



Professional Development for Sustainability Educators

“Developing a Community of Experienced Sustainability Facilitators”

Thematic Module 7: Waste and Resource Recovery

Workbook for Participants

Workshop developed and delivered by

Pat Armstrong (Pat Armstrong Consulting) and Eric Bottomley (CERES)

“Education for Sustainable Development implies a shift ... to the recognition that we are all learners as well as teachers. Environmentally sustainable development must happen in villages and cities, schools and universities, corporate offices and assembly lines, and in the offices of ministers and civil servants.”

Ahmedabad Declaration on Education for Sustainable Development, 2005

Acknowledgements

This workbook was written by Pat Armstrong and Eric Bottomley (CERES Community Environment Park), with assistance from Michelle Sanahon (CERES).

Thanks to the following writers of the other modules in *The Guide Beside* series who kindly gave their permission to quote extracts from their modules:

Brian Sharpley
Colin Hocking
Gilbert Rochecouste
Linda Condon

Contents

BACKGROUND.....	3
PURPOSE OF THE PROJECT	3
TARGET AUDIENCE	3
LEARNING OUTCOMES	4
OVERVIEW OF APPROACH AND CONTENT	4
OVERVIEW OF THE PROGRAM FOR A TWO DAY WORKSHOP	5
INTRODUCTION.....	6
ASSESSMENT.....	7
1 STARTING QUESTIONS.....	8
2 PRINCIPLES AND PARADIGMS.....	19
3 CHANGE MODELS	31
4 FACILITATING	47
5 SCOPING.....	57
6 STRATEGIC PLANNING	65
7 EVALUATING	73
8 IMPLEMENTING	82
9 ACHIEVING CLOSURE	87

The Guide Beside series was written by a team of experienced sustainability educators / facilitators, including the following:

Brian Sharpley
Colin Hocking
Eric Bottomley
Gilbert Rochecouste
Harry Van Morst
Linda Condon
Pat Armstrong

The Guide Beside project, funded through a grant from the Victorian Department of Sustainability and Environment as part of the *Learning to Live Sustainably Initiative*, was coordinated by Colin Hocking, Steve Ray and Teresa Day from VAEE and Steve Malcolm from DSE.

Copyright of the Department of Sustainability and Environment Victoria (DSE) and the Waste Management Association of Australia (WMAA), 2006.

BACKGROUND

This module was developed, with funding from the Waste Management Association of Australia, to meet the training needs of educators who work in waste and resource recovery, as identified in two WMAA surveys of waste educators.

2005 WMAA Victorian Waste Educators survey identified the top three areas in which waste educators needed further training as:

1. Strategic planning for learning and behaviour change
2. Evaluation, continual improvement and reporting
3. Transformative education

2006 WMAA National Waste Educators survey identified the five top areas in which waste educators needed further training as:

1. Evaluation continual improvement and reporting
2. Strategic planning for learning and behaviour change
3. Community engagement
4. Technical waste management
5. Action learning (participative action research)

There is considerable overlap between the two sets of areas. This module was developed with all these areas in mind.

The module is based on the six modules of *The Guide Beside*, which is described in the Introduction on pages 6 and 7. The writers of the other six modules kindly gave permission for the writers to use extracts from their modules in this module.

PURPOSE OF THE PROJECT

The purposes of the Project were to:

1. address members' training needs as identified by the 2005 and 2006 WMAA Waste Education Surveys;
2. develop a high quality, relevant training course in waste education;
3. deliver these units in a series of workshops to waste educators, waste strategists and young professionals groups and to those working in waste management strategic planning;
4. train waste educators to be more effective facilitators of behaviour and cultural change in waste minimisation and resource recovery; and
5. pilot this training course in Victoria and then to make the course available to other WMAA waste educators groups in other states and territories

TARGET AUDIENCE

The expected target audience for this course include:

- Local government waste and resource recovery educators
- Industry waste and resource recovery educators (recycling, waste disposal)
- Waste minimisation and resource recovery managers
- Litter educators
- Regional waste education officers
- General sustainability education officers and coordinators

- Environmental educators in NGOs
- Environmental educators in state government departments and agencies
- Tertiary environmental educators

LEARNING OUTCOMES

At the end of the two workshops, participants will be able to:

1. Reflect on what it means to live sustainably;
2. Reflect on their workplace strategies and approaches to waste and resource recovery education;
3. Describe the key success factors in effective teaching and learning;
4. Describe and give examples of the principles of teaching and learning;
5. Distinguish between transformative education and transmissive education;
6. Describe some helpful paradigms for effective learning and change;
7. Describe some useful models, theories, research results and case studies in behaviour change;
8. Identify common motivators of working with groups and common barriers that prevent change occurring;
9. Describe effective methods of facilitating and mentoring and to apply these methods to their workplace;
10. Describe the important factors to consider when getting started on projects;
11. Describe why it is important to think and plan strategically;
12. Distinguish between the different elements of a strategic plan: vision, mission, , objectives, strategies, indicators, targets risks and how to minimise risks
13. Describe how to build relationships and capacity within the group; and
14. Describe how to integrate evaluation, reporting and communication into a strategic plan.

OVERVIEW OF APPROACH AND CONTENT

The module is structured around nine sections:

1. Starting Questions
2. Paradigms & Principles
3. Change Models
4. Facilitating
5. Scoping
6. Strategic Planning
7. Evaluating
8. Implementing
9. Achieving/Closure

Each section includes:

- Reflective questions
- Useful information
- Activities for facilitation
- Resources
- References
- Attachments

OVERVIEW OF THE PROGRAM FOR A TWO DAY WORKSHOP

DAY 1

Time	Content
9 AM – 10.30 AM	Welcome Outline for the day Session 1: Starting Questions
10.30 AM – 10.45 AM	Morning tea
10.45 AM – 12.30 PM	Section 2: Paradigms & Principles
12.30 PM – 1.00 PM	Lunch
1.00 PM – 2.30 PM	Section 3: Change Models
2.30 PM – 2.45 PM	Lunch
2.45 PM – 4.00 PM	Section 4: Facilitating
4.00 PM	Close

DAY 2

Time	Content
9 AM – 10.30 AM	Welcome Section 5: Scoping
10.30 AM – 10.45 AM	Morning tea
10.45 AM – 12.30 PM	Section 6: Strategic Planning
12.30 PM – 1.00 PM	Lunch
1.00 PM – 2.30 PM	Section 7: Evaluating
2.30 PM – 2.45 PM	Lunch
2.45 PM – 4.00 PM	Sections 8: Implementing & 9: Achieving Closure
4.00 PM	Close

INTRODUCTION

What is transformative learning?

Facilitation of environmental sustainability clearly needs to move beyond telling people what it is they need to do and why, to an approach that engages with people around their circumstances, to achieve learning and change. Many people now refer to this as the 'transformative' approach, which contrasts with what was dominated in the past by a more 'transmissive' approach. A key component of effective sustainability facilitation is the process of transformative learning and the need to re-balance processes that promote learning and change, extending from 'educating', to 'enabling' and further to 'exploring'. In the waste context, this is recognising that the extensive knowledge and skills each participant in the learning process brings along should be explored and discussed in an open and non-threatening environment. Every participant has valuable contributions to make.

The transformative approach does not mean that useful information and guidance is eliminated – but it does mean it is not the only method used to facilitate change for sustainability.

Who is this Module for?

This module has been designed for facilitators working in the waste and resource recovery industry. This could include teachers, tertiary educators, environmental / sustainability educators in NGOs, industry and government. The facilitators of this module may be an external facilitator or one who has experience within the organisation in facilitating change.

What else is available?

The other resources which support Thematic Module 7: Waste and Resource Recovery include:

- *The Guide Beside* - Planning & Designing Participant-based Professional Learning
- Three Generic Modules:
 1. Frameworks and Processes
 2. Evaluation
 3. Organisation and Strategy
- Three Contextual Modules:
 4. Business and Training
 5. Connecting Schools Families and & Communities
 6. Councils, Municipal Officers and Agencies

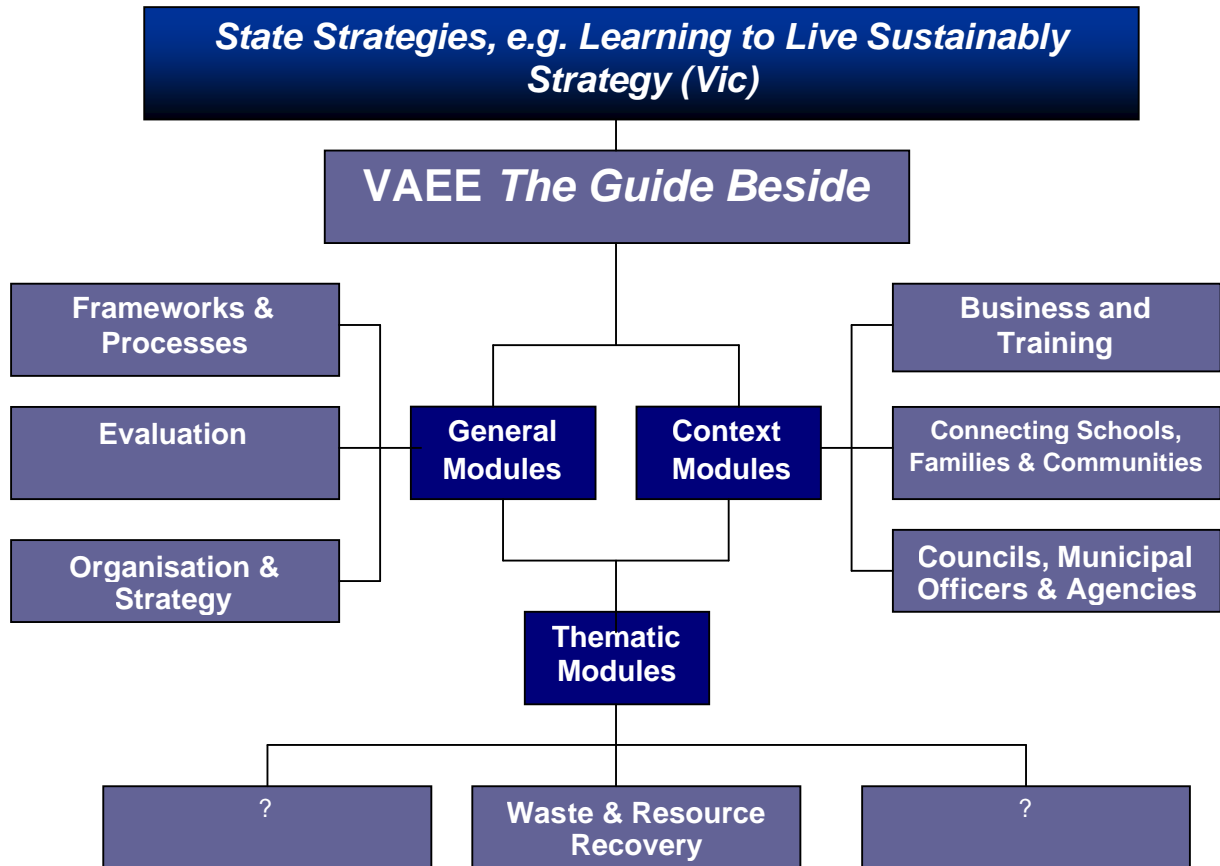


Figure 1. Relationship between the seven modules of the Guide Beside

ASSESSMENT

Name: _____ Contact no: _____

There are two parts to the assessment for this Module

1. Contribution to class activities
2. Completion of plans for work-based project/program for:
 - Strategic plan
 - Evaluation plan

Attendance at each workshop	YES	NO
Explanation for non- attendance		

1 STARTING QUESTIONS

Reflective Questions

- 1.1 What are you hoping to gain from this course? What sector(s) do you work with?
- 1.2 What is this course about?
- 1.3 What do you understand by sustainability? What do you understand by sustainable development? What does it mean to live sustainably? How does solid waste minimisation fit into sustainability?
- 1.4 What do you understand of learning (education) for sustainability? What are the roles of education in bringing about behavioural and cultural change towards sustainability? What other elements are involved?
- 1.5 Think of an example of a waste / resource recovery education project that you believe was effective. What was achieved? How do you know it was effective? Why was it effective? How was it facilitated? What was your role in this project?
- 1.6 Now think of a waste / resource recovery education project that you believed didn't work well? How do you know it didn't work? Why didn't it work? How was it facilitated? What was your role in this project?
- 1.7 How do you obtain the necessary technical information for your work in waste and resource recovery?

Activity 1 – Icebreaker

1. Icebreaker: Participants pair off and each interviews the other person to find out:
 - Their name
 - Who they work for
 - What sector they work in (e.g.: community, government, business, industry, community, schools, tertiary)
 - One change, they are particularly proud of, that they have made this year to reduce their ecological footprint
 - One quirky thing about the person e.g. I once ..., I wear ... , I always ... , When I was at school I was called ...
 - What he/she hopes to gain from this course
2. Participants then introduce their 'partner' to the group.

Activity 2 – About Sustainability

1. Each participant selects three items from the display on sustainability. 'These are the most interesting, the most striking, the most relevant...' or whatever. This initial personal choice is very important for what ensues. The next stage is for each participant to find a partner. The two explain their choices to each other and then, as a pair, repeat the exercise, with the aim of choosing three items between the two of them.
2. Each pair then meets up with another pair and the whole process is repeated again. The final stage involves simply trying to identify which three items in the whole display have received the most 'votes' from the class as a whole.

3. There are, of course, all sorts of ways in which this basic activity can be adapted. However, it is worth always keeping the basic format:
 - individual choice.
 - people talking in pairs
 - people talking in fours, etc
 - group as a whole

[Adapted from p. 78, 'Learning for Change in World Society, World Studies Project, London, 1979]

Activity 3 – Presentation on Sustainability

1. After the presentation, answer the following questions:
 - (1) What are you doing now to reduce your impact on the Earth?
 - (2) What else could you do this year?
 - (3) How did the PP presentation make you feel?
2. Use the Ecological Footprint questionnaire (Attachments) to give details of present footprint.
3. On a scale of 1-10, rate the seriousness of the environmental situation.

Activity 4 – A Manifesto for Wellbeing

1. Discuss the Australia Institute's '*A Manifesto for Wellbeing*'. How can sustainability be presented as a set of gains rather than just reductions? Would you like to develop a similar manifesto for your organisation? Would you personally sign the manifesto? If 'Yes', why? If 'no', why not?
2. Write down three words / phrases that best describe sustainability to you.

Information Box 1

“Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” Brundtland Report *Our Common Future*.

“using, conserving and enhancing the community's resources so that ecological processes, on which life depends, are maintained, and the total quality of life, now and in the future, can be increased.”

Source: Australia's National Strategy for Ecologically Sustainable Development 1992 (NSES)
<http://www.deh.gov.au/esd/index.html#what>

Activity 5 – Concept Map Linking Waste to Sustainability

1. Refer to Information Boxes 2, 3 & 4 on the following pages.
2. Work in small groups to draw concept maps to show the connections of waste and resource recovery to other aspects of sustainability / impacts on the environment.
3. Each group presents their concept maps to the whole group.

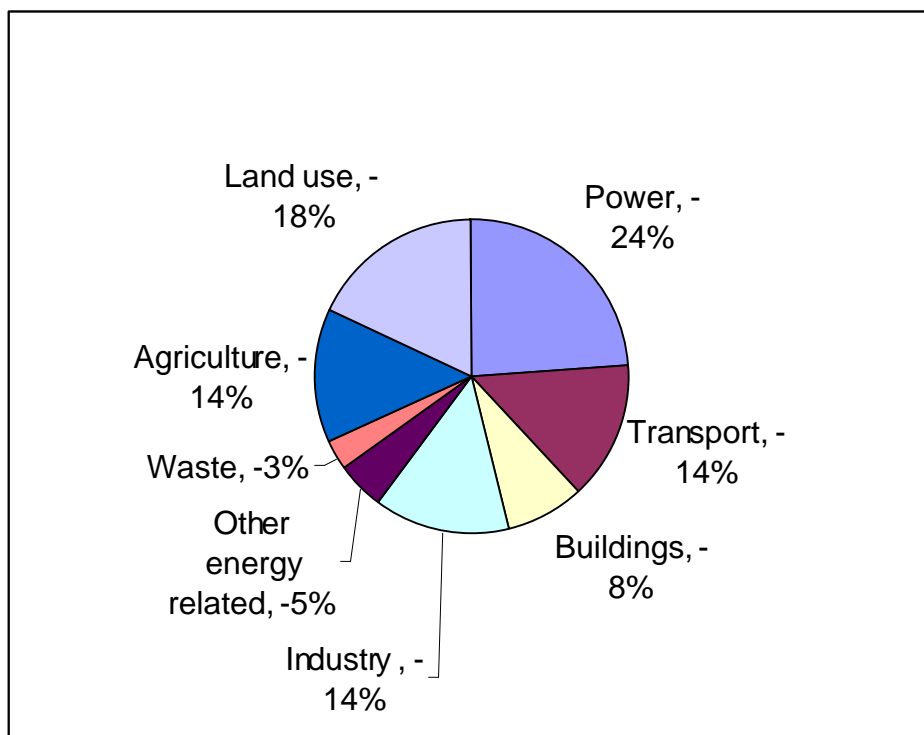
Information Box 2

“When combining the financial costs of kerbside systems with the environmental benefits (which have been estimated using conservative environmental values) it is clear that practically all current systems provide a significant net benefit to Australian communities. On average, net financial costs amount to \$26 per household per year, environmental benefits to \$68 per household per year, with an average overall benefit of around \$42 per household per year. Based on extrapolation, the national net financial cost for recyclables collection, sorting and delivery throughout Australia is estimated at \$158 million per year or, if current collection practices (double siding) are included, \$136 million. This represents the current cost over and above the base landfill option. The national net environmental benefit of kerbside recycling (over landfill) is \$424 million dollars per year. The overall benefit is therefore an estimated \$266 million per year.”

Source: Nolan-ITU Pty Ltd and Sinclair Knight Merz REF: 4046-01, January 2001 *Independent Assessment of Kerbside Recycling in Australia Volume 1*

Information Box 3

Figure 1 greenhouse gas emissions in 2000, by source



NON-ENERGY EMISSIONS: Waste, Agriculture and Landuse (35%)

ENERGY EMISSIONS: Buildings, Transport, power, Industry and other energy related (65%)

Total emissions in 2000: 42 GtCO₂e.

Energy emissions are mostly CO₂ (some non-CO₂ in industry and other energy related).
Non-energy emissions are CO₂ (land use) and non-CO₂ (agriculture and waste).

