

Environmental Awareness in Schools

Photos and Presentation by Wendy Jansen

Ē

Contents

- Environmental Awareness
- Sustainability
- Schools Environment Management Plan
- SEMP Principles
- SEMP Target Areas
- Funding Green Day
- BFA Organic Schools
- Environmental Education Objectives
- Bibliography



Environment Awareness is the increasing of knowledge and understanding of the environment through education.

The main goal of many environmental groups today is to increase awareness because that is the only way to develop a more sustainable world.



Accordingly, all environmental awareness must begin with education.

http://www.envirowiki.info/Environmental_awareness 4/3/12

What is Sustainability?

"Development and activities that meets the social, environmental and economic needs of the present without compromising the ability of future generations to meet their own needs."

www.sustainableschools.nsw.edu.au/





School Environment Management Plan (SEMP)



- A School Environment Management Plan (SEMP) is a document that sets out the school community's intentions in regard to environmental education and environmental management. It represents an agreement to work together across the whole school.
- SEMPs are intended to focus on the management of school grounds and resources, incorporating environmental awareness into the curriculum, and involving the whole school into planning and participation.

www.sustainableschools.nsw.edu.au/

SEMP Rationale

Through the development of a SEMP students will –

- Develop a greater understanding of the impact of people on the environment;
- Be able to identify the areas of the school environment that they can manage more effectively
- Acquire knowledge and skills to manage these key elements of the school environment
- Try to encourage stakeholders to improve their environmental performance and gain an understanding of their place in the whole community
- Make a lifetime commitment to environmental management practices at both the individual and community level.





F

Principles



- Integrate Sustainable practices into the curriculum
- Strengthen our relationship with the community
- Value the input of all groups in the local area.
- Integrating environmental management where possible, into all aspects of the school environment.
- Continually improving our environmental performance
- Communicating our environmental performance

SEMP

Target Areas:

The following are issues that we have identified in our school. Although they are linked they are listed under five main areas:





REUSE



- We Bring our lunch (food and drink) in reusable containers
- We reuse the backs of used paper in our photocopiers, printers and for art work
- Plastic bags are reused wherever possible and we wash and re-use reseal able plastic bags in our lunch boxes

REDUCE



- Implement Litter Free Lunches Nude Food
- Whole school excursion to Council Waste Management Facility to educate children, teachers and parents on issues of waste, landfill, recycling
- The canteen attempts to stock items with minimal wrapping
- Implement the Waste Wise Schools program (council) Audit Waste and make appropriate changes.
- We use compost bins and worm farms for our organic waste.

RECYCLE



- The school buys items made from recycled paper
- We sort our litter by placing paper, plastic, bottles, and compost into specially marked bins that are colour coded both in the playground and in the classroom.

Water - its quality and the quantity used

- Make sure that taps are turned off in the playground and the toilets – Carbon Cops
- Make sure that chemicals, paints or oils do not get washed down the drain
- Ensure our school utilizes organic/ biodegradable fertilisers and pesticides
- Increase the schools collection of rainwater with extra rainwater tanks to be used on the gardens applied for grant
- The garden beds are mulched to retain water
- Ensure the plants that we utilize in our school environment require minimal watering (such as natives)

Land – the impact on the soil, plants & animals of our actions

- Plant and maintain seedlings, cuttings, vegetables, fruit trees and natives.
- Prepare three areas for vegetable gardens
 1. Vegetable garden for the canteen to use.
 2.Herbs and small vegetables for K1.
 3. Kitchen garden for all classes to use at different times.
- Film a documentary showing our sustainable practicestime lapse compost and the filming Green Day
- Fundraise and enter environmental competitions
- Search for and enter into community partnerships focusing on environmental sustainability

Local Aboriginal community - Nimbin Rocks Staff / students Community groups Kyogle Shire Council NPWS Uki/Kyogle Sustainability Projects - Kyogle Together

Energy – to use less and be more efficient whilst using cleaner types

- Deciduous trees are planted to provide shade in summer to school buildings.
- The structure of school buildings and the placement of windows capitalise on the winter sun for rooms facing north (passive solar design)
- The school's electrical appliances are 5 star rated for efficiency
- Implement carbon cops/students to monitor progress



- Maintain our mowers and machinery by regular services to keep emissions clean
- Don't burn off waste
- Utilize hand tools instead of power tools where possible
- Attempt to reduce the noise from traffic by designing gardens at the perimeters that absorb the noise and also provide a visual barrier to the busy road









Children around the country are getting their hands dirty and learning how to grow, harvest, prepare and share fresh, seasonal food.



Funding for Environmental Initiatives

Environment Grants Fundraising Events – Green Day



Thomas George MP

Photo by Albie Jansen



Green Day

is about raising awareness and understanding of the impact people have on the environment. It is an outdoor festival of environmental information and products. Green Day brings families together to share local knowledge and get inspired about environmental sustainability.

It's a great opportunity to showcase all the work we've done in creating a sustainable school, and to raise funds towards achieving the next steps.



Green Day A School Event

- Environmental Speakers
- Demonstrations
- Market stalls
- Entertainment
- Kids Workshops
- Organic Food Stalls
- Healthy Canteen



Green Queen – Wendy Jansen Environment & Sustainability co ordinator



Fact sheet: Benefits of gardening for children

 Gardening can provide multi-faceted educational benefits for children including life skills, developing an appreciation and understanding of where our food comes from, working cooperatively with others as well as assisting in academic achievement.

http://www.organicschools.com.au/

1. Positive social skills

Primary school students who participated in a one-year gardening program showed considerable development in self-understanding and the ability to work cooperatively in groups (Robinson & Zajicek, 2005).



