AAEE Professional Learning Series

# Write it up!

A guide to writing
**Sustainability Education Case Studies**

our environment it's a living thing
NSW GOVERNMENT PROGRAM

NSW Environmental TRUST

Australian Association for Environmental Education. 'Write it up! A guide to writing sustainability education case studies'. Sydney, Australia: Australian Association for Environmental Education.

Published by:
Australian Association for Environmental Education
Sydney, NSW

Email: admin@aaee.org.au

Copyright © 2007 Australian Association for Environmental Education

Information contained in this publication may be copied or reproduced for study, research, information or educational purposes, subject to inclusion of an acknowledgement of the source.

ISBN: 978 0 9578335 2 4

Cover photo by Crystal Woroniuk (http://c.woroniuk.googlepages.com/) from Stock.XCHNG (http://www.sxc.hu/home)

Printed on 100% recycled paper

# Acknowledgements

'Write it Up' is based on original material developed by Phil Smith and Katie Ross in 2006. Additional contributions from Sue Burton, Lynne McLoughlin, Brenda Mattick and other members of the Steering Committee: Neil Dufty, Jasmine Payget, Sue Martin and Doug Reckord.

We would like to thank all the people who have participated in reflecting on and writing the guide and associated four case studies. Each case study acknowledges the participants.

This AAEE resource extends the work by the Nature Conservation Council and Macquarie University: 'Living Change: Documenting good practice in Education for Sustainability in NSW' (Tilbury and Ross, 2006).

Funded by the NSW Environmental Trust and managed by the NSW Chapter of AAEE, the Guide supports the principles of Learning for Sustainability: NSW Environmental Education Plan 2007-2010.

Design and layout by Palmtree Productions.

# Contents


Introduction 1

How to write a sustainability education case study

**1** Plan 4

**2** Research 8

**3** Organise & analyse 11

**4** Write 13

**5** Edit 16

**6** Publish 17

**7** Evaluate 18

Final words 19

Bibliography 20

Appendix 22

# Introduction

'Write it up!' is designed to encourage sustainability education practitioners to share their experiences through writing. It includes questions as starting points for reflecting, thinking and talking; guides for planning, checklists for reviewing—and four case studies that apply sustainability education methods to very different problems and situations.

This guide has been developed by the Australian Association for Environmental Education (AAEE), the national professional association for those who identify themselves as working in the fields of environmental or sustainability education. The NSW Chapter of AAEE is committed to recognising, sharing and expanding current knowledge on good practice in sustainability education. For more information and sample case studies go to AAEE (NSW) at http://www.aaeensw.org.au.

## About case studies

'A case study is a story told in a structured way. Case studies are frequently used to examine complex issues in real-life applications. They are ideally suited for understanding phenomena that require a holistic view, where cause-and-effect relationships are likely influenced by a number of factors' (CIDA, 2007).

### A case study of what?

Case studies can be used to understand good practice in sustainability education. Key questions to ask in considering whether to write up a case study are: what's this case study about? And why would someone else be interested?

Good practice evolves and emerges from action and then reflection. Case studies help participants review their experiences, draw out lessons and share ideas.

DIFFERENT TYPES OF CASE STUDIES

**Department of Environment and Climate Change (DECC)**

- **Effective stormwater education**
  http://www.environment.nsw.gov.au/stormwater/casestudies/index.htm
- **Industry Partnership Program**
  http://www.environment.nsw.gov.au/cleaner_production/ippcasestudies.htm

**NSW Department of Community Services**

**Communitybuilders NSW**
http://www.communitybuilders.nsw.gov.au/stories/

**Business and Management Case Studies**
http://management-case-studies.blogspot.com/

**ARIES case studies**
http://www.aries.mq.edu.au

They also act as a collaborative learning opportunity by helping those involved to reflect on their experiences, share ideas and draw out lessons. Project managers and participants everywhere are encouraged to use this Guide as a tool for questioning, thinking about and writing up their projects.

Case studies can help others learn from your sustainability education projects. Writing up good practice into case studies helps ensure that good practice is more rapidly borrowed, tested and adapted by others. Such sharing and evolution are fundamental as we—all of us together—learn our way towards sustainability.

You can write about others' projects, or about your own project. It can be developed by an external person or by the project participants.

Case studies can be started at the beginning of a project, in the middle or at the end. They are often the outcome of project planning and can be seen as a part of an evaluation process.

## About sustainability education

Sustainability, and therefore sustainability education, can cross many dimensions: ecological, social, economic, personal, local, regional and global.