Redrawn from Stern Review - Source: Prepared by Stern Review, from data drawn from World Resources Institute Climate Analysis Indicators Tool (CAIT) on-line database version 3.0.

Information Box 4**Table 1. Summary of nett savings from recycling per typical Melbourne household per week**

Impact	Unit	Totals	Equivalence
greenhouse	kg CO ₂ eq.	3.2	This equates to 0.25% of a household's total allocation of greenhouse gases from all sources.
Embodied energy	MJ	32.2	9 kWh or enough energy to run a 40 Watt light bulb for 72 hours. (accounting for electricity losses)
Smog precursors	G C ₂ H ₄ eq.	1.3	Equivalent to the emission from 4.5 kms of travel in an average post 1985 passenger car
Water use	litres	92.5	The equivalent of five sink loads of dishes
Solid waste	kg	3.6	Depending on the material, between 60% to 90% of the product placed for recycling will remain out of solid waste streams

Source: Grant, T., James, K.L., Lundi, S., Sonneveld, 2001, Life Cycle Analysis of Paper and Packaging Waste Management Scenarios in Victoria, page vi

Table 2. Embodied energy savings per kilogram in the production of recycled product as compared to an equivalent virgin product

Product	Recycled (MJ)	Virgin (MJ)	Savings
Newsprint	33.7	50.9	34%
Corrugated board -- unbleached	27.7	35.7	22%
Steel slab	7.32	34.7	79%
Aluminium ingot	14.1	2.06	93%
HDPE	15.5	75.2	79%
PET	19.7	81.2	76%
PVC	7.93	40.3	80%
Glass	9.74	22.5	57%

Source: Grant, T., James, K.L., Lundi, S., Sonneveld, 2001, Life Cycle Analysis of Paper and Packaging Waste Management Scenarios in Victoria, page xi

Activity 6 – Learning for Sustainability

1. What do you understand about learning for sustainability?

Information Box 5

In the following quotation, Henderson and Tilbury (2004) distinguish Education for Sustainability (EfS) from the more traditional approaches of environmental education:

“Education For Sustainability differs from traditional approaches to Environmental Education in that it focuses sharply on more complex social issues, such as the links between environmental quality, human equality, human rights and peace and their underpinning politics. This requires citizens to have skills in critical enquiry and systemic thinking to explore the complexity and implications of sustainability.”

(Source: Henderson and Tilbury, 2004, p 8)

Henderson and Tilbury (2004) further consider Education for Sustainability as:

- *“Focus on the future and ability to create a sustainable future*
- *Building capacity for change and improved quality of life*
- *Less emphasis on awareness-raising and behaviour changes*
- *More emphasis on lifestyle choices*
- *Developing skills and knowledge for socially critical citizens to deal with complex issues*
- *More focus on social, structural and institutional change (more than personal change)*
- *More focus on changing mental models”*

(Source: Henderson and Tilbury, 2004, p 7)

A useful vision for ESD is:

“The vision of education for sustainable development is a world where everyone has the opportunity to benefit from quality education and learn the values, behaviour and lifestyles required for a sustainable future and for positive societal transformation.”

(Source: UNESCO, 2004, p 23)

UNESCO describe ESD in relation to lifelong learning:

- *“ESD is for everyone, at whatever stage of life they find themselves. It takes place therefore within a perspective of lifelong learning, engaging all possible spaces of learning, formal, non-formal and informal, from early childhood to adult life.”*
 - *“It is true to say that everyone is a stakeholder in education for sustainable development. All of us will feel the impact of its relative success or failure, and all of us affect the impact of ESD by our behaviour, which may be supportive or undermining.”*
- (Source: UNESCO, 2004, p 5)

Activity 7 – What works?

1. Give an example of a project that you have been involved with that was successful and some reasons for this success?

Information Box 6

“We have concluded that there are a number of common factors that appear to be crucial for the success of a waste wise program in a school. These are:

- The school principal and leadership team are committed and supportive;
- The whole school community is involved in the planning and implementation;
- Students are empowered and encouraged to take ownership of the program;
- The program is planned and implemented in a strategic way with a committee or team, audit, policy, targets, action plan and curriculum plan;
- Operational changes are integrated into the curriculum;
- There are good systems in place – these are simple, easy to use and well-maintained;
- The school community strives to achieve cultural change, while understanding that change is often a long-term process;
- There is a process of continuous improvement; and
- There is fun and enjoyment in the program, a sense of common purpose and opportunities to celebrate successes.”

(Source: Armstrong and Grant (2004) page 8.

Activity 8 – What doesn’t work?

1. Give an example of a project that was not successful and some reasons for this.
2. What do you believe are some of the key elements for success of change programs?

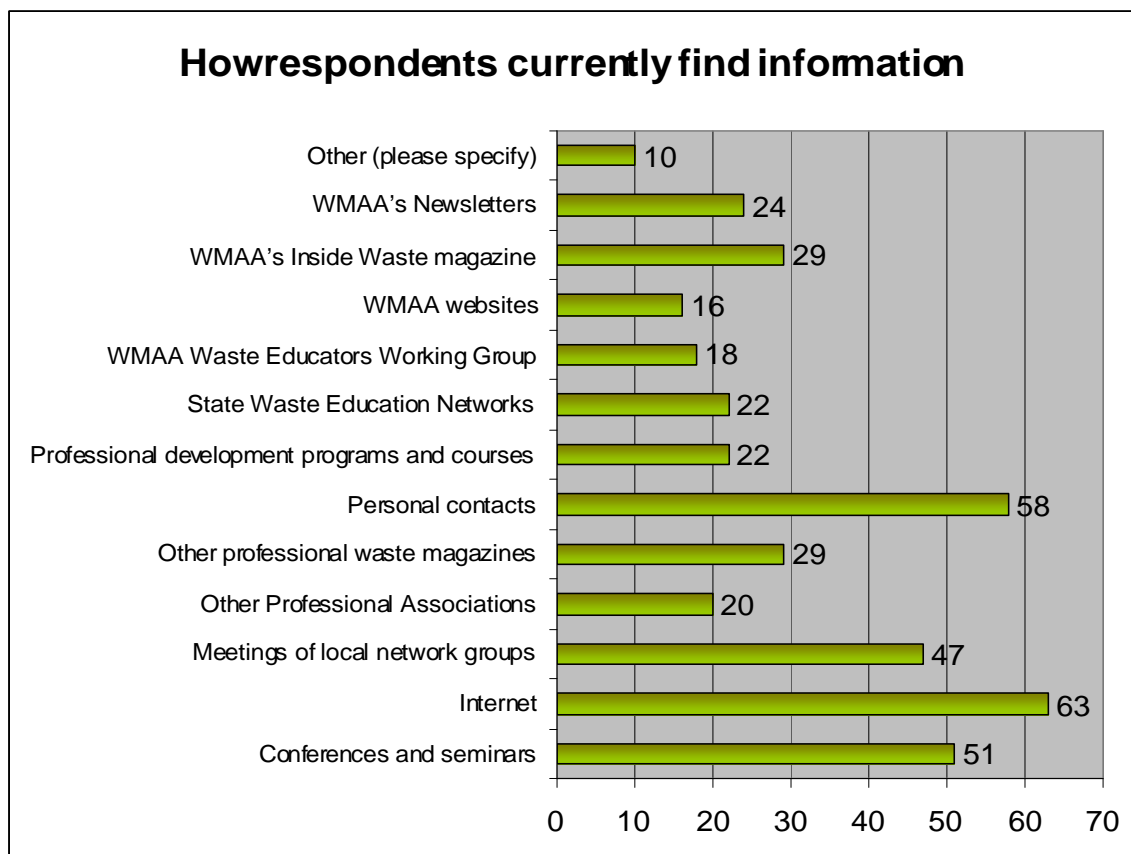
Activity 9 – Obtaining Technical Information

1. Refer to how educators currently obtain information from the 2006 WMAA Nation Waste Educator's Survey (Refer to Information Box 7). The most commonly reported method is the Internet. How does this relate to your personal experiences?
2. Refer to the list of commonly used websites from the 2006 WMAA Nation Waste Educator's Survey (Refer to Information Box 8).
3. One of the best sources of basic information about waste and resource recovery is the Waste and Recycling Information Sheets on the Sustainability Victoria website:

<http://www.sustainability.vic.gov.au/www/html/2039-waste-and-recycling-information-sheets.asp>.

Information Box 7

Results of 2006 WMAA Nation Waste Educator's Survey of how educators obtain information.



Information Box 8

Respondents were asked to list the top five websites they would recommend for use on a regular basis to other waste and resource recovery educators. Commonly ranked websites have been listed.

Sustainability Victoria which includes: EcoRecycle, Eco-buy, Wastewise, Zero Waste	www.sustainability.vic.gov.au www.ecorecycle.sustainability.vic.gov.au http://www.ecorecycle.sustainability.vic.gov.au/www/html/416-eco-buy.asp
Zero Waste SA, Zero Waste WA (Live the vision) Zero Waste (EcoRecycle)	www.zerowaste.sa.gov.au http://zerowastewa.com.au http://www.ecorecycle.sustainability.vic.gov.au/www/html/253-towards-zero-waste.asp
Wastewise	www.wastewise.wa.gov.au
The Gould League/Group	www.gould.edu.au
Planet ark includes Recycling near you	www.planetark.com http://www.recyclingnearyou.com.au/
NSW DEC	http://www.environment.nsw.gov.au/index.htm http://www.environment.nsw.gov.au/education/recyclingandwaste.htm
Victorian Litter Action Alliance Queensland Litter Alliance	http://www.litter.vic.gov.au/www/html/20-home-page.asp http://www.qldlitter.com/
NSW Waste Educators Network NSW North East Waste Forum	http://www.wmaa.asn.au/nsw/eduA.html www.northeastwasteforum.org.au
VISY	www.visy.com.au
Wastenet	http://www.wastenet.net.au/
Social Change Media	http://media.socialchange.net.au/
The Climate Group	http://www.theclimategroup.org/
Midwaste	http://www.midwaste.org/
Enabling change	http://www.enabling-change.com.au/7_doors_page.html
Victorian Waste Management Association Northern Regional Waste Management Group.	http://www.vwma.com.au/ http://www.nrwmg.vic.gov.au/
Ministry for the Environment NZ	http://www.mfe.govt.nz/publications/waste/
Clean up Australia	http://www.cleanup.com.au
Can Smart	www.cansmart.org
Be educated	http://www.beeducated.com.au/
Department of the Environment and Heritage (DEH)	http://www.deh.gov.au/

Healthy Waterways (QLD)	http://www.healthywaterways.org/
QLD Sustainability	http://www.epa.qld.gov.au/environmental_management/sustainability/
Table of waste resources	http://files.thereafter.com.au/swsa/WasteEdResources.pdf
Your Home	http://www.greenhouse.gov.au/yourhome/
Source: 2006 WMAA National Waste Educator's Survey	

Resources

- Ecological Footprint, CERES Education 2001.
- PowerPoint presentation, based on *The Weather Makers* by Tim Flannery, CERES 10/05.
- Ecological Footprint Questionnaire, CERES 2004.
- Madden, C. 1991, *When Humans Roamed the Earth*, Earthscan Publications, London.

References

- Armstrong, P. and Grant, J. 2004, 'How research helped us to move from awareness to action and then to systems development', *Australian Journal of Environmental Education*, vol. 20(1), pp. 13-25.
- Fien, J. 2005, 'Education for sustainability' in R Gilbert, ed. 2005. *Studies of Society and Environment*, Macmillan.
- Flannery, T. 2005, *The weather makers. The history and future impact of climate change*. Text Publishing, Melbourne.
- Grant, T., James, K.L., Lundi, S., Sonneveld, 2001, *Life Cycle Analysis of Paper and Packaging Waste Management Scenarios in Victoria*.
- Gore, A. 2006, *An inconvenient truth, The planetary emergency of global warming and what we can do about it*. Bloomsbury, Great Britain.
- Gough, A. 2005a, 'Quality outcomes for Sustainable Schools', *EQ*, Curriculum Corporation, Carlton. Summer 2005.
- Gough, A. 2005b, 'Sustainable Schools: Renovating Educational Processes', *Applied Environmental Education and Communication*, vol. 4, pp. 339–351.
- Gough, A. and Sharpley, B. 2005, 'Educating for a Sustainable Future, A National Environmental Education Statement for Australian Schools.' Curriculum Corporation, Carlton. <http://www.deh.gov.au/education/publications/pubs/sustainable-future.pdf>. (Accessed 27 January 2006)
- Henderson, K. and Tilbury, D. 2004, *Whole-School Approaches to Sustainability: An International Review of Sustainable School Program*, Report Prepared by the Australian Research Institute in Education for Sustainability (AIRIES) for The Department of the Environment and Heritage, Australian Government.
- Learning for Change in World Society 1997, World Studies Project, London.
- Nolan-ITU Pty Ltd and Sinclair Knight Merz, January 2001 *Independent Assessment of Kerbside Recycling in Australia Volume 1*, REF: 4046-01.

- Sharpley, B. 2000, *A waste wise survey of families at Rutherglen Primary School, Paper Prepared for EcoRecycle Victoria*, EcoRecycle Victoria. Unpublished consultant's reports, available from the Gould League, email: gould@gould.edu.au.
- Sharpley, B. 2005, *Evaluation of the Waste Wise Schools program: A report summarising the findings of five research projects investigating different aspects of the Waste Wise Schools Program, December 2004 EcoRecycle Victoria*. Unpublished consultant's report, available from the Gould League, email: gould@gould.edu.au.
- The Wellbeing Manifesto, Australia Institute* 2005, <http://www.wellbeingmanifesto.net/index.html> (Accessed 15 December 2005)
- Tilbury, D., and Cooke, K. 2005, *A National Review of Environmental Education and its Contribution to Sustainability in Australia: Frameworks for Sustainability, Canberra: Australian Government Department of the Environment and Heritage and the Australian Research Institute in Education for Sustainability (ARIES)*. http://www.aries.mq.edu.au/pdf/Volume1_Revised05.pdf. (Accessed 15 December 2005)
- Tilbury, D., Coleman, V. and Garlick, D. 2005, *A National Review of Environmental Education and its Contribution to Sustainability in Australia: School Education, Canberra: Australian Government Department of the Environment and Heritage and the Australian Research Institute in Education for Sustainability (ARIES)*. http://www.aries.mq.edu.au/pdf/Volume2_Revised05.pdf. (Accessed 15 December 2005)
- Tilbury, D., Coleman, V., Jones, A. and MacMaster, K. 2005, *A National Review of Environmental Education and its Contributions to Sustainability in Australia: Community Education', Canberra: Australian Government Department of the Environment and Heritage and the Australian Research Institute in Education for Sustainability (ARIES)*. http://www.aries.mq.edu.au/pdf/Volume3_Revised05.pdf. (Accessed 15 December 2005)
- UNESCO 2004, *United Nations Decade all Education for Sustainable Development 2004-2014*, Draft International Implementation Scheme. October 2004.
- Victorian Government 2006, *Learning to Live Sustainably*, DSE (Draft).
- Victorian Government 2005, *Our Environment Our Future: Victoria's Environment Sustainability Framework*, DSE (Draft).

Suggested Attachments

- CERES – Ecological Footprints calculator
- A Manifesto for Wellbeing
- Robinson and Glanznig, 2003, pp 34-37 – Why People Do and Don't Act!
- Learning to Live Sustainably, 2006 pp 15-18 – Key Success Factors

2 PRINCIPLES AND PARADIGMS

Reflective Questions

- 1.1 *What are some key principles of sustainability / sustainable development that have implications for your work in waste / resource recovery education?*
- 1.2 *What are some key principles of learning and teaching (children and adults) that have implications for your work in waste / resource recovery education?*
- 1.3 *What are some helpful paradigms for effective learning and change for sustainability / sustainable development that have implications for your work in waste / resource recovery education? What do you understand by 'learning-based behaviour change'?*

Activity 1 – Principles

1. What are some examples of principles?
2. What is a workable definition of a principle?
3. Refer to the list of principles of the National Strategy for Ecologically Sustainable Development (Information Box 9)
4. Rank the principles in order of their significance to your work in waste and resource recovery.
5. Look at the cartoons from www.goma.demon.co.uk. Explain which principle of sustainability may have guided the cartoonist for each cartoon and give reasons for your choice.
6. Work in groups taking one principle per group. Illustrate the principle (poster, song, story, play). The other participants are to guess which principle is being illustrated.
7. Compare these principles with those of the Decade of Education for Sustainable Development (DESD) (Information Box 9).

Information Box 9

National Strategy for Ecologically Sustainable Development

“The Guiding Principles are:

- decision making processes should effectively integrate both long and short-term economic, environmental, social and equity considerations
- where there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation
- the global dimension of environmental impacts of actions and policies should be recognised and considered
- the need to develop a strong, growing and diversified economy which can enhance the capacity for environmental protection should be recognised
- the need to maintain and enhance international competitiveness in an environmentally sound manner should be recognised
- cost effective and flexible policy instruments should be adopted, such as improved valuation, pricing and incentive mechanisms
- decisions and actions should provide for broad community involvement on issues which affect them”

Source: <http://www.deh.gov.au/esd/national/nсед/strategy/intro.html#GoalsEtc>

Decade of Education for Sustainable Development (DESD)

The seven principles of the DESD are:

- Interdependence
- Citizenship and stewardship
- Needs and rights of future generations
- Diversity
- Quality of life
- Sustainable change
- Uncertainty & predicability

Source: Victorian Association of Environmental Education, 2006.

Activity 2 – Key Principles

1. There many other principles for sustainable development that have been developed by different organisations. Give some examples of these. Are there any commonalities for these different sets of principles? Examples of these could include:
 - Ecoliteracy
 - DESD
 - UN Charter
 - Bruntland declaration
 - Learning to Live Sustainably (L2LS)
 - Community Economic Development (CED) (see Information Box 10)
 - Waste minimisation hierarchy

2. A set of principles, developed by O’Riordan, relate to Environmentalism and different world views. (See Attachment – O’Riordan schematic (p. 376) on Gaian to Cornucopian world views.) In reality, we are often a mixture of the views. Circle statements that apply to you. Whereabouts are you best represented in this classification? Can you think of any friends / associates who are representative of the other world views presented? Use this classification to explain your own world views. How could you use this classification in preparing a proposal for the whole school community aimed at removing a few exotic trees in the grounds of a school to make space for vegetable gardens and composting system ?

