

## Case Studies

**Name of School:** Steiner School Alice Springs

### **School context:**

The Alice Springs Steiner School was formed in 1996 but at the beginning of 2004 moved to a new permanent site. This was a block of land that was formerly a goat farm and consequently in a degraded condition. Just before the relocation a fire swept through the property killing or damaging a number of corkwood trees and the few ironwood trees. After site services and demountable buildings were placed on the site, the land was bare, dry, wind swept and dusty; basically a "just finished" building site.

During 2005 the Alice Springs Steiner School joined the NT Sustainable Schools Initiative. Christopher Brocklebank, Class 5/6 teacher at the school, met with Emma Bliss and flew to Darwin for the introductory workshop with Louise Fogg.

### **Issues:**

- Gardens for shade and dust reduction. (Even though all through 2004 the children ran out at recess or lunch breaks completely disregarding the 40-degree day and continuous dust storms.)
- Play equipment
- Shade for buildings
- Use of the recycled water system (The school has all of its water recycled on site)
- Establish a vegetable garden

By the time we joined the Sustainable Schools initiative some gardens had been planted by parents, staff and students during regular working bees, all on a timer/dripper line; a vegetable garden was established and a verandah built on to the Class 5/6 and Kindergarten buildings.

### **Aims:**

The aims of the initiative in 2005 (March) were;

- Extend gardens
- Plant a grassed sports field and small area of grass in the middle of the school
- Make effective use of the water recycling system  
(We had put 100 trees on dripper lines from the recycled water system in 2004, but while learning about its water pressure, no water in the system during holidays – obvious in hindsight, and not being able to link the recycled water systems with town water on health grounds, nearly all these trees died.)

As a result of attending the sustainable schools workshop in March other issues joined the list;

- Awareness and reduction of resources water/electricity.

- Possibilities of waste recycling.

So the aims for 2005 broadly rested on these five issues.

### **What we did.**

#### **Learning - The Land**

- On returning to Alice Springs, spurred on by the Sustainable Schools workshop, Christopher talked to a parent/botanist Dave Allbrecht. On bush walks and tours of the school site with Dave, Christopher and Class 5/6 learnt for the first time about the three different types of land the school site was on or adjacent to.
- A/ "Salt Bush Country" This type of land has shallow soil that rests on impervious clay, water does not soak down very far into the ground. The water quickly dries out on and near the surface leaving residues of salt. All that can grow in this area is low-lying salt bush.
- B/ "Corkwood and Ironwood Country". This type of land has deeper soil and trees are able to grow, as the water can penetrate a fair way down into the ground. Evaporation is not such a problem with minimal, if any, residue of salts. In these areas Corkwood trees and Ironwood trees grow.
- Many of the Corkwood trees, which are extremely slow growing, had died in the fire early in 2004. Only one Ironwood tree survived on the school site.
- C/ "Mulga Scrub Country" Adjacent to the school site, as the land moves up towards the McDonnell Ranges, the ground becomes rocky and a fair amount of water run-off occurs. Here is where the hardy Mulgas grow. The school site contained none of this kind of country, but it was good to know a little about our "neighbours".
- We learned that what governed the three different types of land was the fundamental relationship between soil and water.

#### **Learning - The Vegetable Garden**

- After these initial informative walks and follow up work in the classroom, Dave could then explain that our vegetable garden was on the edge of an area of shallow soiled "Salt Bush Country". As we were watering the garden with over-head sprinkles, it would not take long for it to become salty. Even during the first few months of use salt was already forming in some areas. Our new vegetable garden was definitely not sustainable!
- Dave's solution was to replace the current unsustainable garden with a "no dig" garden. This was built up with railway sleepers in garden beds. This provided plants with the depth of soil required to grow well. The garden is watered with drippers, and has very little, if any run off. Therefore there is no excess water to evaporate and cause salt problems. We are using less water and getting a better result. All the work was conducted by parents, staff and students at the school.
- This "no dig" vegetable garden has blossomed and provided produce all year. The eight garden beds have been planted, cared for and harvested (then prepared and cooked) by all classes in our school from Year One to Year Six. Cabbages, cauliflowers, beetroots, carrots, potatoes, tomatoes and a host of other vegetables have been grown in the most sustainable way, suitable to the type of land.

