

# **Early Education Notes**

### Series Green Team

## **Background**

Play School: Green Team shares important messages and ideas to encourage our youngest citizens to look after planet earth! We explore everyday things that can be done at home or in early learning settings to protect our precious natural environment. Episodes celebrate the positive global effects of a healthy and environmentally responsible lifestyle – from gardening to clean energy and ecofriendly waste disposal, the Green Team is on the case!

We go 'Through the Windows' and see some sustainability practices in action at a community garden, aquarium, koala sanctuary, beehive and native plant nursery. Visit us at the Play School Green Team HQ and discover ways to appreciate and care for our wonderful world!

# Follow-up learning experiences

Links to the Early Years Learning Framework (EYLF)

EYLF Learning Outcome 2.4:	Children become socially responsible and show respect for the environment.
EYLF Learning Outcome 4.2:	Children develop a range of skills and processes such as problem solving, inquiry, experimentation, hypothesising, researching and investigating.
EYLF Learning Outcome 4.4:	Children resource their own learning through connecting with people, place, technologies and natural and processed materials.
EYLF Practice 4:	Intentional teaching
EYLF Practice 5:	Learning environments

This series incorporates familiar ways we can care for the environment in early learning settings and homes; compost bins and worm farms, installing rainwater tanks, recycling and growing fresh produce. Green Team extends on these actions and shares ways we can keep imagining, innovating, and advocating for



At Green Team HQ, Alex and Professor Veena Sahajwalla talk about recycling and upcycling to reduce waste.

much better environmental outcomes! Communicating clearly about all the little things that can be done as part of sustainable practice empowers children to construct knowledge, explore values and develop an appreciation of the environment and its relationship to their worlds.<sup>1</sup>

Education for sustainability is about change at many levels – our thinking, our ways of *being* and our ways of acting to regenerate the Earth.<sup>2</sup> 'Green Team' encourages viewers (of all ages) to delve deeper and explore relationships between humans and other plant & animal species that share the planet. Through follow-up hands-on experiences, children can explore through play while learning about their local context and environmental issues in meaningful ways.

# Upcycling visual arts challenge



Emma and Alex use things from the Play School 'upcycle basket' to turn them into sailboats and ocean liners for water play, instead of throwing them in the rubbish.

We discover how to reduce the amount of rubbish that goes into landfill and oceans, by 'upcycling'. Using old bits and bobs to make something new reduces landfill and is one way we can help take care of the planet! Encourage children to collect recyclable materials before they become 'rubbish' (e.g., shoe boxes, clean plastic bottles, containers, jars, bottle tops, leftover fabric) at home and bring it into your early learning centre. Asking families to donate loose parts for 'upcycling' creates meaningful opportunities for children to learn about sustainability by re-using and re-imagining the use of materials.



<sup>1.</sup> Australian Children's Education & Care Quality Authority (ACECQA). (2016). Sustainability in children's education and care.

<sup>2.</sup> Early Childhood Australia (ECA). (2019). The Spoke, Education for sustainability.

Invite children to choose from a selection of recycled materials and scaffold learning about ways to transform items into something even better. Here are some ideas to create and construct together with young children by 'upcycling'

- Use plastic milk bottles filled with potting mix to create a hanging garden on a wire fence.
- Experiment with floating sailboats using a plastic containers, newspaper and pegs.
- · Weave hammocks for toys using old fabric scraps.
- · Create a bee hotel using bamboo and pieces of wood.
- Assemble wall hangings made with objects collected from nature (items that have fallen to the ground) e.g. sticks, leaves, pinecones or shells.
- Construct a pretend play car using old wooden pallets, small plastic chairs and tyres.
- Make a diorama using a recycled box as a backdrop together with loose parts.

# Sort, classify, RECYCLE!



Matt and Emma sort their waste into the recycling, household rubbish and garden cutting coloured coded bins.

The Play School 'Green Team' reuse, recycle and repurpose! Educators can play an important role in promoting young children's development of life skills, such as waste reduction and recycling. Encourage children to sort rubbish by placing items in colour coded bins at your early learning setting. In addition to green / garden waste, general rubbish and recycling bins – include a 'food waste' bin for garden compost. Investigate different types of rubbish items (those safe to handle, using gloves) by describing and sorting according to their size, shape, weight, colour and texture and discuss which bin children should use to correctly dispose of the waste.