Information Box 10

Community Economic Development (CED) Principles

In 1991, a group of individuals and community organizations formed to promote community economic development in British Columbia. Over 30 provincial groups endorsed their "Statement of CED Principles," condensed below:

- *Equity*: equitable access to community decision-making processes and resources
- *Participation*: of all members of the community in planning and decision-making
- *Community Building*: CED seeks to build a sense of community
- *Cooperation and Collaboration*: because many problems can't be solved in isolation, CED encourages connections within and between communities
- *Self-reliance and Community Control*: building on local strength, creativity, and resources to decrease dependency on economic interests outside the community
- *Integration*: of social, cultural, and ecological dimensions of community well-being
- *Interdependence*: local community exists within the context of a larger complex web of relationships
- *Living within Ecological Limits*: CED encourages processes and initiatives that respect ecological limits and helps to sustain, regenerate, and nurture both the community and the Earth
- *Capacity Building*: self-reliance requires skills development and other supportive structures and institutions
- *Diversity*: CED encourages diverse economic activities appropriate to each community
- *Appropriate Indicators*: CED monitors and evaluates progress according to its goals (B.C. Working Group 1995)

Roseland (1988)

Activity 3 – Principles of Learning and Teaching (PoLT)

1. Read the Principles of Learning and Teaching for school aged children. (Information Box 11)
2. For each major principle, describe in the table on pp 23 & 24 how it could relate to your work in waste and resource recovery education. Discuss your examples with the group.

Information Box 11

“Principles of Learning and Teaching P-12

Students learn best when:

1. The learning environment is supportive and productive.

In learning environments that reflect this principle the teacher:

- 1.1 builds positive relationships through knowing and valuing each student
- 1.2 promotes a culture of value and respect for individuals and their communities
- 1.3 uses strategies that promote students' self-confidence and willingness to take risks with their learning
- 1.4 ensures each student experiences success through structured support, the valuing of effort, and recognition of their work.

2. The learning environment promotes independence, interdependence and self motivation.

In learning environments that reflect this principle the teacher:

- 2.1 encourages and supports students to take responsibility for their learning
- 2.2 uses strategies that build skills of productive collaboration.

3. Students' needs, backgrounds, perspectives and interests are reflected in the learning program.

In learning environments that reflect this principle the teacher:

- 3.1 uses strategies that are flexible and responsive to the values, needs and interests of individual students
- 3.2 uses a range of strategies that support the different ways of thinking and learning
- 3.3 builds on students' prior experiences, knowledge and skills
- 3.4 capitalises on students' experience of a technology rich world.

4. Students are challenged and supported to develop deep levels of thinking and application.

In learning environments that reflect this principle the teacher:

- 4.1 plans sequences to promote sustained learning that builds over time and emphasises connections between ideas
- 4.2 promotes substantive discussion of ideas
- 4.3 emphasises the quality of learning with high expectations of achievement
- 4.4 uses strategies that challenge and support students to question and reflect
- 4.5 uses strategies to develop investigating and problem solving skills
- 4.6 uses strategies to foster imagination and creativity.

5. Assessment practices are an integral part of teaching and learning.

In learning environments that reflect this principle the teacher:

- 5.1 designs assessment practices that reflect the full range of learning program objectives
- 5.2 ensures that students receive frequent constructive feedback that supports further learning
- 5.3 makes assessment criteria explicit
- 5.4 uses assessment practices that encourage reflection and self assessment
- 5.5 uses evidence from assessment to inform planning and teaching.

6. Learning connects strongly with communities and practice beyond the classroom.

In learning environments that reflect this principle the teacher:

- 6.1 supports students to engage with contemporary knowledge and practice
- 6.2 plans for students to interact with local and broader communities
- 6.3 uses technologies in ways that reflect professional and community practices.”

[Source: <http://www.sofweb.vic.edu.au/blueprint/fs1/polit/principles.htm>]

Principle	Example using waste or litter
1. The learning environment is supportive and productive.	
2. The learning environment promotes independence, interdependence and self motivation.	
3. Students' needs, backgrounds, perspectives and interests are reflected in the learning program.	
4. Students are challenged and supported to develop deep levels of thinking and application.	
5. Assessment practices are an integral part of teaching and learning.	
6. Learning connects strongly with communities and practice beyond the classroom.	

Activity 4 – Principles of Adult Learning

This activity introduces some of the key principles of adult learning.

1. How are you motivated to learn?

2. Read Principles of Adult Learning in Information Box 12.
3. Compare these adult principles to those for student learning.

Information Box 11

According to Burns (1995), the following key psychological principles should be used as a guide in adult education.

- “An adult’s readiness to learn depends on the amount of previous practice and learning.”
- “The variety of past experiences of a group of adults underscores the diversity of starting points for any educational activity.”
- “To maximise learning, information must be presented in an organised fashion, proceeding from simple to complex, or organised around a concept. The starting point for organising a body of knowledge for adults is related to their previous experiences and knowledge.”
- “Meaningful material and tasks are more easily learned and longer remembered than non-meaningful material.”
- “intrinsic motivation produces more pervasive and permanent learning. Building an educational activity around an adult’s needs thus ensures more permanent learning.”
- “Positive reinforcement is more effective than punishment or ignoring behaviour.”
- “Active, rather than passive, participation in the learning activity enhances learning.”
- “Learning, especially with regard to skill development, is enhanced by repetition spaced systematically over time.”
- “Factors such as fatigue, tension, time pressure, criticism, context of learning, interpersonal relationships with teachers and compulsion all affect learning.”

(Source: Burns, R. 1995, *The Adult Learner at Work*, Business and Professional Publishing. pp 254-255)

Knowles (1990) believes that adults are motivated to learn by what:

- “is perceived as relevant;
- builds on previous experience;
- actively involves them and is participatory;
- is problem focused;
- enables them to take responsibility for their learning;
- can be applied in practice immediately;
- involves a cycle of action and reflection; and
- is based on mutual respect and trust.”

(From Knowles, M. 1990, *The Adult Learner: A Neglected Species*, Gulf Publishing, Houston, quoted in Robinson, L. 2006, Making behaviour change, Learning for Sustainability Conference, 2006)

Activity 5 – Principles of *The Guide Beside* Modules

1. Refer to the principles of professional learning for sustainability facilitators that were developed for *The Guide Beside* Professional Learning Modules. (Information Box 13.)
2. Mark the five principles of most significance to your work.
3. There is often overlap between principles. Compare the principles of learning and change of this course with principles of other documents, e.g. Learning to Live Sustainably. (Attachments)

Activity 6 – Paradigms

1. Paradigms are theories, models, large view, sets of principles, large scale models, organising framework e.g. Social Marketing.
2. Give some other examples of paradigms that you may have used in waste and resource recovery education.

3. We will discuss some of these in more detail in the next section.

Information Box 13

“KEY PRINCIPLES WHICH UNDERPIN *THE GUIDE BESIDE* MODULES

Professional Learning for Sustainability Facilitators:

The frameworks and processes for the Professional Learning Project (learning how to enhance / improve sustainability facilitation) need to be consistent with the processes and frameworks for fostering change towards sustainability – that is, we affirm transformative learning for change at each level (Group 1 Principles). There are additional principles that are also important for effective change towards sustainability (Group 2) which also apply to broad scale change towards sustainability, as well as to professional learning specifically. Finally, there are also specific principles that are important for those undertaking professional learning to assist their capacity and effectiveness to facilitate change (Group 3 Principles).

The frameworks and processes for using transformative learning for change in facilitation include:

Group 1. Transformative Learning Principles

Reflective practice: Critically and supportively reflecting on our own and each other’s practice, as an ongoing process; implies facilitation and leadership for collaborative learning and commitment to contextually relevant outcomes

Valuing and testing prior experience: Testing in our practice what we consider of value from others' experience, both directly from colleagues & from more consolidated sources (eg. written)

Collaboration: Collaborating together to both foster learning and to facilitate change, and co-learning through the exchange of ideas and experiences, to develop common understandings & actions

High Level Learning: recognising and building on the linkages between different levels and types of understanding – through knowledge and understanding, skills & capabilities, attitudes and values, action and participation

Valuing prior knowledge and diverse ways of knowing: Beginning with the existing knowledge & understanding of participants, wherever that is, and finding ways to connect learning & change to the social and cultural experience of participants, and to the preferred ways that participants learn & work together, so they have ownership of the change process, and are empowered to take action

Valuing both content and process: Fostering learning of ways to reflectively and collaboratively work together for change, and fostering understanding of basic ecoliteracy concepts in ways that are meaningful to the experiences and preferred learning modes of participants

Learning through doing: Trying out new ways of acting, as well as reflecting on the outcomes of this new behaviour, and adapting or changing this, is central to effective practical learning for change.

In implementing this transformative learning approach for change towards sustainability we recognise the importance of:

Group 2: Other Related Principles

Behaviour change is primary goal: Irrespective of how people change, change towards more sustainable actions is the primary goal, and ultimately the behaviour of all people needs to be consistent with environmental sustainability.

Values and ethics: These are the values and ethics which underpin that which we want to sustain and enhance into the future, across positive environmental, social and economic attributes, locally and globally.

Advocacy as well as implementation: Recognising that both the setting and achieving of specific shorter-term achievable sustainability goals (kicking goals), and fostering change towards longer term sustainability goals (shifting the goal posts) are important aspects of change and facilitation; these longer term goals include:

- **Basic Ecoliteracy:** Regardless of the program or approach, over time we need to ensure that everyone in the community is increasing in their understanding of the fundamental ecological ideas that underpin change for environmental sustainability. This does not mean that programs should start with these understandings, but that they are introduced as the program or project continues.
- **Speed (and Scale) of Change:** Over time, we need to build an increase in the pace of change towards sustainability, to minimise the risk that major catastrophic events overtake us – and recognise that ecological limits have a time dimensions that relate to the rate of degradation of resources and ecological systems, and the rates at which these can recover or be replaced by sustainable alternatives.

Bottom up as well as top down: Wisdom resides in the participants and those they are connected to in the wider community, and this wisdom needs to be evoked and aligned with the broad requirements of learning and change toward sustainability – so that everyone involved comes to see themselves learners, expert knowledge and skills are integrated with more general knowledge and skills, and all involved become more effective facilitators for learning and change

Using practical examples: Exemplars, stories, case studies and uses of technologies which at once capture key principles of learning and changing, and the richness of the contexts within which learning and change take place

Regulation and Opportunity: Regulation is an important component of change for sustainability, but must be developed in conjunction with opportunities for transformative learning, as well as encouragement, commitment and incentives for action.

The principles in Group 1 and Group 2 apply to both facilitation of change towards sustainability, in the wider community, as well as to the implementation of programs of professional learning for sustainability facilitators. There are additional principles that are specifically relevant to professional learning for sustainability facilitators, as follows (Note: ultimately many of these principles will apply at all levels of change for sustainability, not just PL for sustainability facilitators)

Group 3: Additional Principles for Professional Learning

Sustaining Ourselves: Because facilitating change for sustainability involves personal as well as professional commitment, and deals with changing peoples' values, and advocating for change as well as achieving pre-set sustainability goals, those undertaking this work meet significant challenges, both personal and institutional. The work entails a level of personal/emotional risk, which requires recognition of this risk, and ways to maintain one's inner integrity and sense of self and values in the face of these risks – developing these are a legitimate part of professional learning.

Fostering a community of experienced sustainability facilitators: as one of the key ways to promote reflective and collaborative learning, including exchange of ideas, information and approaches, as well as supporting one another through major change and challenges, personal and professional.

Being able to facilitate learning and change for sustainability is a necessary but insufficient condition for being able to foster learning (PL): the project needs to identify not only the key elements for successful facilitation, but the conditions and inputs required for people to learn to facilitate better and with more flexibility (in a combination of direct learning from others, background sources and reflective, collaborative practice)

Everyone is a learner: this requires facilitators of PL to balance the need to draw on and consolidate the knowledge and expertise already existing with the community of experienced sustainability facilitators (including for example, written material such as manuals, toolboxes and research papers), with the need to maintain flexibility and adaptability in the implementation of this knowledge and expertise in particular contexts. Also to allow for adaptability with changing circumstances, opportunities for new approaches and perspectives to arise, and for the frameworks and processes (pedagogies) of all participants, including experienced facilitators, to be drawn on in grounded and reflective and transformative ways."

Quoted with permission from *The Guide Beside, Module 1: Processes and Paradigms*

Resources

- Tilbury et al. (2002) have a useful discussion of various paradigms encountered in learning and change for sustainability, and which ones are more valuable and why.
- Sofweb. Principles of Learning and Teaching.
<http://www.sofweb.vic.edu.au/blueprint/fs1/polit/principles.htm>]

References

- Armstrong, P. et al 1996, *Waste Stoppers, a training program for community recycling coordinators*, Gould League, Environs Australia Recycling and Resource Recovery Council.
- Burns, R. 1995, *The Adult Learner at Work*, Business and Professional Publishing.
- CERES 2004 – 2005, *Sustainability education, Learning to change*, Report on Sustainability Education Roundtable Project, (reference to Stephen Sterling)
- Gibson, C. 1993, *Community Networks. Effectively Encouraging Participation in Waste Minimisation Behaviours*, Thesis for Master of Environmental Science, June.
- Hines, J., Hungerford, H. and Tomera, A. 1987, 'Analysis and synthesis of research on responsible environmental behaviour - a meta-analysis', *Journal of Environmental Education*, vol 18, no 2, pp.1-8.
- Knowles, M. 1990, *The Adult Learner: A Neglected Species*, Gulf Publishing
- McKenzie-Mohr, D. 2004, *Fostering Sustainable Behaviour*. Available at: <http://www.cbsm.com> [Accessed 30 March 2004]
- Morrish, M. 1983, *Development in the Third World*, Oxford US.
- O'Riordan, T. 1983, *Environmentalism*, Pion, London, p376.
- Robinson, L. 2006, *Making behaviour change*, Learning for Sustainability Conference, 2006
- Roseland, M. 1988, 'Toward Sustainable Communities', New Society, Canada.
- Tilbury, D., Coleman, V., Jones, A. and MacMaster, K. 2005, op cit.
- Tilbury, D., Stevenson, R., Fein, J. & Schreuder, D. 2002, *Education and Sustainability: Responding to the Global Challenge*, Gland, Switzerland.
- Victorian Government 2005, 'Learning to Live Sustainably', DSE (Draft).
- Wals, A. E. J. and Jickling, B. 2002. "'Sustainability" in higher education: From doublethink and newspeak to critical thinking and meaningful learning', *Higher Education Policy*, vol. 15, pp. 121–131.
- Waste Not, Want Not – An Essential Kit for Manufacturers. EcoRecycle Victoria

Suggested Attachments

- O' Riordan 1983, p 376
- Sterling, 2001, p 38
- Waste Not, Want Not – An Essential Kit for Manufacturers. EcoRecycle Victoria, p 8
- Robinson and Glanznig, 2003, p 37. See Section 1
- Learning to Live Sustainably, 2006, p 13

3 CHANGE MODELS

Reflective Questions

- 3.1 What behaviour change models have you tried? What have you tried? What worked? What didn't work? What has influenced you to change your behaviour in the past? What do you think motivates people to change their behaviour?
- 3.2 What are some useful models, theories, research results and case studies in behaviour change? Which one is useful for different projects? Which one would you choose useful to engage different people – innovators, early adopters, etc,?
- 3.3 What are the common success factors for effective behaviour change programs for individuals? What are the common success factors for effective cultural and community change? How could this knowledge help you in your work?
- 3.4 What are some common barriers that prevent change occurring in different sectors? What are some strategies that will help to overcome these barriers?
- 3.5 What are some of the barriers to different groups working together? What are some strategies that will help to overcome these barriers?

Activity 1 – Change

1. Reflect back on a time in your life when you made a positive change to your life. E.g. gave up smoking, took up running, rode a bike to work, gave up chocolate biscuits. Then answer these questions?
 - “What hopes or aspirations did you need to have before you could even think about making the change?
 - What frustrations were you experiencing about your life at the time?
 - What skills did you need to change?
 - What information did you need to change?
 - What services or products did you need to change?
 - Was there a trigger moment?
 - What people were involved?
 - What words were spoken?
 - What unexpected benefits did you discover afterwards?”

(Source Robinson and Ganznig, 2003, p 33)

2. Share your experiences with a neighbour and record what you learned from the personal experience about how change occurs.

3. What change models have you tried in the past? How effective were these?

4. Refer to the diagram on *Factors that Influence Behaviour* in the Attachments from Armstrong, 1996. This model, based on the work of Hungerford, Volk, Hines and Tomera and Caroline Gibson, show the complex interaction of factors which influence behaviour.
5. Refer also to Information Box 14 which discusses the role of awareness, knowledge, attitudes and values in behaviour change. Think of examples in your own lives in which you were either aware of, had knowledge about or had an attitude about an issue, but did not take action.

Information Box 14.

The role of values & attitudes in behaviour change

“Many studies and extensive experience have shown that holding a set of values does not necessarily lead to change.

Some studies and practical experience show that people change their values as a result of taking action, and not the other way around – that is, people adjust their values to be consistent with their actual behaviour. A subset of this are strategies to gain commitment: once people act to commit to a line of action, they often adjust their subsequent behaviour and values to line up with this earlier commitment.

It is important to clarify the distinction between values and attitudes, the parts these play in take up of sustainability action, and methods for introducing values into discussion and consideration of sustainability strategies and actions. Values tend to be longer lasting, more deeply held but more general views (e.g. ‘the ways that we impact on the environment need improvement’) and attitudes tend to be expressed more in relation to specific issues (e.g. ‘it is going to be difficult to change our environmental impacts because of the way these changes will affect the economy’).

A good approach to values and attitudes is to see these as part of an overall change model, but not necessarily the starting point. Values and attitudes may bring a group together for action, but in some ways these values and attitudes may separate this group from others in ways that are detrimental (we care more about the local creek than the mass of people) as well as beneficial (we are drawn together because of our concern for waterways). Facilitating negotiation of values, as well as understanding and working with different values positions as they affect the learning and change you are trying to

foster, is an important part of change towards sustainability. Arguing about values and attitudes is probably not all that useful. Finding overlaps in values and attitudes between what you want to achieve and the existing primary interests of those you want to change may get you further more quickly.

The cognitive dissonance model tells us that people can be encouraged to make small changes if they are not too far outside of their 'comfort zone' and this can affect how they subsequently frame their values and attitudes – people shift their values and attitudes to accommodate their new behaviour.

The community based social marketing approach to gaining commitment for change is based on this model of the relationship between values, action and change.