In tackling this complexity, sustainability education projects exhibit a range of characteristics (see box below).

'Write it up!' is primarily focused on the **environmental** aspects of sustainability.

It draws on the sustainability education principles of the following (see next page for details):

- Learning for Sustainability: NSW Environmental Education Plan 2007-10
- The Decade of Education for Sustainable Development (UNESCO)
- The Australian Research Institute in Education for Sustainability (ARIES)

The sustainability education approach uses techniques or methods that aim to engage people at a deep and respectful level in the ultimate goal of protecting the environment.

CHARACTERISTICS OF SUSTAINABILITY EDUCATION

**Interdisciplinary and holistic:** learning for sustainable development is embedded in the whole curriculum, not as a separate subject.

**Values-driven:** it is critical that the assumed norms—the shared values and principles underpinning sustainability—are made explicit so that they can be examined, debated, tested and applied.

**Critical thinking and problem solving:** evaluating information to help address the dilemmas and challenges of sustainable development.

**Multimethod:** word, art, drama, debate, experience, different pedagogies which assist learning. Teachers and learners work together to acquire knowledge and play a role in shaping the environment of their educational institutions.

**Participatory decision-making:** learners participate in decisions on how they are to learn.

**Locally relevant:** addressing local as well as global issues, and using the language(s) which learners are familiar with.

## More information

Information on the evolving principles and guidelines for sustainability education is provided by the following recommended sources:

**The Decade of Education for Sustainable Development (2005-2014)**
The United Nations is fostering the importance of sustainability education through its Decade of Education for Sustainable Development (2005-2014). Its main goal is to 'integrate the values inherent in sustainable development into all aspects of learning to encourage changes in behavior that allow for a more sustainable and just society for all.' (UNESCO 2005)
http://portal.unesco.org/education/en/

**Learning for Sustainability: NSW Environmental Education Plan 2007-10**
The NSW Government's second three-year plan for environmental education sets out a series of sustainability principles (see Appendix p. 22).
http://www.epa.nsw.gov.au/cee/lfs.htm

**Australian Research Institute in Education for Sustainability (ARIES)**
'What are the key components of EfS?' Macquarie University, Sydney.
http://www.aries.mq.edu.au/portal/about/keycomps.htm

THE FOUR AAEE CASE STUDIES

**Sustainability education case studies developed with this Guide**

- The Environmental Champions Program: engaging an agricultural industry
- The Watershed: an urban sustainability resource centre
- Tom Thumb Lagoon: what if it's not in anyone's backyard?
- Youth LEAD: from little things, big things grow

GO TO:

**Australian Association for Environmental Education (AAEE)**
http://www.aaeensw.org.au

# How to write a sustainability education case study

## 1 Plan

The first step is to plan the writing of your case study. What you will write about and how to present it depends on the project, the audience and the scope of the case study. Map out how long you will spend on each section of the project, eg data collection, analysing information, writing and editing. Ensure that the writing phase is given adequate time.

The following questions will help you in this planning phase.

### What do you aim to achieve?

It is important to clearly define the aims and scope of the overall project.

**The Project**: why is it a sustainability education project? What principles does it demonstrate? What was the aim of the project: the challenge that needed to be addressed, or the problem that needed solving?

**The Case Study**: why write up your particular case study? What are the lessons you aim to share?

You may wish to:

- publicise the outcomes of the project
- promote the learning processes used
- strengthen the commitment of participants to continue with the project
- help train others in the design and delivery of education programs.

### Who are you writing for?

Define your target audience (readers). What would they be most interested in? How do you expect them to use the case study?

You may be writing for:

- those involved in the education project itself
- people in a related business or industry
- people in the local community
- key decision-makers in your organisation
- project stakeholders eg local government
- environmental and sustainability educators

MORE INFORMATION

**Project planning**
For help with project planning, go to: 'Community education'
http://www.environment.nsw.gov.au/community/index.htm

## Where will it be published?

Will it be published on your own organisation's intranet or a professional association's website? Do you aim to publish it in a journal, a newspaper or report?

Case studies need to be adapted for different audiences and publications. A funding body may request 250 words plus photos. A Council's annual report can limit descriptions of even a major project to 25 words or less. Some community organisations prefer online case studies of around 1,000 words.

AAEE encourages you to submit your case study to http://www.aaeensw.org.au to share with other educators and add to the body of good practice.

## Who needs to be involved?

Who are the stakeholders for this case study? Participation helps build ownership of the case study. It also helps ensure accuracy, encourages critical reflection and strengthens stakeholders' understanding of the education initiative.

