focussed on teacher and community development
- Encouraged children to undertake homework projects at home so parents learn with them

Next steps:

- Eco-mapping school's ecological footprint
- Understanding interconnectedness of all ESD perspectives





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SESSION 5

Group Discussion Exercise

Develop practical strategies for change towards delivery of ESD in your context.

Anticipate potential problems and barriers to change in your context and develop practical approaches for overcoming these.

What support would you need to implement change successfully in your context?

What partnerships would support the changes?