

# TOMORROW'S LEADERS FOR SUSTAINABILITY

## Reader #2: Ideas for Student Projects

### Primary

#### 1. Built Projects

- Set up and manage a complete **recycling system** in the school (check out the ResourceSmart AuSSI Vic Resources such as:  
[http://www.resourcesmart.vic.gov.au/documents/SV\\_RS\\_RRR\\_SchoolOperations\\_section1.pdf](http://www.resourcesmart.vic.gov.au/documents/SV_RS_RRR_SchoolOperations_section1.pdf))
- Build or fundraise to buy **compost bins or worm farms** (reference as above)



Composting centre at Alphington Primary School

- Fundraise to buy **recycled plastic outdoor furniture** (Go to Red Group website: <http://redgroup.net.au/>)
- Design and produce **signs or posters** to be placed around the school to remind people to save energy and water, pick up litter and cut rubbish to landfill
- Build **gardens** (see below)
- Build **animal enclosures** (see below)
- Build a **green model** (there are a heap of solar /wind powered projects on this website: <http://www.builditsolar.com/Projects/Educational/educational.htm>). For example:
  - Solar cooker
  - Solar hot water systems
  - Solar powered car
  - Wind generator
  - Wind powered land boat

#### 2. Keeping Animals

- A good general reference for keeping animals at schools is:  
<http://www.education.vic.gov.au/management/schooloperations/animalcare/animals.htm>

Other ideas include:

- Build a **“lizard lounge”** for native lizards, such as skinks and blue tongue lizards (A useful reference, with a downloadable activity sheet, is:  
<http://www.environment.gov.au/land/publications/firewood-kit/lizard.html>)

- Keep **guinea pigs or rabbits** (again check with your local council to see if there are any local regulations about keeping animals)
- Keep **chickens** – first check with your local council on local regulations for keeping chickens (A good reference is: <http://www.livinggreener.gov.au/waste/kitc hen-food-waste/keeping-backyard-chickens>.)
- Keep **invertebrates** (Check out the main reference above)
- Build a **frog bog** (A very helpful reference is: <http://www.latrobe.edu.au/wildlife/nursery/frog-bog>. The La Trobe Wildlife Sanctuary can provide a brochure on building a frog bog.)



Chicken coop at Lumen Christie PS1

- Keep **larger animals**, such as goats, sheep, birds, such as ducks or geese (Check out the main reference above)

### 3. Gardens

- An excellent video for building all sorts of gardens is the ABC's *Sustainable Gardening* (Order from the ABC website)
- Another good general reference is: Cross, R. and Spencer, R. (2009). *Sustainable gardens*. CSIRO Publishing, Collingwood.

Ideas for gardens include:

- Build a **no-dig garden** (A good fact sheet for this is: <http://www.abc.net.au/gardening/stories/s867068.htm>)
- Build a **herb and vegetable garden** (contact your local nursery for plants that will suit your local soil and weather)
- Build an **aboriginal food garden**, using plants that provided foods for local aboriginal people (The Royal Botanic Gardens Melbourne provide a teachers' Kit on this topic at: [http://www.rbg.vic.gov.au/\\_\\_data/assets/pdf\\_file/0015/6711/ARTupdatedJan07.pdf](http://www.rbg.vic.gov.au/__data/assets/pdf_file/0015/6711/ARTupdatedJan07.pdf))
- Build a **local indigenous plant garden** (using plants that grew originally in your area – contact your local indigenous plant nursery). You could also build a nature trail around the school with information about each species of plant)
- Build a **wetland or frog bog**, using water that runs off from the roof (see the reference under Keeping Animals)
- Build a **water wise garden** with plants that require little or no watering (You could use succulents or hardy local indigenous (native) plants). Mitre 10 provide a useful reference at: [http://www.mitre10.com.au/media/pdf/title/MP\\_PDF\\_92\\_create\\_a\\_water\\_saving\\_g arden.pdf](http://www.mitre10.com.au/media/pdf/title/MP_PDF_92_create_a_water_saving_g arden.pdf))

- Build a **fruit orchard** (there are many types of fruit trees that will grow well in schools - apples, pears, oranges, limes and lemons. Make sure that you get some advice from your local nursery. A good general guide from NRM in South Australia, but which still be relevant to Victorian schools, can be found at: <http://nrmeducation.net.au/uploads/Sustainability%20Themes/Food/Fruit%20Tree%20Fact%20Sheet%20approved%20May%202011.pdf>)



Apple orchard

- Build a **vertical garden** (a good starting reference is: <http://au.lifestyle.yahoo.com/better-homes-gardens/gardening/techniques/article/-/9321300/vertical-gardens/>)
- Build a **rain garden** to take help slow down the passage of storm water to the drains and wetlands (For advice go to: [http://raingardens.melbournewater.com.au/content/what\\_is\\_a\\_raingarden/how\\_do\\_i\\_build\\_a\\_raingarden.asp](http://raingardens.melbournewater.com.au/content/what_is_a_raingarden/how_do_i_build_a_raingarden.asp))

#### 4. Communication and IT

- Develop a sustainability section on the **school's website**
- Design and produce a regular **sustainability newsletter**
- Include a regular **article on sustainability** in the school's newsletter
- Set up a school **Green Radio Station**
- Write a **song about sustainability** and perform it at the school assembly
- Write a **brochure on living more sustainably** and place it on the school's website
- Develop a **DVD** about sustainability / climate change / saving water / reducing waste

#### 5. Competitions

- Run a competition for the best **environmental art** (e.g. sculpture, craft, banners, posters)
- Run a competition for the best **musical or literacy performance** (e.g. song, band, poetry)
- Design and run an **environmental competition** on a particular theme (water, energy, waste, biodiversity), such as *Lunchbox Lotto*, with a trophy for the winning class or student

