



ACTIVITY FOURTEEN:

A sustainable transport system

Sustainability education is a focal point for learning in the twenty-first century. In this activity students can explore why a sustainable and safe public transport system is a feature of the State Government's policies. Students will also have the opportunity to compare the resources needed to sustain a variety of lifestyles.

Student Outcomes

Society and the Environment

Strand: Place and Space
People and Places
Care of Places

- PS 3.3 The student understands that people have different views about which places need to be cared for.
- PS 4.3 The student understands that people act to sustain the environment according to their values.

Purpose

- This activity will provide an opportunity for the student to:
- Identify and discuss why cooperation is necessary to achieve equitable use of the environment in an effort to achieve an ecologically sustainable future
- Describe how a safe, efficient public transport system can reduce our ecological footprint
- Students can plan to reduce their ecological footprint by using public transport to get to school.

Preparation

- Prior to the activity the teacher and students can collect photographs or newspaper articles of developing countries that depict standards of living. Oxfam and Save the Children Fund have great photographs that can be used.
- Have access to the internet so students can measure their ecological footprint by using the 'Global Ecological Footprint Calculator' at: www.ecologicalfootprint.org

Procedure

1. The teacher will need to give a definition of 'ecological footprint' so students understand the impact they have on the environment: *"An approach to measuring how much of the earth's carrying capacity it takes to sustain humanity's consumption of goods and services."*
2. A simple way to develop the ecological footprint concept is for students to trace around their footprint on A4 paper. Within the footprint the students can write down all the items in their house that use electricity or some other form of energy.
3. Introduce the photographs of poor children living in developing countries and compare the size of the house, the items that use any form of energy, the transport options and the food available.
4. Compare the two footprints and ask the students to make some statements about the two footprints.
5. Ask the following questions:
 - Who uses the most resources?
 - Where does our food come from?
 - How much energy is used in the packaging of food?
6. Introduce the concept that the average Australian needs over five earths to maintain our lifestyle.
7. Have students calculate their own footprint at www.ecologicalfootprint.org using the Global Ecological Footprint Calculator.
8. Have students brainstorm what they can do to reduce this footprint. Make a list of ten things each family could do to reduce their footprint.
9. Compare this to the list's compiled by Tim Flannery in the book 'We are the Weather Makers' and in the documentary by Al Gore 'An Inconvenient Truth'.
10. Each student can develop a personal plan to reduce their footprint with an increase in using public transport as one of the goals.



Variation

- Visit www.synergy.com.au and have students measure their electricity use in their homes. Plan a way to reduce their ecological footprint.
- Undertake an audit in your school or classroom and develop a plan to reduce the classes' ecological footprint.
- View the film 'Saving Hieronymus', a great resource for primary schools that focuses on climate change and its implications for the twenty-first Century.
- Read Dr Seuss 'The Lorax'.
- For older students view 'An Inconvenient Truth', Al Gore's film about climate change and set up a series of debates under the banner 'Are we really serious about the climate change debate?'
- Research government initiatives to find more efficient fuels for public transport at www.dpi.wa.gov.au/ecobus
- Register your school in the TravelSmart to School program and run a whole school campaign to reduce car use to and from school.

Fact File

Trains help keep our air clean!

Everyone knows that cars create huge amounts of pollution every day. Each passenger train on the network can hold between 312 and 560 passengers! That's hundreds of cars off the road each day, per train! Think of how many trains travel every day and take a deep breath of cleaner, greener, air.

From the Kids

"I think the transport system is really valuable because it helps us reduce greenhouse gas emissions. Every time you drive one kilometre you create a third of a kilo of greenhouse gas and if everyone took the bus or train instead of the car we would take tonnes of carbon dioxide out of the atmosphere each year." – Megan (22)