2. Influencing healthy diet choices

Studies provide overwhelming evidence that children who have the opportunity to grow their own food are more prone to eating fresh fruits and vegetables (Libman, 2007; McAleese & Rankin, 2007; Pothukuchi, 2004) or show a preference for these foods (Lineberger & Zajicek, 2000; Morris & Zidenberg-Cherr, 2002).



3. Greater understanding of healthy eating

School gardening programs, including the BFA Organic School Gardens program, often include lessons on nutrition, resulting in greater knowledge about healthy eating

(Koch, Waliczek & Zajicek, 2006; Morris & Zidenberg-Cherr, 2002; Pothukuchi, 2004).



4. Greater achievement in science

Numerous studies have found that students who have participated in school gardening activities have achieved higher marks in science studies (Klemmer, Waliczek, & Zajicek, 2005; Dirks & Orvis, 2005; Smith & Motsenbocker, 2005)



Photo by Zac Jansen

5. Academic achievement

Gardening activities can be integrated into all areas of the school curriculum, making learning more meaningful .The BFA Gardens Program provides practical applications for school subjects in nutrition, natural sciences, mathematics, language, environmental studies and life skills for students. (*Canaris, 1995*).



6. Environmental Stewardship

Studies have found that primary school students participating in a school gardening programs have shown more positive attitudes towards the environment. This was shown to grow in line with an increase in outdoor learning experiences (Skelly & Zajicek, 1998).



Photo by Wendy Jansen

F

Environmental Education Objectives

NSW Government Environmental Education Policy

Students will develop skills, knowledge and understanding about :

- The nature and function of ecosystems and how they are interrelated
- The impact of people on environments
- The principles of ecologically sustainable development
- Identifying and assessing environmental problems
- Communicating environmental problems to others
- Resolving environmental problems
- Adopting behaviours and practices that protect the environment
- Evaluating the success of their actions

www.curriculumsupport.education.nsw.gov.au/policies/envired/index.htm 04/03/12



Students will also develop values and attitudes relating to:

Respect for life on Earth

and

Marley Myles P & C Assoc. - President An appreciation of their cultural heritage

Resources



NEW SOUTH WALES DEPARTMENT OF EDUCATION AND TRAINING











sustainableschools nsw

Australian Government Department of Sustainability, Environment, Water, Population and Communities





This project has been assisted by the New South Wales Government through its Environmental Trust.















Conclusion



Having a school Environment Management Plan in place is the first step in achieving our initiatives.

We all need to increase awareness because that is the only way to develop a more sustainable world.

Mr Thomas School Principal

It's up to us.

Bibliography:

www.sustainableschools.com.au

http://treeday.planetark.org/

http://www.organicschools.com.au/

www.northernriversfoodlinks.com.au

https://www.det.nsw.edu.au/policies/curriculum/schools/envir_educ/PD20020049.shtml

All web sites cited on 04/03/12

Canaris, I. (1995). Growing foods for growing minds: Integrating gardening and nutrition education into the total curriculum. *Children's Environments* 12(2): 134-142.

Dirks, A. E. & Orvis, K. (2005). An evaluation of the junior master gardener program in third grade classrooms. *HortTechnology* 15(3): 443-447.

Klemmer, C. D., Waliczek, T. M., & Zajicek, J. M. (2005). Growing minds: The effect of a school gardening program on the science achievement of elementary students. *HortTechnology* 15(3): 448-452.

Koch, S., Waliczek, T. M., & Zajicek, J. M. (2006). The effect of a summer garden program on the nutritional knowledge, attitudes, and behaviors of children. *Hort-Technology* 16(4): 620-625.

Libman, K. (2007). Growing youth growing food: How vegetable gardening influences young people's food consciousness and eating hablts. *Applied Environmental Education & Communication 6(1):* 87-95.

Lineberger, S. E. & Zajicek, J. M. (2000). School gardens: Can a hands-on teaching tool affect students' attitudes and behaviors regarding fruit and vegetables? *Hort-Technology* 10(3): 593-597.

McAleese, J. D. & Rankin, L. L. (2007). Garden based nutrition education affects fruit and vegetable consumption in six grade adolescents. *Journal of the American Dietetic Association 107: 662-665.*

Morris, J., & Zidenberg-Cherr, S. (2002). Garden-enhanced nutrition curriculum improves fourth-grade school children's knowledge of nutrition and preference for vegetables. *Journal of the American Dietetic Association*, 102(1), 91-93.

Pothukuchi, K. (2004). Hortaliza: A youth 'nutrition garden' in southwest Detroit. *Children, Youth and Environments* 14(2): 124-155.

Robinson, C. W. & Zajicek, J. M. (2005). Growing minds: The effects of a one-year school garden program on six constructs of life skills of elementary school children. *HortTechnology* 15(3): 453-457.

Skelly, S. M. & Zajicek, J. M. (1998). The effect of an interdisciplinary garden program on the environmental attitudes of elementary school students. *HortTechnology8(4): 579-583.*

Smith, L. L. & Motsenbocker, C. E. (2005). Impact of hands on science through school gardening in Louisiana public elementary schools. HortTechnology 15(3):439-443.