People you could involve include:

- project participants (the target audience of the education project)
- project managers
- partners and supporters
- others with experience in writing case studies
- colleagues
- AAEE members
- other stakeholders in the project

Think about when you will involve them: at the beginning, during writing or at review stage? Will you set up a steering committee of representatives from stakeholder groups? How will you communicate with each other?

Time for involving others needs to be built into project planning.

### Ethics of working with others

When you involve others in the processes of planning, writing and reviewing the case study, be sure to discuss aspects of privacy and intellectual property rights.

Acknowledge those who contribute.

SUSTAINABILITY EDUCATION PROMOTES PARTICIPATION

**Environmental Champions Program**

A circle of over 30 partners manage and oversee the ECP program. The Ricegrowers Association of Australia works in partnership with farmers, irrigation companies, natural resource management organisations, environmental organisations, local and state governments and many others.

## Scope

It is difficult to identify the many aspects of a complex project. Make a list, timeline, flowchart or mindmap to help define the scope of your case study. Try to be inclusive in this initial scoping exercise as it may enable the sustainability education practice to become clearer.

### Mind maps

Mind maps may help identify key elements of your project and the connections between them.

> 'A mind map is a diagram used to represent words, ideas, tasks or other items linked to and arranged radially around a central key word or idea. It is used to generate, visualize, structure and classify ideas, and as an aid in study, organization, problem solving, and decision making.'
> (Wikipedia, 2007)

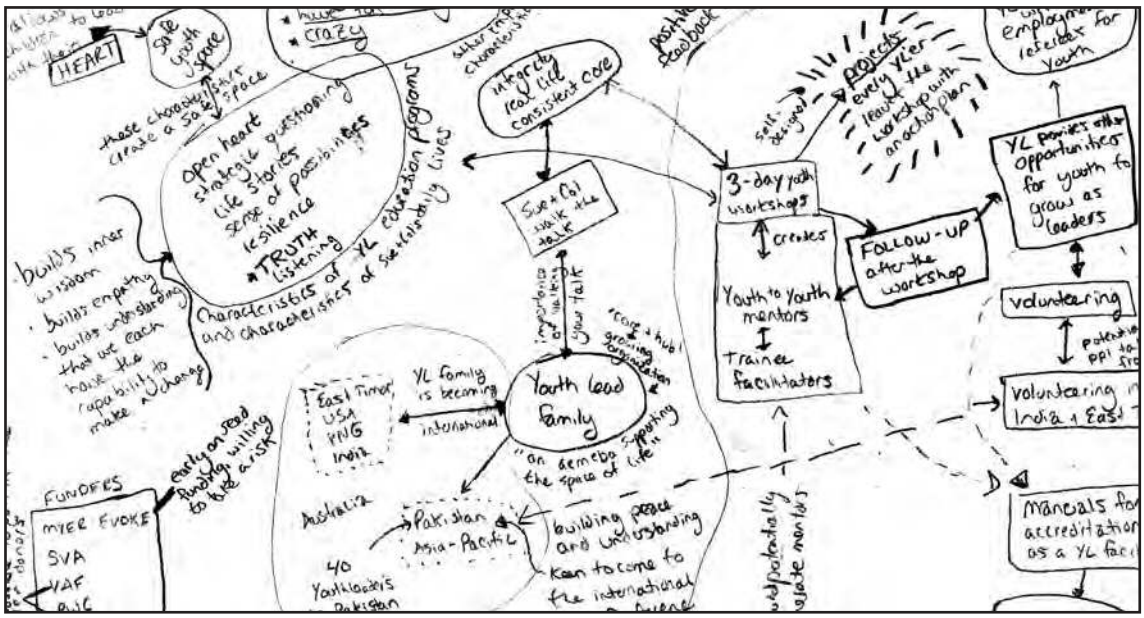
### How to create a mind map

Case study participants can be invited to draw mind maps to help identify the major components of the project and the links between them: the events, goals, participants, processes and outcomes, for example.

Start with a central core concept of the project and draw the main ideas that relate to it. Then take each of those ideas and draw the ideas that relate to them. In this way a large number of related elements can be identified, and an outline or map of the project is created.

The mind mapping process can be an exciting learning experience for your project team. It will generate discussions about what needs to be included and why.

**Example**
This mindmap was drawn up by participants in a YouthLEAD project:



## What do you include?

What aspects of the project are important? The whole story of your project could fill a novel! Not all of it can be told, so you need to decide what to include—and what to omit.

