



Core units: Key understandings – Years 9–10

Illustration 1: Sustainability

Sustainability in focus

These materials in the following pages will enable you and your students to develop informed approaches towards sustainability and the content descriptions expressed in the Australian Curriculum for Years 9 and 10.

Defining sustainability

Starting from first principles, to be sustainable simply means to enable things to continue to achieve a form of existence which can be maintained indefinitely (the word sustainable actually derives from the Latin word *sustineere*, which denotes a sense of support in both physical and emotional terms). The word sustainable is actually an adjective, which means it is used to qualify, clarify or add meanings to nouns (or names) and other phrases. Consequently, when we use the term sustainable we rarely use it in isolation, but instead add it to words like agriculture, economy, environment and of course society. In this context the word sustainable transforms the way we understand the world around us and suggests that instead of promoting unsustainable practices like clear-cutting forestry, boom and bust economics, or environmental pollution, we develop sustainable systems of forestry, a sustainable economy, a sustainable environment. In the contemporary world you may have noticed that the phrase 'sustainable' has become a very fashionable adjective, appearing in an increasingly wide range of contexts (and qualifying an increasingly large number of nouns).

Whitehorse, M. (2006). *Spaces of sustainability: Geographical perspectives on the sustainable society*. London: Routledge, p. 9.

Sustainable development as a process or journey

Sustainability may be best defined as the *capacity for continuance into the long-term future*. Anything that can go on being done on an indefinite basis is sustainable. Anything that cannot go on being done indefinitely is unsustainable. In that respect, sustainability is the end goal, or desired destination, for the human species as much as for any other species.

By contrast, sustainable development is the process by which we move towards sustainability.

Porritt, J. (2007). *Capitalism: As if the world matters*. London: Earthscan, p. 33.

Ten key values of the green movement

1. Ecological wisdom: an holistic view that humans are part of nature, not its owners.
2. Grass roots democracy.
3. Responsibility for society: individual obligations to respond to human suffering.
4. Non-violence.
5. Decentralisation: restoration of power and responsibility locally.
6. Community-based economics.
7. Post-patriarchal values: replacing dominance and aggression with cooperation.
8. Respect for diversity: cultural, spiritual and sexual diversity.
9. Global responsibility: an orientation to grass roots groups in less economically developed places.
10. Future focus.

Barnaby, F. (1988). *The Gaia peace atlas*. London: Pan Books, referred to in J. Huckle (1990). *Environment and democracy: What we consume*. Godalming: WWF UK, p. 6.

Education for sustainability

Education for sustainability encompasses a vision for society that is not only ecologically sustainable but also socially, economically and politically sustainable as well.

Fien, J. (2004). Education for sustainability. In R. Gilbert (Ed.). *Studying society and environment: A guide for teachers*. South Melbourne: Cengage Learning Australia, pp. 186–187.

Australian Curriculum, Assessment and Reporting Authority (ACARA) advocates:

Education for sustainability develops the knowledge, skills, values and world views necessary for people to act in ways that contribute to more sustainable patterns of living. It enables individuals and communities to reflect on ways of interpreting and engaging with the world. Sustainability education is futures-oriented, focusing on protecting environments and creating a more ecologically and socially just world through informed action. Actions that support more sustainable patterns of living require consideration of environmental, social, cultural and economic systems and their interdependence.

Source: Australian Curriculum. *Sustainability*. Retrieved October 2013: from: <http://www.australiancurriculum.edu.au/CrossCurriculumPriorities/Sustainability>

The future of sustainability: Re-thinking environment and development in the twenty-first century <http://cmsdata.iucn.org/downloads/iucn_future_of_sustainability.pdf> promotes rethinking ideas about the sustainability project and moving on from the idea of sustainable development.

There are also excellent educational materials prepared around education for sustainability but again sustainability is merged with sustainable development. Refer to **Teaching and learning for a sustainable future** <http://www.unesco.org/education/tlsf/mods/theme_gs.html>

These materials are focused on education for sustainable development (ESD) in support of the United Nations Decade of Education for Sustainable Development, 2005 to 2014.

The Second World Conservation Strategy

The Second World Conservation Strategy project *Caring for the earth: A strategy for sustainable living* was published by the World Conservation Union (IUCN), the United Nations Environment Program (UNEP) and the World Wide Fund for Nature (WWF) in 1991.