Conflict in groups (community, organisational) is often around the expression of different values. Facilitating processes to identify what people have in common, at least in a practical sense, is a key to resolving conflict, and often leads to a re-assessment of personal values and how these relate to the values of others.

Awareness and knowledge in behaviour change

As for values and attitudes, it is now clear that being aware, or even knowing in detail about the changes that are needed for sustainability, does not by itself lead to change. This mis-conception lies at the heart of the transmissive approach to change: that if someone understands what needs to happen, they will take action. There is evidence that, for short-term change at least, getting people to take action, prompted by their own interests and priorities, is likely to lead to changes in awareness and further action.

On the other hand, awareness and knowledge of environmental issues and problems are important pre-requisites to taking sustained action over the long term, and the level of environmental knowledge (ecoliteracy) in the broader population.”

Quoted with permission from *The Guide Beside, Module 1 Processes and Paradigms*

Activity 2 – Whole of System Thinking

1. Refer to Information Box 15. What are some examples of programs or projects that have used whole of system thinking?

Information Box 16**Whole of systems thinking**

Sterling emphasises whole of systems thinking as opposed to more fragmented approaches. According to Sterling:

“From the system's point of view, the health of any system -- be it a family, the community, the farm, the local economy, the school, or an ecosystem – depends on the health of its subsystems, and they on their subsystems, and so on. Sustainability is the ability of the system to sustain itself in relation to its environment, given that all systems are made up subsystems and parts of larger supra-systems. The system that either undermines the health of its own subsystems or of its supra-system is unsustainable.

Sustainability is therefore about encouraging self-sustaining abilities and wholeness between systemic levels. ... it is not difficult to see the parallels between, or the integrative pattern that connects, ecological sustainable development practice and sustainable education – that connects ‘becoming more sustainable’ and ‘becoming more human’”

(Sterling, 2001, p 54.)

Activity 3 – Models for Change

1. Refer to Information Box 16 and the two attachments from Sterling, 2001, p 38 and pp 60 \$61.
2. For each of the situations below, would you use either transmissive, transformative or a combination of both approaches, giving reasons for your choices?

Situation	Type of approach	Reason
(1) A teacher wants to know how to build a worm farm.		
(2) A pre-school wants to become more waste wise.		
(3) A group of traders have asked for assistance in setting up a uniform waste and recycling system.		
(4) A group of university students would like to become trained waste auditors.		

2. Refer to Information Box 17 that has a summary of some of the widely used models. Some of these models are discussed further in Chapter 7 in Robinson and Glanznig, 2001. We will look at how to choose the most appropriate approach in the next activity.
3. What other factors, apart from education, may be involved in both personal and community change?

Information Box 16

Transmissive and Transformative Education

Stephen Sterling has been for many years championing the shift from transmissive methodology in education to transformative methodology in education for sustainability.

According to Sterling, with transmissive methodology, “education for change’ is instructive – i.e. with the transfer of information - and ‘education in change’ is *imposed*.” (Sterling, 2001, p 35.)

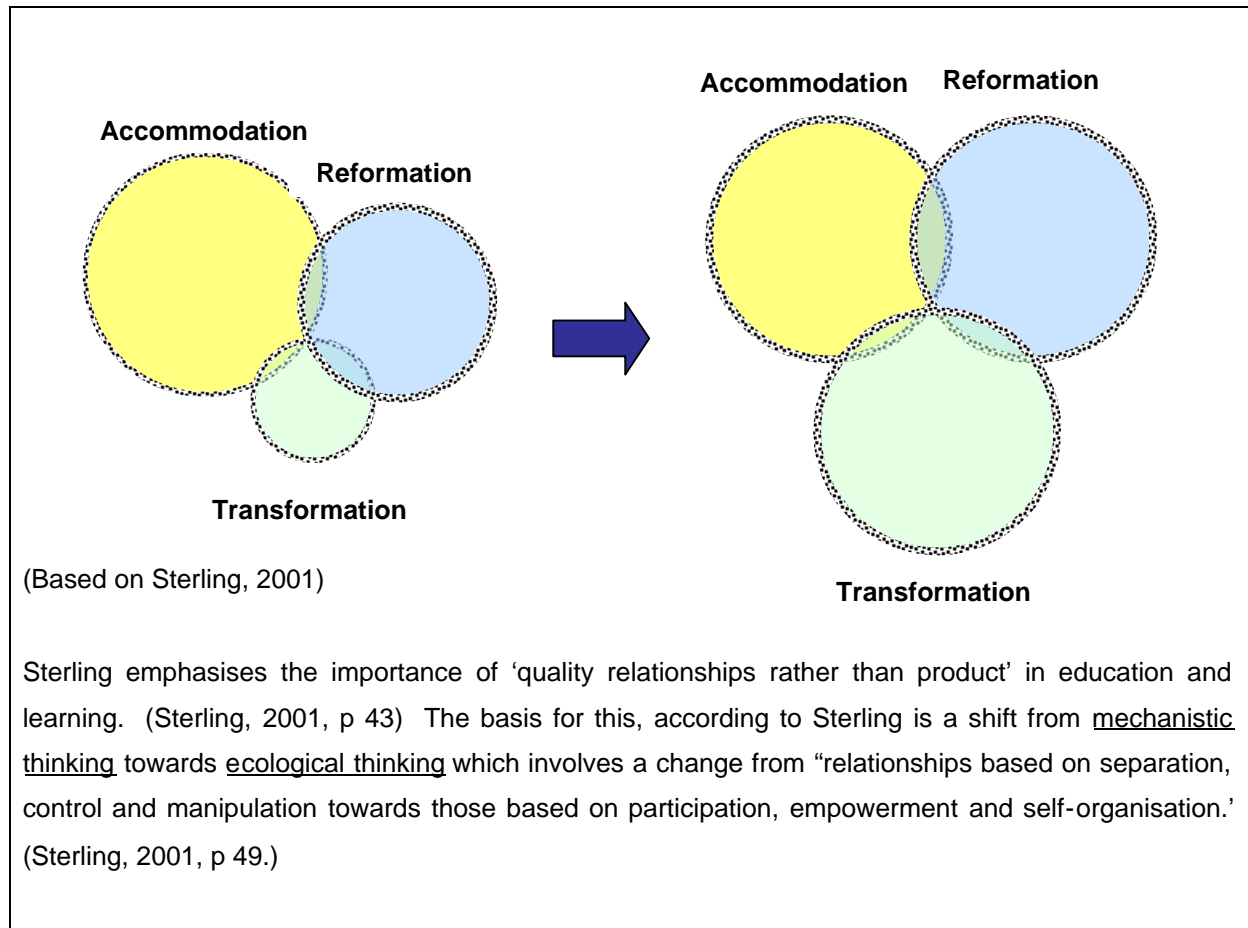
In contrast, Sterling believes that with transformative education, “education for change’ is *constructive* – i.e. engages the learner in construction and owning meaning – and ‘education in change’ is *participative*. (Sterling, 2001, p 35.)

(“Education *for* change concerns the role of education in bringing about change in the person or society. It is about change sought or achieved *through* educational practice.

Education *in* change refers to the policy changes made to educational rationale, theory and practice affect and may facilitate (or hinder) education for change”. (Sterling, 2001, p 34.)

The differences between transmissive and transformative education are further explained in the table from Sterling, 2001, p 38.

Sterling proposes that there can be a variety of “responses to educational thinking and practice to the challenges of sustainability”. These responses show the progression from “accommodation” (education *about* sustainability), through “reformation” (education *for* sustainability) to “transformation” (education *as* sustainability). These responses are summarised in Box 6 from Sterling, 2001, pp 60-61. (See attachment) This does not mean that there is no place for transmissive education, as for example in training for workplace skills, but that there is more of a balance between the three responses and a shift towards more transformative approaches.



Information Box 17***Some of the widely used models of behaviour change*****1. Stages of Change Model (Trans-theoretical)**

This model assumes that people make voluntary changes based on perceived costs and benefits.

Four stages are identified:

1. Pre-contemplation
2. Contemplation
3. Trial action
4. Maintenance

(Refer to Robinson and Glanznig, pp 38-41)

2. Diffusion of Innovations Model

This model considers that change or innovation moves through the community like a wave starting with the innovators and finishing with the laggards. The five major groups in society are categorised as:

1. Innovators
2. Early Adopters
3. Early Majority
4. Late Majority
5. Laggards

(Refer to Robinson and Glanznig, pp 41-47)

3. Participatory Action Research

Robinson and Glanznig believe that the “essential components of a PAR project are:

- reasonably representative participants;
- participants define the ‘problem’ and possible solutions through reflection of their own experiences, knowledge and research;
- the group commissions or carries out additional research;
- the group reports back to its larger community.”

(Refer to Robinson and Glanznig, pp 86-93)

In this model, participants are involved in cycles on planning, doing, observing and reviewing. This model is an open system that is dynamic and evolving.

4. Community Based Social Marketing (CBSM)

This model, championed by Doug Mackenzie Mohr uses approaches from social marketing to bring about community changes to particular issues. Some of the key elements of this approach are:

- Identifying Barriers
- Behavior Change Tools (such as commitments and prompts)
- Piloting
- Evaluation

(Refer to <http://www.cbsm.com>)

Activity 4 – Choosing the Best Approach

1. For each of the four scenarios below, decide what outcome you are seeking and which approach or mix of approaches you would use. Give reasons for your decisions. Refer to Information Boxes 17 & 18 and attachments from Robinson & Glanznig, 2003.

Scenarios	Desired Outcome	Approach	Reason
(1) A local waste officer for a region would like to help a business that has won the Waste Wise Business of the Year Award, but would like to do even more.			
(2) An industry waste education officer would like to educate residents who persistently overfill their rubbish bin.			
(3) A local government education officer would like to encourage residents to home compost.			
(4) An education officer that works for an environmental education NGO has been invited by a group of schools to help them to become more waste wise			

2. Choose a work-based project of your choice. Start a concept plan to engage the community for your work-based project, using the following questions in the Concept Planner on the next page.

Concept Planner

Choose a work-based waste / resource recovery / litter project or program and develop a concept plan to engage the community. Use the following questions as a guide:

<p>(1) What is the main <u>outcome</u> of your program? (What are you trying to achieve?) e.g. reduce waste to landfill in the City of XX.</p>	
<p>(2) What is your <u>target audience</u>? (Who are you trying to reach / change with your program?) e.g. residents, industry, group of shopkeepers, schools, TAFE college</p>	
<p>(3) What <u>level of engagement</u> are you aiming for? e.g. Passive to Active (CES, 2006, p 9)</p>	
<p>(4) What is the <u>approach</u> of your education program? e.g., Information sharing, Social marketing, Community involvement, Capacity building (CES, 2006, p 9)</p>	
<p>(5) What is the <u>focus</u> of your education program? e.g. provide information (CES, 2006, p 9)</p>	
<p>(6) What <u>methods</u> will you use? e.g. brochures, professional development, etc. (CES, 2006, p 9)</p>	
<p>(7) Which <u>segment(s)</u> will be included in your target audience? e.g. Innovators, Early adopters, Early majority, Late Majority Laggards</p>	
<p>(8) What will be your <u>role</u> for each segment? Will this change your methods in (6)? In what way? (See Robinson and Glanznig, 2001, pp 42 & 43)</p>	

Information Box 18

The following table summarises the how different approaches can be used to engage the community.

Types of community education programs

	Approach	Features	Focus	Examples of methods
Passive	<i>Information sharing</i>	Raising awareness	<ul style="list-style-type: none"> • Providing information in various forms • Tends to be one-way communication 	<ul style="list-style-type: none"> • Advisory services • Brochures • Demonstration • Projects • Internet sites
	<i>Social marketing</i>	Persuading people to change behaviour	<ul style="list-style-type: none"> • Based on marketing techniques • May be wide-scale or targeted 	<ul style="list-style-type: none"> • Advertising • Incentive schemes • Market research • Promotions
Community engagement	<i>Community involvement</i>	Involving community in dialogue and / or collaborative actions	<ul style="list-style-type: none"> • Dialogue is aimed at developing mutual understanding and concern • Actions may be determined by education providers or driven by participants 	<ul style="list-style-type: none"> • Community action programs • Community monitoring of an area / resource • Public forums
	<i>Capacity building</i>	Developing skills, abilities, and relationships	<ul style="list-style-type: none"> • Developing the potential of individuals and groups to make changes in their own areas of influence • Often done in more formal settings, such as courses or workshops 	<ul style="list-style-type: none"> • Action research • Mentoring • Professional development and training • Scenario planning
Active				

Source: Commissioner for Environmental Sustainability 2006, *Framework for Assessing Community Education for Sustainability*, DRAFT September. p 9.

This report recognised that:

“‘Behaviour change’ is often highlighted as a goal of education programs. However, it is important to recognise the difference between behaviour change as a method or as an outcome.

- As a method, behaviour change is often associated with social marketing, which aims to change specific individual behaviours in a targeted way.
- As an outcome, behaviour change can result from education and / or many other initiatives such as regulations, infrastructure changes or economic incentives that can create an encouraging context for behaviour change.

It is essential to focus on outcomes and use the best available approaches to achieve changes.”

Source: Commissioner for Environmental Sustainability 2006, *Framework for Assessing Community Education for Sustainability*, DRAFT September. p 9.

Information Box 19

Change in the business sector¹

Condon concluded from current research that there a number of critical elements for change to occur:

Critical elements:

- The change needs to be convenient
- A certain level of social pressure is needed
- Knowledge about HOW to be able to change
- Leadership is needed
- Incentives are always useful to spark change
- People's values are important to explore to determine what drives them
- People need to have knowledge ABOUT the issues and understand that it makes a difference if they make the change
- Attitudes are part of the acceptance to agree to change
- Both location in the organisation and location of the environment should be considered²

Activity 6 – Barriers to Engage Communities

1. Refer to Education for Sustainability Roundtable summary document for examples of barriers in each sector.
2. Identify sectors and the barriers for each sector. Prioritise the main barriers for each sector.
3. Look at strategies for addressing each of the key barriers for each sector. Some examples of useful strategies include:
 - Creating positive learning, doing & change contexts
 - Communications
 - Program/group dynamics
 - Implementing action
 - Feedback, reflecting & revising (Reflective cycle)
 - Working with groups, WIN–WIN, leadership, partnerships, networks, collaboration (e.g. government, business, schools, higher education, community)

¹ Linda Condon, *The Guide Beside, Module 4. Business and Training* 2005

² Monash University – Castelan M. *Motivators for the performance of environmentally responsible behaviour*
naomi.castelan@med.monash.edu.au - unpublished

Information Box 20**Critical success factors for community change projects and programs**

Community Empowerment Project in Maichun India³	Sustainable Schools - Pilot Stormwater Project⁴	Waste Wise Schools Project (Victoria)⁵
<i>In this project a local environmental education organisation worked with the people in a local rural village in northern India. The evaluators, Armstrong and Joshi, concluded that the project has led to many lasting environmental, social and economic benefits.</i>	<i>Five schools were given grants and support from a trained facilitator in the approach of Sustainable Schools. The evaluator, Gough, identified many environmental, social and economic benefits for each school</i>	<i>The Waste Wise Schools program provides a range of support services to schools including a kit, professional development, website, model schools and awards. It has involved over 1000 schools and led to significant outcomes for these schools.</i>
<p>Success factors:</p> <ul style="list-style-type: none"> – Education was the central driver for change, not monetary grants or other incentives. – The educational approach was transformative; focusing on deep, interactive and relevant learning through co-learning, listening and mutual respect. – The change process was facilitated by staff from a local NGO. These staff were well trained, local people who understood the local traditions and culture. – The formation of a women's group was the catalyst for change. – The village community had control and ownership over the project. – The approach was made locally relevant to the village community. – The actions that were undertaken met the needs of the village community. – The village community was part of strong networks. – The process encouraged capacity building. 	<p>Success factors:</p> <ul style="list-style-type: none"> – “A shared vision of teachers, students and parents that the environment has a high profile in the school. – Broad ownership of and engagement with Sustainable Schools across the school. – Support of the school leadership team. – Enthusiastic and committed staff. – Immersion of all staff in the Core unit. – The structure of Sustainable Schools made it easy to implement. – Integrating sustainability into school operations and across the curriculum. – Student involvement in the day to day sustainability operations in the school. – The availability of funds to enable the development of visible sustainability infrastructure (such as the rainwater tanks). – There is a school grounds master plan that helps bring together all aspects of achieving a Sustainable School.” 	<p>Success factors:</p> <ul style="list-style-type: none"> – It “... fosters co-learning and encourages teachers, students and parents to take ownership of their program, leading to highly innovative solutions and approaches by schools.” (Transformative education) – It “... encourages schools to use a systems approach in which all sectors of the school are involved in the planning and implementation of the waste wise program.” – Workshop presenters “... changed from being deliverers of information (the “experts”) to facilitators of learning and in the process became co-learners. “ – It provides “...a clear framework for schools ...” – There is “a comprehensive package of support services to schools and multiple entry points into Waste Wise Schools. This versatility allows schools to enter and develop their waste wise program in a way that meets their needs.”

