

Schools and sustainability

A climate for change?

The Government wants all schools to become 'sustainable schools' by 2020.

Inspectors visited a selection of primary and secondary schools to assess teaching about sustainability and progress towards meeting the expectations of the *National framework for sustainable schools*. In the best lessons, teachers used a range of imaginative activities to help pupils develop and test out their views on complex ethical issues. However, most of the schools visited had limited knowledge of sustainability and work in this area tended to be uncoordinated, often confined to special events rather than being an integral part of the curriculum.

This document may be reproduced in whole or in part for non-commercial educational purposes, provided that the information quoted is reproduced without adaptation and the source and date of publication are stated.

Alexandra House
33 Kingsway
London WC2B 6SE
T 08456 404040

www.ofsted.gov.uk

Reference no. 070173

© Crown Copyright 2008



Contents

Executive summary	4
Key findings	5
Recommendations	5
Introduction	6
Part A. Establishing learning for sustainability	8
Leadership and management	8
Sustainable development in the curriculum	9
Teaching about sustainability	13
Learning outcomes	14
Part B. Through the sustainable schools 'doorways'	15
1. Food and drink	15
2. Energy and water	17
3. Travel and traffic	19
4. Purchasing and waste	20
5. Buildings and grounds	21
6. Inclusion and participation	22
7. Local well-being	23
8. Global dimension	25
Putting it all together	27
The impact of inspection	27
Notes	29
Further information	30
Publications	30
Websites	31
Annex A	33
Schools visited for this survey	33

Executive summary

This survey draws on the results of visits by inspectors to 41 primary and secondary schools in 2006/07. It assesses the extent to which these schools teach their pupils about sustainability and the progress they are making towards meeting the expectations of the Government's *National framework for sustainable schools*.

Most of the schools visited had limited knowledge of sustainability or of related initiatives. Work on sustainability tended to be piecemeal and uncoordinated, often confined to extra-curricular activities and special events rather than being an integral part of the curriculum. Therefore, its impact tended to be short-lived and limited to small groups of pupils.

In the lessons on sustainability, or related issues, the teaching was often good and sometimes outstanding. In the best lessons, teachers used a range of imaginative activities so that pupils could work individually and in groups on identifying, discussing and solving practical problems and could develop and test out their views on complex ethical issues. The pupils responded well to such opportunities, drawing on the knowledge, understanding and skills acquired outside as well as within school. However, in many cases, the lack of a coordinated whole-school approach and insufficient opportunities for pupils to reinforce and develop what they had learned reduced the impact.

In moving towards becoming sustainable schools, better progress was being made in primary schools than in secondary schools. In several of the primary schools, the theme of healthy eating was used to enrich the curriculum and develop thinking in a range of subjects. Pupils were involved in making decisions about catering, in growing their own food and in discussing the implications of fair trade. They also took an active role in monitoring and reducing energy and water consumption. In secondary and primary schools, pupils drew on knowledge gained in science and geography lessons to contribute to decisions about how to make their schools more energy efficient and to learn about sustainable lifestyles.

Most schools had travel plans but these were rarely implemented consistently. The best results were achieved when staff, pupils, parents and the whole community collaborated on drawing up and implementing the programme. Most pupils were aware of recycling but more often as a result of what they experienced at home rather than at school. They were less aware of minimising and re-using waste, although several schools were increasing their focus on these areas. Ethical purchasing was usually confined to buying Fairtrade products for the staff room and considerations of cost usually outweighed other factors in awarding contracts.

Primary schools were more effective than secondary schools in using their grounds to support sustainability. However, inspectors saw very good examples in secondary schools which used work in art and design and technology to enhance the environment. In many instances, school councils and eco councils took a very active

role in promoting sustainability within the school and the local community. The cross-curricular approach in primary schools meant that they tended to be more successful than secondary schools in enabling pupils to explore issues from different viewpoints and to focus on the global implications of what they were learning.

The report's conclusion describes some of the actions schools took as a result of inspection.

Key findings

- In most of the schools visited during the survey, there was little emphasis on sustainable development and limited awareness of national and local government policies for this area.
- In the large majority of the schools, promoting sustainable development through National Curriculum subjects was inconsistent and uncoordinated.
- In many of the schools, sustainable development was a peripheral issue, often confined to extra-curricular activities and involving only a minority of pupils.
- A small number of the schools placed considerable emphasis on sustainable development. In these cases, teaching was good, lessons were stimulating and pupils took an active part in improving the sustainability of the school and the wider community.
- Primary schools were more successful than secondary schools in promoting sustainability, particularly in terms of using their grounds as a resource for learning about it.
- Schools were more successful in developing pupils' understanding of local rather than global issues of sustainability.

Recommendations

The Department for Children, Schools and Families (DCSF), the Training and Development Agency for Schools (TDA), and the Qualifications and Curriculum Authority (QCA) should:

- give a higher priority to sustainable schools, supporting this through funding for central and local initiatives including staff training and development
- ensure that the curriculum reflects the importance of learning about sustainability and that schools are supported in making it an integral part of their improvement plans
- stress the importance of education for sustainability as part of a broad and balanced curriculum and disseminate good practice in this area.

Additionally, the DCSF should:

- link learning about sustainable development more closely to 'Building Schools for the Future' and other capital investment, refurbishment and maintenance programmes.

Local authorities and their partners should:

- develop a common vision for a sustainable community in which the contribution of schools is explicit and work together to implement it.

Schools should:

- integrate sustainable development into their development plans and ensure that resources and training are available to support it
- identify a key person to manage and coordinate sustainable development within and outside the classroom
- give all pupils the opportunity to learn about and take an active part in promoting sustainability within the school and beyond, through membership of school councils, eco councils and other groups
- give all pupils the opportunity to put their understanding of local issues into a global context, so that they see how their decisions can have an impact on others now and in the future.

