Sustainable Development in the new key stage 3 curriculum

Maggie Smith and Emily Baker consider the opportunities for teaching sustainable development within the new requirements for the key stage 3 geography curriculum and explore the potential for developing sustainable development issues within the cross-curricular dimensions area of the curriculum.

In September 2007 a revised curriculum was announced for key stage 3 students in England. This will be phased into schools over three years from September 2008, so that in 2008 it must be taught to year 7, by 2009 to years 7 and 8, and by 2010 to all students at key stage 3. The intention of this latest revision to the key stage 3 curriculum was to increase flexibility in the way that the curriculum was taught and learnt in schools. The amount of prescribed content in the subject areas has been reduced and the subject areas are now defined by setting out the key concepts and processes that underpin them. The revised curriculum also emphasises the importance of exploring connections across the subject areas of the curriculum in order to make the students' learning more coherent and encourage students to increase the depth of their understanding.

So what do these changes mean for the teaching and learning of sustainable development in schools? The new curriculum seems to have sustainable development at its core, as can be seen in the statement on the values underlining the curriculum:

'Education should reflect the enduring values that contribute to personal development and equality of opportunity for all, a healthy and just democracy, a productive economy, and sustainable development' (QCA, 2008).

It goes further than this, however, in noting that these underpinning values should relate not only to the environmental aspects of sustainable development, but also to the social aspects of sustainable development such as human rights, justice and social diversity.

The importance of geography

The study of geography stimulates an interest in and a sense of wonder about places. It helps young people make sense of a complex and dynamically changing world. It explains where places are, how places and landscapes are formed, how people and their environment interact, and how a diverse range of economies, societies and environments are interconnected. It builds on students' own experiences to investigate places at all scales, from the personal to the global.

Geographical enquiry encourages questioning, investigation and critical thinking about issues affecting the world and people's lives, now and in the future. Fieldwork is an essential element of this. Students learn to think spatially and use maps, visual images and new technologies, including geographical information systems (GIS), to obtain, present and analyse information. Geography inspires students to become global citizens by exploring their own place in the world, their values and their responsibilities to other people, to the environment and to the sustainability of the planet. Within the subject areas of the new curriculum, geography, science, citizenship and design and technology all carry specific requirements to teach about sustainable development, and there are opportunities for including issues related to sustainable development in most other subjects. Sustainable development also features, with the global dimension, as a one of the cross-curricular dimensions which are intended to provide links to unify students' learning across subject areas.

The new requirements in the geography curriculum

The revised key stage 3 geography national curriculum has elevated the statutory teaching focus for sustainable development to a higher status, promoting sustainable development from a marginal to a core issue. This is made clear in the introductory statement to the geography curriculum, which makes explicit reference to sustainable development (Figure 1).

The overall approach to the new curriculum (Figure 2) reflects the seven key principles of sustainable development as a holistic concept (QCA, 2002), the seven dimensions being:

- interdependence (of society, economy and the natural environment, from local to global)
- citizenship and stewardship (rights and responsibilities, participation, and co-operation)
- needs and rights of future generations
- diversity (cultural, social, economic and biological)
- quality of life, equity and justice
- sustainable change (development and carrying capacity)
- uncertainty and precaution in action.

This is noticeably different from the 1999 geography national curriculum, which mentions sustainable development linked to environmental change but does not acknowledge the broader aims of sustainable education (Figure 3); these being to equip students with the skills to recognise differences from a local to global scale and to respond through participation as a citizen within the precautionary principle.

Opportunities offered by the new curriculum

There are more opportunities offered by the new curriculum for the teaching of sustainable development. The structure of the new curriculum encourages sus107

Key Concepts

- 1.6 Environmental interaction and sustainable development
- a) understanding that the physical and human dimensions of the environment are interrelated and together influence environmental change
- b) exploring sustainable development and its impact on environmental interaction and climate change.

Explanatory Notes: Understanding the dynamic inter-relationship between the physical and human worlds involves appreciating the possible tensions between economic prosperity, social fairness (who gets what, where and why) and environmental quality (conserving resources and landscapes and preventing environmental damage). The interaction of these factors provides the basis for geographical study of the environment and understanding of sustainable development.

Range and Content

g) human geography, built and managed environments and human processes

Explanatory Notes: This should include themes such as urban change, migration and sustainable development.

h) interactions between people and their environments, including causes and consequences of these interactions, and how to plan for and manage their future impact

Explanatory Notes: This should include the investigation of climate change. Making links between people and their environments at different scales helps students understand interdependence (e.g. considering how their consumption of energy has a global impact on physical systems such as climate). Students should investigate different perspectives and values relating to these interactions, including sustainable development. They should also consider future implications of these interactions.