Consider including the following, for example:

- background to the project
- purpose
- context (political, social, economic, political, legal, and environmental)
- products
- learning processes
- key events
- people and organisations involved
- benefits
- costs
- resources
- relationships between all these elements
- photos
- graphs
- maps
- outcomes
- lessons
- evaluations.

SYSTEMIC THINKING

Systemic thinking is an important sustainability education principle.

It can be defined as 'the need for people to think holistically and explore the interrelationships and patterns within our natural and social systems' (ARIES, 2005).

# 2 Research

## What data do you need?

First decide what you need to know. The purpose and scope of the case study will help identify the data you need. Collect any documents that may be useful and evaluate the information.

During the research stage, unanticipated themes and ideas might begin to emerge. Be aware of your own assumptions and keep an open mind—you may notice emerging patterns of data or new issues.

## When will you collect the data?

Case studies written after the event collect data retrospectively. If you decide that the case study should be developed during the course of the project, different data collection methods can be used.

## How will you collect the data?

In order to validate your case study, collect data from different sources.

### Journals

Personal journals or project diaries of participants and case study writers can be used as the project unfolds.

Encourage participants to use them as a tool for stimulating critical reflection on their project. Journals can help show how assumptions are tested, challenged, confirmed or changed.

JOURNALS FOR DATA COLLECTION

Journals were used successfully to gather data for the four AAEE case studies. Questions for participants to consider were sent out regularly to stimulate thinking and journal writing.

Discuss:

- what the project meant to you
- reflections on such things as quality, change, good practice
- relationships with others in the project
- current shape of project
- thoughts since then (looking back on the project)

Sketch:

- you in your project
- your project in the agency/organization
- your project in the community

### Documentation
Memoranda, studies, agendas, reports, letters, project design and evaluation documents.

### Archival records
Service records, charts, maps, photos, survey data.

### Media reports
Newspapers, internet, television.

### Participatory Action Research (PAR)
'Action' research can be described as a family of research methodologies which pursue action (or change) and research (or understanding) at the same time.

It does this by:

- using a cyclic or spiral process which alternates between action and critical reflection, and
- in the later cycles, continuously refining methods, data and interpretation in the light of the understanding developed in the earlier cycles.

It is therefore a process which takes shape as understanding increases; an iterative process which converges towards a better understanding of what happens.

> 'In most of its forms it is also participative (among other reasons, change is usually easier to achieve when those affected by the change are involved) and qualitative' (Dick, 1999).

'Participatory' means that research is not 'on' people but 'with' them—people are treated as partners. The 'action' refers to the questioning process rather than starting out with the answer.

The PAR process may involve, for example: getting an interest group together (or the group forms organically because they are all interested) and deciding how to go about the research—the group then grows in knowledge, ownership and skills. Record it all as you go.

The researcher may be 'immersed' in the group or on the outside capturing the process and outcomes.

### Direct observation
Observation of project action and project participants—of the environment where the project took place, of educators educating and participants participating—provides first-hand material.

Observation may be independent or participatory, where the writer participates in the events being examined.

### Focus groups and interviews
Interviews are commonly used to gather data. They may be open-ended or structured, and may involve individuals or focus groups.

In order to increase participation and ownership of case studies, invite participants to tell the story they think is most important. Encourage them to draw out the links between actual practice and the principles of good practice.

## How to conduct effective interviews

### Prepare

- Send interviewees a letter outlining the purpose of the case study and what you specifically want to talk to them about.
- Prepare a list of questions that stimulate critical thinking, foster an enjoyable atmosphere and dig into the issues. What questions will best draw out the discussion you are interested in?
- Before you start, discuss the type of material that you might want to use, e.g. quotes or photos.
- Set the right atmosphere. Begin by introducing yourself and reminding everyone of the purpose of the meeting. This simple step is often forgotten!
- Keep interactions with participants and stakeholders positive.
- Keep communication open and clear.

### Capture the dialogue

Capture the interview discussions through notes, audio or video recording.

### Listen carefully

Often when people talk to each other, they don't listen attentively. They are often distracted, half listening, half thinking about something else.

### Remain flexible

You'll have your list of questions ready, but be open to asking a different question based on what you are hearing (be alert to the unexpected!).

### Be ethical

- Provide full, honest and open information to participants about the interview process and confirm this has been understood.
- Create a system for storing and protecting all the data gathered for the case study, as well as a timeline for how long the data will be kept. Protect confidentiality where requested.
- Create a process where a participant may withdraw or have their comments deleted from the oral record.
- Acknowledge those who provided the ideas and analysis.
- Give credit to those who participated.
- Consider writing a 'Letter of Understanding' between the participants and the researchers. This outlines your relationship and the steps you are taking to protect the privacy and intellectual property rights of those involved. Check if the associated organisations have their own ethics policies.