Introduction

'The goal of sustainable development is to enable all people throughout the world to satisfy their basic needs and enjoy a better quality of life, without compromising the quality of life of future generations.'¹

1. Sustainability and climate change are gaining a higher public and political profile. In October 2006, Alan Johnson, the then Secretary of State for Education and Skills, said:

'Schools are there to give children the knowledge and skills they need to become active members of society. Many children are rightly worried about climate change, global poverty and the impact of our lifestyles on our environment. Schools can demonstrate ways of living that are models of good practice for children and their communities. They can build

¹ *Securing the future: UK Government strategy for sustainable development*, (Cm 6467), TSO, 2005; available from www.sustainable-development.gov.uk/publications/uk-strategy/index.htm.

sustainable development into the learning experience of every child to encourage innovation and improvement.²

2. The Government wants all schools to become 'sustainable schools' by 2020. The *National framework for sustainable schools* has close links to Every Child Matters outcomes.^{3,4} As stated in the guidance for governors, the framework places 'the child at the centre of its concerns for a healthy, just and sustainable society. It paints a picture of the kind of place and the kind of school culture where each learner can be healthy, stay safe, enjoy and achieve, make a positive contribution and achieve economic well-being – all within the earth's environmental limits'.⁵
3. Sustainable development is a challenging concept. Following the sustainable schools consultation in 2006, the Department for Education and Skills described it as 'a way of thinking about our lives and work – including our education system – such that we don't destroy our most precious resource, the planet'.⁶ Clearly, the learning needed to achieve this is also very challenging.
4. The *National framework for sustainable schools* focuses on ways in which sustainable development can be embedded into whole-school management practices and provides practical guidance to help schools work in a more sustainable way. It identifies three principles for schools to consider: care for oneself, care for each other (across cultures, distances and time) and care for the environment (near and far). It also introduces eight 'doorways' through which schools may choose to initiate or extend their activity about sustainable schools: food and drink; energy and water; travel and traffic; purchasing and waste; buildings and grounds; inclusion and participation; local well-being; and the global dimension. Each doorway may be approached individually or as part of a whole school action plan, although undoubtedly schools will find that many of the doorways are interconnected. Part B of this report illustrates how the doorways can be used.
5. The Sustainable Schools programme is linked to other initiatives such as Building Schools for the Future. In April 2007, the Secretary of State for Education and Skills announced that funding would be available over three years 'to test a bold aim – even higher standards for new and refurbished

² *Sustainable schools for pupils, communities and the environment: government response to the consultation*, DfES, 2006. Available from <http://publications.teachernet.gov.uk/>.

³ The complete framework is available to view at www.teachernet.gov.uk/sustainableschools/framework/

⁴ Information, publications and other resources about the Every Child Matters initiative are available from www.everychildmatters.gov.uk

⁵ *Strategic, challenging and accountable – a governor's guide to sustainable schools*, DfES, 2007. Available to download from the 'core materials' section of the Sustainable Schools website: www.teachernet.gov.uk/sustainableschools/support/support.cfm?id=54

⁶ *Sustainable Schools for pupils, communities and the environment: government response to the consultation on the Sustainable Schools strategy*, DfES, 2006.

buildings to reduce their carbon emission rates, in some cases up to carbon neutrality'. All new schools, both primary and secondary, are expected to aim towards major reductions in this area. An additional investment is being made available for new schools within the Building Schools for the Future and the Academies programmes to ensure reduced requirements for energy and carbon energy generation. One of the aims of the Building Schools for the Future programme is to involve young people in designing their own schools. Clear opportunities exist, therefore, for them to become directly involved in considering the issues of sustainability which architects and designers face.

6. Opportunities for learning about sustainability are also included in the National Curriculum, one of whose aims is to 'develop pupils' awareness and understanding of, and respect for, the environments in which they live, and secure their commitment to sustainable development at a personal, local, national and global level'.⁷ Sustainable development is linked formally to four statutory subjects (citizenship, design and technology, geography and science), although it is a theme which cuts across all subjects. Within the most recent revisions, climate change is identified as a topic to be studied by all secondary school pupils to raise awareness of the challenges individuals and communities face, in this country and throughout the world. Sustainable development is also one of seven cross-curricular dimensions which 'provide important unifying areas of learning that help young people make sense of the world and give education relevance and authenticity'.⁸
7. The Government has an ambitious policy for developing sustainable schools. Some funding has been used for a series of regional conferences to raise awareness. However, these have varied in the extent to which they have involved key education policy makers and strategists. Although local authorities have policy statements on sustainability, these tend to focus on corporate issues relating to public services and rarely refer explicitly to the responsibilities of schools.

Part A. Establishing learning for sustainability

Leadership and management

8. In the large majority of the 41 schools inspected, inspectors' initial discussions revealed schools' lack of awareness of sustainable development. Very few headteachers knew about the Sustainable Schools programme and this area was rarely a priority for development. Further inspection usually showed some action within the curriculum and through extra-curricular activities such as eco

⁷ The National Curriculum for England is available from: www.nc.uk.net

⁸ Details of the cross-curricular dimensions are available from the Qualifications and Curriculum Authority (QCA) website: <http://curriculum.qca.org.uk/cross-curriculum-dimensions>

and gardening clubs or recycling projects. However, school leaders acknowledged that little of this work formed part of a coordinated whole-school approach. As a result, the impact on pupils' attitudes and behaviour was less than it could have been. The following was typical:

There was no overall policy or plan for sustainable development, although the school's philosophy and ethos were sympathetic. For example stakeholders' views were canvassed and acted upon; governors had been active in working with the local authority to create and fund a school travel plan; middle managers had been supported in developing ethical purchasing policies; considerable effort had gone into successfully developing measures to save energy and water; and the school's work was having a positive impact in the local community.

