

# Sustainability Education Trail Guidance for Teachers

## Key words & definitions

United Nations Sustainability Framework – The Triple Bottom Line

The principle of sustainability is presented in a triple bottom line framework of social behaviour, economic rationalism, and environmental protection as equal measures of sustainability.

The triple bottom line concept is a direct reference to the United Nations (UN) three pillars of sustainability commonly referred to as the three Ps - People, Planet & Profit.

The UN defines sustainability as:

*Forms of progress that meet the needs of the present without compromising the ability of future generations to meet their own needs.*

Brundtland Report, 1987

And the UN extension to the precautionary principle is:

*An action should not be taken if the consequences are uncertain and potentially dangerous.*

Sustainability vocabulary for children and adults alike:

<b>Waste:</b>	discarded as no longer useful, unwanted
<b>Sustainable:</b>	able to be maintained at a similar rate or level
<b>Prevent:</b>	to put a stop to
<b>Protect:</b>	keep from harm
<b>Pollution:</b>	substance that has harmful or poisonous effect
<b>Preserve:</b>	care for, or to take care of
<b>Habitat:</b>	natural home of plant, animal or organism
<b>Conserve</b>	Protect from harm or destruction
<b>Primary Resources:</b>	natural resources before processing
<b>Reuse:</b>	to use again
<b>Reduce:</b>	make smaller or less in amount
<b>Recycle:</b>	return to a previous stage in a cyclic process

<b>Repair:</b>	restore to good condition
<b>Bio-degradable:</b>	capable of being decomposed by bacteria & other living organisms
<b>Non-biodegradable:</b>	opposite of bio-degradable
<b>Synthetic:</b>	substance made by chemicals
<b>Economic:</b>	production and transfer of wealth
<b>Social:</b>	society and its organisation
<b>Environmental:</b>	relating to the natural world and humans impact on its condition.
<b>Consumer:</b>	a person who buys goods or services
<b>Values:</b>	what is important and why
<b>Serendipity:</b>	events by chance that lead to happy or mutual benefit
<b>Decompose:</b>	natural matter that can rot or decay
<b>Product Life Cycle Orbit:</b>	cradle to grave of a products life, from design, manufacturing, transport, sales, to end of life

## **Sculpture Trail – themes and learning outcomes**

### **1: Sculpture title Take my Hand**

Defines the three Rs of reduce, reuse and recycle as sustainable actions, and seeks a commitment from participants to take each other's hand and together we will lead the way to a sustainable future, as the United Nation definition provides.

Discussion – what is sustainability? What is re-use & recycling, a brain storm on expanding the three r's out – to refill, replace, repair etc.

### **2: Sculpture Title: Waste Stream Totem**

Discussion - environmental benefits of reducing, reusing and recycling are highlighted including protection of habitat, conservation, maintaining water quality, pollution and prevention of harm to other creatures i.e. fish & owl.

### 3: Sculpture title Wanda Waste Not, Want Not, Wallaby

Discussion - benefits of waste minimisation in economic, social and environmental terms - the triple bottom line in action.

Social Aspect	Economic Aspect	Environment Aspect
Social responsibility	Wealth generation	Nature conservation and habitat
Social commitment to behaviour change	Employment	Preservation & Prevention
Social commitment to working together as fellow community members	Supporting & stimulating other businesses	Primary resources and pollution
Express love of community through action and words	True economic rationalism	Love of place
Values	Values	Values

### 4: Wazza & Joey Waste Not, Want Not Wallabies ©

Wazza and Joey are simply hopping with joy to see you as fellow members of their waste wise flock– they are a celebration of public participation in waste minimisation, and thank you for caring about your own back yard. Participants are asked to guess how many products and parts have been put back into circulation by the community since the opening of the Glenorchy Tip Shop since 1993 – the answer is over 19,500,000.

### 5: Sculpture title Let's Talk Plastic

Discussion –the modern consumer era and our disposable society has generated many unintended environmental, social and economic consequences i.e. five giant plastic gyres in world's oceans. Two large detailed interpretation panels provided. The pre-cautionary principle is introduced here as an extension to the UN sustainability principle.