Curriculum Opportunities

a) build on and expand their personal experiences of geography

Explanatory Notes: This involves using students' practical and life experience to extend and deepen their awareness and understanding of a range of geographical ideas, such as the significance of location, the nature of environments and sustainable development.

Figure 2: Sustainable development in the 2008 National Curriculum. Source: QCA, 2007.

tainable development as an underlying theme for all modules rather than as a stand-alone module or bolt-on extra, which is a more likely choice with the current curriculum. In developing each

Knowledge and understanding of environmental change and sustainable development

- 5. Pupils should be taught to:
- a) describe and explain
 environmental change
 (for example, deforestation, soil erosion) and recognise
 different ways of managing it
- b) explore the idea of sustainable development and recognise its implications for people, places and environments and for their own lives.

Figure 3: Sustainable Development in the 1999 National Curriculum. *Source*: QCA, 1999. of the geography concepts the seven principles of sustainable development, as mentioned previously, need to be taken into consideration. The new framework for personal, learning and thinking skills (see the Skills section of the new National Curriculum) notes six groups of skills which students require:

- independent enquirers
- creative thinkers
- reflective learners
- team workers
- self-managers
- effective participants.

The personal, learning and thinking skills link with the aims of sustainable development to promote student competence and capacity to evaluate critically and respond to arising situations while considering the future. To maintain geography's role as important within the curriculum rather than as a marginalised discipline, it is important to play to its strengths as a key learning subject for sustainable development and the broad-range skills which can be taught through geography.

Geography is well placed in the school curriculum to lead the way with sustainability by taking action which is arguably the most important part of empowering students for the future. The element of action maintains the option of a positive future that is often overlooked by cataclysmic predictions of doom and gloom such as those portrayed in movies such as The Day After Tomorrow. If there is no positive option, no better future presented, then students will be less inclined to act. While the 'action' element can be harder to achieve within the constraints of the school environment, it is important to gain deeper learning and understanding and eventually bring change to the way in which society does as well as thinks.

As the term 'sustainability' becomes ubiquitous in the press, both students and teachers are inclined to make their own definitions of the term. It is important for students to have some time to assess what the term 'sustainable development' means to them both as a definition and as a concept. To explain this further, a definition of sustainable development that focuses solely on the needs for future generations misses the important notion that students can be empowered to change the future. This needs to be supported by an analysis of the inhibitors to achieving sustainable development, as the problems are widereaching (from politically and scientifically to personal issues such as empathy and morals) and once identified can begin to be acted upon with integrity.

Cross-curricular dimensions in the new curriculum

The cross-curricular dimensions are intended to act as links that unite students' learning across the subject areas and across the curriculum as a whole. 'Global dimension and sustainable development' is one of seven cross-curriculum dimensions. In the curriculum material, each of the dimensions is supported by guidance notes in which the dimension is discussed and defined, and illustrated with case studies from schools.

The discussion of the global dimension and sustainable development, for instance, contains an account of the relevance of each of these two issues to present-day life, noting how the expansion of global travel and communications gives people access and exposure to people, cultures and environments in many different parts of the world. There is a list of opportunities that should be provided across the curriculum to help students increase their awareness and understanding of the issues surrounding sustainable development. These include opportunities for students to:

- understand the connections between the environmental, social and economic spheres and make links between local, national and global issues
- appreciate that economic development is only one aspect that contributes to quality of life
- develop skills that will enable them to identify and challenge injustice, prejudice and discrimination
- recognise that some of Earth's resources are finite and therefore must be used responsibly
- consider probable and preferable futures and how to achieve the latter
- appreciate the importance of obtaining materials from sustainably managed resources
- make informed decisions about how they can understand and potentially make their own contribution to local and global communities.

These seem to be useful starting points for developing the concept of sustainable development across the curriculum – either by specific subjects working together on a sustainable development issue, or through a PSHE programme. Four case studies are given in the case studies library area of the national curriculum to illustrate different ways in which schools have developed the sustainable development dimension in a cross-curricular way.

These starting points will be very familiar to geography teachers, and it would seem that geography is a natural subject area to co-ordinate the teaching and learning of sustainable development across the curriculum. However the cross-curricular dimensions are not a statutory part of the curriculum, and opportunities to develop them may be restricted by other priorities that compete for curriculum time in schools.

Conclusion

There are more requirements to teach sustainable development in the 2007 geography curriculum. Sustainable development has been recognised as one of geography's key concepts. The next step is for teachers to integrate sustainable development into new curriculum plans and to develop and share effective teaching and learning strategies to support student understanding of these issues.

References

QCA (2002) *Key Concepts of Sustainable Development*. London: QCA. QCA/DfEE (1999) *The National Curriculum for Teachers in Secondary Schools in England*. London: QCA/DfEE. QCA (2007) *The National Curriculum for England at Key Stage 3*. London: QCA.

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