- Excess produce has been gifted to parents. (It is great to be able to give back to parents who put so much into the school.) Further excess produce has been sold through “Afghan Traders” an organic food shop established by and affiliated with the school, the profits going back into the garden enterprise (mainly seeds and seedlings).
- This “no dig” garden was not an issue or aim determined at the start of the Sustainable Schools program but arose as a consequence of an increased awareness resulting from participating in the program.

### **Community**

“As the community makes the school the school makes the community”.

- Central to the Alice Springs Steiner School is parent involvement. There are four regular working bees at the beginning of each term. The governing body, the School Council, is made up predominantly of parents, including key positions of Chairperson and Treasurer. Parents work on school committees such as the “Land and Buildings Committee, Employment Committee and Finance Committee. Teaching staff are represented on committees and attend all meetings. The working and social relationships at the school are based on over ten year’s association.
- Parents regularly come into the school and assist with classes such as craft, cooking, gardening or woodwork. They also support with transport for school trips and cleaning of classrooms, not to mention fund-raising!
- It is the combined energies of the school and students combined with that of parents that makes our school. This has been the case with activities related to sustainable schools.

### **This year the outcomes to our aims have been:**

1/ Extend gardens.

Seven new garden areas have been added to our school. Local native plants have been planted and dripper lines installed. Also the building and use of the “no dig” garden. We are all very proud to have won the ABC Garden Competition for “Best School” in Central Australia. The school had to have “a garden that demonstrates student and parent participation with judges looking at appropriate species selection, education value and general presentation”.

On our Master Plan for the school site three areas have been put aside for regeneration back to the natural Corkwood and Ironwood Country. As the site previously a goat farm, there is little in the way of new generations of local native flowers, shrubs and trees. On bush walks students have collected seeds from native flowers and sown them into these regeneration areas. This is intended to provide “natural corridors” for native animals and improve the biodiversity of the school site.

The native lemon grass, planted last year has become home to a bearded dragon that sits outside of Class One. Last week the class sat outside and sketched him!

2/ Plant a grassed sports field and small area of grass in the middle of the school.

With the help of a professional landscape gardener we were able to put a grassed soccer pitch and a small grassed area in the middle of the school. For a school that had no grass whatsoever these have been greatly appreciated by students. No more grazed arms and legs when taking a tumble! Also the grassed areas are great at

dust reduction. During term four Class 5/6 with the help of staff and parents are putting in a pop up watering system for the soccer pitch.

### 3/ Make effective use of the water recycling system

The school has put in an application for a federal water grant to take our system of water use a step further and to make more effective use of the water recycling system. This aim is pretty much on hold until next year.

### 4/ Awareness and reduction of resources water/electricity.

Christopher Brocklebank attended two workshops covering water audits for schools and awareness and reduction of water use in schools. As we are in the process of building purpose built classrooms for our school and adding details to the school Master Plan, this information on effective use of water is timely for contributing to this process.

### 5/ Possibility of waste recycling.

Our school has exchanged a large skip bin for a mini skip bin for rubbish removal. This was done for safety reasons as well as to increase awareness of waste reduction. We are finding the use of the smaller mini skip has brought about a drop in the amount of rubbish removal and the associated cost.

An initiative started in Term Three to install a glass and aluminium recycling area at the school. This has been achieved; Russ Driver removes this material.

All in all it has been a pretty active year with progress in a number areas.

## **Governance**

- The school is developing a 5-year strategic plan and Master Plan for the school site. This process is being coordinated by the Land and Buildings Committee and overseen by the School Council. Input concerning continued establishment and maintenance of sustainable practices and processes are to be placed within these documents. We are very much at the preliminary stage this year with draft plans and designs and consultation with the school community

## **Community Links:**

Through the Sustainable Schools Program links between schools attending workshops have been strengthened. This has been the case particularly for Irrkerlantye School and Laramba School. Irrkerlantye School has visited our school twice to see the gardens and recycling water system. Our school and Laramba are planning visits to each other's schools next year. Also Ross Park has expressed interested in visiting the "no dig" garden.

