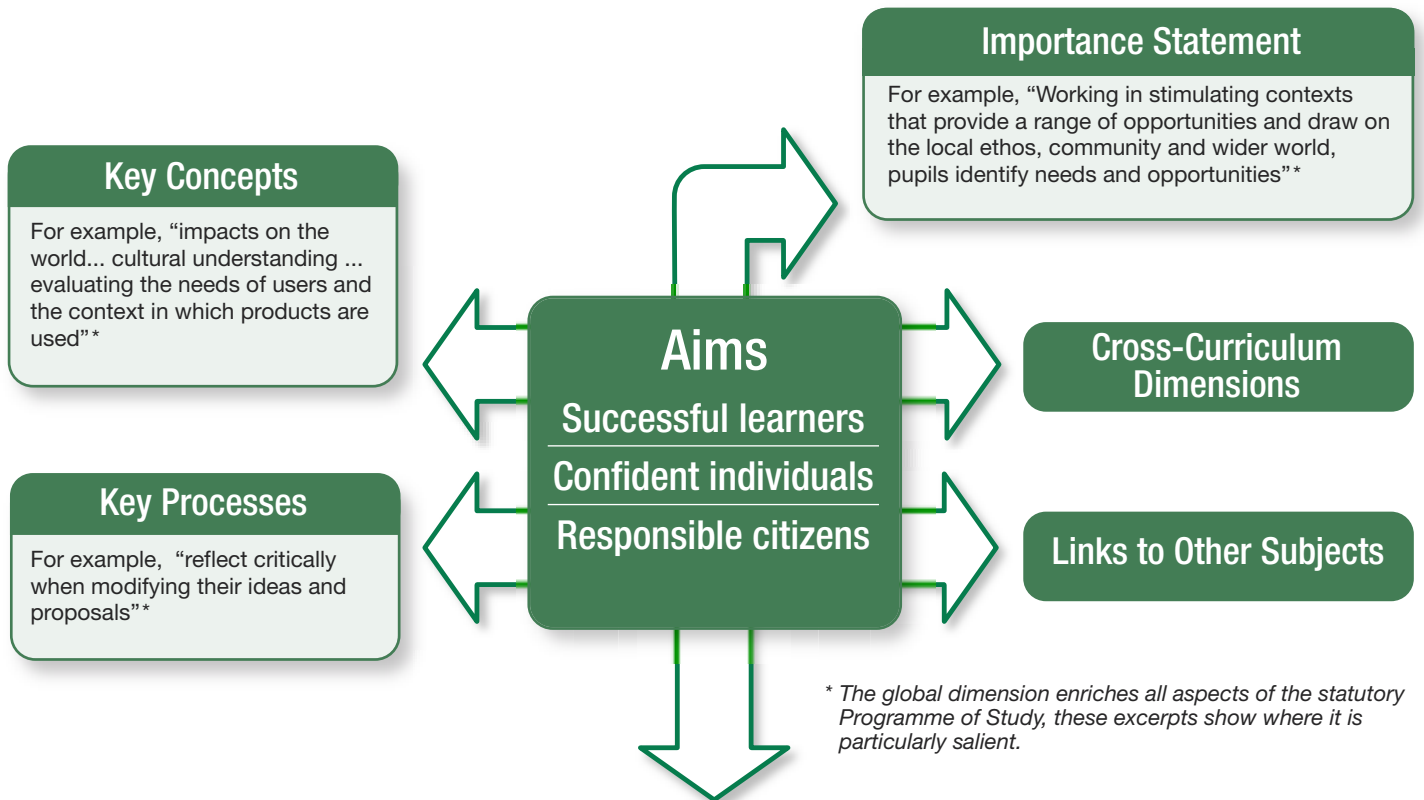


# Exploring the Global Dimension to Design and Technology

Design and Technology can illuminate webs of global interconnections of people and environments and provide students with a space to respond creatively to a range of needs and opportunities.



## Eight Key Concepts of the Global Dimension

### Global Citizenship

For example, understanding their role as designers, producers and consumers and the impact their decisions have on other people.

### Interdependence

For example, understanding that choices made about materials have implications around the world.

### Social Justice

For example, relating the creation of products and technologies to the creation of a more just world.

### Human Rights

For example, understanding the role of designers, producers and consumers in ensuring human rights are respected through the implications of the choices they make.

### Conflict Resolution

For example, understanding the roles that sourcing materials and technology can play in creating and resolving conflict.

### Diversity

For example, understanding that different environments and cultures need different products.

### Sustainable Development

For example, analysing the economic, social and environmental impacts (both now and in the future) of products over their whole lifecycle, remembering the six Rs: rethink, refuse, reduce, reuse, repair, recycle.

### Values and Perceptions

For example, developing critical thinking skills for evaluating both consumerist values and particular products and appreciating that these can be viewed from a range of perspectives; recognising how students’ designs reflect their own values and perceptions and how they might consider those of others.

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

# A few examples

## Life cycle analysis

Students can examine the impact on people and the environment of the production, use and disposal of an existing product, such as a mobile phone or a pair of jeans, or a product which they design and make, such as a wooden box.

For example, for a mobile phone, this can include exploring the impact of Coltan extraction in the Democratic Republic of Congo; farmers' use of mobile phones to access market prices and transfer money; the impact of easy communication on a range of people; the use of phones to photograph and record human rights abuses; the disposability encouraged by phone contract arrangements; the impact of leaving chargers on; debates around phone masts; issues around phones in landfill or how they are disassembled and by whom.

## Food

Pupils can evaluate the social, cultural, economic and environmental effects of current school meals and propose alternatives based on life cycle analysis, as above. The class can discuss possibilities and barriers with catering staff.

Pupils design and make school meals. They develop criteria for ingredients such as: ethically produced; fairly traded; locally sourced; organic; can be cooked with a minimum of energy; affordable; healthy; culturally sensitive; minimal and biodegradable packaging. They can explore the dilemmas and contradictions that arise within and between the criteria.

## Evaluating products

Pupils can compare products, for example:

- A football with a logo claiming that it has been ethically produced and a football from a well known brand
- A non-organic cotton and a synthetic textile
- Vegetables with different amounts of packaging and countries of origin
- Soft wood and hard wood from different countries

Pupils consider what criteria they would use to decide which to buy and what further information they might need.

Taking one product, pupils draw a winners and losers chart showing who benefits and who loses directly and indirectly (including through the impact on their environment) from each stage of the production, trade, use and disposal of the product.

## 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](http://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](http://www.globaldimension.org.uk/explore)

### The Design and Technology Association

[www.data.org.uk](http://www.data.org.uk)

### Practical Action

[www.practicalaction.org.uk/education](http://www.practicalaction.org.uk/education) for innovative teaching ideas.

### QCA Secondary Curriculum Website

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