

Climate Change Education Inside and Outside the Classroom



UNESCO Course



United Nations
Educational, Scientific and
Cultural Organization



Module 3

Module 3

Lesson Planning for Climate Change

“...from a pedagogical viewpoint, climate change is uniquely challenging...climate change tests the capacity of education to organize learning around problems characterized by complex social dynamics, uncertain knowledge and risks.”

- Læssøe, J. et al. Climate Change and Sustainable Development: The Response from Education. 2009.

Alignment With The Syllabus / Curriculum

- Many teachers feel that topics such as climate change (or ESD in general) are an ‘extra load’ on top of what the school curriculum requires.
- This is not necessarily so, because the knowledge, skills and values associated with climate change education are integral to the learning outcomes (goals) of school subjects.
- It is vital to develop lessons that are well situated (anchored) in what the curriculum requires learners to do. Part of this requirement is to support learners to be literate and numerate.

A Focus on Literacy and Numeracy



- Many developing nations in Africa and the SIDS have a poor tradition of educational quality. When literacy and numeracy levels are low, learners are ill-equipped to become critical, confident citizens and decision-makers.
- While literacy and numeracy are fundamental to all classroom activities, including ESD and climate change education. Learners need to be able to collect and interpret data, read graphs, engage critically with a range of written texts, express their findings and responses in clear, effective ways.
- Consider how to integrate age-appropriate reading, writing and numeracy tasks into the climate change lessons you develop.

A Focus on Knowledge

- To make informed decisions about climate change adaptation and mitigation, citizens require a strong knowledge foundation.
- Types of knowledge that may be important in the learning process include:
 - Basic scientific knowledge (e.g. concepts such as fossil fuels, greenhouse gases, the carbon cycle, ecosystems)
 - Local, contextual knowledge resides with community members (e.g. learners' or their families' knowledge of what plants grow well in the area, or how frequently the river estuary floods); as well as in local surveys or scientific reports.
 - Traditional, indigenous or historical knowledge (e.g. descriptions of what the mangrove forest was like 50 years ago; ways of coping with severe storms; stories of people's relationships with the natural world (traditional values and ethical practices)).
- Educators can also work with their learners to consider the knowledge gaps i.e. what is not yet known about climate change?

A Focus on Critical Thinking and Creativity

- The scope and complexity of climate change can feel overwhelming for educators and learners:
 - Media and other advocacy groups often misrepresent or exaggerate the causes or predicted impacts of climate change;
 - Climate change knowledge itself is often characterised by uncertainty;
 - As a global threat, it can be difficult to know what can be done at a small, local level.
- Secondary school teachers can respond by developing their learners' ability to engage **CRITICALLY** and **CREATIVELY** with climate change.
- Climate change education is not just about 'studying the topic of climate change'. As explored through this course, schools can stimulate new ways of thinking and doing in response to climate change. But this requires critical thinking, confident, informed and creative young citizens. How might your lesson plans support this?

A Focus on Values and Responsible Citizenship

- Many drivers of climate change are associated with values that underpin modern, consumerist and individualised lifestyles.
- Similarly, many of the ways that communities (local and global) can mitigate and adapt to climate change are dependent on new ways of valuing and acting in terms of our relationships with places, people and other species.
- The school curriculum can stimulate young people (future citizens) to consider their values and what they mean for people and planet. For example:
 - Do we value the freedom and wellbeing of current AND future generations?
 - Is it only human wellbeing that we value? Or what else?
 - How might we enact these values at the local community level (local citizenry) and the international level (global citizenry)?

A Focus on Local, Achievable, Worthwhile Learning and Action!

- **RELEVANCE:** As you plan your lessons, consider how the knowledge, skills and values gained will be relevant to your learners' local context and lives.
- **FEASIBILITY:** If you are planning an action-based response, think carefully about how feasible (achievable) it is. Avoid the risk of setting learners up to feel overwhelmed by the scale of problems that they can never realistically address! Develop learning outcomes and action goals that are appropriate and achievable for the age group, the available time and resources, and the type of follow-up and support that is needed. It is more important for learners to develop their potential to become future responsible citizens, than it is for them to feel burdened with fixing all the problems in their community.

Some Case Studies of Classroom-based Climate Change and Environmental Interventions

- Handprints for Change
- Using Sandwatch to teach English
- Stepping Up to Sustainability
- Sustainable environmental actions by Bequia Community High School

