

Climate Change ~ the educational implications



Introduction

As a network of teachers, we have been concerned that in the rush to be doing things, a real educational debate about climate change is not taking place.

A series of teacher groups, consultative workshops and seminars, and young people involved in the *Let's Talk Climate Change* project have been discussing the implications.

This paper is offered as a stimulus to your own thinking and planning. It offers propositions about the educational implications of climate change. It raises the question of how we, as a profession, should be contributing to the response to climate change if we are to meet the needs of young people.

The propositions are that:

- 1. climate change is a global phenomenon;*
- 2. it is complex;*
- 3. responding to climate change requires learning;*
- 4. it raises challenges about what is learnt and how;*
- 5. it is a controversial issue;*
- 6. it demands fresh thinking about curriculum;*
- 7. young people's dialogue is vital;*
- 8. young people need to learn to choose;*
- 9. schools need to work on their collective disposition.*

To share ideas and help shape proposals for future educational policy we need your feedback.

TOMORROW'S CLIMATE
*Today's Challenge*TM

*This paper is a contribution to
DEFRA's Climate Challenge initiative*

How do you respond to the proposition: ...

1. that climate change is a global phenomenon?

It will affect us all in many ways. It raises key principles of commonality and interdependence. It connects us with communities all over the world, who are also working creatively on how to respond. There is a real sense that 'we are all in it together'. Perspectives from elsewhere in the world offer us particular insights.

2. that it is complex?

"This is the most complex system we have ever tried to understand."

Dr Stephan Harrison

We need to acknowledge that the issues are contested and there is some uncertainty about what is going to happen.

Moreover, climate change is not a single issue: understanding it calls for joined-up thinking. This means drawing on the strengths of different curriculum areas [eg Geography, Science, Citizenship, Design & Technology].

Understanding climate change also raises questions about the culture of science - and science education. It has the potential to open up enquiry and encourage 'scientific literacy'.

3. that responding to climate change requires learning?

The seriousness of the issues gives us a great deal to think about and act on. Their complexity challenges us to do so in a dynamic and sophisticated way.

The contribution of learning is often undervalued by those seeking to respond to climate change.

Young people need to have the opportunity to understand what is happening and to engage with the issues. We propose that this should be an entitlement.

4. that climate change raises challenges about what is learnt and how?

As a compelling real life context, climate change calls for learners to engage in purposeful and critical thinking.

Climate change is not simply a subject which can be 'covered': it is a process of change. There will always be new things to learn, or existing understandings to re-evaluate. This is challenging, but offers potential for exciting and meaningful learning.

Learners will require a range of perspectives to get a sense of what is going on. Sensationalist or simplistic approaches may encourage a sense of powerlessness or cynicism. Learners will need time and space to assess the many conflicting assertions they come across, and arrive at their own ideas about the issues.

5. that it is a controversial issue?

Understanding climate change is work in progress, even at the most sophisticated and 'expert' levels.

The idea that the teacher doesn't know 'the answer' offers particular opportunities in the context of personalised learning. This has implications for teacher-learner relationships, and those between peers. It offers strong potential for student enquiry, and for matching teaching to what young people decide they need to know.

6. that it demands fresh thinking about curriculum?

Climate change engages the agenda of 'developing a curriculum for the 21st century' in a real way. Understanding such a complex global issue requires new curriculum models.

Such a curriculum needs to emphasise critical thinking, co-operation and learning to learn.

7. that young people's dialogue is vital?

We know that climate change is likely to affect young people through their lives. They have a stake in its implications for the future, and this goes beyond knowledge. *What are their aspirations?*

There is a need for mutual learning between teachers and learners, and great potential for young people to learn from each other.

The young people we consulted challenged the widespread tendency to get them doing things rather than thinking about them; and the often well-intentioned desire to protect young learners from a potentially alarming or depressing vision of the future.

8. that young people need to learn to choose?

We need learning which leads to real action, and action which leads to real learning. Action should be based on young people's understanding.

Any decisions and choices arrived at by learners themselves are likely to be more sustainable and sustained than those enforced by an external authority. Such choices are also likely to be more open to further reflection and critical re-evaluation.

Current received wisdom is unlikely to be adequate when dealing with the needs of the future. We need to be thinking about *learning for empowerment rather than compliance*.

Activity itself can also be a stimulus to learning, but we should not confuse this sort of activity with the kind of action which arises from a learner's informed understanding. It is healthy for learners to feel they are making a difference, but not to be unquestioning about what that means.

9. that schools need to work on their collective disposition?

Issues like climate change can offer schools a unifying focus. They call for whole school coherence and integration, for dialogue across roles, subjects, phases, and specialisations ... and for this to centre on the learner's experience.

The Framework for Sustainable Schools raises questions about what practices schools model, and how the school campus and community relate to what is being learnt.

There is potential to engage learners in school decisions about climate change, where at a minimum they are informed about what is happening, and preferably they are able to offer leadership. This leadership can also extend to the wider community. There are many good examples to draw on.

In thinking about the issues raised by these propositions, we are aware that schools will be considering them in the context of:

- ◆ *Curriculum planning [and proposed curriculum changes]*
- ◆ *Every Child Matters*
- ◆ *New Ofsted SEF criteria*
- ◆ *The DCSF Framework for Sustainable schools*
- ◆ *The Manifesto for Learning Outside the Classroom*

The workshops and seminars which led to this project included inputs from teachers, heads, local authority advisors and others in support roles. There was a particular input from young people involved in the *Let's Talk Climate Change* project. We also welcomed specialist inputs at seminars, including Lynne Jones MP on climate change and politics, and the climate scientist Dr Stephan Harrison from the University of Exeter.

To download this document and support materials see www.tidegloballearning.net

One way to use this paper

This paper is offered to stimulate curriculum creativity. We have found this "card game" an effective way to initiate discussion in staff groups.



- Each teacher has a copy of the paper and takes a look at the propositions.
- They think about the question "What would we need to prioritise in our school?"
- They write one brief point down on each of four blank cards [one side only!]
- These are placed face down in the middle of the group.
- The cards are shuffled – and each teacher is dealt three cards.
- Teachers 'stick' or 'twist' until they have three cards in their hand, which they agree with but didn't write [NB they are not rejecting statements, but reflecting current priorities].

Teachers' choices form the basis of discussion – where is there agreement? Where do ideas diverge and why?

One way to follow this up



Tide~ has launched 'a challenge' focusing on the issues raised by Professor William Scott [University of Bath] at our last conference.

As Becky Link [Chair of the Tide~ West Midland Sustainable Liaison Group] explains:

"There needs to be a balance between telling young people how to 'be sustainable' in order to begin to make changes in our communities, and engaging them in the thinking that will enable them to make sound decisions for themselves. He [Bill Scott] suggests that 'our long-term future will depend less on our compliance in being trained to do the 'right' thing now, and more on our capability to analyse, to question alternatives and to make our own decisions when we need to'."

What are the implications for how we enable learners?

'The challenge' is about the need for fresh thinking focusing on such longer-term approaches; sharing experiences and synthesizing proposals for future education policy [see website].

"Sustainable development, if it is going to happen, is going to be a learning process. It certainly won't be about 'rolling out' a set of pre-determined behaviours."