



THINKING THROUGH  
**CLIMATE CHANGE**

INTRODUCTION

- 1 Teachers' notes
- 3 Teachers' notes on Shishmaref
- 4 Acknowledgements



## Teachers' notes

### **Thinking through climate change**

This e-learning resource has been designed by a group of teachers to support young people's enquiry into climate change. It draws on our own work with 7-14 year olds, and is aimed to make the most of e-learning activities to support independent and group enquiry into this complex global issue.

While it is designed for use by schools, we imagine it may also be used by learners of all ages, often outside of classroom contexts.

> [Teachers' site map](#)

The resource's starting point is the lives of young people in Shishmaref, Alaska – one of the communities most vulnerable to climate change in the world.

From a **news story** about Shishmaref, it goes on to invite learners to find out more about climate change worldwide, through a series of connected modules. Learners might explore all these modules, or a selection of them. We offer suggestions about differentiation below, and you may want to take this into account when thinking about this.

Each module is supported by downloadable **teachers' notes**, and invites learners to record their growing understanding of the issue in a **learning log**.



**A final module** invites learners to present their conclusions from this investigation as a multi-media news item, and to share ideas with others about their own responses to climate change [including personal and collective action].

The resource supports enquiry learning and thinking skills in a variety of areas, and we have sought to identify these in our notes. They include Science, Geography, Citizenship, ICT, Literacy and Numeracy. See teachers' notes on **The Daily Melt ~ Starting an investigation** for links to further general guidance.

> [Starting an investigation](#)

We offer this resource in a spirit of professional sharing, and as a stimulus for your own creativity. We welcome your feedback.

> [admin@wmnet.org.uk](mailto:admin@wmnet.org.uk)

<b>Differentiation</b>		
We have colour coded activities according to levels of difficulty. Most activities are fairly open-ended, and can be adapted for ease and complexity as required. We have offered literacy levels as a broad guideline.		
green	<b>Simple</b>	Corresponds approximately to levels 3-4. We imagine most learners at KS2 and KS3 will be able to do these activities without significant support.
blue	<b>Intermediate</b>	Corresponds approximately to levels 4-5. We imagine many learners at KS2 and most at KS3 will be able to do these activities without significant support.
red	<b>Fairly advanced</b>	Corresponds approximately to levels 4-6. We imagine most learners at KS2 and some at KS3 will require support.
black	<b>Advanced</b>	Corresponds approximately to levels 5+. We imagine most learners at KS2 and KS3 will require support.



## Teachers' notes on Shishmaref

We have chosen Shishmaref as a starting point because it offers a dramatic real-life example of climate change consequences for a particular place.

Climate change can sometimes seem abstract and intangible. We wanted to start at a human scale, engaging children's interest and empathy. For that same reason we have homed in on the particular experiences of twin boys resident in the town. We have striven to be authentic: all of this section has been created through communication with the Tokeinna family. Other sections look at examples in detail.

> [Introduction](#) > [What's Going On?](#) > [Changing Places](#)

As well as their personal account, we offer an edited news account from the BBC, which helps put the story in context. Looking at climate change in the news is one of the themes which recurs in these materials, and this news story may serve as an exemplar text for learners' own work later on.

We also offer some onward links, which further establish the context and reality of what is going on. We imagine these will be of particular use to learners wishing to look at Shishmaref as a geographical locality.

Shishmaref is at the North-West tip of the American continent, in the Bering Straits region and within the Arctic Circle. While polar regions are experiencing particularly acute early effects from global warming, it is important to establish with learners that they are not the only places to experience consequences of climate change, and that these consequences may be quite different elsewhere [eg flooding in the UK Midlands, increased desertification in Northern China].

More advanced learners might be invited to consider the idea that the effects of climate change happen in combination with other factors [eg land use, physical geography].

All learners should be invited to consider the possibility that some of these changes may not be unstoppable or irreversible, and at the very least there are things which can be done to help people adapt to what is happening.

*From this introductory section, we invite learners to consider some more general questions about climate change.* > [Questions and task](#)



## Acknowledgements

These materials have been developed through a teachers' working group at Tide~ [Teachers in development education] for the WMnet *Climate change in the curriculum portal* > [climatechange.wmnet.org.uk](http://climatechange.wmnet.org.uk)

### **Copyright © 2006 WMnet**

They form a contribution to West Midlands Coalition *Framework 2: sustainable development*. They build on the earlier project *climate change, local & global* and the 2005 conference *A climate for change?* See [www.tidec.org](http://www.tidec.org) for details.

### **Project co-ordinators:**

Ruth Henshaw, The Wakeman School, Shrewsbury  
Malcolm Smith, Barston Education Centre [Severn Trent Water], Solihull

### **Project worker:**

Ben Ballin, Tide~

### **Project steering group:**

Ben Ballin and Scott Sinclair, Tide~  
Margaret Danby and Steve Horsfield, WMnet

### **Working group:**

Rupert Brakspear, Worcestershire County Council  
Barbara French, Netherton Primary School, Dudley  
Kate Glanville, Blue Coat CE Junior School, Walsall  
Paul Kemp, Groundwork Birmingham and Solihull  
Jodie Mills, Highfields School, Wolverhampton  
Mike Smart, Bell Heath Study Centre, Birmingham  
Gerry White, Education Walsall  
Clare Whitfield-Crisp, Woodcock Hill JI School, Birmingham  
Alyson Whittaker, Bramford Primary School, Dudley

## INTRODUCTION

### **Project core/advisory group:**

Paul Archer, Birmingham LA  
Jon Cree, Bishop's Wood Centre, Worcs  
Derrick Golland, Staffordshire LEA  
Dr Stephan Harrison, Oxford University [in advisory role]  
Paul Kemp, Groundwork Birmingham and Solihull  
Steve Lockwood, Dudley LEA  
Dr Fran Martin, University of Worcester [in advisory role]  
Steve Rogers, Shropshire LA  
Sue Shanks, Natural Curriculum Project, Wolverhampton  
Andrew Simons, Centre of the Earth, Birmingham

### **Involved in consultations:**

James Green, Worcestershire LEA  
Sue Fenoughty, National Association for Environmental Education  
Matthew Jones, Old Park School, Dudley  
Stephen Pickering, Worcestershire County Council  
Sonia Wright, Bell Heath Study Centre, Birmingham

### **Additional thanks to:**

Ashley Cooper and the Tokeinna family; National Environment Agency and Educators for Sustainability [The Gambia]; Don Passey, University of Lancaster; John Rhymer, Bishop's Wood Centre; the staff and management committee and members of wmc2 liaison group at Tide~.