

**A Shifting Climate Needs Sharper Thinking:
A Unit of 2 Lessons focusing on Climate Change Information and Critical Thinking (Foundation
and Advanced Levels)
Third and Fourth Level in Scotland (Geography)**

Introduction

This programme develops transferable evidence-evaluation skills required across Science, Geography, English, and Humanities/Modern Studies curricula in all UK nations.

This unit develops transferable evidence-evaluation and media-literacy skills required across Citizenship, English, Science and Humanities/Social Studies in all UK secondary curricula, using climate examples as structured case studies.

As such, the programme functions as a cross-curricular reasoning module that can be delivered within Science, Geography, English, Citizenship, or broader interdisciplinary provision.

Purpose of the programme

This two-lesson Third and Fourth level unit develops students' ability to interpret information, evaluate claims, and justify decisions using evidence. Climate change is used as a real-world context, but the core aim is to strengthen transferable reasoning skills needed across the curriculum.

The unit teaches students to:

- identify what information is claiming
- recognise evidence and missing information
- interpret graphs and data correctly
- evaluate sources and expertise
- recognise persuasive language
- justify decisions using evidence

These skills support learning in multiple subject areas and align with national curriculum expectations in all UK jurisdictions.

Delivery requirements

- two standard Third and Fourth level lessons
- no specialist subject knowledge required beyond basic climate awareness
- group discussion-based
- minimal written workload
- ready-to-use student worksheet

The programme is designed for straightforward classroom delivery without additional resources.

Expected student outcomes

After completing the unit, students should be able to:

- apply a structured method to test reliability of information
- interpret graphs and claims with greater accuracy
- recognise when important information is missing
- justify decisions using evidence
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These competencies transfer directly to National 5 study in multiple subjects.

Implementation flexibility

The programme can be used:

- once per Third/Fourth level cohort
- as part of a broader climate education strand
- as an introduction to evidence evaluation skills
- as preparation for National 5 analytical work

No ongoing timetable commitment is required beyond the two lessons.

Curriculum positioning

This programme is not designed to sit within a single subject. It supports core analytical competencies already required across:

- Science
- Geography
- English
- Mathematics
- Citizenship/Humanities/Social Studies/Modern Studies

It may be delivered:

- within Geography
- within in Science
- within English
- as part of literacy across the curriculum
- as an interdisciplinary Third/Fourth level enrichment module
- during PSHE / tutor curriculum / project weeks

Schools may place ownership where most convenient operationally.

Direct Mapping to the Curriculum for Excellence for Geography (Social Studies) if taught here

Cross-cutting Principles and practice

Principles include:

- exploring and evaluating different types of sources and evidence

Practice includes:

- use of relevant contexts and experiences familiar to them (climate in this case)
- use of interdisciplinary learning experiences

Direct Mapping to the Fundamental Capacities of the Curriculum for Excellence

Responsible citizenship

Includes:

- informed judgement
- critical thinking about complex local and global issues
- evaluating environmental change

Direct Mapping to learning for Sustainability in Curriculum for Excellence

Responsible citizenship

Includes:

- exploring local and global issues
- climate change education

Cross-Departmental Justification

To explain why and highlight where subjects other than Geography can be involved in the teaching of this resource.

Subject contributions:

Science

Supports:

- working scientifically
- interpreting data and graphs
- evaluating evidence
- understanding reliability of claims

Students practise distinguishing evidence from assertion and recognising limits of data.

Geography

Supports:

- analysing environmental information
- evaluating sources
- interpreting climate-related data
- considering consequences of environmental decisions

Students apply geographic reasoning to real-world environmental claims.

English

Supports:

- critical reading
- analysing persuasive language
- distinguishing fact from opinion
- evaluating argument structure

Students practise identifying how language shapes interpretation.

Mathematics

Supports:

- interpreting graphical data
- understanding trends
- recognising misleading statistical presentation

Students learn how scale, timeframe, and representation affect conclusions.

Supports:

- evaluating public claims
- considering consequences of decisions
- understanding information used in public debate

Students discuss how unreliable information can influence real-world outcomes.

Inspection and school improvement relevance

The programme directly supports:

- disciplinary literacy across subjects
- evidence-based reasoning
- student ability to interpret complex information
- preparation for National 5 analytical requirements

It also strengthens students' ability to evaluate information encountered online and in media, supporting whole-school priorities for digital and information literacy.