Students are asked to guess how long they think plastic lasts in the environment – the answer is 300-600 years.

The red plastic items contained in the sculpture piece are photo-degrading through time – from red to white and as such visually demonstrates what happens to plastic in the environment.

The key message is don't litter, pick up plastic when you see it, and protect our water ways, and leads into making good sustainable consumer choices.

## **5: Characters - Brad & Mr Bliss Cat**

Discussion – Mr Bliss Cat, born as a feral kitten under the Recovery office was rescued by the business owners, he highlights the need to care for other creatures as well.

Brad Mashman as the founder of the Tip Shop concept in Australia shares his two favourite finds.

## **6: Sculpture title Good Consumer Choice Flowers (GCC Flowers)**

Discussion –keeping the three Rs of reduce, reuse and recycle in mind, participants are asked what factors make up a good consumer choice; how long will it last, what will happen to it at end of life, and to buy local – the ultimate expression of economic sustainability.

## **7: Sculpture title Serendipity Complex**

Discussion – we are all connected to each other whether we realise it or not, so let's work together for mutual benefit and happiness.

## **8: Sculpture title Fletch & his dog Lockwood**

Discussion – Australian society's attitudes to waste change depending on need or economy. Indigenous people - no such thing as waste.

Time of colonisation – tyranny of distance, there were no shops in 1788, had to repair and replace, goods were quality and made for life.

Depression Years and Wars – Rationing, poverty.

## **9: Flock of Mobile Waste Wise Wallabies © - the newest members of Wanda's Flock**

Big Bob Brown, Lisa & Winnie: Bob is a larger than life character, he has rear vision mirrors so he can see who is coming up behind him, Lisa is a modern wallaby who is ready to tackle 21<sup>st</sup> Century challenges, and Winnie – well she is a winner and gets there in the end.

## **10: The Tipping Point**

The Tipping Point is a stunning piece of modern art and is a comprehensive discussion of climate change inside of the triple bottom line sustainability frame work. Interpretation panels are provided –with a focus on current glacial retreat, and the need for a social tipping

point to address climate change.

Starting at the Tip Road end and moving around the piece anti-clockwise – the first side panel represent glaciers, each consecutive panel showing glaciers in retreat and sea level rising to the point of a huge wave, this wave has an eye in it – our consciousness looking back at ourselves. The top of the piece shows three islands in the sea.

Starting at Tip road –is the doom dome, it features the hour glass symbol as time is running out, an extinction symbol; war figures are present and taking aim at the two sitting ducks, the danger of homogeny is represented by white figures all facing the same way.

The second dome represents change; the golden figures in the centre are reclaiming the island from all of those who have failed to protect it. Look at for the three blind mice.

The third dome is the hope dome, the island is preserved in its natural state in the middle with a happy good luck elephant, and humanity lives on the outside in harmony and balance.

### **10: Sculpture Flying Piggy**

Everything you see at the Recovery Centre was either destined for landfill, or salvaged directly from landfill- our waste is a great indicator of a nation's wealth. Waste is about values – just because you don't value something, does not mean it does not have the potential for new values for a new owner.

### **11: Character Mr Tinker Fix It**

Discussion – things can be fixed, repaired, replaced or remade, parts are useful.

### **12: Tip Goddess**

Generosities of spirit – Tip Shops are community resource banks, please participate and pass your stuff on to someone else. The value in sharing – give someone else in your community a cheaper option, something to do with a mate, and most importantly a sense of joy from their own efforts.

**The trail ends with all students agreeing to make a renewed collective commitment to sustainability**

- We will face the challenges of the 21<sup>st</sup> Century together.
- We will embrace technological, environmental and cultural change.
- We will accept collective responsibility.
- We will actively and consciously seek to establish and maintain strong social cohesion and inclusiveness.
- We will act together expressing every day a love of community and love of place.