



## Sustainability

## Stage 1: Identifying learning need

## **Authentic context for learning**

## Big question / global issue / big idea:

Sustainability is crucial for preserving the planet and our finite natural resources like water, air, and soil.

## Why this learning matters for our young people:

- Our natural resources are finite and cannot be replenished.
- For our own survival, we need to adopt behaviours that sustainably manage the environment and natural resources.
- Sustainability mitigates key issues like climate change, pollution, and biodiversity loss.
- Sustainability is a key factor in ensuring that future generations will have access to vital natural resources and live in a healthy planet.
- We are all responsible for the sustainable management and use of natural resources.

## **Making meaning**

## **Understandings:**

Learners should come to understand that:

- Overexploitation of natural resources (when resources are consumed faster than they can be replenished), can lead to the depletion of natural resources, environmental degradation and species extinction.
- As the human population increases, the amount of natural resources we use rises.
- Increased population results in increased farming and manufacturing, leading to more greenhouse gas emissions, unsustainable energy use, and deforestation.
- Sustainable behaviours are not simply nice to do, but promote a balance between economic growth, social inclusion, and environmental protection.
- Pro-climate and pro-environmental behaviour change is everyone's responsibility and key to our survival.

## **Underpinning Concepts:**

Learner's understanding will be founded upon:

- Ecosystem services
- Climate change
- Resilience
- Society
- Lifestyles
- Consumerism
- Pollution
- Causes and consequences
- Health impacts
- Biodiversity
- Food systems
- Energy systems
- Transport systems
- Economic systems







## **Stage 2: Identifying progression**

Prior knowledge, skills and understanding				
Learners already know:	Learners already can:	Learners	s already understand:	
Purposes of learning			Transferable of learning	
Learners can become increasingly effective by:  Engaging with contemporary issues based upon their knowledge and values.  Building up a body of knowledge and having the skills to connect and apply that knowledge in different contexts.  Thinking creatively to reframe and solve problems.  Facing and overcoming challenge.  Understanding and considering the impact of their actions when making choices and acting.  Showing their commitment to the sustainability of the planet.		Learners might use their learning in other contexts by:		







## Knowledge and skill acquisition

### Learners should broaden and deepen their knowledge of:

- Sustainability, what is it?
- · How we use natural resources.
- How we sustainably manage natural resources.
- The impacts of overexploitation.
- How does sustainability mitigate the effects of climate change?
- How does the sustainable management of natural resources impact human health.
- How human actions can affect interrelationships between the natural world and people.
- Pro-climate, pro-environmental behaviours.

#### LNF/DCF/AoLE:

## **Essential questions**

## Students should consider and reconsider:

### **Topic Level Questions:**

- How does the way we sustainably manage natural resources support us in adapting to the impacts of the climate and nature emergencies?
- How does the overuse of natural resources impact planetary and human health?
- · What impact does society and lifestyle have on the natural environment?
- · How should individuals and society act to reduce their impact on the natural world?

#### **Unit Level Questions:**

- How do we reduce our impact on nature?
- · How do we prevent our society and lifestyle from overusing natural resources?
- · What does the future look like if we don't change and continue to exacerbate climate change?
- · What does the future like if we make positive changes, act sustainably, and help nature thrive?
- · How do we influence sustainable development, pro-climate, pro-environmental behaviour in others?



# Supporting your planning and curriculum design



## **Stage 3: Demonstrating learning**

Learner portfolio	Foci for progression	Evidence of learning
<ul> <li>Learners might demonstrate their understanding by:</li> <li>Assessing and recording data about their own/their family's/ their setting's consumption of natural resources, products and services over a given period.</li> <li>Making an action plan to show how their own/their family's/ their setting's use of natural resources could be reduced.</li> <li>Setting up their own sustainability project.</li> <li>Researching information and data on the sustainable management of natural resources locally, nationally, or globally.</li> <li>Presenting information on the causes and consequences of failing to adopt sustainable behaviours.</li> <li>Present information and actions taken to maximise their/their family's/their setting's sustainable activity to a wider audience.</li> <li>Comparing the sustainable management and use of natural resources between Wales and other countries.</li> </ul>	Learners should make progress in:  Their effectiveness as learners.  The breadth and depth of their knowledge.  Their understanding of the ideas of the AoLE.  The sophistication of their skills.  Their ability to transfer understanding to new contexts.	What might you see / hear / read that demonstrates progression?



# Supporting your planning and curriculum design



## Stage 4: Learning plan

## Overview of learning activities

(to be designed by the educator)

These resources and their supporting information are available on our <u>'Sustainability' education webpage.</u>

- Activity plan How do we live sustainably?
- Activity plan Sustainability glossary game
- Activity plan What's your carbon footprint?

## Other webpages which may be of interest:

- Resources Wales climate change emergency - a range of activities covering sustainable development, adapting to climate change, and mitigating its impacts.
- Resources Green energy investigate energy use and ways to be more sustainable.

### Or:

- Undertake an investigation of ethical consumerism.
- Undertake an audit of sustainable behaviours.
- Examine sustainable local industrial and business behaviours.
- Identify and investigate sustainability influencers.
- Visit a local sustainability initiative, project, or business.
- Look into the sustainable management of natural resources in your local authority and across Wales.
- Ask your learners to consider: Are stakeholders in Wales creating a supportive environment to ensure key sectors are able to drive climate change mitigation?

## **Focus of learning**

(Acquisition / Making meaning / Transfer)

## **Acquiring skills:**

- Developing a glossary of sustainable developmentbased vocabulary.
- Data collection.

## **Knowledge about:**

- · Consumerist behaviour.
- Cause and effect, how our lifestyles impact nature.
- How we manage our food, energy, waste, transport, and finance systems.

### **Connect learning together:**

- Using gathered information to inform future decisions to act sustainably.
- Influencing others to develop sustainable behaviours.

# Transfer of knowledge and understanding:

- · Global warming.
- Biodiversity decline.
- Agriculture.
- Construction.
- Energy use.

### **Future progression**

(How should learners be developed next?)

## Learners need to extend their knowledge of:

Learners need to be more skilled at:



# Supporting your planning and curriculum design



## To support further learning about sustainability why not go on a site visit to:

- A local sustainable energy producer.
- Your local waste management facility.
- A local recycling centre.
- A local farm.

Learning in, learning about, and learning for the natural environment. Looking for more learning resources, information and data?

Visit <a href="https://naturalresources.wales/learning">https://naturalresources.wales/learning</a>

Alternative format; large print or another language, please contact: enquiries@naturalresourceswales.gov.uk, 0300 065 3000