## 6. Environmental art

- **Murals** – painted or tiles (e.g. animals painted on concrete pathways – endangered animals, very large or small animals etc.)
- **Sculptures** – e.g. wind chimes,
- **Brick art pathways** (with personalised student or family designs in each brick)



Making recycled paper

- **Artwork from reused materials** (these could all be displayed in the school foyer or corridor)
- **Environmental photography** (with the prints either displayed or sold to raise funds for charity)
- **Green bollards** (this could also be a competition for the school with students submitting entries for the winning designs)
- **Recycled paper** (the finished paper cards and writing paper could then be packed up and sold with the funds donated to a charity)

## 7. Events

- Run a **Green Battle of the Bands**
- **Organise a school** environmental club
- Organise a **seminar** with guest speakers on sustainability
- Organise a **Clothing Swap Meet**
- Conduct a **sustainability event** at the school, such as:
  - Waste Wise Day
  - Rubbish free lunch
  - Green Day – round robin of sustainability activities
  - Put on a Jumper Day (no heating)
  - No Photocopying Day
  - Green concert
  - Walkathon around the oval

## 8. Fundraising

- Arrange for a **used clothing and small household goods recycling day** to help raise funds for either your school's sustainability initiatives or for a charity (Refer to the Southern Cross Recycling's Second Life School Fundraising Program : <http://www.southerncrossrecycling.com.au/contact.html>)
- Run a fundraising event to build a **school weather station** or buy a water tank
- Arrange a **"Tech Free 24"** (students are sponsored to go for 24 hours without using computers, mobile phones, television, Ipods, I Pads etc.) with the money going towards school sustainability projects (an exception may have to be made here for students to use computers for essential school work)

## Secondary schools

### 1. Enterprise projects

This type of project allows students to show their initiative by starting up a business of their own. There are a number of examples of students starting their own businesses – see these examples below.

- [http://uninews.unimelb.edu.au/articleid\\_3652.html](http://uninews.unimelb.edu.au/articleid_3652.html)
- [http://uninews.unimelb.edu.au/articleid\\_2934.html](http://uninews.unimelb.edu.au/articleid_2934.html)
- [http://www.yaa.org.au/programs\\_bio-tech.html](http://www.yaa.org.au/programs_bio-tech.html)
- <http://www.youngentrepreneur.com/>

Of course some of the above projects for primary students could be taken a step further to be turned into an Enterprise project for secondary students. For example:

- Build a herb and vegetable garden and sell the produce to the local community or use in the school canteen
- Build an aboriginal food garden and sell the produce to the local community
- Build an indigenous plant garden and sell seedlings to the local community
- Run a competition for the best environmental art (sculpture, craft, poster, environmental photos, banner) – and sell the completed products to the local community
- Run a fundraising event to build a school weather station – keeping track of all financial aspects of this project would be a great enterprise activity
- Arrange a collection of plastic bags and use the credits to buy recycled plastic outdoor furniture (Red Group)
- Promote a collection day for unwanted clothing, shoes and household goods and use the funds raised for the school's sustainability program (Southern Cross Recycling)
- Conduct an energy or water audit of the school and negotiate with the Principal to use some of the energy and water savings for sustainability initiatives

### 2. Research projects

#### *(a) Research*

Investigate a topic of your choice. See the following websites for some ideas and examples:

- <http://www.sciencebuddies.org/> This is an excellent website full of ideas on science based projects. Go to the Project Ideas section and look under Environmental Engineering or Environmental Science or another topic of interest to you. Also see the Project Guide section on how to best implement your research.
- <http://www.csiro.au/csiro/channel/pch9r.html> Undertake a research project under the supervision of a practising scientist or engineer through the CSIRO Student Research Scheme or Teacher Research Scheme.
- <http://www.earthmurals.org/> Create your own environmental mural
- <http://www.thinkquest.org/library/> Create your own website
- <http://www.kabq.org.au/> See the Keep Australian Beautiful website and create your own program under their existing initiatives
- <http://www.kidsface.org/> See how one girl in the USA has made a difference

### ***(b) Working models***

See primary section for examples. solar water heater, solar cooker

### ***(c) Behaviour change projects***

These are projects that aim to change behaviour of people in either a family, school, community and/or workplace. There are already a number of initiatives that aim to change people's behaviours as they relate to the sustainability of our planet. Some examples of these include:

- Waste Wise Program
- Make Poverty History
- National Tree Day
- Every Family Needs a Farmer

Some examples of this type of project for students are:

- working with their family to reduce its electricity use (as with Carbon Cops)
- helping a local primary school to grow vegetables in a no-dig garden
- monitoring dripping taps in a school and reporting this to the rest of the school
- mentoring new students in a school about the school's sustainability initiatives

## **3. Work placement**

The range of work placements available to your students will not only depend on the partnerships between your school and the community, but also on the make up of the school parent association. Perhaps families can host students for this activity. Examples could include:

- Work at a local retail store and implementing a green business program
- Work at a local nursery and help educate customers about water wise gardens
- Work with a local conservation group to undertake some conservation work
- Work with a local conservation group and conduct research project at the site (e.g. monitoring the biodiversity impacts of a revegetation project)
- Work at a local council helping with education and outreach about issues of sustainability
- Work at a local council environmental centre helping with education and outreach about issues of sustainability
- Work with local landowners to implement conservation activities
- Work with a local government to monitor environmental problems. e.g. water, air pollution etc
- Work as a water quality laboratory assistant