9. In the small minority of schools where sustainable development was well established, the following were observed:
- There was an expectation that all subject areas identified ways in which they could contribute to pupils' knowledge, understanding and skills in relation to appropriate areas of sustainable development.
 - A vision for sustainable development was conveyed to all members of the school community so that it permeated its everyday life.
 - All staff understood that they had a role in promoting sustainability, for example by ensuring that the school became more effective in recycling and reusing waste materials and in using energy and water efficiently.
 - Managers were prepared to invest financial resources to improve the school's long-term contribution to sustainability.
 - Individual teachers received good support for in-service training and professional development to improve their capacity to contribute to this area.
 - Issues relating to sustainability were seen as key criteria in determining the award of contracts, for example, for catering.
 - Management responsibilities for sustainable development were clearly defined, well understood, and supported through appropriate training. The impact of initiatives on pupils' academic progress and personal development was also monitored.

Sustainable development in the curriculum

10. The National Curriculum programmes of study for citizenship, geography, science, and design and technology all include elements of sustainable development. However, the extent to which this was reflected in the teaching varied considerably within and between the schools visited.
11. Citizenship can provide a powerful vehicle for involving pupils in considering sustainable development from a local to a global scale. As well developing knowledge and understanding, citizenship focuses on the skills of 'participation

and responsible action' and on opportunities to 'do something'. This was very evident in some schools where, for example, pupils were involved in writing letters to the local council about the park and footpaths/cycle routes or discussing the links between fair trade and the impact on the local community of importing food that could be, or was, grown locally. Too often, however, such opportunities were missed.

12. Considering issues relating to sustainable development should be at the heart of geography teaching but this was rarely the case in the schools visited. One exception was a secondary school in which pupils explored sustainable development through a range of imaginative activities such as designing an eco-friendly tourist resort; writing speeches about the problems of drought in less economically developed countries; creating advertising materials for Fairtrade products; debating the complexities of Third World debt; and exploring the impact of the flooding resulting from global warming.
13. The science curriculum should cover important issues relating to sustainability, such as renewable energy, the science of global warming and biodiversity. The properties and sustainability of materials are central to design and technology. However, in both subjects, coverage of these issues was limited. Provision was good in only a few schools and then mainly because of the particular skills and interests of individual subject leaders.

In a design and technology college, students were encouraged to consider materials in terms of recycling, reusing, costs and sustainability. A valuable link with a large, local company producing foam provided the department with useful material which it recycled and used imaginatively. This company, and two other significant ones in the area, supported an enterprise week, when Year 9 students worked in teams, designing and making realistic products.

14. The patchy provision within individual subject areas meant that few opportunities existed to create cross-curricular links and provide a cohesive whole-school approach to sustainable development. They occurred more often in primary schools when planning for classes or year groups crossed subject boundaries.

A primary school made excellent use of themes about sustainable development to enliven work in literacy. Pupils in Years 4 and 5 had written to the Prime Minister about global warming and to the local council about parking and litter. They used persuasive writing to express their views about local environmental issues and wrote creatively in response to visits to a recycling centre, a reservoir and a water treatment works. They were proud of their achievements and discussed their work with tremendous enthusiasm.

15. In a small number of the secondary schools visited, links across subjects were associated with innovative curricula, as in the following example:

The college had found weaknesses in students' key skills. It therefore decided to use topics about sustainable development as stimuli for promoting skills in literacy, numeracy, decision-making, problem-solving and working in groups. The topics were also used to develop students' independence and their ability to listen to and balance different points of view in discussion. Sustainability was promoted further through work-related learning, involving organisations such as recycling companies and Paignton Zoo, which had a strong record of involvement in this area.

16. Although sustainable development often had a low profile in the subject curriculum, several of the schools visited made it the focus of activities such as 'suspended timetable' days, themed weeks or assemblies. Themed sessions were often successful in providing a good range of activities in which the whole school could participate.

One school's 'Fair Trade Fortnight' made very effective use of the expertise of a parent who worked for a Fairtrade food company. He helped the pupils establish links with a school near one of the company's plantations in India. Through email exchanges and other correspondence, the pupils gained first-hand experience of the equity of fair trade and the ways in which it had improved the quality of life for the Indian children and their families.

In another school, as part of a science week, all the lessons the inspector saw focused on water and issues of sustainability. Pupils were using research skills to prepare for presentations and debates. In this way, they were developing their understanding of personal and group responsibilities towards the environment and other people.

17. It was not uncommon for a school to raise awareness of sustainability through a high profile environment day where pupils were urged, for example, to conserve water, switch off lights and tidy the playground. In one secondary school, each tutor group spent a week as eco-monitors with responsibility for overseeing such activities. This ensured that everybody – not just a select group of enthusiasts – played a part in improving the school's sustainability.
18. Most of the schools visited used assemblies to explore the theme of sustainability and to raise pupils' awareness of it. The impact was greatest when such messages were reinforced throughout the year rather than confined to a single activity. The assemblies were frequently led by pupils, although a very good range of external speakers was also often involved.

The theme of the assembly in one primary school was 'love in a box', represented by shoeboxes which pupils had filled with toys and other items for children in Romania and parts of Africa. The pupils had a good

understanding of the difference between needs and wants and how this related to their own lives and to those of children in much less privileged circumstances. They were also aware that this was a good opportunity for re-use or recycling, as some sent toys and games that they had finished with, or grown out of, but were still in good condition.

19. Many schools made considerable use of extra-curricular activities to develop pupils' understanding of sustainable development. However, such activities were rarely coordinated or integrated within the formal curriculum. Examples of extra-curricular activities included taking responsibility for enhancing the school grounds and neighbouring open spaces by planting bulbs; looking after the school woodland; taking an active part in community projects; and working with parents in craft, recycling or woodland groups. Although all pupils might be encouraged to be involved, it was usually only small numbers of pupils who actually took part. However, these highly motivated pupils often had a high profile and made a positive impact on the school and the local community.