³ Adapted from Armstrong, 2005

⁴ Gough, 2004

⁵ Adapted from Armstrong and Grant, 2004

Activity 7 – Motivators

1. Discuss with the group the factors that will motivate the community in waste minimisation. Some examples of motivators include:
 - Mutual learning
 - Altruism
 - Sponsorship
 - Corporate social responsibility
 - Marketing

Information Box 21***Summary of what the research tells us about behaviour change***

1. Knowledge about an issue alone rarely changes behaviour (MacKenzie Mohr, 2001)
2. Awareness of an issue alone rarely changes behaviour (MacKenzie Mohr, 2001)
3. Having a particular attitude rarely changes behaviour (Robinson and Glanznig, 2003)
4. Holding a particular or set of values does not necessarily lead to change (Robinson and Glanznig, 2003)
5. Getting people to take specific actions is important in behaviour change and it can lead to changes in attitudes and encourage new learning (Robinson and Glanznig, 2003)
6. The three factors that influence behaviour are action skills, knowledge of action strategies, and knowledge about issues. (Hungerford et al)
7. Encouraging people to take small steps that are not too far out from their comfort zone can lead to behaviour change. (Cognitive Dissonance Model)
8. People are often persuaded to change by a 'credible' and trusted person. (Robinson and Glanznig, 2003)

Resources

- Robinson, L., & Glanznig, A. 2003, *Enabling ecoaction. A handbook for anyone working with the public on conservation*, Humane Society International, in association with World Wildlife Fund and World Conservation Union, Sydney, Australia. This book can be also accessed from the website:
http://media.socialchange.net.au/people/les/Enabling_EcoAction.pdf#search=%22enabling%20eco%20actions%20handbook%22
http://media.socialchange.net.au/people/les/Summary_Diffusion_Theory.pdf
- Diffusion and innovation model
http://www.valuebasedmanagement.net/methods_rogers_innovation_adoption_curve.html
- Change management iceberg
http://www.valuebasedmanagement.net/methods_change_management_iceberg.html
- Change in communities and other organisations
http://media.socialchange.net.au/people/les/CoCreate_v1.pdf
- Doug McKenzie Mohr and Community Based Social Marketing <http://www.cbsm.com/>
- This website explores a range of sustainability challenges and is comprehensive in addressing barriers, organisational change and incorporates a toolkit for change.
<http://www.biothinking.com/applysd/models.htm>
- A range of management models are available at this site for examination
<http://www.valuebasedmanagement.net/>
- For a comparison of the approaches of Participatory Action Research and Social Marketing, refer to Tilbury, D., Coleman, V., Jones, A. and MacMaster, 2005 (pp 9-21); and MacKenzie Mohr, 2001).
- ARIES website discussion paper on Industry and Sustainability -
http://www.aries.mq.edu.au/pdf/Volume4_Final05.pdf and
http://www.aries.mq.edu.au/pdf/IndustryForumRep_April.pdf

References

- Armstrong, P., Winters R.J. and Gibson, C. 1996, *Waste Stoppers, A Training Program for Community Recycling Coordinators*, Gould League, Environs Australia, Recycling and Resource Recovery Council.
- Armstrong, P. and Grant, J. 2004, 'How research helped us to move from awareness to action and then to systems development', *Australian Journal of Environmental Education*, vol. 20(1), pp. 13-25.
- Armstrong, P. and Joshi, N. 2004, *Independent Evaluation Report of Community Empowerment Towards Sustainable Development, Projects in India and Nepal*. Unpublished report prepared for UNESCO and UNEP.
- CERES 2005, *Sustainability Education, Report on SE Roundtable Project 2005'*
Victoria.
- Commissioner for Environmental Sustainability 2006, *Framework for Assessing Community Education for Sustainability*, DRAFT September. p 9.
- Robinson, L. and Glanznig, A. 2003, *Enabling EcoAction*, Humane Society International, Sydney.

- DSE 2005, *Learning to Live Sustainably: Draft Strategy. Victoria's approach to learning based change for environmental sustainability*, Department of Sustainability and Environment, Victoria, Melbourne, Australia.
- Sterling, S. 2001, *Sustainable education: Revisioning learning and change*, Green Books & The Schumacher Society, Bristol, United Kingdom.
- Tilbury, D. 2001, *IUCN Commission on education and communication: teaching and learning for a sustainable future*, UNESCO, New York, USA.
- Townsend, J. 2002, *The Trainer's Pocketbook*, Management Pocketbooks Limited.

Suggested Attachments

- Robinson and Glanznig, 2003, pp 40-43
- Commissioner for Environmental Sustainability 2006, p 9.
- Armstrong, P., Winters R.J. and Gibson, C, 1996, pp 45-46
- Learning to Live Sustainably Draft Strategy, 2006, pp 10-11
- Learning for Sustainability Conference, 2006 – CERES article
- Education for Sustainability Roundtable Summary document

4 FACILITATING

Reflective Questions

- 4.1 What is facilitation? What is the role of facilitation in waste and resource recovery education? Why is facilitation so important in achieving effective behavioural and cultural change? What is the importance of the human element? What do you think are the characteristics and skills of a waste and resource recovery educator that would help them to be effective in bringing about behavioural and cultural change?**
- 4.2 What are some approaches for facilitation and mentoring? Are there different kinds of attributes and skills that are needed for each of the approaches?**

Activity 1 – Key Terms

- Complete the table below, giving an example of how you would use these terms in your waste and resource recovery education work. Share your examples with a neighbour to check that you understand the difference between each of the terms.

	Dictionary meanings	Example of how you would use this term in your waste and resource recovery education work
Education	“The field of study that is concerned with the pedagogy of teaching and learning.” ⁶	
Teaching	“the activities of educating or instructing or teaching; activities that impart knowledge or skill.” ⁷	
Learning	“the cognitive process of acquiring skill or knowledge” ⁸	
Facilitation	“any activity which makes easy the tasks of others” ⁹	

- Work with the group to list the tasks that are required of a waste and resource recovery educator. These will be recorded on a whiteboard / butcher’s paper, under two headings: education-based and non-education. Which are the five most common tasks undertaken by the group for each list?

⁶ <http://www.answers.com/education&r=67>

⁷ <http://www.answers.com/topic/teaching>

⁸ <http://www.hyperdictionary.com/search.aspx?define=learning>

⁹ <http://www.answers.com/facilitation>

Activity 2 – Role of Educators

1. The main role of educators is no longer to just give information, although this may still be required at times. The new view of educators is as facilitators of change. Your task is to be ‘catalysts of change’ or ‘change’ agents rather than direct the change.
2. Think of someone that you have either observed or worked with whom you believe are effective facilitators. Work in groups of 4-5 to create / draw a caricature of your “ideal facilitator”. What are the common attributes identified by the group?
3. Read the extract from Chapter 8, The Human Touch, from Robinson and Glanznig, 2003, pp 52 & 53. What does the ‘Human Touch’ mean to you?
4. Refer to Information Box 22. How does this list compare with the class list just developed?

Activity 3 – The Role of Facilitators

1. Play a group game (modified from a game demonstrated by Sue Burton, Dept of Environment and Conservation in NSW). Select two volunteers and ask them to stand outside. Ask the remainder of the group to stand in a circle holding hands. Ask the group to keep holding hands, but to weave under and over the linked arms to form a tangle. Invite the two volunteers back into the room and ask them to work together to untangle the group. (Time how long this takes)
2. Repeat the activity, but this time the volunteers do not give instructions to the group to untangle, they just give encouragement for them to work it out for themselves. “Come on, you can do it” “Well done, you are almost there!” (Again time how long this takes)
3. Which process led to the best outcome? What can we learn from this game? (1. Most people do know how to solve their own problems. 2. An external facilitator will be more effective in the long run if they just encourage the group to look at their own problems and take responsibility and ownership for the solutions to these problems.)

Information Box 22

“Some Key Attributes of Effective Sustainability Facilitators

- 1. Awareness of the process of change**
 - social change and organisational change
- 2. Positive, optimistic & opportunistic**
 - a sense of humour
- 3. Acknowledging of ‘audience’ (those one seeks to facilitate to change)**
 - empathetic & sensitive to difference
- 4. An active & respectful listener who values where people are at & what they are saying**
 - building on previous experience of individuals & the group
 - starting where people are at and not where you are at
- 5. Strong conceptual understanding of what sustainability is about & what is needed**
 - especially having expertise & credibility in the sector one is seeking to evoke change
- 6. Evoking & sharing in the excitement of discovery**
 - - helping to facilitate a process of collaborative /co – learning
- 7. Possessing a skill bank of strategic tools & processes for facilitating change towards sustainability – and building on this in an ongoing way**
- 8. Recognizing & acknowledging the social challenges of working towards sustainability – in self and others**
- 9. Knowing how to/having ability & resilience to ‘get back on the bike’**
 - in the face of challenges thrown up by those one seeks to change
 - in the face of attack/challenge by those resisting change
 - swimming against the inertia of major regional, national global challenges
- 10. Generating a feeling of being trusted and respected within the learning and change context**
- 11. Being patient: to effect change may be like the central Asian concept of ‘doing business after eating together and sharing seven bags of salt’**
- 12. ‘Half-hearted avengers’ – being clear about what you are advocating for, but acting on this in ways that engage people, rather than putting them off**
- 13. Attitude**
 - open to new ideas & information
 - able to critically and creatively reflect on own practice
- 14. Strong inter-personal & relationship building skills**
 - passionate without being a zealot
 - tempering passion with where the audience wants to go
- 15. Sensitivity modulated by experience**
 - what level and approach to pitch the material
 - a sense of where to go to next
- 16. Knowledgeable about, and having capacity to combine what the ‘audience’ wants and what is required by policy & organisational or job description objectives”**

(Source: *The Guide Beside, Connecting Schools, Families and Communities, Module 6, p. 36*)

Activity 4 – Approaches to Facilitation

1. Examine the table in Information Box 22 and to circle the approach in each aspect that you are using now. Discuss examples of changes you could make to give your work a more future's perspective.

Information Box 22

Approaches to environmental sustainability and learning-based change – future perspectives

Aspect	Dominant approach	Future perspectives
Problem	Pollution/end of pipe	Pollution/source reduction
Solution	Environment protection	Sustainability solutions
Connectedness	Humans separate from ecosystems	Humans as part of ecosystems
Time frame	Present/short term	Future/long term
Goals	Awareness and knowledge	Changed behaviours, practices and structures
Education methods	Predominantly information-based	Participatory and experiential learning, community development and capacity building
Learners	Audiences/target groups	Participants/stakeholders
Implementation	Mainly top down	Through partnerships/networks
Legitimacy	Predominantly technical expertise	Based on different ways of knowing

From NSW Council on Environmental Education, 2002, *Learning for Sustainability: NSW Environmental Education Plan 2002-05.*, quoted in DSE, 2006, *Learning for Sustainability, Victoria's approach to learning-based change for environmental sustainability*, Victoria, Draft, p14.

Activity 5 – Attributes and Roles of Facilitators

1. Refer to the Chapter vi: Facilitation and Mentoring in Tilbury et al (2005), pp 30-32.
2. Work in small groups to identify the key attributes and skills required of educators for different approaches or tasks. Complete the table below.

Approach	Attributes required of the educator	Skills required of the educator
Facilitating a group meeting		
Supporting a waste wise student group in a school		
Giving a presentation		
Managing a project		
Mentoring a colleague		
Leading a small work team		
Running a workshop on composting		

Activity 6 – Facilitating Group Meetings

1. Read the suggestions for facilitating group meetings in Information Box 23.
2. Describe situations when you have used some of these ideas in facilitating group meetings.
3. We will be applying these ideas in a later session.

Activity 7 – Effective Communication and Giving Presentations

1. Read the attachment from Gould Group on effective communication and giving presentations and talks to groups of children or adults.
2. Describe a situation when you have experienced difficulties in giving presentations / talks / workshops to either children or adults. How did you deal with the situation? How would you handle the situation now?

Activity 8 – Conflict Resolution for Facilitators

1. Facilitating with different personalities and levels of commitment requires special insights and skills. Refer to the summary of conflict resolution (Watson et al, 1980). This article helps to identify different personal approaches and the most useful strategies in groups. Complete the exercise in the summary.

Information Box 23

“Facilitating group meetings

Effective facilitators are risk-takers, willing to stretch as they apply their facilitation skills and previous experience to a variety of group situations. Many facilitators find that as they broaden their endeavours, they need to increase their understanding of organizational culture and dynamics to handle the more challenging situations they encounter. Facilitation requires practitioners to use all dimensions of their personalities. As the situations become more challenging, growth must occur to meet new opportunities.

Anyone—introvert or extrovert—may have what it takes to be an effective facilitator. It is more an issue of personal interest, dedication, and willingness to meet a substantial challenge. It doesn't always require extensive technology, though knowledge of technological options is always useful. Effective facilitators believe in the value of facilitating and, most importantly, they have fun with it. Some additional information is included here to further assist facilitators in a business context.

Role of a facilitator

- Maintain a neutral role — prompt others in the meeting to discuss their ideas and suggestions.
- Maintain a balanced flow of ideas among the attendees — don't let a few attendees dominate the discussion.
- Ensure that everyone participates.
- Keep the discussion focused on the topic at hand.
- Provide the group with processes that help balance and focus the discussion.
- Summarize points of agreement and agreed-upon next steps.

Understanding your audience

Use these questions to consider the needs and concerns of your team:

- Are all meeting participants directly interested in the topic or involved in carrying out results? If not, should they be involved in the meeting?
- Are there other ways to keep people with a “need to know” informed — telephone, memos, and personal meetings?
- How familiar is each person with the topic?
- What information do you need to provide to ensure full understanding?
- What degree of interest, “buy-in” or resistance do members of the audience have in the topic?
- What data, information or other form of influence do you need to increase “buy-in”?
- What terms or concepts, if any, will need to be explained?

Encouraging participation in sessions

- Review the discussion objective(s) at the start of the session to orient participants to the nature of the discussion.

- Establish a ground rule at the start of the session that everyone participates — that it's important to hear everyone's ideas and opinions.
- Don't offer opinions yourself; instead, draw out participants' ideas and thoughts.
- Ask participants who are not contributing for their thoughts or opinions (e.g., Dianne, what do you think about this?).
- Ask people who have not contributed to play "devil's advocate" for an idea that's been presented.
- Acknowledge contributions by thanking the person or by indicating in other ways that the contribution is helpful (e.g., "Very interesting..." or "That should improve the..." or "That's a new way of looking at the problem").
- Encourage people to generate new ideas or approaches.
- Encourage a healthy discussion of ideas.
- Accept opposing points of view.
- Assign individuals to summarize key discussion points at the end of the session.

A process for helping a group to prioritise

Use the following technique to help a group clarify the relative importance or impact of ideas presented. This is also a way to obtain consensus among a group.

- Post these definitions of priority on a flip chart:
 - 1 = most importance or impact
 - 2 = medium importance or impact
 - 3 = low importance or impact
- Review the definitions with participants and ask them to assign a priority to the ideas under discussion.
- Either ask for a show of hands and count the number of "1's," "2's," and "3's" for each suggestion (to obtain a general consensus on priorities); or survey the group visually, looking for verbal and non-verbal signs of agreement or disagreement.

Moving toward consensus

To keep the discussion focused, identify areas of general agreement first and leave topics on which there are differences to the next discussion. Here is an example:

- After the group has identified several suggestions (e.g., for way to tackle waste in the office, poll the group for consensus for priority. (See above for tips on prioritization)
- Mark each item of general agreement with an identifying symbol (check mark).
- When you reach an item on which there is a substantial difference of opinion, say something like: "We'll discuss this one in a few minutes since there seems to be a difference of opinion."
- When you have reviewed all items on the list, return to the items on which there were differences of opinion.

Moving toward resolving differences

To focus discussion on a topic on which there are different opinions, it's helpful to structure it around pros (reasons the item should be included) and cons (reasons the items should not be included).

- Post a flip chart similar to the design below:
 - Pros = Reasons To Include; Cons = Reasons Not To Include
- Refer to the flip chart, saying something like: "Let's think of items on which there are different opinions." Then review the definitions of pros and cons. Keep the flip chart visible throughout the discussion.
- If the differences of opinion are strong...
 - Record the group's responses on the flip chart so everyone can see the differences of opinion.
 - Ask attendees to assign a priority to each "Pro" and "Con." (See above for tips on prioritization)

Handling distracting behaviors

- Rambling discussions — Return to the discussion objective(s) and ask for cooperation in achieving them or ask how the person's comments relate to the topic at hand.
- Off-the-point comments or discussions — indicate that the person's comment is interesting and that there may be others in the group who would like to discuss it on a break. Then return to the topic at hand.
- Raising topics that will be covered later — mention that there will be full opportunity to discuss this topic in another session (indicate when).
- One or a few dominating discussion — keep participants from dominating the discussion by directing questions to others (e.g., "Sam, what do you think about this issue?" Sue, what has been your experience?").
- Latecomers — don't stop the meeting to "catch them up." If you are referring to handouts, ask latecomers to look on with someone else and give them a copy at a break.
- Arguments or clashes — restate the essence of each person's point of view. If appropriate, state that the difference cannot be resolved here and that you need to move on with the agenda. If the atmosphere has become tense, call for a short break.
- Side conversations — pause without looking directly at those talking. If the conversation continues, ask if they have a question or issue to share with the group."

Quoted with permission from *The Guide Beside, Module 4: Business and Training*, pp 40-42.

Resources

- (Shields 1991) – provides excellent examples of key attributes for effective facilitation, as well as many other useful perspectives, from a variety of approaches

- (Robinson, Les 2005) – has excellent coverage of what effective facilitation is and a good summary of key attributes of an effective sustainability facilitator
- (Schuman 2005) contains detailed information and advice to assist improvements in facilitation, drawn from the extensive experience of the International association of Facilitators
- The International Association of Facilitators website is at www.iaf.org
- Professional development resource kit at – www.swin.edu.au/ncs
- Characteristics of a good facilitator
http://www.bonner.org/resources/modules/modules_pdf/BonCurFacilitation101.pdf
<http://tilz.tearfund.org/Publications/Footsteps+51-60/Footsteps+60/Effective+facilitation.htm>
- Information on leadership style and facilitation - <http://www.leader-values.com/default.asp>
- Some tips and activities for good facilitation -
http://www.bonner.org/resources/modules/modules_pdf/BonCurFacilitation101.pdf
- Presentation Planning checklist -
<http://www.mindtools.com/CommSkill/PresentationPlanningChecklist.htm>
 - Speaking to an audience - <http://www.mindtools.com/CommSkill/SpeakingToAnAudience.htm>

References

- Gould Group, 1999, *Waste Education Training Course, Effective Communication*.
- Robinson, L., & Glanznig, A. 2003, *Enabling ecoaction. A handbook for anyone working with the public on conservation*, Humane Society International, in association with World Wildlife Fund and World Conservation Union, Sydney, Australia.
- Robinson, L. 2005, *CoCreate: the facilitator's guide to collaborative projects*, Enabling Change, Sydney, Australia.
- Sterling S. 2001 op cit.
- Schuman, S. (ed.) 2005, *The IAF Handbook of Group Facilitation - Best Practices from the Leading Organization in Facilitation*, The International Association of Facilitators, New York.
- Shields, K. 1991, *In the tiger's mouth. An empowerment guide for social action*, Millenium Books, Brisbane, Australia.
- Tilbury et al, 2005, op cit.
- Townsend, J. & Donovan, P. 2003, *Facilitator's Pocketbook*, Management Pocetbooks.
- Watson H.J., Vallee, J.M. and Mumford, W.R. 1980, *Structured Experiences & Group Development*. Curriculum Development Centre, Canberra.

Suggested Attachments

- Gould Group, 1999 pp 45-48
- Robinson and Glanznig, 2003, pp 52 & 53
- Personality and Conflict Resolution (proverbs) Source?
- Tilbury et al (2005), pp 30-32
- Watson et al, 1980 pp?