### Wrap up

- Transcribe the interviews (this helps you analyse what you have heard).
- Send the interviewees thank you notes and keep them up to date on the progress of the case study.
- Be sure to get their written approval of the final case study and any use of their quotes, ideas, or photos.
- Prepare a brief statement which explains what you want to do, with a space for their signature.

# 3 Organise and analyse

What criteria will you use to judge the information that will be included? Most case studies will require information on the following:

- What are the significant issues?
- What happened (process) and who was involved (participants)?
- What sustainability education principles or practices are showcased?
- What were the achievements and outcomes?
- What lessons were learnt?

## What are the significant issues?

Take the time to ask yourself what you have discovered and attempt to make sense of it. Look at the parts and the whole.

- What's jumping out of the data for attention?
- What are the interpretations that should be pursued? Are there any alternative or conflicting interpretations?
- What does the data mean?

Critically reflect on your assumptions and values and ask if the data could be interpreted in other ways. Critical thinking and problem solving lead to confidence in addressing the challenges of sustainable development.

Engage others in the processes of analysis. If there are different views, remember that disagreements can lead to deeper understanding on all sides and use this as a rationale to explore the issues further.

## What happened (process) and who was involved (participants)?

Outline the process of the project clearly so that someone unfamiliar with it can easily understand what happened.

## What sustainability education practices are showcased?

Use the list of characteristics at the beginning of this document to identify how the case study might showcase sustainability education. You could also use the list of **Good practice sustainability education principles** (Appendix, p. 22).

ENVIRONMENTAL CHAMPIONS PROGRAM

**Process and participants**

Each cluster group in the ECP begins with an introductory meeting which gives potential group members a chance to ask questions and decide if they will work well together. Participants begin at their own pace, come up with their own ideas, join forces and set group targets.

Groups meet wherever the group decides, in places ranging from offices to shearing sheds.

## What were the achievements and outcomes?

List these clearly and from a number of perspectives.

EXAMPLE

**Tomb Thumb Lagoon case study**

Between 2001 to January 2006, volunteers:

- planted 6121 native plants
- controlled weeds over 21.3 ha
- collected 661 kg of rubbish
- coordinated 2072 volunteer person days (mostly local community volunteers)
- conducted flora and fauna surveys and monitoring, vegetation mapping, seed collection, mulching and habitat restoration (Byrne, 2007).

## What lessons were learnt?

Analyse the data in the light of these questions:

- How have the practitioners incorporated sustainability education principles into their program?
- What have the practitioners learn about sustainability education?

EXAMPLES FROM CASE STUDIES

**Environmental Champions Program (Rice Growers Association)**

- built an organisational structure which supports participants and stakeholders
- developed effective partnerships: between farmers, irrigation companies, natural resource management organisations, environmental groups, local and state governments and others

**YouthLEAD**

- promoted a belief that answers and solutions lie with participants and stakeholders
- built and maintained support networks

**Watershed**

- helped volunteers develop and implement their own programs
- supported long-term learning and action
- responded to community needs

**Tomb Thumb Lagoon**

- supported and enhanced community initiatives
- fostered ownership and participation

## Pause and reflect

Press the PAUSE button. You have clarified your purpose, outlined your project and gathered and analysed your data. It's time to take stock of what you've learnt.

Are you and your participants achieving your original aims?

# 4 Write

How the case study is written will determine whether it is read—and whether your effort has been worthwhile.

You will already have decided on the purpose and audience for your case study. Now decide what structure (organisation or framework) to use.

You also need to think about how your case study will be published: will it be a printed report, web page or newspaper article, for example?

Give yourself a tight deadline.

Keep your purpose and readers in mind: different structures suit different audiences, purposes and formats. Who will read your case study, and why would they read it? What are their needs and interests? Present your case study in an engaging, compelling style.

Writing is best done in stages:

- discuss, read, research, make notes
- outline (list the main headings, subheadings)
- write first draft
- peer review (have someone else read it)
- revise
- check accuracy with stakeholders
- edit
- proofread
- check final version with stakeholders

## Case study structures

### Snapshot

This is useful for a short article or brief overview, or as background information for presentations.

The snapshot or summary includes the following information:

- main aim
- major challenge
- important stakeholders
- key issues involved
- results
- contacts

Depending on space restrictions, you may be able to include photos, maps or charts, for example.