A small group of Year 5 pupils became interested in environmental issues and formed the School Wombles Club. They presented an assembly for the whole school on the theme of 'reduce, re-use and recycle' which was extremely well received by the other pupils. They organised a poster campaign around the school to give the issues further prominence. They demonstrated re-use by showing how materials such as cans could be turned into toys and other useful products rather than being thrown away. Having asked the local council for more recycling and compost bins and not received a reply, they were planning to contact the local media and lobby councillors to force them to act.

20. A number of schools had applied for environmental awards such as Eco-Schools.⁹ This often had a positive impact, including raising awareness across the school of environmental issues; changing attitudes and behaviour regarding recycling; and encouraging better use of energy and water. It also led to practical improvements such as switching off lights and electrical equipment when not in use, the composting of food waste, and the reuse and recycling of paper. A decrease in litter around schools also reflected increasing care for the environment.
21. Despite the wide range of activities available, only a small minority of the schools visited made a clear attempt to coordinate and integrate them into the

⁹ Eco-Schools is an international environmental award programme. Currently operating in 40 countries, it provides a simple programme to enable schools to analyse their operations and become more sustainable. A key element is the involvement of pupils in the whole process, including monitoring, action planning and decision making, leading to ownership of the programmes and an increase in their sense of responsibility to the environment and the local area. Full details are at www.eco-schools.org. There is also a separate website for the UK, www.eco-schools.org.uk.

mainstream curriculum, to ensure progression in developing knowledge, skills and understanding.

Teaching about sustainability

22. The teaching seen during the survey was often good and sometimes outstanding. Only a few lessons focused primarily on sustainable development, although many touched on related issues.
23. The most effective lessons had a consistent focus on engaging the pupils and ensuring that they understood why they were studying the topic and its relevance to their own lives. Lessons were framed around key questions with pupils researching the answers, often in groups. They were given opportunities to discuss, make decisions, solve problems, listen to and assess alternative points of view and to arrive at their own conclusions. In this way, they were able to tackle complex moral and ethical issues, such as equality and justice, interdependence and the needs and wants of future generations. Pupils said that they enjoyed these lessons and were 'able to learn better' because they were personally involved, could express their own views and could listen to those of fellow pupils, 'not just those of the teacher'.
24. Some lessons and activities were highly practical:

An urban primary school had embarked on a project to convert nearby waste ground into a community garden. Pupils in Years 3 and 4 were discussing the relative merits of a range of designs before going on site with a TV crew to launch a fund-raising campaign. The designs had been produced by professionals but the pupils had been involved in finding out what members of the local community wanted and in making their own suggestions about what ought to be incorporated. The teacher used skilful whole-class questioning and activities in pairs and groups in which pupils expressed, clarified and developed their ideas. They considered questions such as whether the garden should be organic; whether it should include composting facilities; and the most sustainable materials for its construction. The focus on sustainability was excellent.

25. In a number of lessons, teachers drew on good subject knowledge to make effective links to issues of sustainability.

In a particularly imaginative Year 4 lesson, based on the Green Goal 2006 website, the teacher introduced pupils to ways of making football matches more environmentally friendly. These included using CFC-free fridges for drinks; providing free transport with tickets for football matches to discourage car use; and using solar panels to generate electricity for ticket machines. Pupils also discussed how to tackle the refuse generated at matches. They were asked to consider similar challenges when preparing a party in their own school.

In a Year 6 lesson on a contrasting locality, the teacher introduced the pupils to the Countryside Code. She stimulated a lively discussion on several issues relating to sustainability, including animal welfare, the climate, natural beauty and preserving plants. She carefully pointed out why codes were necessary by referring to the Highway Code to which pupils had already been introduced through their cycling proficiency lessons.

26. In a minority of the schools visited, the principles underpinning sustainability were well understood and widely shared. Here, teachers were quick to take advantage of opportunities to encourage pupils to reflect on the principles emerging from their investigations and apply them directly to their personal behaviour, at home and school and in the wider community.

Learning outcomes

27. There are no defined 'standards' for education for sustainable development as there are for National Curriculum subjects. For this survey, inspectors used the following broad criteria for judging the quality of learning outcomes. The criteria were based on guidance published by the Sustainable Development Education Panel, and adapted to meet Ofsted guidelines.¹⁰
28. In primary schools, pupils should understand that the environment is important. They should have some knowledge and understanding about sustainability and the need to lead more sustainable lives. They should know about the benefits of reducing, re-using and recycling, and how individuals can contribute by recycling paper and glass, making their own compost and reducing electricity and water consumption. They should know about the environmental impact of, for example, transport or the generation of electricity. They should have an awareness of relevant topical issues such as global warming and measures to reduce the carbon 'footprint'. They should be able to think critically and argue effectively about these issues.
29. In secondary schools, they should extend this knowledge and understanding and develop the ability to discuss and debate issues at a sophisticated level, presenting well argued opinions and considering the views of others.
30. In particular lessons, pupils showed many of these characteristics. In some cases, they resulted from planned experiences. In others, pupils brought to the

¹⁰ The Sustainable Development Education Panel was set up in February 1998 to consider issues on education for sustainable development, in its broadest sense, in schools, further and higher education, at work, during recreation and at home; and to make practical recommendations for action in England. The panel reported directly to the Deputy Prime Minister and Secretary of State for Education until 2003. The guidance can be found in the First Annual Report of the Panel (1998), available from www.defra.gov.uk/environment/sustainable/educpanel/index.htm

lessons knowledge and skills acquired in other subjects, through extra-curricular activities or at home. Sometimes, illustrations were drawn more from the home than school. For example, while discussing what waste was produced and what happened to it, pupils readily described what they did at home but often had to be prompted to identify what the school did. This was particularly noticeable in rural schools where pupils tended to have a greater awareness of the diversity of the local environment and a good understanding of the importance of looking after it, especially when this affected parents' livelihoods.