5 SCOPING

Reflective Questions

- 5.1 How does a project get started?
- 5.2 What are you trying to achieve? i.e. What is your purpose? What are the benefits / outcomes of your project? What are the values of your community and how might they differ from the purpose of your project? Can your project be designed to meet both sets of needs?
- 5.3 How are the stakeholders and influencers identified and engaged? How are target groups identified?
- 5.4 What research do you need to do at the start of the project? What other information do you need?
- 5.5 What are some ways to build a steering team? How can you convert this team into a collaborative learning team? How can you maintain the team's momentum? What is your role as a facilitator?
- 5.6 What types of communication are useful at this start up stage?

Refer to Information Box 24 for this section.

Activity 1 – Concept Mapping

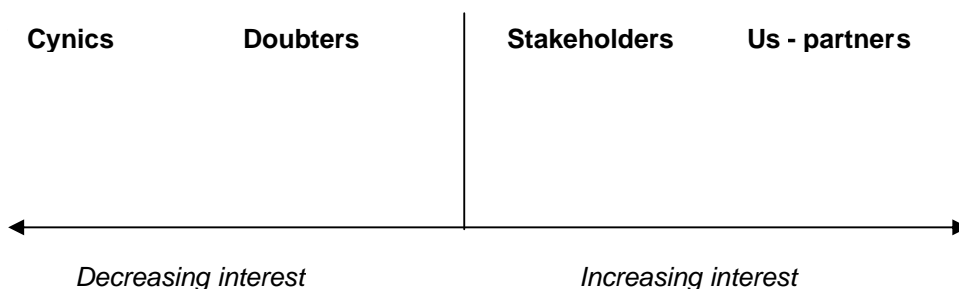
1. As a group draw a concept map for a hypothetical project (e.g. Setting up a waste wise networking forum for schools), including the participants of the project, the potential partners, members of an advisory group, sources of funding – sponsors, grants etc.
2. Refer to Robinson and Glanznig, 2003, pp 84-85, for a simple achievability test.
3. Repeat the exercise for a project of your choice. Keep adding to your concept map.

Activity 2 – Purpose and Benefits

1. Share examples of projects with which you have been involved that had clear written purposes and outcomes. Discuss whether or not this early planning was helpful in the acceptance of the idea.
2. Complete the purpose and benefits for your project of choice in the table on page 59.

Activity 3 – Aligning Goals

1. Refer to Robinson and Glanznig, 2003, pp 20&21. Draw two overlapping circles and write in the left circle the government prescriptions for government agencies for waste and resource recovery and write in the right circle the aspirations of teachers in schools. What would be some examples of approaches that meet both sets of needs - the "Zone of Intersection?"

Activity 4 – Mapping the Players of Project

2. As a group activity, write the people/groups under each of the headings for the hypothetical project: *Setting up a waste wise networking forum for schools*. Circle the key stakeholders. These can become the people/group who could be the prime influencers for your project. They could be invited to a planning meeting for the project and may even become the foundation for an advisory group.
3. Complete the activity for your project of choice in the table on p 59.

Activity 5 – Mapping the Players of Project

1. Share ways that you have obtained information (.e.g. council and shire websites, leaflets, posters, etc
2. Add how you will obtain information about your project of choice to in the table on p 59.

Activity 6 – Building a Core Team

1. Recall a group that you have been involved with that came together for a particular project. Consider the purpose of the group, why each member participated, and what each member contributed and what they got out of the project. Why did some members start to come to meetings and then stop coming?
2. Complete section on core team building for your project of choice in the table on p 59.

<u>Starting up a Project</u>	
What is the purpose of the project? Is it achievable?	
What might be the anticipated benefits / outcomes of your project?	
Who are the key stakeholders and influencers?	
Who are your target groups?	
What research do you need to do at the start of the project?	
What other information do you need?	
What are some ways to build a core group?	
What are some ways to build an advisory group / committee?	
How can you maintain the momentum of an advisory group / CLT? What is your role as a facilitator?	
How will you communicate about your project in the early stages?	
Who will you communicate with?	

Activity 7 – Communication

1. What are some examples of where early communication of ideas and proposals has been helpful, and where these have been harmful? For each category, identify the characteristics of helpful and harmful early communication.

2. Complete the section on communication for your project of choice in the table on p 59.

Information Box 24

Getting started on projects

1. What is the purpose of your project? Is it achievable?

It is important to write down in one or two sentences just what you are trying to achieve with your project. This will clarify in your own mind what you are trying to do and to communicate it to others whom you may wish to involve in your project. An example of a purpose is "To form a network group of teachers in my region so that they can share their experiences about being waste wise schools." (Refer to Robinson and Glanznig, 2003, pp 84-85, for a simple achievability test.)

2. What might be the anticipated benefits / outcomes of your project?

The benefits and outcomes will help to sell the idea to others in your organisation and to help promote the project to the target audience. In the example, the benefits of the networking group could be:

- Increased uptake of waste wise behaviours in the schools in your region
- Greater diversion of waste from landfill
- More schools become accredited waste wise schools
- Greater recognition and acknowledgement of the waste wise achievements of the schools

3. What are the values of your community and how might they differ from the purpose of your project? Can your project be designed to meet both sets of needs?

Robinson and Galznig have identified that often the stated policies of organisations, in particularly governments, are quite remote from the "value driven aspirations" of the very people the policies are intended to reach. The authors recommend that messages and communication need to be expressed in language that aligns with the values of the target groups. In the school network example, you might like to communicate to the teachers with messages such as "Composting made easy and safe. Learn from the experts at XX school." This meets the teacher's values of more time and safe schools.

(Refer to Robinson and Glanznig, pp 20-21)

4. How are the stakeholders and influencers identified and engaged?

Stakeholders are those groups who have a stake or interest in your project. These might be other staff in your organisation, partners, sponsors, grant bodies, other educators. Influencers are those who could help you to influence the outcome of your project. These people may be able to give you contacts, suggest funding sources, get high level support and suggest viable approaches.

5. How are target groups identified?

Your target group are the people who will be affected by your project or program or project. In the example, the target group would be teachers in schools in your region, but it could expand to parents, principals and even students.

6. What research do you need to do at the start of the project?

Some simple research is probably needed at this early stage to test the viability of your project. In the school network example you could:

- find out if there is such a group operating already in the region or even in one municipality
- conduct a phone survey to test the idea with a few teachers in say six schools
- check the website to tap into existing networks to see if similar group is operating elsewhere and then find out the more about the group, how they operate and any benefits / difficulties they may have experienced.

(Refer to Robinson and Glanznig, pp 82-83)

7. What other information do you need?

In the school network example, you might like to know such information as:

- Number of schools in the region /each municipality
- Number of schools who have attended Waste Wise School workshops / are accredited
- A plan for at least six network meetings
- Giveaways to act as incentives for teachers that attend.

8. What are some ways to build a core group?

“In the early stages of the formation of a core group, special attention needs to be paid to building inter-relationships, building shared views and values, or at least tolerance of differing views, and sufficient cohesion and common purpose to keep the core group together:

- focusing on what is shared
- relationships as much as objectives
- importance of recognition and celebration, even for small achievements – building a sense of achievement, and valuing collaborative champions
- developing processes that include and value new participants

These elements are important to maintain throughout the life of the program/project – many of these are elements of effective facilitation and collaborative leadership”.

(Quoted with permission from *The Guide Beside, Module 1, Processes and Paradigms*, pp 63.

9. What are some ways to build an advisory group / committee?

In some projects, it is helpful and, in some cases a requirement of a project, to establish an advisory group or committee. Some suggestions to set up and run this group / committee:

- Invite people to join the committee who have an interest in the project and who are prepared to make a commitment to attend meetings and genuinely contribute to the project
- Invite someone with expertise and experience in running meetings to chair the meetings
- Keep the number of meetings to a minimum, and keep them brief
- Work to an agenda, keep minutes and provide concise reports
- Develop a memorandum of understanding, setting out the roles and responsibilities of the group.

10. How can you form a collaborative learning team (CLT) for a project?

With many projects, there are opportunities to form informal groups of people who come together on a project. These informal groups can enhance a project by providing additional resources and support to the target group, while at the same time bringing mutual benefits to the team. In the progress of the project, all the players are both collaborating and learning in the process. A well known collaborative learning team has been the Waste Wise Schools program with the CLT made up of the managers, partners, advisory committee, regional education officers, local education officers etc.

In building a CLT consider:

- Composition of the team
- Team dynamics
- Getting the best out of your team

11. How can you maintain the momentum of an advisory group / CLT? What is your role as a facilitator?

Maintaining the momentum of an advisory group or CLT takes time, energy and commitment. At the heart of all this is building relationships, trust and pathways for effective communication. Your role as facilitator is central. In the early stages of a project, it is worth your time to work out how to set up the group and to ensure that meetings are run efficiently, giving ownership and responsibility to the group.

12. What types of communication are useful at this start up stage?

At this early stage, examples of useful communication strategies include:

- Press releases
- Memos
- Launches
- Brochures
- Websites

Resources

- The Executive Committee – The Business Case for Sustainable Development – making a difference towards the Johannesburg Summit and beyond World Business Council for Sustainable Development 2002 <http://www.wbcsd.org/DocRoot/lunSPdIKvmYH5HjbN4XC/csr2000.pdf>
- Corporate Social Responsibility – the World Business Council's Journey <http://www.wbcsd.org/DocRoot/IONYLirijYoHBDflunP5/csr2002.pdf>
- Training methods for Business <http://www.businesslink.gov.uk/bdotg/action/layer?topicId=1074202347>
- Corporate sustainability project at UTS <http://www.csp.uts.edu.au/resources/>
- (Robinson, L & Glanznig 2003) – have some useful suggestions about how to develop a communications plan, including what to do in early stages of a project
- (McKenzie-Mohr 2000) – also has useful ideas about where and how communications fit in with an overall learning and change strategy
- A useful practical working guide to producing reader friendly materials can be found at http://media.socialchange.net.au/reader_friendly/
- Spectrum of Allies – written up by The Change Agency www.thechangeagency.org.au
- (Cavaye 2001) has extensive advice on appropriate approaches to consultation and engagement for building projects
- (DSE & DPI 2004) in Chapter 12 has a range of case studies suggesting how engaging with community can build towards ongoing projects and programs
- Department of Victorian Communities community building initiatives: www.communitybuilding.voc.gov.au/index.asp
- Victorian Local Governance Association: www.vlgaconsultation.org.au
- Commonwealth Government community organising: www.community.gov.au
- New Zealand landcare research into community capacity building and engagement: <http://nrm.massey.ac.nz/changelinks/>
- British Government advice on community consultation and engagement: www.cabinet-office.gov.uk
- (Shields 1991) - has excellent suggestions and resources for building and consolidating groups.
- (Wadsworth 1984) – has some useful suggestions for ways to foster establishment of groups for common purposes.
- (Robinson, 2005) – approaches building a core group via partnerships
- The GreenTreks Network website as resources, including downloadable videos, which can assist participants to think through what they have in common, and what themes they might form around, at www.greentreks.org/education/resources_educationanddiscovery.asp
- (Robinson & Glanznig, 2003) – have some useful suggestions about how to develop a communications plan, including what to do in early stages of a project
- (McKenzie-Mohr, 2000) – also has useful ideas about where and how communications fit in with an overall learning and change strategy

- A useful practical working guide to producing reader friendly materials can be found at http://media.socialchange.net.au/reader_friendly/
- Looking at intersections in interests and goals between stakeholders is a relatively straightforward concept, but one that is often overlooked. A number of manuals and websites explain this approach (with some variations) in a straightforward manner. For example see <http://www.thechangeagency.org>
- (Robinson & Glanznig, 2003) - have an excellent description of the intersecting interests approach and how it links to other aspects of goal-setting and developing a communications and overall action plan.

References

- Cavaye, J. 2001, *Community engagement framework project: scoping and reviewing paper*, Cavaye Community Development/ CEO Committee on Land Resources, Brisbane, Australia.
- CERES 2004, 'Sustainability education, Learning to change', *Report on sustainability education roundtable project, 2004-2005*.
- DSE & DPI 2004, *Effective community engagement. Workbook and toolbook. Version 2*, Department of Sustainability and Environment and Department of Primary Industries, Melbourne, Victoria, Australia, Melbourne, Australia.
- MacGillivray, A. et al 1988, *Communities Count*, New Economics Foundation, London.
- Roseland, M. 1988, *Toward Sustainable Communities*, New Society, Canada 1988.
- Robinson, L. & Glanznig, A. 2003, *Enabling ecoaction. A handbook for anyone working with the public on conservation*, Humane Society International, in association with World Wildlife Fund and World Conservation Union, Sydney, Australia
- MacKenzie-Mohr, D. 2000, *Community based social marketing*, CBSM Publications, New York.
- Robinson, L. 2005, *CoCreate: the facilitator's guide to collaborative projects*, *Enabling Change*, Sydney, Australia.
- Shields, K. 1991, *In the tiger's mouth. An empowerment guide for social action*, Millennium Books, Brisbane, Australia.
- Wadsworth, Y. 1984, *Do it yourself social research*, Victorian Council of Social Services, Collingwood, Australia.

Suggested Attachments

- Robinson, L. & Glanznig, 2003
pp. 20 – 21 – differing values
pp. 82 – 85 – first steps and achievability test
pp. 102 – 103 – The ATTRACT-ORS Tool (See Section 5.)
pp 90-91 & 93 – Planning and checklist for a Participatory Action Research project

6 STRATEGIC PLANNING

Reflective Questions

- 1.4 What does it mean to think strategically?
- 1.5 What does it mean plan strategically? Why do we need strategic plans? What are some reasons why people don't plan strategically? Who needs to be involved in its development? What are the elements of a strategic plan? Generally, why is each element important? Are some of the elements not necessary in some cases? What else needs to be considered? What are the attributes of objectives? How can you prioritise these?
- 1.6 How can you build relationships and involvement by the participants? How can you encourage ownership by the participants? How can you empower the group? How can you tap into the creativity in the group?
- 1.7 How can you build collaborative projects?
- 1.8 How can you plan for effective communication? How can you plan to provide effective feedback to the target group and potential participants?
- 1.9 How can evaluation be built into the strategic planning from the start? What types of evaluation are there? How do you choose which type to use for your project? How can you capture the positive achievements (expected and unexpected) of the project? How can you learn from the negative findings?

Thinking strategically means – thinking ahead, learning from past mistakes, thinking around, thinking with others, thinking through, thinking with an end in mind and thinking it through.

Roughly based on a quote displayed in a staff room – source unknown.

Activity 1 – Strategic Thinking

1. What are some examples of how you got into difficulties / encountered problems through lack of strategic thinking? Why should we, where possible, think more strategically? Strategic thinking can be learnt even if it doesn't come naturally to some people.

Activity 2 – Strategic Planning

1. Why do we need strategic plans? What are some examples of projects that failed through lack of planning?
2. What are some of the reasons why people don't plan strategically? (Refer to Wadsworth, 1991).

Activity 3 – Elements of a Strategic Plan

1. Strategic plans are usually designed several years into the future, whereas an action plan is usually completed on an annual or even half-yearly basis. Strategic plans are only a guide to planning and allowances need to be built into the plan for fine tuning. The Participatory Action

Research model can be used to show how planning goes through many iterative cycles of reflection, design, observation and review. (Refer to the diagram from the back cover of Wadsworth, 1991 – attachment.)

2. Note that a strategic plan should also include:

- Planning for process
- Planning for communication
- Planning for capacity building
- Planning for evaluation: formative, summative, audit review, open inquiry (Refer to Section 7)
- Planning for organisational infrastructure, support, collaboration & partnerships

Information Box 25

Elements used in strategic plans

1. Vision statement

Vision statements are quite difficult to write, but they are important as they set the common direction for a project or an organisation

“A vision is a guiding image of success formed in terms of a contribution to society. If a strategic plan is the “blueprint” for an organization’s work, then the vision is the “artist’s rendering” of the achievement of that plan. It is a description in words that conjures up a similar picture for each member of the group of the destination of the group’s work together.”

A vision ... *“answers the question, “What will success look like?” “*

“A vision statement should be realistic and credible, well articulated and easily understood, appropriate, ambitious, and responsive to change. It should orient the group’s energies and serve as a guide to action. It should be consistent with the organization’s values. In short, a vision should challenge and inspire the group to achieve its mission.”

Source: John Mark Ministries. Accessed 30 October, 2006: <http://jmm.aaa.net.au/articles/8813.htm>

An example of a vision is the Port Phillip Community Vision:

“Our vision for the City of Port Phillip is of a city where diversity and harmony are sustained and encouraged. A place where all members of our community feel connected through a sense of belonging and pride in our city. There is a shared responsibility to ensure all people, regardless of age or of cultural and socio-economic background enjoy the benefits of our city and participate in all it has to offer.” Source: City of Port Phillip Council Plan, 2005 – 2009

The first step in producing vision statement is to write down all the words that relate to what you are trying to do under three headings: verbs, adjectives and nouns. Prioritise the top three words in each

list. Form these words into “must have” phrases. A combination of these words can then become your actual statement.

2. Mission statements

According to Janel M. Radtke there are three essential elements to a mission statement:

1. The Purpose (“... opportunities that we need to address”)
2. The Business (“... what we are doing to address the needs”)
3. The Values (“... that guide our work”)

Accessed 30 October:

<http://www.tgci.com/magazine/How%20to%20Write%20a%20Mission%20Statement.pdf>

As an example, the mission of the City of Port Phillip is:

“Our mission: to make the community a better place. To build a sustainable and inclusive city that is focussed on the future and provides excellent service – we see a future where the city is popular, prosperous and people enjoy a good quality of life and the city is improved through the provision of excellent services and information.”

Source: City of Port Phillip Council Plan, 2005 - 2009

3. Goals

Goals are simply broad aims.

The goals of the City of Port Phillip are:

Social equity pillar

1. *To build a just, resilient, healthy and inclusive city with equitable access to responsive and relevant services and resources.*

Economic viability pillar

2. *To promote effective stewardship of the council’s assets and promote positive economic development within Port Phillip that also supports the council’s social, cultural and environmental goals.*

Environmental responsibility pillar

3. *To foster a livable and attractive urban environment that uses fewer finite resources.*

Cultural vitality pillar

4. *To foster conditions that allow communities within Port Phillip to express, experience and enjoy diversity of values, beliefs and aspirations*

Source: City of Port Phillip Council Plan, 2005 – 2009

4. Objectives

Objectives are more specific than goals. A commonly used method to express objectives is the SMART method – Specific, Measurable, Achievable, Realistic, Time-framed. An example of an objective could be to reduce the number of skips collected each week by a school from two each week to one each week by the end of the school year.

