

Overview

This module is about promoting students' understanding of sustainability, addressing the tension between existing and emerging global issues and meeting human needs as the world's population grows.

This should allow students to fully understand the United Nations (U.N.) definition of sustainable development.

Learning objectives

These objectives are worded to blooms taxonomy, and will be the criteria by which students are assessed on the topic through the quiz and activity sheets. Outcomes for each can be differentiated depending on ability and age group.

In this module, students will learn and understand:

- What is meant by 'human needs'.
- How environmental and social issues are related to global development.
- How sustainable development can change the way we live on planet earth.

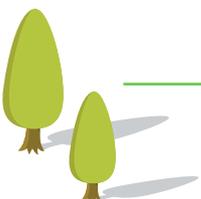
Content

Online module

This covers both 11 to 14 and 14 to 16 year old students for teachers to teach from and deliver in class, or students to explore independently. Included are interactive quizzes for reinforcement to ensure the learning objectives are covered.

Student Sheets

A series of half hour long classroom Student Activities, which can be customised for 11 to 14 year olds or 14 to 16 year olds and used independently, in pairs, group discussions or set as homework activities. Note, you may provide additional paper to your students to write longer responses for Student Activities. Student Sheets also include a copy of the interactive quiz in each module and any additional case studies.





Student Activities

Overview

This section contains curriculum links and expected outcomes for each activity, additional notes and discussion topics. This should aid teachers in setting outcomes according to their assessment strategy.

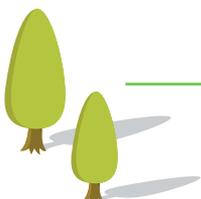
Student Activities can be differentiated by outcomes. Note that where 'Supported Foundation' is indicated, a support sheet is available for students who may require additional support. Teachers may wish to differentiate the expected outcomes depending on the age and key stage of the group.

The following table indicates which age group the sheet is most useful for:

Activity:	Supported Foundation 11-14 yrs (KS3)	Foundation 11-14 yrs (KS3)	Intermediate 11-14 yrs (KS3)/ Foundation 14-16 yrs (KS4)	Higher 11-14 yrs (KS3)/ Intermediate 14-16 yrs (KS4)	Higher 14-16 yrs (KS4)
Overpopulation Debate		x	x	x	x
Climate Change in Bangladesh			x	x	x
Climate Change in the Philippines	x	x	x	x	x

Curriculum links

Activity:	Type of Activity							11-14 yrs (KS3)					14-16 yrs (KS4)				
	Literacy	Numeracy	Creative	Speaking & Listening	Debate	Independent	Group	Science	Geography	D&T	RE	PSHEE	Science	Geography	D&T	RE	PSHEE
Overpopulation Debate					x	x	x		x		x	x		x			x
Climate Change in Bangladesh			x					x	x		x	x		x			x
Climate Change in the Philippines	x		x		x	x	x	x				x	x	x			x



2. Climate Change in the Philippines

Aim: Students learn about a real world case study and complete the comprehension activity to improve their understanding of climate change.

Running the activity: This is a basic comprehension activity best suited for individuals to work on either in class or for home work. Suggested answers are provided below:

1. Extreme weather, warming oceans, sea-level change, erosion of natural barriers such as coral reefs, all as an effect of climate change.
2. Massive displacement of people, homelessness, poverty, the cost of rebuilding infrastructure.
3. Reasons include: The destruction of natural barriers, its location as a collection of islands in the pacific, the lack of money to provide protection, that the people are spread over thousands of small islands.
4. Solutions could include: sustainable buildings and infrastructure that can protect people against extreme weather events, regulation change to ensure sustainable development i.e protection for natural environments, actions to combat climate change.

Extension activity: Design a two-minute advert to raise awareness of the plight of the people of the Philippines, for use on a popular video sharing platform.

Note: This could be used instead of the comprehension, depending on the type of class.



3. Climate Change in Bangladesh

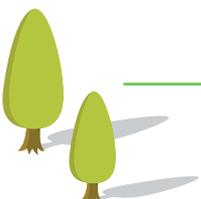
Aim: Students research the social, environmental and economic impacts of climate change in the region, and synthesise their findings in a fact sheet.

Running the activity: Students write a fact sheet to summarise their research into an introductory paragraph providing an overview of an issue and a bullet point list of relevant facts.

Students should include flash flooding, storm surges, extreme temperatures, drought, cyclones, the following environmental impacts: on agriculture and fisheries, water and biodiversity.

They may include details about poverty and inequality in Bangladesh, the impact of rapid population growth and geographical vulnerabilities, such as much of the country being on a floodplain.

Extension activity: Adapt the extension activity above for Activity 2 to designing an advert to raise awareness around the impact of climate change in the region.





Global Development Quiz

1. Drag and drop the year to its current or predicted world population total.

1950 2.5 billion **2050** 9.7 billion

2015 7.3 billion **2100** 11.2 billion

2030 8.5 billion

2. Meeting the needs of our growing population is not easy. It is important that we live in a healthy environment free from hunger caused by food insecurity and have water to drink and wash with. To have a truly sustainable future, we must eradicate poverty and create societies where equality means that everyone is treated fairly and justly, and has access to education and sanitation.

3. Match the global challenges with their definition and causes.

Issue	Definition	Cause
Climate change	The changing of weather patterns	Greenhouse gas and air pollution due to reliance on fossil fuels
Desertification	The turning of fertile land into arid dry land	Removal of natural vegetation
Deforestation	The loss of rainforest ecosystems	Logging, climate change, irresponsible farming
Rising sea levels	Increased exposure to flooding, loss of the polar ice sheets	Global warming and melting of polar ice caps
Resource depletion	The loss of coal, gas and oil	Reliance on fossil fuels for energy, transport and industry

4. Look at the sustainability solutions in the left hand column and select which global issues will be impacted as a result of each solution.

	Reduce resource depletion	Reduce CO ₂ emissions	Reduce Waste	Prevent Deforestation	Reduce Water Pollution
Sustainable Agriculture		x		x	x
Renewable Energy	x	x			x
Sustainable Design	x	x	x	x	x
Waste Minimisation	x	x	x		x

