

Sustainability Action Process



NSW Department of Education & Training

NSW Public Schools - Leading the Way - www.det.nsw.edu.au

Mark Caddey
Environmental Education Unit
Curriculum K-12 Directorate



Framework development

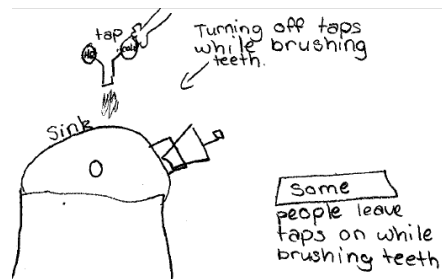
Research inputs

Education for Sustainability framework structure

Sustainability Action Process

5 steps

- Schools WRAPP (Waste Education)
- Climate Clever Energy Savers
- Sustainability Curriculum Framework



Illustrations from Stage 1

Draw a picture of when something has been wasted and another of when something has not been wasted

NSW Department of Education & Training

NSW Public Schools - Leading the Way - www.det.nsw.edu.au

Mark Caddey
Environmental Education Unit
Curriculum K-12 Directorate



Framework development

There are a range of accepted sequences / processes that guide students through investigation that leads to a deeper understanding.

Science
Geography
Technology and Design

Education for Sustainability?



If you put the paper in the recycling bin it goes to a factory and they use it to make more paper

NSW Department of Education & Training

NSW Public Schools - Leading the Way www.det.nsw.edu.au

Mark Caddley
Environmental Education Unit
Curriculum K-12 Directorate



Framework development

- What sustainability concepts, skills and values do we teach and when?
- What existing frameworks exist?

Sustainability Expert inputs

- What are the main threats to sustainability?
- What are the general areas of solution?
- What do our school graduates need to know, be able and inclined to do to be part of the solution?

Sydney Environmental Education Conference
Cockatoo Island October 2007

Framework development

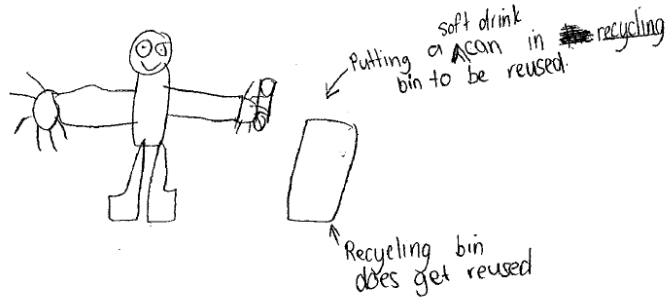
Two Sustainability Expert Forums

Review of current practice , Assoc. Prof. Keith Skamp Southern Cross University

Student Voice Project, Hon Prof. Susan Groundwater-Smith Sydney University

Syllabus mapping

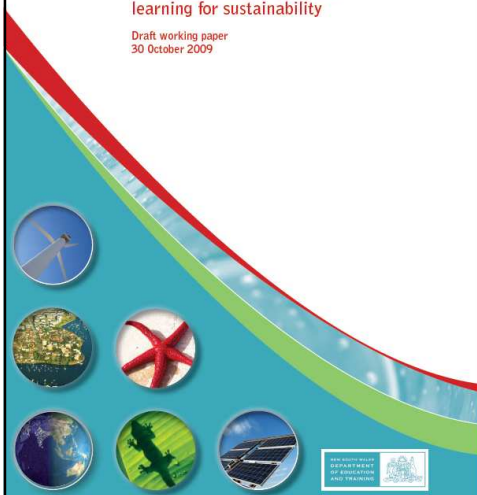
Analysis of all materials and development of Earth Citizenship



Earth citizenship

A conceptual framework for learning for sustainability

Draft working paper
30 October 2009



Framework development

Wellbeing

Citizenship

Global Citizen, Change Agent & Biosphere Custodian

Repertoires of Practice

World viewing & valuing, systems Seeking & testing, futures thinking & designing

Knowledge and Understanding

Social systems & technologies, ecological systems & processes

Learning for Sustainability: components of Earth Citizenship

Circle 1 Wellbeing

What do I need as
a foundation ...

Circle 2 Citizenship

What kind of citizen
should I be ...

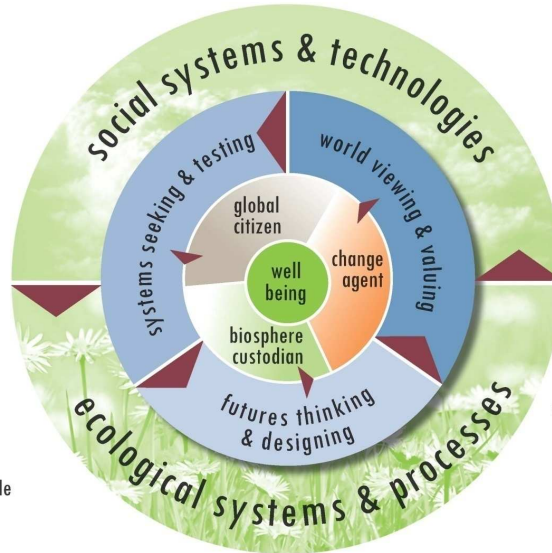
Circle 3 Practice

What do I need to
be able to do ...

Circle 4 Knowledge

What do I need to
know ...

if I am to contribute
to creating a sustainable
society.