## Detailed case study

This structure is useful for longer brochures, articles, or media stories. See the AAEE case studies at www.aaeensw.org.au.

| | |
|---|---|
| **Snapshot or summary** | A short snapshot or summary that defines:<br>• the aim<br>• the major challenge<br>• the important stakeholders<br>• the key issues involved<br>• the results |
| **Introduction (opening paragraph)** | How will you attract the interest of your readers with your opening paragraph? Consider a dramatic portrayal of the issues, problems or perhaps an unexpected outcome.<br>Retell a significant experience of one of the participants.<br>Highlight the main findings: facts and figures, changes or achievements. Use an inspiring quote from your interviewees. |
| **Aims, background and issues (several paragraphs)** | Clarify the purpose of your case study and the key issues raised. Describe the background or origins of the case study.<br>Explain briefly who you (and other authors) are, the scope of your involvement, and the approach you have taken. |
| **Present the challenge or problem (1-2 pages)** | Present the facts of the case study: identify the economic, social, political and environmental costs and benefits involved. |
| **Drill down on key issues and perspectives (1-2 pages)** | Now that you've outlined the facts of the case, focus on the challenge and highlight the complex or contested issues.<br>Use the data from stakeholder interviews to offer different perspectives on the case, or different approaches to addressing the challenge. |
| **Outcome/resolution (1-2 pages)** | After you've presented the issues, describe how the challenge was addressed and what was achieved.<br>What decisions were made? Who made them? What was the result?<br>Reflect on the outcomes of the project. |
| **Lessons learned (1-2 pages)** | Identify the key sustainability education lessons learned from this case study. |

Reproduced with the permission of the Minister of Public Works and Government Services, Canada (2007), and adapted to the sustainability education context.

## Narrative

A useful way of describing change over time is to tell the story of the case study. This option allows for a variety of methods and structures.

| | |
|---|---|
| **Tell the story from the perspective of participants or stakeholders** | Draw out the similarities and differences. Include lessons, achievements, personal insights and changes along the way. |
| **Begin at the end** | Explain how the project and participants got to that point. |
| **Build the case study** | Use extracts from journals and news clippings, for example. |
| **Compare and contrast** | Use differences and similarities between interesting features, facts and findings. |
| **Use the language of fiction** | Write vivid and lively descriptions, delve into dramatic events, describe your characters (the participants in the case study) and set the scene. Ensure that the facts remain unchanged. |

EXAMPLE

**The YouthLEAD case study**

This case study tells how Sue and Col Lennox ran innovative school-based environmental education activities.

They later founded OzGREEN (an independent environmental awareness and education program) and YouthLEAD (a program which supports and equips young people to work as leaders and active citizens in their communities).

# 5 Edit

Follow the editing checklist below to ensure the quality of your case study:

| ROLE | CHECKLIST |
|---|---|
| **As reader** | |
| Readability | Is it easy to follow, clear and logical? Would someone not familiar with the case be able to understand it? Have you explained acronyms and avoided bureaucratic language? Have all spelling and grammatical mistakes been corrected? |
| Organisation | Does the structure of the case follow a logical order? Are data tables, appendixes, charts labeled and used effectively? |
| Interest | Is there a story to the case to which other readers could relate?<br>Have you used a variety of means to tell your story:<br>• text, images, quotes, diagrams, art, drama, debate?<br>• extracts from journals, interviews or newspapers?<br>If publishing online, could you insert video or audio clips? |
| Purpose | After reading the first page, are you clear what the purpose and the focus of the case study is? |
| Balance and Perspective | Is the study devoid of the author's editorial comments? Are the insights and opinions primarily those of the interviewees? |
| **As researcher** | |
| Decision-makers | Does the case study give voice to the critical decision-makers? |
| Professionalism | Does the case study represent a scholarly investigation of the issues? |
| Narrator | Is there a description of how the case study came into being? Is the role of the narrator apparent? Are the facts of the case presented accurately and completely? |
| Triangulation / Cross-checking | Have observations/assertions collected during the writing process been verified through multiple independent sources? |
| **As ethicist** | |
| Consent | Have all the people consulted and interviewed been informed of the purpose of the case study and been given the choice to participate of their own free will? |
| Attributions | Have all direct quotes and off-the-record interpretations been approved by persons quoted prior to circulating the complete document for comments? (Ensure you do not misquote or cause someone harm from their involvement.) |
| Acknowledgement | Have co-authors or those who made special contributions been acknowledged? |
| Review / Verification | Has the case study been reviewed by your reference group (key participants and stakeholders)? Have you included their contact information for verification? |
| Contact Information | Have you included your own contact information? |

Reproduced with permission of the Minister of Public Works and Government Services, Canada (2007)

# 6 Publish

One of the main reasons for writing a case study is to share what you or others have done and what has been learnt. Sharing good news stories is important for the project stakeholders and for the community itself—it helps build a sense of achievement and promotes sustainability.