Explore Planet Ark's <u>Recycling Near You</u> website to learn more about recycling and ways early education services can be involved in 'National Recycling Week'. Download the <u>Australasian Recycling Labels</u> and talk with children about the importance

of recognising the different symbols to make sure each piece of rubbish is put in the right bin. An excursion to a local <u>Recycling Deposit Centre</u> to recycle bottles, cans and cartons can give children an opportunity to help the environment through a fun, hands-on experience as they place items on the conveyor belt.

Professor Veena Sahajwalla joins Alex in the Green Team HQ and explains how recyclable items can become useful new things like textiles and home décor! Veena sees rubbish as an opportunity - "Waste is really one of those untapped resources just waiting to be harnessed". Educators can learn more about Professor Veena's story and her inventions via <u>ABC News</u>.

# STEM and clean energy



Alex and Michelle tell a story about Farmer Jill and her son Jack to explain clean energy and wind turbines.

The Play School *Green Team* investigate 'clean / green energy' sources to create electricity for a sustainable future. Alex and Michelle, along with special guest Craig Reucassel from ABC series War On Waste show ways we can make simple changes to our homes in order to reduce the amount of pollution we produce. Clean (or renewable) energy is made from resources that nature will replace like wind, water and sunshine.

Educators can scaffold children's understandings about different types of clean energy through simple STEM experiments (Note: type the green experiment titles into your search engine for more detail):

- Build a 'wind powered car' using loose parts (straws for axles, small 'wheels'), cardboard square and pop-stick for the sail, and a recycled foam tray for the car body.
- Make a 'solar oven' to melt cheese on corn chips using a recycled pizza box, foil and wire.
- Create a 'small wind turbine' using two paper cups, a straw and toothpick.



# Exploring habitats in 'small world play'



Jemima and Kiya go for a walk in a mangrove habitat and see a Kingfisher bird, crab and fish!

Messages about the importance of taking care of our rivers, oceans, land and skies are shared on the *Green Team* series through oral storytelling. Stories focus on describing the habitats of animals (koalas, platypus, native bees, sea animals, birds) and explore the impact of human activities on natural environments. Build children's understandings about the importance of protecting different ecosystems (oceans, rainforests, mangroves, bushland and deserts) by disposing of rubbish correctly, using clean energy, recycling and planting trees.

Invite children to design and construct a small world play habitat for an animal using natural and upcycled resources. Some examples include:

- A goanna burrow using wooden blocks, tree branches, grass, rocks, a shoe box and masking tape
- A Rainbow Lorikeet nest using fallen bark, leaves, sticks, twine and small cardboard cartons to represent a 'nest' similar to the hollow limb of a eucalypt tree.
- A Fruit Bat habitat (tree or cave) using clay, straw, sticks and fallen leaves.
- Platypus riverbank burrow using blue and brown playdough, small sticks and pebbles.

# **Caring for Country**



Clarence Slockee speaks about the importance of caring for Country.

Episode five encourages children to observe and appreciate their natural surroundings and Australian native flora. Special guest, Clarence Slockee is from the Bundjalung Nation from north coast NSW and is the Education Officer at the Sydney Botanic Gardens, where his work involves promoting Aboriginal culture and bush tucker. Clarence is also a presenter on the ABC's Gardening Australia. We hear Clarence talk about Australian native flowers and how their seeds are released during a bushfire to grow more plants. Ranger Kiya also models bush regeneration by panting Acacia and Snow Gum tree saplings.

As outlined in the Narragunnawali <u>Care for Country RAP action</u>, educators can build children's understandings 'about traditional Aboriginal and Torres Strait Islander knowledges and practices used to look after Country/place, and how these can continue to contribute to addressing some of the big environmental questions/concerns of our modern times.' Planting 'bush tucker' seeds in early learning settings is a wonderful opportunity for children to learn about how native plants grow and what foods can be found in the Australian bush. Some suggestions can be found at <u>Tucker Bush</u> and include:

- · Bush Mint
- · Lemon Myrtle
- · Sea Celery

### Green Team *Through the Windows* films

This series offers a useful selection of films made to develop children's understandings and respect for the natural environment. They showcase both children and adults modelling environmentally responsible practices, demonstrating care and appreciation for plants, animals and the land.