31. Many schools were developing the skills and attitudes that underpin pupils' education for sustainable development, but did not identify them as such. This did not necessarily detract from the quality of pupils' experiences but it did mean that there was a danger of the learning being uncoordinated and lacking progression. For example, many of the schools encouraged pupils to develop respect for others and, through such activities as mentoring younger pupils, to develop a good understanding of rights and responsibilities. In lessons, they developed decision-making skills, weighed up options, balanced evidence and opinions and listened to others. In an after-school club, they might work in the school garden or allotment. In assemblies, they would hear messages encouraging recycling and, in the school canteen, they might eat locally sourced food. However, unless these messages were reinforced, pupils did not necessarily make the links to their own behaviour. They might adopt some practices but reject others as inconvenient because they did not fully understand what it meant to lead a sustainable lifestyle.

Part B. Through the sustainable schools 'doorways'

32. The 'doorways' of the *National framework for sustainable schools* are intended primarily to provide guidance for school leaders. However, this report uses them to demonstrate the range of activities relating to sustainable development in which pupils in the survey schools were involved. The quotations introducing each of the following sections are from the framework.¹¹

1. Food and drink

'By 2020, the Government would like all schools to be model suppliers of healthy, local and sustainable food and drink. Food should, where possible, be produced or prepared on site. Schools should show strong commitments to the environment, social responsibility and animal welfare. They should also seek to increase their involvement with local suppliers.'

¹¹ Find the complete framework at www.teachernet.gov.uk/sustainable-schools/framework

33. Although pupils are aware of the need to eat healthily, many choose not to do so, as a recent Ofsted report showed.¹² Schools in the sample visited which gave pupils the opportunity to be involved in discussing the school's catering or even in growing their own food appeared to increase pupils' levels of commitment. Students in one secondary school visited were represented on the nutritional advisory group and were actively involved in decisions about catering, including the local sourcing of food.
34. Several primary schools were using the theme of healthy eating to enrich the curriculum and develop thinking in a range of subjects. If they discussed food in lessons, they often related it to its environmental impact, fair trade and more complex issues related to the global economy.

Year 1 and 2 pupils focused on healthy diets and the importance of eating fruit and vegetables. They were discussing apples, many of which were grown locally. The discussion led on to the apples in the local supermarket that came from other parts of the country, how they had to be transported and the damage this could do in terms of pollution from the lorries used. They understood that other fruits, such as mangoes and pineapples, come from even further away and they were aware of the consequences of flying and shipping them to this country. However, they understood that people's lives depended on growing these fruits and they had a good appreciation of the complex decisions about buying them.

In another primary school, Year 3 and 4 pupils were researching a fast food chain outlet through the Internet as part of their work on healthy eating. They discovered that the rainforest was being destroyed to grow soya to feed the chickens that ended up in the meals. They thought that this was bad but realised that people's livelihoods depended on growing soya and that the issue was not as straightforward as they first thought.

35. In several of the primary schools visited, pupils were actively involved in growing food. Many schools had compost bins and some had created garden areas or raised beds where the compost could be used.

Pupils in a primary school described enthusiastically how they used their compost to grow fruit and vegetables which they then ate as part of their 'healthy eating'. The pupils came from a wide range of ethnic backgrounds. Through this activity, they had also been given the opportunity to exchange information about each other's diets and to grow and taste food that was new to them.

¹² *Food in schools: encouraging healthier eating* (070016), Ofsted, 2007; available from www.ofsted.gov.uk/publications/070016

Plots were usually used by the school gardening or eco club as part of extra-curricular enrichment. Only a minority of the schools integrated such activities fully into the curriculum.

36. Not many schools were able to source their food locally, especially where they were committed to central local authority contracts. However, there was a growing awareness of the need to do so when possible and some imaginative approaches were being used to raise awareness.

A coordinator for a Sure Start centre had set up a food cooperative based on the school. The intention was to source much more food locally and to ensure that as much as possible was organic. Many parents were involved in the project and most pupils knew about it through them or through presentations in assembly. Older pupils could relate these developments to wider issues, such as food miles, as well as to decisions affecting the local community.

Pupils in Year 6 discussed fair trade. They covered arguments for supporting the local economy and the problems caused by importing food that could be obtained locally. They were able to link these topics to broader themes, such as pollution and the implications for the local community in terms of potential unemployment. They discussed whether individual decisions about buying food could have a wider, even global, impact. They touched on the power and influence of supermarkets. Many of the pupils showed very good understanding of the links between environmental issues and individual and collective decision-making.

2. Energy and water

'By 2020, the Government would like all schools to be models of energy efficiency, renewable energy use and water management. They should take the lead in their communities by showcasing wind, solar and bio-fuel energy, low-energy equipment, freshwater conservation, use of rainwater and other measures.'

37. Schools in the sample made tangible gains when they became more energy conscious although, in most cases, the buildings were old and not energy efficient. The majority recognised that financial savings could be made by reducing the amounts of energy and water used.
38. A small number of schools had new buildings, usually refurbishments or extensions. In these cases, new building regulations applied and there was a stronger and more visible commitment to saving energy and reducing waste.

The headteacher and governors took energy reduction seriously. They had changed the energy source from oil to gas because it was cheaper and more efficient but, with an eye to the future, had installed dual fuel

boilers. Other energy saving initiatives included installing roof insulation and fitting fuel-efficient boilers in the swimming pool.

A primary school was gradually making improvements, when funding allowed. Improvements included installing push-on taps in cloakrooms, water-saving devices in lavatories and automatic lighting in the corridors and classrooms. The school had also ensured better use of natural light by installing skylights in the roofs of its buildings.

39. The schools which involved their pupils in reducing energy consumption and water use achieved the best results. Primary schools were more successful, partly because it was easier to motivate and organise the smaller numbers involved. Pupils enjoyed monitoring meters and striving to meet targets for reducing use, by diligently switching off lights or computers and turning off taps.

By monitoring meters, pupils in a primary school had ensured average savings of £50 per week on electricity bills. They were now going to extend this activity to water meters.