There are a range of options for publishing your case study—and one option is to submit your case study online to AAEE at www.aaeensw.org.au.

Consider the following additional publishing options (each will have its own editing and design requirements):

- Submit an article to the local press where the project took place.
- Give a presentation to project stakeholders.
- Submit the case study to the project funders.
- Extract the key outcomes and report them to the local council or to your employing organisation.
- Present a paper to conferences on education, change—or the project's specific issue (e.g. water, waste).
- Submit an article to relevant journals or magazines.
- Self-publish (print or online).
- Organise or find events where you can run workshops on aspects of your sustainability education project.

# 7 Evaluate

How effective was your case study? How well did it meet your aims? Evaluating your case study is different to evaluating the project.

You can evaluate your case study before and after publication. Evaluating your case study and obtaining feedback helps enhance your knowledge, understanding and skills. It builds your capacity to learn—not only about how you wrote and presented the case study, but also about how the project was conducted.

Feedback obtained from stakeholders and peers prior to publication will also hone the case study into a better product, whether print, online or presentation.

You might want to find out, for example:

- How many people read it?
  What organisations or groups do they represent?
- What are the major ideas they took away from it?
- Did they use it as a basis for a workshop or paper, for example?
  If so, why, how and for whom?
- Did this case study influence how they thought about education, change or the specific sustainability issues raised?
- Did they share this case study with others? If so, with whom and for what purpose?
- How readable was the case study? How could it be improved?

### How will you obtain the feedback?

You may wish to use:

- a response form at the end of the case study
- a targeted request to key people in the field; include a return-addressed envelope or online form
- an online survey and rating mechanism
- an invitation for readers to provide a name and number when they download a case study so you can and ask them what they thought
- a workshop session with opportunities for discussion and feedback.

# Final words

There is an urgency to understand the connection between our actions and the sustainability of the planet now and in the future.

Sustainability is about everyone, everywhere, every when. Sustainability touches on a broad range of issues, from social to personal, ecological to economic, cultural to political; it embraces health, education, poverty, global climate change, diversity, governance, corporate responsibility and consumerism (UNESCO 2005). Sustainability education focuses on finding meaningful solutions across this complexity.

There are many quality sustainability education projects to be found across NSW. However, the learning and positive changes that they promote may be going unnoticed and unshared.

AAEE NSW encourages all sustainability educators to use this guide, write up your project, and publish and share your experiences to assist other educators developing sustainability education for a sustainable future.

AAEE NSW welcomes feedback on this guide.

Please send to: admin@aaeensw.org.au

Happy writing!

# Bibliography


AAEE (2005) 'United Nations Decade of Education for Sustainable Development 2005-2014: A proposal for action from the Australian Association for Environmental Education'. Australia.

ARIES (2005) 'Education for Sustainability Portal'. Macquarie University http://www.aries.mq.edu.au/portal/index.htm

Australian Government (2007) 'Sustainability Education', DEWR. http://www.environment.gov.au/education/index.html

Byrne, Jen (2007) 'Restoration of Tom Thumb Lagoon'. Wetland Restoration Case Studies, Conservation Volunteers Australia. http://www.wetlandlink.com.au/content/restoration-of-tom-thumb-lagoon

Davidson, S (2005) 'Transforming Thinking.' ECOS Jan-Mar (11).

Department of Environment and Conservation NSW (2004) 'Does Your Project Make a Difference?' Sydney.

Dick, Bob (1999) 'What is Action Research? ' http://www.scu.edu.au/schools/gcm/ar/whatisar.html

James, Neil (2007) 'Writing at Work: How to Write Clearly, Effectively and Professionally. Crows Nest, Australia: Allen & Unwin.

Kearsley, Greg (2007) 'Explorations in Learning and Instruction: The Theory into Practice Database'. http://tip.psychology.org

Macquarie University (2007) 'Ethics', Research Ethics Information. http://www.research.mq.edu.au/researchers/ethics

NSW Council on Environmental Education. http://www.environment.nsw.gov.au/cee/index.htm

Smith, DC (2005) 'Case Study Research'. Rhodes Education Department.

