

## **Best Practice Guidance**

### Science Education, the Environment and Sustainability

#### **Context**

Since the 1970s public awareness of, and concern for, the environment has grown and deepened. Substantial steps have been taken to address problems such as air and water pollution, the thinning of the ozone layer and acid rain. However, we still have a long way to go and we find ourselves faced with a series of '[wicked](#)' problems such as biodiversity loss and climate change. These problems will never be solved as such but their impact will be mitigated through interdisciplinary approaches. Science plays a key role in addressing environmental challenges and contributing to the development of a world that is more sustainable than it is at present.

#### **The position of ASE**

- All students should be supported to develop their environmental literacy throughout their time in school.
- Science education has a key role in promoting better understanding of environmental issues and in empowering students to develop the skills and competences required to contribute to protecting and improving the environment for humans and other animals.
- Science teacher education should address issues of environmental literacy and sustainability.
- Science education in out-of-school settings provides unique opportunities to develop environmental literacy and to promote sustainable lifestyles.

#### **Best practice should seek to include**

- An acknowledgement that environmental issues can only be effectively addressed using interdisciplinary whole school approaches.
- Using sustainability practices in schools as well as simply taught.
- Opportunities to use out-of-the classroom resources should be encouraged.
- An awareness that, as a society, our existing lifestyles are unsustainable

- Reference to the global dimension to these issues incorporating international initiatives such as the [Sustainable Development Goals](#) these are “End poverty, Fight inequality and injustice, Tackle climate change”.
- Up-to date science knowledge for these complex issues. The [Royal Society](#) has produced a good summary of climate science evidence, that fits the scientific consensus on these issues.

## Links

Guidance on developing sustainable practices see, for example,

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/187037/DFE-32056-2012.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/187037/DFE-32056-2012.pdf)).

The Council for Learning Outside the Classroom <http://www.lotc.org.uk> provide curriculum links, resources and a Quality Badge scheme for providers.

Topical issues to bring sustainability into the classroom. These emphasise the point that our current lifestyles are unsustainable <https://www.wwf.org.uk/what-we-do/area-of-work/promoting-sustainable-living>

The 17 Global goals with associated lesson plans, useful for assemblies, science lessons or any time there is a focus on sustainability <http://worldslargestlesson.globalgoals.org>