In another school, Year 2 pupils could explain that the more electricity they used, the more fossil fuels would need to be burned to produce it. Therefore it was important to turn off lights, computers and other electrical apparatus when not in use. They recognised that their actions could have wider implications. They understood that two local wind farms also generated electricity and realised that these had prompted differing reactions from members of the local community.

In a third school, pupils had studied wind farms and made and investigated model turbines in science and design and technology lessons. They expressed their views with passion and enthusiasm and showed considerable depth of understanding.

40. Inspectors found good examples of pupils' views being taken into account and of their being able to make a direct input into sustainable development.

A headteacher and governors were considering installing solar water heating devices to provide hot water in classrooms and small scale turbines and photovoltaic cells to provide electricity for parts of the school. The pupils had investigated models of these renewable energy devices and showed a deeper understanding than usual of their benefits, costs and limitations. Similarly, in an arts college, students were very well informed about the use of energy in buildings. This was because, in science lessons, they had discussed the systems for energy management being incorporated into a new building on their site.

3. Travel and traffic

'By 2020 the Government would like all schools to be models of sustainable travel, where vehicles are used only when absolutely necessary and where there are exemplary facilities for healthier, less polluting or less dangerous modes of transport.'

41. Increasingly, schools are focusing on the 'staying healthy' aspect of Every Child Matters and are encouraging pupils to walk or cycle to school wherever possible. The great majority of the schools surveyed had travel plans but, in many cases, they were not being implemented fully and pupils were often unaware that they existed. The practicality of walking and cycling depended very much on safety concerns and the distance the pupils needed to travel. Most of the secondary schools admitted a significant minority of pupils from outside their immediate area. Cycling was also affected by the size of the school and the amount of storage space available for bicycles.
42. The main factors discouraging pupils from cycling to school were a lack of safe storage for bicycles; lack of adequate changing facilities; and poorly lit or badly maintained cycle paths.

One secondary school had met this challenge by good use of grants and support and advice from the local authority and other specialist agencies. Parents and pupils had also been involved in identifying problems and exploring ways of resolving them. As a result, more pupils were walking and cycling to school. The key to success was not just improving facilities but ensuring that pupils were fully involved in the campaign to reinforce the message that it was 'cool to walk and cycle to school'.

43. Many schools held events such as 'Walk to school Wednesday'. These raised awareness for a short time. However, the schools which made a lasting difference ensured the message was continually reinforced, not just through poster campaigns or assemblies but also through engaging pupils in the classroom, as in these two examples:

Key Stage 1 pupils were discussing walking and cycling to school. Central to the discussion in their lesson was a large map of the local area with the routes to the school clearly marked. The pupils were keen to walk and were aware of its health and environmental benefits. However, they identified that the road through the village was very busy and there were no footpaths in some parts. They had written to the local council about it but had not yet received a reply.

In another school, pupils were very much involved in developing the school's travel plan. They were used to discussing ways of travelling to school and the health benefits of walking and cycling. The school council had insisted on a 'walk to school day' being organised each half term.

44. The issue of travel can provide a relevant and realistic learning context for developing pupils' understanding and result in high levels of discussion and debate.

Year 9 pupils were discussing the question: 'Does the car have a future?' This was in preparation for a case study which formed part of the GCSE in 21st century science, which they had just started. The discussion focused on the environmental impact as well as social issues associated with individual car use. They calculated the carbon emissions of different vehicles and different forms of travel, linking their findings to the counter arguments about the flexibility of individual car use and the problems associated with public transport. They developed hypotheses about the impact that different scenarios would have on the environment and quality of life. As the lesson progressed, the complexity of the issues became more evident to them, stimulating their curiosity and interest.

4. Purchasing and waste

'By 2020, the Government would like all schools to be models of sustainable procurement, using goods and services of high environmental and ethical standards from local sources where practicable, and increasing value for money by reusing, repairing and recycling as many goods as possible.'

45. All the schools visited were involved in recycling but the extent varied greatly. Some recycled only paper. Occasionally, this was done in a tokenistic way, involving only the members of the eco club, rather than all pupils. In contrast, in other schools, recycling was part of a well established and comprehensive programme which involved not only the whole school but also the wider school community:

Recycling was well established within the school community, with pupils and staff understanding the potential benefits. 'Eco monitors' in each class reminded their peers to switch off lights and turn off taps. Paper trays in classrooms, offices and the staff room contained paper sorted for recycling and re-use. Bins were provided in classrooms for recycling the remains of breaktime snacks. Year 6 pupils took the waste to the compost heap for the gardening club to use. One class ran a recycling project for mobile phones which was publicised to pupils, parents, governors and the rest of the village. The school asked parents for plastic containers and newspaper to use in art work, gardening, model-making and other activities. There were also arrangements for recycling ink cartridges.

46. Most pupils were aware of recycling because it was something they did at home. They were less aware of minimising waste, especially when they were exposed to a throw-away culture in their everyday lives. Re-using was the least developed aspect, although most of the primary schools visited regularly used

paper from the 'scrap box'. Subjects such as art and design and technology were making better and more frequent use of waste products to produce functional or decorative items and to stimulate pupils' imagination and creativity.

47. Fairtrade products were common in the majority of staff rooms but ethical purchasing often ended there. Almost all the schools found that, in purchasing, costs and the need to balance the books had to take priority. A minority tried to buy recycled paper but most schools, understandably, selected the cheapest option. One of the secondary schools visited awarded its contract for waste disposal to the firm which had the greatest capacity to recycle, even though the costs were greater. It also made sustainability the main criterion for awarding other contracts, such as catering. However, this was an exception.

5. Buildings and grounds

'By 2020 the Government would like all school buildings - old and new - to make visible use of sustainable design features and, as opportunities arise, to choose building technologies, interior furnishings and equipment with a low impact on the environment. We would like all schools to develop their grounds in ways that help pupils learn about the natural world and sustainable living, for example, through food growing and biodiversity conservation.'