Information Box 26**Terms used in Strategic Planning**

Term	What is it?	What should you ask?	Example
Vision	Clear, inspiring “big” picture of what your organisation would like to achieve sometime in the future	What are we hoping to achieve in the future?	“The achievement of zero waste”. (Zero Waste South Australia)
Mission	Explains the purpose, business and values of your organisation	What is our <u>purpose</u> ? What is our <u>business</u> ? What are our <u>values</u> ?	“Our mission: to make the community a better place. To build a sustainable and inclusive city that is focussed on the future and provides excellent service – we see a future where the city is popular, prosperous and people enjoy a good quality of life and the city is improved through the provision of excellent services and information.” Source: City of Port Phillip Council Plan, 2005 - 2009
Goals	Broad aims	What are we trying to achieve in specific areas?	“To foster a livable and attractive urban environment that uses fewer finite resources” (City of Port Phillip)
Objectives	Specific aims: SMART – Specific, Measurable, Achievable, Realistic, Time-framed	Precisely, what are we trying to achieve in specific areas?	Reduce waste to landfill by 25% (from South Australia’s Strategic Plan) by 2014 (Zero Waste South Australia)
Outcomes	In broad terms, what your organisation is hoping to achieve	What do we want to achieve?	“Community understanding of and commitment to environmental initiatives” (City of Port Phillip)
Strategies	Description of what you are going to do to achieve the goals/ outcomes	How are you going to do it?	“Encourage community participation and involvement in adopting environmentally positive behaviours” (City of Port Phillip)
Targets	Precise outcomes	How will you know you have been successful?	“At least 25% of all material presented at the kerbside is recycled” (by 2006) (Zero Waste South Australia)
Actions	Actions to achieve strategies	What should I do? When? Who? How much will it cost?	Conduct community enviro festival in Spring, with demonstrations of recycling.
Indicators	Indicators of performance in a particular area	What example will indicate whether or not our strategies are working?	“City of Port Phillip corporate water consumption per annum” (City of Port Phillip)

Activity 4 – Writing a Strategic Plan

1. Refer to the Information Box 25, which describes the key elements of a strategic plan. Information Box 26 summarises the key terms, giving definitions and examples.
2. Refer to Information Box 27. Values, attitudes and expectations influence vision and how it is often difficult to establish common vision
3. Start to write a vision statement, a mission statement, goals, objectives, strategies, target audience for your chosen education project, using the table - Creating Your Strategic Plan on page 70.

Information Box 27.

Values, Attitudes and Expectations

- **Values** are deep personal beliefs – these can be changed in children, but are very difficult to change in adults, e.g. honesty, punctuality etc.
- **Attitudes** are personal opinions, e.g. It is important to sort out paper, bottles and cans for recycling.
- **Expectations** are people's hopes and aspirations e.g. I expect that my council will always provide separate services for garbage, recyclables and green waste.

Activity 5 – Alternative Ways to Develop Visions

1. Using the sheet from Fien (1987) p 197 (Attachments), complete this diagram with examples from your own region. How could you attempt to make the probable future closer to your preferred future?

“Good (facilitators) know that the answers lie within the group and that their role is to help bring these answers out. They do this by getting the group, at all stages of the process, to understand that they own what is happening in the room and that they are the principal actors in the situation. So, every stage of the process is agreed and signed off before moving onto the next.”

(Townsend and Donovan, 2003)

Activity 6 – Encouraging Ownership

1. Recall strategies from the earlier sessions of good facilitation that will empower a group and encourage ownership. Examples of these positive strategies are empathic listening, praise, encouragement, support, guiding, keep focussed, considering individual differences, offering frameworks, tools and structures, tailoring the approach to suit the needs of the group, allowing time for reflection etc.

<u>Creating Your Strategic Plan</u>		
Vision	Clear, inspiring "big" picture of what your organisation would like to achieve sometime in the future	
Mission	Explains the purpose, business and values of your project	
Goals	Broad aims	
Objectives	Specific aims: SMART – Specific, Measurable, Achievable, Realistic, Time-framed	
Strategies	Description of what you are going to do to achieve the goals/ outcomes	
Targets	Precise outcomes	
Actions	Actions to achieve strategies	
Indicators	Indicators of performance in a particular area	

Activity 7 – Working Collaboratively

1. What is an example of collaborative projects that has gone well? What are some reasons for this?

2. What is an example of collaborative projects that has not gone well? What are some reasons for this?

Activity 8 – Planning for Effective Communication

1. Refer to Robinson and Glanznig (2003) for the following chapters on communication planning:
 - (1) Crafting strong messages
 - (2) Designing an integrated communication campaign
 - (3) Always pre-test
 - (4) Communication pitfalls
 - (5) Reaching Non-English Speaking Background audiences
2. Read the 13 Steps to Good Practice from Social Change Media.
3. Outline the steps you will take to develop a communication plan for your chosen project.

Resources

- For details on the framework used in the Natural Step process - The Natural Step <http://au.naturalstep.org/> and http://www.naturalstep.org/learn/understand_sust.php
- Strategies - <http://www.sd3.co.uk/challenge.html>
- World Business Council for Sustainable Development

<http://www.wbcd.org/templates/TemplateWBCSD5/layout.asp?type=p&MenuId=ODY&doOpen=1&ClickMenu=RightMenu>

- Paul Tebo – former Vice President of H,S&E at DuPont discusses the change which took place at DuPont
http://www.sustainableenterprise.com/resources/Key_Papers/PaulTeboTomorrowMagazine.pdf
- Stakeholder engagement manual
http://www.sustainableenterprise.com/resources/Key_Papers/StakeholderEngagementPractitionersPerspectives.pdf
- A conversation with Prof. Stuart Hart – world expert in sustainable business
<http://www.pearsoned.co.uk/Bookshop/article.asp?item=851>
- Checklist for communicating sustainability
http://media.socialchange.net.au/people/les/good_practice_checklist.pdf
- Frameworks and other information relating to reporting, methodologies for achieving sustainability and indicators for sustainability.
http://www.environment.sa.gov.au/reporting/frameworks.html#sustainability_counts
- Gilding P., Safe companies A PRACTICAL PATH FOR 'OPERATIONALIZING' SUSTAINABILITY
<http://www.ecoscorp.com/library/Safe%20Companies%20March%202002.pdf>
- Communication and feedback plan - Robinson and Glanznig, 2003 Chapters 18-22.
- Checklist for communicating sustainability
http://media.socialchange.net.au/people/les/good_practice_checklist.pdf

References

- Armstrong, P. and Winters J.R. 2003, *Learning to be Waste Wise: Curriculum Resource*, EcoRecycle Victoria
- Fien, J. 1987, *The Future of the Australia Environment Living in the Australian Environment*, Commonwealth Schools Commission, ACT.
- Robinson, L. and Glanznig, A. ,2003, *Enabling EcoAction*, Humane Society International, Sydney.
- Townsend, J. and Donovan, P. 2003, *The Facilitator's Pocketbook*, Management Pocketbooks.
- Wadsworth, Y. 1991, *Everyday evaluation on the run, Action research issues*, Association, Melbourne.

Suggested Attachments

- Robinson and Glanznig, 2003:
pp 92-93 – checklist for a successful participatory project
pp 118 – 119 – program design cycle
- Checklist for communicating sustainability
http://media.socialchange.net.au/people/les/good_practice_checklist.pdf
- Fien (1987) p 197

7 EVALUATING

Reflective Questions

7.1 How can evaluation be built into strategic planning from the start? What types of evaluation are there? How do you choose which type to use for your project? How can you capture the positive achievements (expected and unexpected) of the project? How can you learn from the negative findings?

The Information Boxes 28-30 in this section contain extracts which are used with permission from *The Guide Beside, Module 2 Evaluation*.

Activity 1 – Why evaluate?

1. Refer to Information Box 28 and the EPA NSW section, pp 6-7 for ideas on why we should evaluate projects and the benefits of integrating strategic plans and evaluation plans.
2. Write a rationale (purpose) for including evaluation in your chosen project or program. You might also consider who the evaluation is for, when it is to take place and who will complete the evaluation. (Can you or someone on staff complete it or will you need to engage an external consultant?)

Information Box 28

Stokking et al (1999) identifies four different purposes of an evaluation process:

The possible purposes of evaluation include:

- a. reporting to a funding body (accountability)
- b. to be able to provide participants and target groups with information (PR function)
- c. to monitor quality (keeping a finger on the pulse)
- d. to improve quality (learning from experience).

Reasons for carrying out more, or more systematic, evaluation as an organisation relate to combinations of the above. For example, it might be to determine whether an activity corresponds sufficiently to the interests of the target group, to determine what participants learn from it, to discover what aspects of a product can be improved, to make the value of your work clear to administrators, clients and others and so on. In short, as an organization you only carry out evaluation if it is in your interest to do so.

Wadsworth (1997) describes two approaches to evaluation: The open or inquiry evaluation and the audit review evaluation.

The open evaluation aims to seek and starts with questions such as: How are we going? Is it working? The questions are opening up ones that require a questioning, intuitive and often creative approach.

The audit evaluation aims to check and starts with questions such as: Have we done what we set out to do? What are the signs that we have done this? The questions are narrowing down ones that require a systematic, orderly and logical approach.

For many programs and projects, the evaluation is likely to be a mixture of the two approaches. It is well worth deciding which aspects of the evaluation are open inquiry and which are audit review. The diagram in Wadsworth (1997, page 45) could be used as a framework to help you decide.

Information Box 29**Program/Project Logic****1. Outcome Hierarchy**

Needs – Activities – Immediate outcomes – intermediate outcomes – ultimate outcomes.

Outcome Hierarchy	Definition
Ultimate Outcomes	Impact of the overall program and the ultimate program goals in biophysical, social, economic, organisational or communications terms.
Intermediate Outcomes	Changes in individual and group knowledge, skills, attitudes, aspirations, intentions, practices and behaviour
Immediate Outcomes	Level and nature of participation and reactions to the activities
Activities	The activities that the program will create to engage participants
Needs	The priority issues/problems that the program must respond to based on existing information.

A Guide to evaluating environmental education projects and programs, pages 9-15, provides an excellent description of the outcome hierarchy and how to develop one.

<http://www.epa.nsw.gov.au/community/projecteval.htm>

2. Bennett's Hierarchy for Developing Objectives has 7 levels

Inputs-activities-people-reactions-knowledge-practice change-end results

Level	Description of level	Description of possible objectives
7	End results	The end results of practice change
6	Practice Change (adoption)	The adoption of new practices, technology or change in behaviour
5	Knowledge, attitudes, skills and/or aspirations	A change in people's knowledge, attitudes skills and/or aspirations
4	Reactions	A change in people's reactions, favourable response
3	People	Level of contact, numbers participating in activities, characteristics of participants
2	Activities	Performance of specified activities
1	Inputs	Allocation of kinds and amount of resources to a program.

A good overview of the seven levels can be found at:

<http://citnews.unl.edu/TOP/english/overviewf.html>

Activity 2 – Developing a Project/Program Logic

1. Refer to Information Box 29 which shows two models for developing a logical approach to evaluating projects and programs. Refer also to the case study examples in Department of Environment and Conservation (NSW) (2004) Page 21.
2. Use the Outcomes Hierarchy to develop evaluative questions and outcomes for your chosen project in the table on the next page. Mark each outcome as either short-term or long-term.
3. This project logic is very useful as general guide, however, your evaluation plan should be sufficiently flexible to accommodate unexpected outcomes.

Outcome Hierarchy	Possible evaluative questions	Indicators
Ultimate Outcomes	e.g. How do we know that the program has been really effective in the long term?	
Intermediate Outcomes		
Immediate Outcomes		
Activities		
Needs		

Activity 3 – Indicators

1. Refer to Information Box 30 and then to write indicators for the evaluation questions that you developed in the previous activity for your chosen project/program.
2. These indicators can then be fed directly into their action plan for your project as shown in the diagram in Information Box 30. Refer also to the case study examples in Department of Environment and Conservation (NSW) (2004) Page 21.

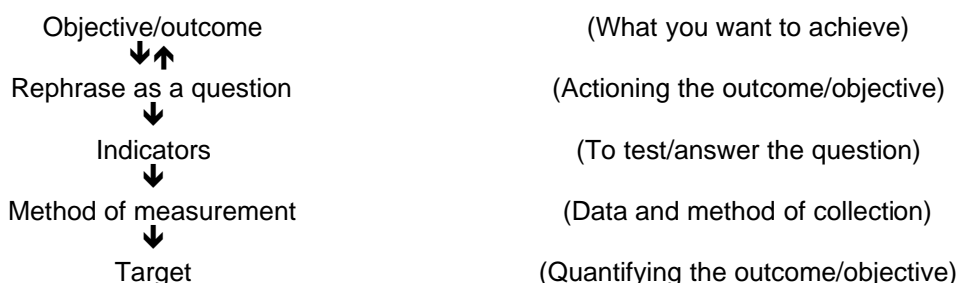
Information Box 30

Indicators

An indicator is what you observe to measure change. It should be clear and concise and be directly related to the outcome or objective. There may be one or more indicator for each outcome/objective. Examples might be

- Number of people using your service
- Number of participants who have implemented a water saving policy
- Area of bushland regenerated
- Number of different species visiting an area

The pattern of the evaluation processes, however, will generally follow the following logical pathway:



Examples of indicators can be found in:

http://www.iucn.org/webfiles/doc/CEC/Public/Electronic/CEC/Manuals/Enabling_EcoAction.pdf

<http://www.epa.nsw.gov.au/community/projecteval.htm>

Activity 4 – Strategies for Evaluating Projects

1. There are many excellent tools for evaluating projects and you should familiarise yourself with these before developing the data collection strategies.
2. Refer to the websites in the Resources section.

Activity 5 – Using Your Findings

1. Answer the following questions to round off your evaluation plan for your chosen project/program:

(a) How can I summarise findings, using statistics where possible?	
(b) How can I best write up the report and communicate the findings? To whom should I communicate?	
(c) How can I ensure that the findings are part of an on-going process? i.e. Cyclical Research Process	
(d) How can we celebrate our successes?	
(e) How can we learn from negative findings?	
(f) How can we develop a culture of evaluation?	

Activity 6 – Participatory Action Research

This activity looks at Participatory Action Research as an alternative way of conducting research.

1. Read Information Box 31 and the attachment from Waste Wise Way (page 10).
2. Match stage and description in the hypothetical example below of two cycles in a participatory action research project.

Stage	Description
1. Plan 1	A. Notice that there are problems with the bins, such as there are many broken glass bottles in the bin and residents complain that there is not enough room in the paper half of the bin
2. Act 1	B. Implement program and remove the central divider in each recycling bin
3. Observe 1	C. Consider redesigning the bin, after public consultation and research of other council systems
4. Reflect 1	D. Decide to monitor the situation
5. Replan	E. Council committee, with resident participation, selects a split bin for council recycling, one half for paper, one half for bottles and cans
6. Act 2	F. Redesign the bin to collect fully commingled recyclables - paper and bottles and cans
7. Observe 2	G. Implement program and deliver bins to householders
8. Reflect 2	H. Observe that there are fewer broken glass bottles and fewer complaints form residents

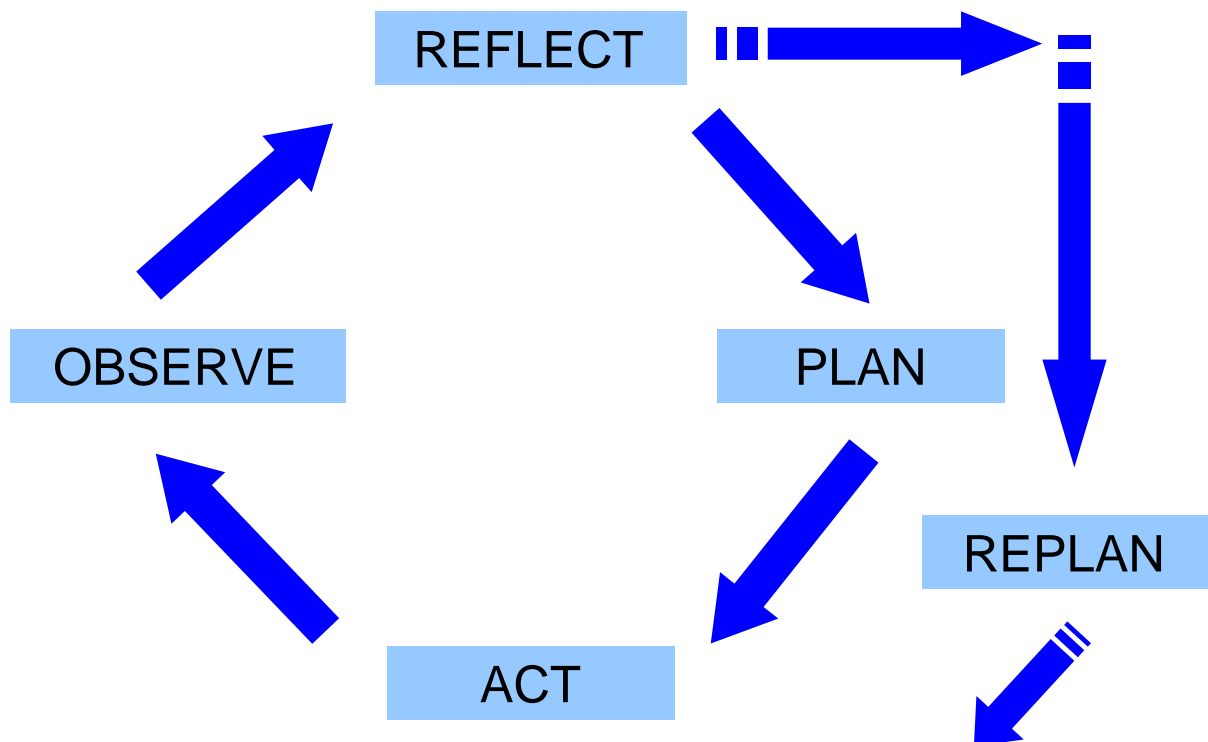
Correct sequence at end of page

Information Box 31

“Participatory action research can be defined as “collective, self-reflective enquiry undertaken by participants in social situations in order improve the rationality and justice of their own social...practices” (Kemmis & McTaggart 1988, P 5). Research using PAR as its method will happen in the four moments of action research, namely reflection, planning, action and observation. These research moments exist interdependently and follow each other in a spiral or cycle.”¹⁰ Refer to the diagram on page 88.