Further analysis of the Earth Citizenship

Sustainability Action Process developed

- Engaging students in environmental improvement of sustainability action
- Explicit reflection on learning and syllabus and cross-curriculum linkages
- Articulate a flexible/adaptable process
- Guided as well as student centred
- Individual to group
- Simple and complex sustainability issues



Sustainability Action Process

Making a case for change - exploring a sustainability issue, assessing the current situation & stating the case for change

Defining the scope for action - exploring options for making a change, available resources, constraints, seeking consensus

Developing a proposal - preparing, modifying, communicating plans ready for implementation

Implementing the proposal - turning the plan into action

Evaluating and reflecting – assessing the degree of success and efficiency of processes, identifying possible future directions and the learning resulting from the action

NSW Department of Education & Training

NSW Public Schools - Leading the Way - www.det.nsw.edu.au

Mark Caddey
Environmental Education Unit
Curriculum K-12 Directorate

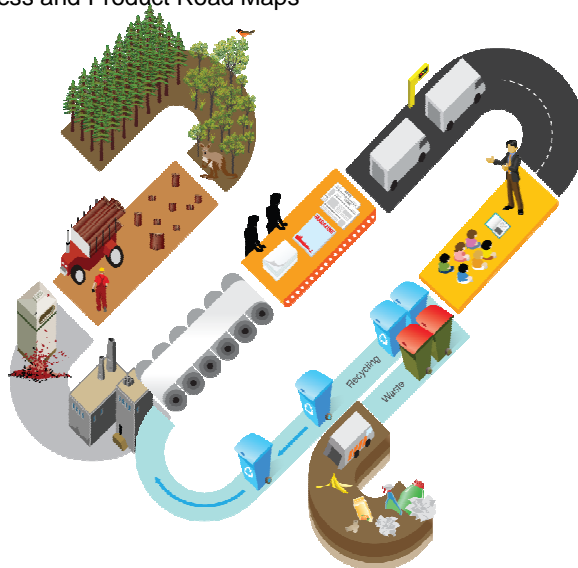


Sustainability Action Process

Schools WRAPP (Waste Recycling and Purchasing Policy)
Sustainability Action Process and Product Road Maps

Stage 2 - Paper

- Analysis of paper production
- Paper recycling
- Identify options to increase recycling
- Implementing ideas
- Reviewing success



Sustainability Action Process

Schools WRAPP (Waste Recycling and Purchasing Policy)

Stage 3 clothing

Questioning scaffold

Making the case for change

Exploring clothing production processes

What fibres are our clothes made from?

Where is most of our clothing made?

What raw materials are used in clothing production?

Can clothing be made from recovered materials, eg, PET?

How is an item of clothing made?

What are the steps in the production process?

Are there sustainability considerations in clothing production?

NSW Department of Education & Training

NSW Public Schools - Leading the Way www.det.nsw.edu.au

Mark Caddley
Environmental Education Unit
Curriculum K-12 Directorate



Sustainability Action Process

1 MAKING THE CASE FOR CHANGE

- Exploring energy
- Assessing the current situation through a school energy audit
- Investigating concepts and ideas relating to energy and its sustainable use
- Stating the case for what needs to change in the school and why

2 DEFINING THE SCOPE FOR ACTION

- Exploring options for making a change
- Identifying available resources and constraints
- Developing the statement (brief) describing an agreed direction for action

3 DEVELOPING THE PROPOSAL FOR ACTION

- Generating and selecting ideas for action
- Preparing and communicating the proposal
- Gaining agreement on the proposal

4 IMPLEMENTING THE PROPOSAL

Either

- Receive the Principal's support and CCES funding for implementing the proposal - Implement the proposal

Or

- Receive Principal support but not CCES funding - Review the proposal and consider seeking alternative funding

Or

- Proposal not supported for implementation - Review the proposal and weigh up options

5 EVALUATING AND REFLECTING

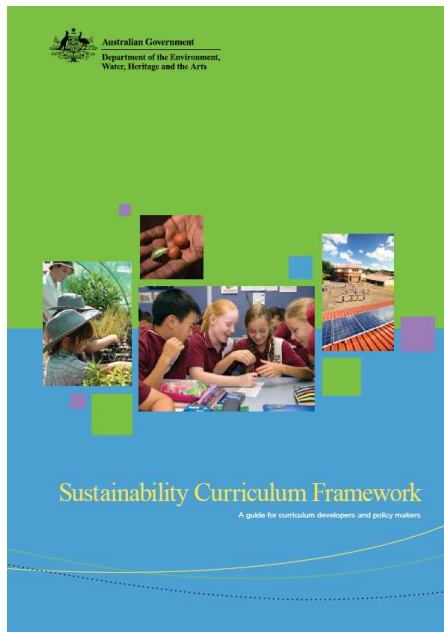
- Evaluating the sustainability action
- Reflecting on the processes used and our learning

Climate
Clever
Energy Savers



Curriculum K-12 Directorate

www.curriculum.nsw.edu.au/energy_savers/energy_savers.html



Sustainability Curriculum Framework

Sequenced K-10 learning for sustainability
(K-2, 3-6, 7-10)

Sustainability Action Process
Knowledge of systems
Repertoires of practice

www.environment.gov.au

Referred to Australian Curriculum writers
for Sustainability cross-curriculum
dimension