The principles of a sustainable society set out in *Caring for the earth* are as follows:

- **Respect and care for the community of life** – an ethical principle which maintains that all life on earth is part of one great interdependent system which influences and depends on the non-living components of the planet – rocks, soils, water and air.
- **Improve the quality of human life** – this includes the following goals: a long and healthy life, education, access to resources needed for a decent standard of living, political freedom, guaranteed human rights and freedom from violence.
- **Conserve the earth's vitality and diversity** – this requires us to conserve life-support systems, conserve biodiversity and ensure that uses of renewable resources are sustainable.
- **Minimise the depletion of non-renewable resources** – minerals, oil, gas and coal resources can have their 'life' extended by recycling, using less of a resource or switching to a renewable alternative.
- **Keep within the earth's carrying capacity** – policies that bring human numbers and lifestyles in balance with nature's capacity must be developed alongside technologies that enhance that capacity by careful management.
- **Change personal attitude and practices** – people must re-examine their values and alter their behaviour.
- **Enable communities to care for their own environments** – empowered and informed communities can contribute to decisions that affect them and play an indispensable part in creating a securely-based sustainable society.
- **Provide a national framework for integrating development and conservation** – a national program for achieving sustainability should involve all interests and seek to identify and prevent problems before they arise.
- **Create a global alliance** – all nations stand to gain from worldwide sustainability and are threatened if we fail to attain it.

Hutchinson, N. & Hirsch, P. (1996). *Geography in focus, Book Two*. Milton: Jacaranda Press, pp. 95–96. Reproduced with permission of Wiley Australia & Jacaranda Press.

Worldviews about sustainability

Researchers McEwen and Schmidt emphasise the role of worldviews in the following: 'Sustainability is as much about the mindset through which the world is seen as it is about the activities taken in support of it' (2007). A developmental perspective suggests that every sustainability practitioner/educator/leader has a worldview that is made up of the beliefs that person holds and their definition for sustainability emerges out of those beliefs. Moreover, there are consistent patterns observed cross-culturally in the ways that these worldviews develop. Understanding and learning to work with the diversity of perspectives and their developmental trajectory is vitally important for sustainability education and leadership in that it helps us to design curriculum, and sustainability campaigns, policy and actions in ways that are more holistic, include a diversity of worldviews, address conflict between them and contribute to the development of the worldviews themselves.

Lynam, A. (2012). Navigating a geography of sustainability worldviews: A developmental map. *Journal of Sustainability Education*. Retrieved 6 September 2012, from: <http://www.jsedimensions.org/wordpress/wp-content/uploads/2012/03/LynamJSE2012.pdf>, p. 2.

In Australia, there are clearly all sorts of different shades of opinion. Robin Gray, ex-Premier of Tasmania, described the Franklin River, a World heritage area, as nothing but a brown ditch, leech-ridden and unattractive to the majority of people.

Hutchinson, N. & Bonnor, C. (1990). *Focus on global futures: People, environment and change*. Milton: Jacaranda Press.

The wild earth and saving species from extinction have always been my first priority, at a time when there's the most savage assault on the natural environment since the dinosaurs went into extinction.

Bob Brown quoted in Williams, C. (2006). *Green power: Environmentalists who have changed the face of Australia*. South Melbourne: Lothian Books, p. 32.

Apart from the use of fire, the earth was sustained through an invisible and even more important tool – the story. Telling stories kept alive the links between the earth and the animals, the people and the ancestral land in the Warrambul – the Milky Way. Without stories the knowledge would die and when the knowledge was gone, everything else would die too.

Sveiby, K. & Skuthorpe, T. (2006). *Treading lightly: The hidden wisdom of the world's oldest people* Sydney: Allen & Unwin, p. 11. © Karl-Erik Sveiby and Tex Skuthorpe 2006.

Geographers have long been concerned with the biophysical environment, sometimes referred to as external nature or the unmediated material world (Ginn 2009, p. 301). But a geographer's worldview also encompasses society and culture. It is here that geography makes a strong claim to be an integrated environmental science, centred on the nature-society system (Castree 2005)¹ and well versed in examining sustainability issues (Sneddon 2000, p. 540)².

¹ Castree (2005) demonstrates that former worldviews that separated nature and society were underpinned by Orientalism, capitalism and the exploitation of both people and nature.