48. The primary schools visited were more effective than the secondary schools in using their grounds to support learning about sustainability. In the best examples, using the 'outdoor classroom' brought learning to life and pupils saw its relevance and purpose, as in the following example from a primary school:

The grounds included several features which were used effectively to enhance learning. A small and large pond were used in science lessons to study minibeasts and issues of biodiversity. The large compost area for grass cuttings and food waste was a valuable resource for the gardening club. The wild flowers and other plants grown by the pupils added colour to the grounds. The managed wild area included bird boxes and a log pile to attract small animals. The pupils were very proud of this area and all classes enjoyed using it to study a wide variety of wildlife and their different habitats. Here the grounds were being used very effectively to enhance knowledge and understanding from the Nursery to Year 6.

49. Primary schools often involved their pupils in planning and maintaining their grounds. This helped develop good cooperative and decision-making skills, as well as a sense of collective responsibility. Because they felt a sense of ownership, pupils cared for, and were proud of, what they produced; as a result, less litter was dropped and there were fewer incidents of vandalism. The following is a good example of imaginative playground development involving pupils:

The pupils had won a considerable sum of money in a Playground Partners design competition.¹³ They had spent it creatively on refurbishing the sandpit and buying new equipment, including a willow tunnel, a gazebo and a jungle gym. The garden area was a superb resource where pupils grew flowers, vegetables and fruit, such as tomatoes and strawberries, from seed. A parent who was a professional gardener had set up a gardening club for parents and children and funding had been secured to buy a big shed and a polytunnel. The school was hoping to sell vegetables at the market fair and, eventually, to supply the school kitchen.

50. Younger pupils particularly enjoyed growing plants and vegetables. Unfortunately, in many of the schools visited, this often became the preserve of a small and select gardening club and the potential to involve all pupils and relate these activities to learning in the classroom was never fully exploited.
51. The following illustrates an important way in which a school can have an immediate effect on improving its environment:

The senior management of a secondary school regularly commissioned art and design and technology work from GCSE and A level students. The quality of two- and three- dimensional works in the buildings and the grounds was highly impressive. Students had also designed and made seating, outdoor lunch tables and other features to make the site more attractive and friendly. This school had succeeded in using the environment and enhancing its attractiveness while also celebrating its students' creativity and skills.

6. Inclusion and participation

'By 2020 the Government would like all schools to be models of social inclusion, enabling all pupils to participate fully in school life while instilling a long-lasting respect for human rights, freedoms, cultures and creative expression.'

52. In several of the schools visited, very effective school councils played a significant role in improving the school environment. A few also had an eco-council with particular responsibility for sustainability. The following demonstrates how effective such councils could be:

Through the school council's efforts, several aspects of the physical environment had been improved. For example, the lavatories had been

¹³ Originating in the USA, Playground Partners is a programme designed to help schools organise games, during lunch and break times, that emphasise sporting behaviour, teamwork and conflict resolution.

recently refurbished and, as a result, the pupils were now caring for them far better. In response to representations from the school council, the school had worked with the local authority to produce a travel plan. One significant result had been funds provided to build new cycle sheds and provide lockers for pupils' cycling equipment. This had led to a greater number choosing to cycle to school. Other pupils involved in the school's 'Lifestyles' project had done much to improve the quality of previously drab social areas through painting and planting schemes. The headteacher and staff had encouraged the pupils to publicise their campaigns and take up their concerns, such as the quality of school lunches and lack of support for recycling, with the relevant local authority departments.

53. Many pupils had a strong sense of stewardship for their environment. Change was clearly evident when they were involved fully in decisions about subjects of relevance to them. One school council had been responsible for several excellent initiatives to improve sustainability, including:
- putting notices next to all light switches, taps and washbasins to remind pupils not to waste electricity or water
 - conducting a survey of locally available Fairtrade products and advising staff on which ones might be purchased for the staffroom
 - working with the canteen staff to improve healthy eating¹⁴
 - surveying the school grounds and canvassing pupils' opinions to decide where best to position recycling bins.

7. Local well-being

'By 2020 the Government would like all schools to be models of corporate citizenship within their local areas, enriching their educational mission with activities that improve the environment and quality of life of local people.'

54. The schools in the survey contributed to local well-being in a number of ways.

A group of pupils in a secondary school, under the guidance of a teacher and adult education lecturer, helped to organise a computer course for adults, giving them individual tuition and advice. The project had been started in response to a competition organised by the local water board, aimed at involving young people in the community. Now in its fourth year, it had proved a huge success, with an average of 10 to 14 adults attending the ten week course.

55. As noted in 's3', the Sustainable Schools self-evaluation tool, 'With their central locations and often extensive facilities, schools can act as hubs of learning and

¹⁴ Together they devised a scheme where all products sold were rated on a 'healthy eating scale', with points awarded for each item. These were automatically recorded on the swipe cards that the pupils used to pay for their meals and prizes were awarded for the person with the healthiest diet.

change in their local communities, contributing to the environment and quality of life.¹⁵ This was clearly exemplified by one of the primary schools visited:

This school had strong links with the local community. It provided an increasing range of extended services before and after the normal school day. Curricular links with the local high school and collaboration with the Scouts, Guides and other groups gave pupils the opportunity to take direct action on a number of environmental and sustainability concerns. Parents had worked with the school to resolve traffic congestion around the site by providing alternative parking and introducing a 'walking bus'. The local churches had contributed to the push to reduce vandalism by providing disaffected local teenagers with a wider range of social and learning opportunities. Local businesses also subsidised a varied programme of extra-curricular visits, including one to the Houses of Parliament where pupils were able to see democracy and participation in action.

56. One of the secondary schools had developed good links with the wider community to help promote its sustainable agenda and promote positive changes in behaviour:

The school planned assemblies carefully to include citizenship and topics such as 'greed', 'selfishness' and 'building bridges'. Students had a well developed sense of responsibility. They helped in the local community on projects such as clean up campaigns, gardening work for senior citizens and organising a keep fit after-school club for mothers and carers. They had also designed images which were mounted on the railings along the local pathway to brighten up the environment. They regularly volunteered to raise money for charities in this country and overseas. Fund raising for specific charities had become even more of a focus recently, following the severe illness and recovery of a fellow student. The school had taken part in the 'Town in Bloom' competition and there were many other examples where pupils took part in similar community events.

