



Wipe out Waste



Banksia Park Kindergarten

Banksia Park, 4 staff, ~35 children

Case Study

Banksia Park Kindergarten has been working with KESAB environmental solutions and NRM Education on their Site Environmental Management Plan (SEMP). Their commitment to being sustainable is reflected in their vision statement -

"We want sustainability to be part of our daily practice, embedded in our curriculum. Sustainability is written in our philosophy which outlines our values and practices."

The kindergarten's enthusiasm for creating a sustainable environment has helped build a strong child, parent and staff community.



Children are learning about the water cycle by using natural materials they have collected.

Student action

Director Elspeth McKinnon says, **'Incorporating sustainability in the curriculum is easy because it's everywhere.'**

Children have many opportunities to engage with nature, especially in their veggie garden. They help to make the garden beds and love harvesting the produce. The garden teaches the life cycle of plants and where their food comes from.

Funds from collecting 10c drink containers go towards the purchasing of new plants for the garden. Produce from the garden is used in cooking and staff and children have made a range of foods from different cultures.

Produce from the garden and how it is affected by the seasons is documented in a Nature Diary which is shared with the children and acts as a growing guide for future use.



The Nature Diary documents the garden and surroundings.

Children collect seeds from the garden, store them in paper bags and label them. The seeds can then be planted the following year.



Eggplants are grown for cooking and scraps will be composted, creating a closed loop system.



Food scraps from snacks, lunch and cooking are collected in a green bucket and put in the bokashi bin or worm towers to decompose and return nutrients to the soil.

The children's food scraps go into the worm tower located in a garden bed. The worms will fertilise the soil.



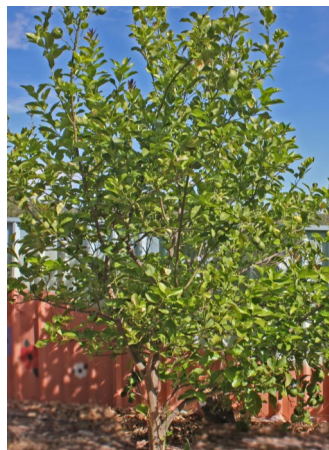
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A lesson learned: in 2013 birds ate the apples so this year they have a net over the tree. Apples will be used in cooking.



The kindergarten plans to make lemonade with the children.

Staff use plastic trays in the kitchen to cover food instead of cling wrap. This method has inspired families to do the same at home.

A current challenge is mini yoghurts because they are a landfill item. These single use items are difficult for preschoolers to open and an expensive way to purchase yoghurt in non recyclable containers.



Yoghurt suckers can't be recycled.

Reuse

The kindergarten has a clothing collection bin for Diabetes SA and is equipped with some furniture from the Reuse of Office Supplies and Equipment Scheme (ROSES).

Parents donate cardboard boxes, bottle caps and other materials for children's craft activities and yogurt containers are rinsed and reused as paint pots.



Diabetes SA clothing bin and white paper recycling bin are easy to access for parents and staff.

Challenges

One of the challenges the kindergarten faces at the start of Term 1 is to reduce the amount of packaged food brought from home. Notices in the newsletter educate families about ways to reduce food packaging and healthy nude food options are encouraged.



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Aluminum foil is preferred over cling wrap because the children enjoy collecting it to make a big ball which can then be recycled.

To recycle foil, it must be big enough for a large human hand to pick up from a conveyor belt.

Partnerships

The kindergarten works with NRM Education on their SEMP (Site Environment Management Plan) goals and advice about local provenance trees.

KESAB educators have made recycled paper with the children and provided bin sorting activities. The kindergarten hosted a Tea Tree Gully Council sponsored composting and worm farming workshop; an initiative to assist with their own worm farming issues and start up a compost system in the adjoining community garden.

A Wipe Out Waste workshop was held at Banksia Park Kindergarten with many sites attending to learn and share their experiences. WOW conducted a bin audit to see how well their systems are working to reduce landfill materials. (Very well!) Children also attended a Wally and the Wipe out Waste Wizard performance which encourages the use of a 3 bin system and the 'Less to Landfill' challenge.



Plastic buckets are provided at eating times to sort landfill, recycling and composting items; replicating the colours of council bin lids.



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Kindergarten staff are keen participants in workshops about sustainability to develop their knowledge and gain ideas for new programs and activities.

Children visit the Northern Adelaide Waste Management Authority (NAWMA) education centre at Elizabeth to see the processing of recyclable materials, learn about what goes in which bin, and about reducing, reusing and recycling.

The kindergarten has a strong community and parents donate plants and make time to water the garden. One parent applied for and won a Landcare grant for new garden beds. Another has donated a rain water tank for the garden and a local community group will install it.



The Landcare grant helped purchase a wicking bed for herbs and veggies. The wicking bed saves up to 50% of water used for irrigation.

The impact of teaching sustainability

Teaching the children about sustainability is having a positive impact as the children take learning home and share it with their families. Everyone can learn more about recycling and the type of plants around their home!

Elspeth says that teaching children about sustainability: **'teaches them to respect the world and each other.'**



One of the activities for the children was to illustrate and label the plants in their garden at home.

Future plans

Banksia Park Kindergarten is currently working with Banksia Park Primary School to further develop the community garden that is located between the two sites. This will allow the primary school students to work with the kindergarten children. They plan to create a frog pond there as well.



Alan Shepard teaches composting at the Banksia Park Community Garden as part of the council sponsored workshop.

A butterfly garden is currently being established at the kindergarten. They are also looking into keeping chickens and seeking assistance to ensure they can be looked after when staff are not present.

The kindergarten is working with the adjacent school to maintain the waste reducing practices that have been established as children transition to school.

Elspeth recommends:

- Having a plan and getting everyone on board to help achieve your goals.
- Making environmental activities easy and fun for children and families.

July 2015 update:

A 2015 Bin Materials Audit shows the kindergarten has reduced the already small volume of material being sent to landfill by 72% to set **a new benchmark for the smallest volume being sent to landfill** from sites audited by WOW. Just **0.036L/person/day** - less than 1L/day for the whole site shows almost all material can be reduced, reused, composted or recycled. We look forward to Zero Waste in 2016!