² Sneddon (2000, p. 540) remarks, 'With regard to the sustainability explosion as a whole, my argument might be best summarized as a plea to be mindful of the multiplicity of meanings and uses to which "sustainability" is attached, a task that geographers are readily able to assume due to a long and diverse tradition of human-environment thinking'.

For example, geographers study Aboriginal seasonal calendars in Kakadu that show how traditional people's lives are finely attuned to the rhythm of the seasons; they study the regular burning of savanna grassland in Kakadu National Park by Aboriginal rangers that provide a mosaic of burnt and unburned habitat for the Partridge Pigeon to thrive in; and they study the persistent maintenance of rainforest/eucalypt forest ecotones by Bama in the Queensland Wet Tropics. Aboriginal people have demonstrated sustainability in terms of the 'capacity for continuance into the long-term future' (Porritt 2007, p. 32) or 'a way of thinking about how to sustainably meet the needs of people and the environment without undermining ecological integrity' (Mansfield 2009, p. 27).

At what scale should sustainability be studied?

The Australian Curriculum: Geography

<<http://www.australiancurriculum.edu.au/Geography/Rationale>> offers opportunities to study sustainability at a variety of scales, from the personal to the global. However, this simplified hierarchical view of scale, where spaces are neatly nested together in a kind of Russian-doll framework, tends to emphasise operational scale rather than the more important interconnections that exist between the various scales.

To really understand sustainability at the scale of the local catchment or the nation state the interconnections that criss-cross from individuals to the local, regional, national and global scales become all-important. Individuals can impact significantly on a global issue such as the development of a sustainable society. Individual agency is affected by the local community and by events taking place in far-off corners of the world. Further, the personal scale can only really be understood when the social, economic and environmental relationships that interconnect humanity at all scales are taken into consideration. This notion of scale enables individuals and communities to reflect on ways of interpreting and engaging with the world, thinking more deeply about sustainability and engaging more fully in sustainable practices.

Resources

- Barnaby, F. (1988). *The Gaia peace atlas*. London: Pan Books, referred to in J. Huckle (1990). *Environment and democracy: What we consume*. Godalming: WWF, UK.
- Castree, N. (2005). *Nature: Key ideas in geography*. London: Routledge.
- Fien, J. (2004). Education for sustainability. In R. Gilbert (Ed.). *Studying society and environment: A guide for teachers*. South Melbourne: Cengage Learning Australia.
- Ginn, F. & Demeritt, D. (2009). Nature a contested concept. In N. Clifford, S. Holloway, S. Rice & G. Valentine. *Key concepts in geography (2nd ed.)*. London: Sage.
- Hutchinson, N. & Hirsch, P. (1996). *Geography in focus, Book Two*. Milton: Jacaranda Press.
- Lynam, A. (2012). Navigating a geography of sustainability worldviews: A developmental map. *Journal of Sustainability Education*. Retrieved 6 September 2012, from: <http://www.jsedimensions.org/wordpress/wp-content/uploads/2012/03/LynamJSE2012.pdf>
- Mansfield, B. (2009). Sustainability. In N. Castree, D. Demeritt, D. Liverman, & B. Rhoads (Eds.) *A companion to environmental geography*. Oxford: Blackwell Publishing.
- Maude, A. (2012). Defining and explaining sustainable development and sustainability: A review of curriculum guides and school texts. In M. Robertson (Ed.). *A focus on Australia, New Zealand, and the Oceanic Region series: Schooling for sustainable development, Vol. 3*, Sydney: Springer, pp 49–63.
- Porritt, J. (2007). *Capitalism: As if the world matters*. London: Earthscan.
- Savage, V. (2006). Ecology matters: sustainable development in Southeast Asia, *Sustainability Science*, 1, Hutchinson, N. & Bonnor, C. (1990). *Focus on global futures: people, environment and change*. Milton: Jacaranda Press.
- Sneddon, C. (2000). Sustainability in ecological economics, ecology and livelihoods: A review. *Progress in Human Geography*, 24(4), pp. 521–549.
- Sveiby, K. & Skuthorpe, T. (2006). *Treading lightly: The hidden wisdom of the world's oldest people* Sydney: Allen & Unwin.
- Whitehorse, M. (2006). *Spaces of sustainability: Geographical perspectives on the sustainable society* London: Routledge.
- Williams, C. (2006). *Green power: Environmentalists who have changed the face of Australia*. South Melbourne: Lothian Books.