Sterling, S (2001) 'Sustainable Education: Re-visioning Learning and Change'. Bristol, Schumacher Briefings.

Tilbury, D and Ross, K (2006) 'Living Change: Documenting Good Practice in Education for Sustainability in NSW'. Sydney: Macquarie University.

UNESCO (2005) 'Decade of Education for Sustainable Development 2005-2014' http://portal.unesco.org/education/en/ev.php-URL_ID=23279&URL_DO=DO_TOPIC&URL_SECTION=201.html

Wadsworth, Y (1997) 'Everyday Evaluation on the Run'. Allen & Unwin, 2nd Edition, St Leonards NSW Australia.

Watson, Don (2003) Death Sentence: the Decay of Public Language. Australia: Random House.

Wikipedia (2007) 'Mind Map.'
http://en.wikipedia.org/wiki/Mind_Mapping

Yin, R (1994) 'Case Study Research: Design and methods'. Thousand Oaks, CA, Sage Publishing.

## Writing case studies

Center for Education in the Built Environment (n.d) 'Case Study Template'.
http://www.cebe.heacademy.ac.uk/learning/casestudies/CaseStudyTemplate.doc

Center for Youth Studies (n.d.) 'How to Write a Case Study.'
http://www.centerforyouth.org/page.aspx?id=65364

CIDA (2007) 'Guide to Writing Governance Case Studies'. Canadian International Development Agency.
http://www.canadacorps.gc.ca/CIDAWEB/acdicida.nsf/En/EMA-218122155-PRC#notes

De Young, R and Monroe, M (1996) 'Some fundamentals of engaging stories'. Environmental Education Research. 2(2): 171-187.

Global Travel and Tourism Partnership (n.d.) 'How to Write a Case Study."'
http://www.gttp.org/docs/HowToWriteAGoodCase.pdf

Landsberger, Joe (2007) 'Procedures and considerations of case studies.' Study Guides and Strategies.
http://www.studygs.net/casestudy.htm

LEAD (2007) 'Writing your case study.' Learning through case studies.
casestudies.lead.org/index.php?id=19

Monash University (2007). 'Case Study.' Language and learning online.
http://www.monash.edu.au/lls/llonline/quickrefs/27-case-study.xml

Penn State University (2006) 'Writing the Case.'
http://tlt.psu.edu/suggestions/cases/write.html

Stake, Robert (1995) 'The Art of Case Study Research'. Thousand Oaks, London: Sage Publications.

University of Minnesota (2006) 'What is active learning?' Centre for Teaching and Learning.
http://www1.umn.edu/ohr/teachlearn/tutorials/active/what.html

University of Western of Australia (2000) 'Case studies', Alternative Modes of Teaching and Learning. Perth, WA.
http://www.csd.uwa.edu.au/altmodes/to_delivery/casestudy.html

# Appendix

GOOD PRACTICE SUSTAINABILITY EDUCATION PRINCIPLES

**The development and delivery of environmental learning in NSW is aimed at assisting the community to move towards sustainability**
Effective and integrated education for sustainability programs are integral to building an informed, active and environmentally responsible community.

**Education for sustainability is integrated with other environmental management tools**
To achieve sustainability, education for sustainability must be integrated with public policy, regulation, economic incentives, infrastructure, research, and monitoring and reporting.

**Education for sustainability acknowledges the complex connections between diverse aspects of environmental problems**
A more comprehensive and proactive approach to addressing environmental issues extends the focus of education from specific local and visible symptoms of environmental problems (such as water pollution or waste disposal) to the underlying causes of these problems (such as personal and social values, and organisational structures).

**Education for sustainability promotes social change through the initiatives of individuals and organisations**
Quality education promotes changes in personal behaviour, and organisational practices to deliver changes in broad social, economic and physical systems.

**Education for sustainability builds a 'learning society' through critical and reflective engagement, to enable the development of new understandings of the environment and our place within it**
Because there are no simple prescriptions or blueprints for sustainability, building individual and organisational capacities to sustain learning is a key role for education. This involves establishing processes for co-operative learning with other stakeholders.

**Education for sustainability is a lifelong learning process that provides environmental learning opportunities for all sectors of society**
Education for sustainability needs to engage people of all ages and backgrounds. This requires provision of comprehensive learning designed to equip people to make decisions and take actions that are environmentally sustainable at home, at work and during recreation.

**Continual improvement is at the basis of all planning, delivery and evaluation of education for sustainability**
Improving the effectiveness of education involves the use of research, evaluation, co-learning and adaptive management.

Learning for Sustainability: NSW Environmental Education Plan 2007-10