According to Wadsworth (1998), PAR is an iterative series of steps:

“In participatory action research, while there is a conceptual difference between the ‘participation’ ‘action’ and ‘research’ elements, in its most developed state these differences begin to dissolve in practice. That is, there is not participation followed by research and then hopefully action. Instead there are countless tiny cycles of participatory reflection on action, learning about action and then new informed action which is in turn the subject of further reflection. Every minute of every hour may see participants absorbing new ways of seeing or thinking in the light of their experience, leading to new related actions being taken on the spot. Often these will pass unnoticed and unrecorded, but with practice these too become the subject of further reflection and group self-understanding. Change does not happen at ‘the end’ - it happens throughout.”



¹⁰ Seymour-Rolls, K. & Hughes, I 1995, 2000, Accessed 16/01/2006, <http://www2.fhs.usyd.edu.au/arow/arer/004.htm>

Resources

- Chapter 2 in Bond et al (1997) is a good reading exercise to follow up these activities. Can be found at: http://www.horizon-research.com/reports/1997/taking_stock.php
- (Bond et al 1997) http://www.horizon-research.com/reports/1997/taking_stock.php
- Chapter 2 discusses the question Why Evaluate? It discusses formative and summative evaluation and is a good follow up to the first two activities.
- Department of Environment and Conservation (NSW) (2004). *Does your project make a difference? A guide to evaluating environmental education projects and programs* <http://www.epa.nsw.gov.au/community/projecteval.htm>
- A very useful guide to starting, designing, developing and learning from evaluation. Section 1: Getting started on Evaluation is a good introductory reading.
- Introduction to Program Evaluation <http://www.southalabama.edu/coe/bset/johnson/660lectures/rflone.htm>
- A brief introduction to evaluation research. (Stokking, H., van Aert, L., Meijberg, W., Kaskens, A. 1999) <http://www.iucn.org/wp2003/books/pdf/cec4.pdf>
One of the few resources focusing on evaluation within the Environmental Education field.
- (Wadsworth, Y. 1997) Chapter 1 provides a useful introduction to evaluation. This has good section on Participatory Action Research.
- (Wadsworth, Y. 1998). What is Participatory Action Research? Action research international Paper 2 <http://www.scu.edu.au/schools/gcm/ar/ari/p-ywadsworth98.html>
An online paper based on the previous reference.
- Readings:
<http://146.227.1.20/~jamesa//teaching/objectives.htm>
<http://edweb.sdsu.edu/courses/EDTEC540/objectives/ObjectivesHome.html>
- A good overview of the seven levels can be found at:
<http://citnews.unl.edu/TOP/english/overviewf.html>
- Taking Stock Chapters' 3 Framing the evaluation and 4 Defining Goals and Objectives.
- Enabling Ecoaction: Achievability test: Page 84- 85 Setting Action-able Objectives: Page 98, Making your program measurable: Pages 104- 109.
- Evaluating Environmental Education Chapter 3 Defining the objectives of the product or activity: Pages 31-42.
- Examples of indicators can be found in:
http://www.iucn.org/webfiles/doc/CEC/Public/Electronic/CEC/Manuals/Enabling_EcoAction.pdf
<http://www.epa.nsw.gov.au/community/projecteval.htm>
- (Bond, S. L.; Boyd, S.E.; Rapp, K.A. 1997) http://www.horizon-research.com/reports/1997/taking_stock.php

- (Covey, S. 1989) An excellent resource for individuals to reflect on their own work habits and motivations.
- (Robinson, L. & Glanznig, A. 2003)
http://www.iucn.org/webfiles/doc/CEC/Public/Electronic/CEC/Manuals/Enabling_EcoAction.pdf
 This handbook aims to be a road map for anyone working with the community to achieve environmental change, including environmental educators and managers, local government officers, and community development officers.
- (Stokking et al 1999)
<http://www.iucn.org/wp2003/books/pdf/cec4.pdf>
- Action Research Resources:
 This is the "front page" of a substantial action research site at Southern Cross University.
<http://www.scu.edu.au/schools/gcm/ar/arhome.html>
- (Dick, B. 1998) Action Research and Evaluation. A paper prepared for the on-line conference on "Innovations in Evaluation and Program Development", ARIA Associates, September 1998
<http://www.aepro.org/inprint/conference/BDick.html>
- http://www.iucn.org/webfiles/doc/CEC/Public/Electronic/CEC/Manuals/Enabling_EcoAction.pdf
- (Bell, J. 1993) Part 11, selecting methods of Data Collection.
- (Bond et al 1997) Chapter 4, Finding the right mix is a good introduction to using quantitative and qualitative data.
- (Burns, R. 1997) Parts 2 and 3 offer extensive information about different research techniques.
- (Stokking et al 1999) <http://www.iucn.org/wp2003/books/pdf/cec4.pdf>
 Chapter 3, steps 4-8 offer a useful framework to implement evaluation processes.
- (Walker, R. 1985). *Doing Research*. Cambridge University Press: UK.
 Chapters 3 and 4 on methods and techniques.

References

- Armstrong P. et al, 1998, *The Waste Wise Way*, savings, benefits and school operating practices, EcoRecycle Victoria.
- Bell, J. 1993, *Doing your Research Project. A Guide for First-Time Researchers in Education and Social Science*, Open University Press: UK.
- Bond, S. L.; Boyd, S.E.; Rapp, K.A. 1997, *Taking Stock: A Practical Guide to Evaluating Your Own Programs*.
- Burns, R. 1997, *Introduction to Research Methods*, (3rd Ed.) Longman: Melbourne.
- Covey, S. 1989, *The 7 Habits of Highly Effective People*. Melbourne: The Business Library.
- Department of Environment and Conservation (NSW) (2004). *Does your project make a difference? A guide to evaluating environmental education projects and programs*.
<http://www.epa.nsw.gov.au/community/projecteval.htm>
- Dick, B. 1998, *Action Research and Evaluation. A paper prepared for the on-line conference on "Innovations in Evaluation and Program Development"*, ARIA Associates, September 1998

- Kemmis, S. & McTaggart R. 1988, *The Action Research Planner, 3rd ed*, Geelong: Deakin University.
- Robinson, L. & Glanznig, A. 2003, *Enabling Ecoaction: A handbook for anyone working with the public on conservation*. Sydney: Humane Society International.
- Stokking, H. van Aert, L. Meijberg, W. and Kaskens, A. 1999, *Evaluating Environmental Education*: IUCN Commission on Education and Communication CEC
- Walker, R. 1985, *Doing Research*. Cambridge University Press: UK.
- Wadsworth, Y. 1997, *Everyday Evaluation On The Run*. Second Edition. Australia: Allen & Unwin.
- Wadsworth, Y. 1997, *Do it Yourself Social Research*. Second Edition. Australia: Allen & Unwin.
- Wadsworth, Y. 1998, *What is Participatory Action Research?* Action research international Paper 2, <http://www.scu.edu.au/schools/gcm/ar/ari/p-ywadsworth98.html>

Suggested Attachments

- Armstrong P. et al, 1998, p 10
- Robinson & Glanznig, 2003:
 - pp 90-91 – Participatory Action Research
 - pp 118-119 – Designing your program as a cycle
 - pp 102-103 – The ATTRACT-ORS Tool
- Department of Environment and Conservation (NSW) (2004):
 - pp 6-7
 - pp 21, 24 & 25
- Wadsworth, 1997:
 - p 83
 - chart from back cover

Correct sequence: 1E, 2G, 3A, 4C, 5F, 6B, 7H, 8D
--

8 IMPLEMENTING

Reflective Questions

- 8.1 How would you deal with differences (values, aspirations, time availability, standards, ethics) in achieving project objectives? How do you move to “win-win” situations?
- 8.2 How do you keep the project going (continuous improvement model as represented in the action research spiral)? How do you keep people engaged and motivated? How do you build capacity?

Activity 1 – Barriers to Groups Working Together

1. What are some the barriers of groups with divergent objectives working together on waste projects? What are some strategies that will help to overcome these barriers? (This was also considered in Section 3.)
2. The following exercise will help you develop a greater understanding of solution multiplying approaches. Working in pairs, one person is to act positively about developing a green office program where they work; the other person is act negatively. Participants take roles and then each person works through ‘Conflict Checklist’.

Activity 2 – Win-Win Solutions

1. The well known method of Fisher and Ury create win-win situations is (Refer to Fisher and Ury, 1991):
 - (a) Separate the people from the problem
 - (b) Focus on interests, not positions
 - (c) Invent options for mutual gain
 - (d) Insist on using objective criteria
2. Apply these methods in the role play on the next page.

Role Play

The Scenario

Grevillea Council has a serious problem with contamination of the recyclables collected from households. The contamination rate is now running at 30% of the total quantity of recyclables collected. This means that the recycling contractor is wasting time, labour and fuel collecting and sorting material that just ends up in landfill. This is costing the contractor big money and, naturally, they are not pleased. Some of the material collected from kerbside is so “gross” that the recycling coordinator is concerned for the health and safety of the staff who work in the MRF. The Manager has contacted the Council and asked that something be done.

The Meeting

A meeting had been called to address the issue and to come up with a PLAN that is agreeable to all parties. Among the people to be invited are:

- The Mayor who will chair the meeting
- Manager of waste services
- Engineer
- MRF Coordinator
- Recycling truck driver
- President of the Ratepayers Association
- Residents
- Waste education officer
- Teacher from a local school
- Student representative
- Owner of small business

The draft program is as follows:

1. The issue and the problems
2. Some options for the short term (technological, education, rewards, punishment and others)
3. Some options for the long-term
4. Pros and cons of each option
5. Can we come to a tentative solution?

The Action

Write the names of the invitees on cards, leaving some blank. Participants draw cards from a hat and assume the role of the person on the card. Those that draw a blank card play the role of observers and report back at the end of the role play. Participants with roles work through the steps in the program and try to achieve a win-win solution

The Debrief

To be presented by observers:

1. Did the group reach a consensus? How would you categorise the solution (technology, rewards, punishment, education or a mix)? What examples of Ury's method of conflict resolution were observed?
2. What was the role of the education officer in this meeting?
3. What attributes did the education officer display in reaching a consensus?

ROLES FOR ROLE PLAY

Mayor

Keen to get a resolution that will meet the needs of all the players. Concerned that the reputation of council may be harmed as they may be seen as not able to "manage" the situation.

Waste Education Officer

Keen to see that education is an integral part of any approach used by council. Uses research from behaviour studies that show that you should use different strategies with different sectors in the community. "One size does not fit all."

Manager of Waste Services

Keen to see a quick resolution of the situation, as the costs of contamination are coming out of her/his budget. Would like to see council officers "fining" residents who repeatedly contaminate their recycling bin.

Engineer

Strongly believes that council should get tough with the residents who repeatedly contaminate their recycling bin. "Fine them or take away their recycling bin - that is the only way that they'll get the message."

MRF Coordinator

Sees the situation as urgent. She/he is very concerned about the safety of their workers. If it continues, the MRF workers will go on strike. They are planning to install CCTV on their trucks to look inside bins. If the operator sees non-recyclables in a bin, they'll just put the bin back - unemptied. - "that'll teach them."

Recycling Truck Driver

I just do my job, but I used to work on the MRF line and I can sympathise with the workers. Some of the stuff that they have to deal with is just "gross" - we even had a "bag of dirty nappies" one day. We need to come down hard on people who mess up. If I was given more paid time I could check all the bins on our CCTV in the truck and then put warning strips on offending bins ...'No collection next week' stickers and future fine warnings. We'll get 'em as long as we are given the paid time to do a professional job.

President Ratepayers Association

As you know we are a watchdog group trying to stop these constant rate rises by the council officers who have their comfortable council jobs for life. We have paid a lot for our recycling service and refuse to support any more increases in expenditure. Whatever the council wants to do, do it within the existing budget. No more of our precious cash for trash!

Resident 1

Keen to see a solution. Concerned that the collection service might be disrupted. "If you come down too hard on people they will just not bother with recycling and they'll just put all their bottles and cans in the rubbish bin. All we need is information leaflets."

Resident 2

I'm really concerned about this. I hate having bins left on the nature strip on collection days. It looks so untidy. I keep our house looking very neat and tidy, why I even sweep the gutters every day. I think that if people can't do the right thing and recycle correctly, then they should be fined and their names listed in the local paper. Bring on the Recycling Police to check people's recycling bins. Why don't we have by-laws and fines to punish the offenders?

Resident 3

We need to think very carefully about this. If the recycling workers go on strike, it might lead to an even more widespread strike. I can remember back in 1986 when the garbos went on strike for three weeks. I'll never forget it. The smell from our bins was something terrible.

Teacher from a local school

Keen to see schools involved in assisting council. "Educating the kids is a great way to reach the parents. Kids are our best teachers."

Owner of small business

Business people are very busy. Just give us clear information on the bins. We cannot afford to not have our bins collected. It will become an OH&S issue if uncollected bins are left on the footpaths. And don't charge us any more for the improved service as that is what we are supposed to be paying for already!

Student representative

We have learnt all about recycling at school and our school is an accredited Waste Wise School. We could help by developing great communication messages for householders. Why doesn't council run a school competition for the best poster or advertising message or song? The winning poster could be displayed at the local shopping centres and the winning message or song could be played on our local radio station. "Think beyond fining people guys, that went out with the Ark."

Observer

Note the strategies used by different players to "convince" others and in particular the "attributes" of the waste education officer in dealing with the other players.

Observer

Note the strategies used by different players to "convince" others and in particular the "attributes" of the waste education officer in dealing with the other players.

Observer

Note the strategies used by different players to "convince" others and in particular the "attributes" of the waste education officer in dealing with the other players.

Observer

Note the strategies used by different players to "convince" others and in particular the "attributes" of the waste education officer in dealing with the other players.

Resources

- 'Conflict Checklist'... from Conflict Resolution Network, PO Box 1016, Chatswood NSW:
<http://www.crnhq.org/freechecklist.html>
- Business Council for Sustainable Development
<http://www.wbcd.org/templates/Template8/layout.asp?MenuID=36>
- Green Biz - <http://www.greenbiz.com/>
- http://www.google.com/Top/Society/Issues/Business/Corporate_Environmentalism/
Alcoa case study - http://www.alcoa.com/global/en/environment/pdf/Envr_Strategy.pdf
- Business and Sustainable Development – <http://www.bsdglobal.com/studiesalphabetical.asp>
- Fantastic website on Capacity building
<http://www.rirdc.gov.au/capacitybuilding/about.html>
- References on partnering
The Partnering Initiative <http://thepartneringinitiative.org/index.php>
Partnership Brokers' Forum
<http://www.partnershipbrokers.net/CSRBrokers/Brokers.nsf/indexw.html>
Business Partners for Development (cued to the section for advisers & facilitators) <http://www.bpd-naturalresources.org/html/adfac.asp>
Partnership Brokering Accreditation
http://www.odi.org.uk/pppg/PBAS/PBAS_brochure05.pdf
- Seminal works (for the Western world in any event) on interest based negotiation:
Getting to Yes: Negotiating an Agreement without giving in - Fisher R and Ury W Random House
Business Books - now in 2nd Ed 1991
Getting Past No: Negotiating with Difficult People Ury W - Business Books Limited 1991
- Synopsis of The Natural, Advantage of Nations: Business Opportunities Innovation and Governance in the 21st Century <http://www.thenaturaladvantage.info/>
- Group dynamics resource page - <http://www.richmond.edu/~dforsyth/gd/>
- Information about how group dynamics works – <http://www.grouprelations.com/>
- Employee motivation and group dynamics
http://www.accel-team.com/work_groups/informal_grps_06.html

References

- Fisher, R. Ury, W. & Patton, B. 1991, *Getting to yes, negotiating an agreement without giving in*, Random House, London.
- Fisher, R. Ury, W. & Patton, B. 1991, *Getting Past No: Negotiating with Difficult People*, Random House, London.
- Robinson, L. & Glanznig, A. 2003, *Enabling Ecoaction: A handbook for anyone working with the public on conservation*. Sydney: Humane Society International, 2003

Suggested Attachment

Robinson & Glanznig, 2003, Campaign Matrix, p 132

9 ACHIEVING CLOSURE

Reflective Question

9.1 What is needed to close off a project? How can you measure the overall success of project? Where will you go next?

Activity 1 –Achieving Closure

1. Review the whole process using PAR – Participatory Action Research. Refer to chart from Wadsworth (1991).
2. Relate this process to a project you have worked on and, working with a partner, illustrate each of the 7 steps in the ‘Spiral of Improvement’. (The spiral is an open, adaptive system with an emphasis on communications to and from the organizational environment.)
3. Often, one of the weakest areas of environmental work is in marketing and communications. To ensure a project is well presented, it is useful to plan the message. Refer to Robinson and Glanzig (2003). Work in groups of 4. Each group selects one action project of interest to the group and completes the ‘message matrix tool’ p.132.

Activity 2

1. Refer to Information Box 31. From your experience is there anything else that you would add to the list of suggestions?

Information Box 31 ***Project Review and Closure Report***

“It is useful to develop a *Project Review and Closure Report* to:

- Review the outputs and success of the project;
- Outline outstanding issues and recommendations;
- Detail activities undertaken to close the project; and
- Inform future projects.”

“There are a number of mechanisms that can be used to determine the lessons learned from a project. The following list is not fully comprehensive, but provides a few suggestions, a combination of which may best suit your individual needs:

- examination of project records and documentation;
- questionnaire or survey of a representative stakeholder sample;
- face-to face interviews - either one-on-one or groups; and/or
- facilitated feedback sessions with a large group of stakeholders.”

“It is important that stakeholder perceptions of the project are captured. Although different stakeholder groups will have different perceptions of the project, for future projects it is important to learn from their perspective what worked well, or could be improved.”

Accessed 19/112006,

http://www.projectmanagement.tas.gov.au/pm_templates/pm936_projectreview_closure2.0.htm PM 936 Project Review & Closure Report (Small) Template & Guide

Resources

- Communicating sustainability – a checklist
http://media.socialchange.net.au/people/les/good_practice_checklist.pdf
- A range of checklists which may be the basis for evaluation of the program - Template for closure report -
http://www.projectmanagement.tas.gov.au/pm_templates/pm936_projectreview_closurev2.0.htm

References

Wadsworth, Y. 1991, *Everyday evaluation on the run, Action research issues*, Association, Melbourne.
Robinson, L. and Glanznig, A, 2003, *Enabling EcoAction*, Humane Society International, Sydney.

Suggested Attachments

- Wadsworth, 1991, back cover
- Robinson & Glanznig, 2003, Campaign Matrix, p 132.