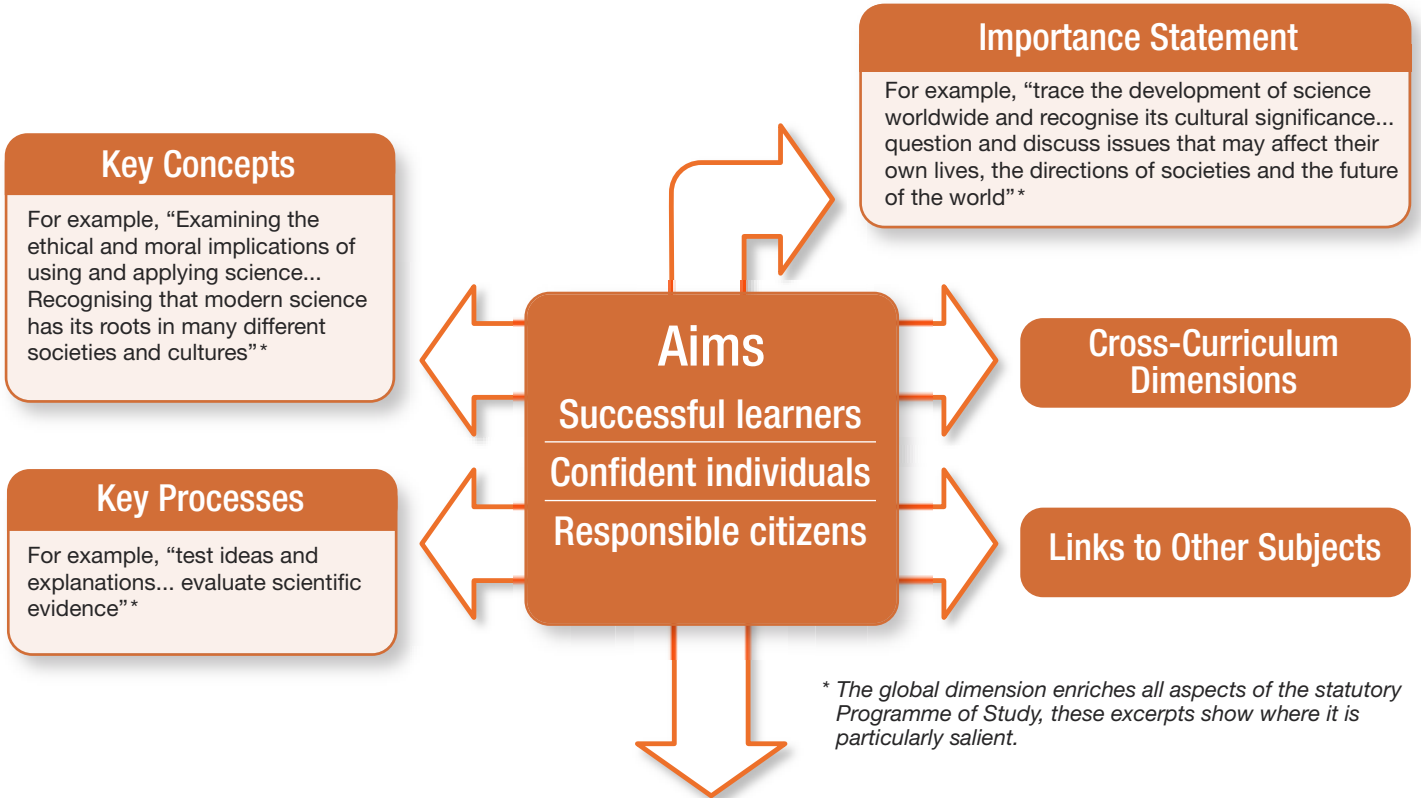


Exploring the Global Dimension to Science

Science provides opportunities to explore sustainable development; how scientific ideas contribute to technological change; scientific evidence in relation to global issues; the diverse cultural roots of science; and a range of perspectives on significant issues.



Eight Key Concepts of the Global Dimension

Global Citizenship

For example, international collaboration in science.

Interdependence

For example, global issues such as climate change or flu pandemics.

Social Justice

For example, unequal access to the benefits of scientific innovations.

Human Rights

For example, rights to health and clean water.

Conflict Resolution

For example, responding to ethical issues raised by science and recognising how conflict is a potentially creative process.

Diversity

For example, the value of diverse perspectives in scientific collaboration.

Sustainable Development

For example, alternative energy sources; considering probable and possible futures and how to achieve the latter.

Values and Perceptions

For example, critical analysis of evidence and recognition of human bias.

The eight key concepts form part of the cross-curriculum dimension, 'Global dimension and sustainable development'.

A few examples

Organisms, behaviour and health

Students can look at an example of a pandemic and how it spreads, investigating the reasons why a chosen virus could be dangerous to humans.

Students can explore actual and alternative responses to the threat at local, national and international levels, considering global interdependence. Students can look into the role of national and international health and/or agricultural organisations in responding to a potential pandemic.

Impacts of scientific and technological developments

Students can explore the potential advantages and disadvantages of scientific and technological developments in different contexts. Examples might be: selective breeding and genetic engineering of plants and animals; electric cars; bio-fuels; solar energy; nuclear energy; fertilisers; and building materials.

Students can consider the ethical issues raised by the way scientific innovations, such as vaccines, are developed. An example can be explored from a variety of perspectives.

Global garden

Students can develop a school garden as an educational resource for other students. They can learn about and signpost issues such as: where particular plants are originally from; the medicinal and other uses of particular plants; food (including cookery and issues around food miles); water sources and irrigation systems; and composting.

Students can explore how medicinal plants have been used over hundreds of years in a range of countries. They can debate issues around companies acquiring intellectual property rights to aspects of this ancient knowledge.

Find out more

The Global Dimension Website

Search for a wide range of global dimension teaching resources; find local organisations to support you, including Development Education Centres; and sign up to the termly Global Dimension newsletter at: www.globaldimension.org.uk

To download additional copies of this leaflet and tell us how you have used it, please go to: www.globaldimension.org.uk/explore

The Association for Science Education

Choose 'ASE Global' from the menu at www.ase.org.uk

Practical Action

www.practicalaction.org.uk/education for innovative teaching ideas.

QCA Secondary Curriculum Website

<http://curriculum.qca.org.uk>