### 1. Community garden

Calypso and her friends visit a community garden. They feed food scraps to chickens and collect eggs to make yummy healthy muffins! A simple idea to help young children learn about ways to reduce food waste.

### 2. Aquarium

Maila visits an aquarium to find out about a special program that is helping to protect White's seahorses! This video can be used as a useful provocation to develop children's knowledge and understandings about how animal conservation is an important part of looking after the planet, by maintaining ecosystems.

### 3. Koala sanctuary

Eden and Kaira visit a koala sanctuary! They meet some koalas who have been rescued and cared for so that they can soon return to their natural habitat. Educators can extend children's learning by exploring other animals in their habitats, to help develop understandings of biodiversity.



#### 4. Native bees

Isabella, Lachie and Mabrey join bee expert Abbie to build bee hotels! They learn all about native Leafcutter bees and find a great spot for their hotels in the garden. Investigating the role these insects play in seed dispersal is a great way to help children learn about the important relationship between plants and animals in the natural world.

During episode four, Play School presenter Michelle also sings a well-known fingerplay *'The Beehive'* 

Here is the beehive (hold up fist)

Where are the bees? (pretend to peek inside)

Hiding away where nobody sees.

Watch them come creeping

Out of their hive



1-and-2-and-3-4-5! (raise fingers one at a time)

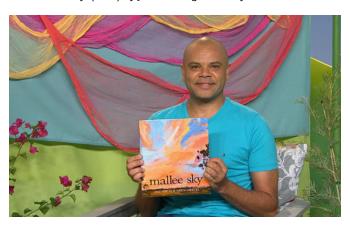
#### 5. Native nursery

Zahli and her friends visit a special nursery to learn all about Indigenous bushfood. They taste river mint, pick finger limes and plant murrnong yam daisies! Follow-up excursion visits to local nurseries or community gardens can help children learn how food is grown, fostering an appreciation and respect for the natural environment.



#### **Picture books**

- Sing Me The Summer' (2020) by Jane Godwin and Alison Lester
- 'Backyard Magic' (2021) by Wenda Shurety and Harriet Hobday
- 'Mallee Sky' (2019) by Jodi Toering and Tanya Harricks



Play School presenter Luke reads 'Mallee Sky'

# **Related reading and resources**

- Community Early Learning Australia (CELA) <u>Upcycling</u> <u>Inspirations</u>, shares ways early childhood services have embraced upcycling in creative ways.
- Further reading about simple and effective ways to reduce, reuse and recycle can be found at the <u>World</u> Wildlife Fund Australia.
- Extend your knowledge about current environmental issues by watching the popular ABC series <u>War On Waste</u>.
   Presenter Craig targets plastic water bottles, straws, e-waste, fast furniture, food waste and the recycling crisis
- Visit <u>Environmental Education in Early Childhood</u>, a nonprofit organisation providing support, resources and professional development in relation to Education for Sustainability in the Early Years.
- Explore the <u>Take 3 for the Sea</u> environmental advocacy organisation and be inspired to adopt more sustainable daily practices.
- Watch an <u>ABC Education Recycling</u> video, which includes a visit to a vast recycling plant and explores how 2-D and 3-D shapes are used to sort and reuse rubbish.



#### **ABC Kids Early Education**

- Extend children's understandings about sustainability
  practices by implementing visual arts learning
  experiences from the <u>Play School Art Time Inspiration</u>
  <u>Pack for Early Childhood Educators</u> using natural, recycled
  and homemade materials.
- Check out <u>Sustainability and Nature</u> and <u>Extension Ideas</u>
  for video, audio and other <u>Play School Notes for Educators</u>
  and <u>Families</u>. From bush walks to recycling we learn
  about plants and animals while exploring how we can
  care for our amazing planet.
- Download these <u>Play School Educator Notes</u> for more ways to explore caring for Country together in early learning settings.

#### **ABC Kids Listen**

- Related News Time podcasts World Bee Day and super slugs and Earth Day and winged shark.
- Noisy by Nature podcasts provide the opportunity to listen to the strange, surprising and sometimes silly sounds that Australian nature makes. Hear fun facts to help develop young children's understandings and respect for biodiversity in different natural environments.

#### References

1. Australian Children's Education & Care Quality Authority (ACECQA). (2016). Sustainability in children's education and care.

2. Early Childhood Australia (ECA). (2019). The Spoke, Education for sustainability.

#### Credits

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