57. Pupils often showed sensitivity to potential injustices when issues touched the quality of life in their community.

In one city primary school, a class of Year 5 and 6 pupils developed an understanding of 'community' by examining the likely impact of the closure of the local post office on a wide range of different people. Discussions focused on how the community could help by taking over some of the functions of the post office. Pupils considered the impact on older people and on the many members of the community for whom

¹⁵ *s3: sustainable school self-evaluation for primary, middle and secondary schools*, DfES, 2006; available from www.teachernet.gov.uk/sustainableschools/tools.

English was an additional language and who had relied on the helpful support the post office provided. They also considered families without cars or the means to travel to the next post office and what it would be like using the local buses with young children and pushchairs. Since the context was relevant and immediate, the pupils demonstrated excellent empathy and understanding of connections between local communities as well as a realisation that there may have been good economic reasons for closing this post office. They were able to consider the delicate balance necessary when making decisions about social need and economic reality.

The new duty on schools to promote community cohesion provides an opportunity for pupils to gain experience of sustainability issues and develop an understanding of how they have an impact on the quality of life in the local area and beyond.

8. Global dimension

'By 2020 the Government would like all schools to be models of good global citizenship, enriching their educational mission with activities that improve the lives of people living in other parts of the world.'

58. Although all the schools visited referred to global issues, they did not approach these systematically. Subjects such as geography and citizenship provide an obvious way to study distant places. However, they should also deal with issues such as mutual dependence, climate change, diversity and the needs and rights of future generations, all of which can be linked to an understanding of community cohesion. In practice, the study of a distant locality in geography frequently ignored the global dimension because teachers did not make these links clear or explore them in depth.
59. The primary schools tended to be better than secondary schools at adopting a cross-curricular approach which enabled pupils to make relevant links and explore issues from different viewpoints. This led to clearer progression and development of ideas.

To celebrate Europe Day, a school coordinated a range of activities for all the schools in the area. Each class chose a country as its focus. They wore that country's colours and created dishes or researched celebrities associated with it. They compiled a 'What I know' book about a country they had visited and heard and saw stories being acted out in a variety of modern foreign languages. The day ended with an assembly where the pupils shared their new knowledge and understanding with their parents and friends.

In addition to Europe Day, the school also organised a themed week, drawing on the breadth of cultures within the school, particularly its Brazilian and French families. A cross-curricular approach was adopted, with visitors and experts such as dancers and artists being used to

increase pupils' knowledge and awareness of different countries and cultures. Activities were similar to those for Europe Day but with a broader focus which included history, beliefs, festivals and celebrations. National costumes and food were explored through design and technology, art and discussion. Cartoons and stories in foreign languages were used throughout the week to immerse children in various languages. Language teachers, teaching assistants and parents made a major contribution to these activities, as did members of the local business community. This themed week was a regular event on the school calendar but the school community saw the international and global dimension as integral to its life throughout the year.

60. The most meaningful links were those made between the local and the global. One primary school was uniquely placed to do this.

The school was in the village which had been the base for the Australian and New Zealand Army Corps (ANZAC) at the end of the First World War. The influenza outbreak of 1918 caused many deaths among the young soldiers who, despite never actually fighting in the war, failed to return home to their families. Many of them were buried in the village churchyard close to the school. In 1919, a group of young boys playing nearby picked flowers and placed them on the graves. This started a tradition where the whole village celebrates ANZAC Day, 25th April, as a special event. All the pupils participate in a service at the local church, often leading eulogies and prayers. Each child lays a posy on a grave and visitors, relatives and guests are served tea and biscuits. It is a special day enjoyed by the pupils and visitors. Pupils have a good understanding of the impact of war and how it can affect families and lives thousands of miles away. Links with Australia and New Zealand remain strong and are flourishing because, around eight years ago, the school used the opportunity to forge closer bonds. All the names of the classes were changed to have ANZAC connections. The school is also building up a display of historical artefacts, photographs and memorabilia linked to the soldiers who were billeted in the village. There are regular visits to the school by relatives of the soldiers from 1918. Many of these visitors send photographs, letters and other items to add to the collection which is growing steadily. This now provides a wonderful and authentic resource for use in English, history, and personal, social and health education. The pupils also research the Australian War Memorial website which provides a wealth of additional information about the lives and backgrounds of the soldiers. This gives relevance and value to the study of life at a particular historical period and also enables the pupils to gain a greater understanding of contemporary life in a country on the other side of the world.

61. The international visits which schools organise can provide rich opportunities to develop students' understanding of other cultures and to challenge

stereotypical views and prejudices. They also enable students to develop a better understanding of the differences between rights and responsibilities and between needs and wants, as in the following example:

During a trip to South Africa, students visited a partner school in a township. They were amazed that their pen pals walked 10 miles each way to and from school and that there would often be 70 students in a class. They were shocked to find that their friends had to pay for their own equipment and, if they turned up with no pencils or equipment, they were not allowed into school. It made the students from England think about their own lives, as well as questioning their own needs and wants and what was really important. These experiences prompted them to reflect on and re-assess their own lives and values.

Putting it all together

62. Schools which review what they offer, identify what they are doing well and what still needs to be included can create an excellent curriculum. This was particularly evident in one of the secondary schools visited. The following were amongst the many outstanding features found:

- The mathematics department used a wide range of international statistics on human rights to make the subject relevant to students' lives and help them to examine major global issues.
- The languages department's analysis of its contribution to the sustainable schools 'doorways' revealed the wealth of cultural and political topics that students studied, ranging from exploring historical human rights issues in classics to eco-tourism in Spanish. Pupils were able to make links from the past to the present and understand that thinking about sustainability transcends time.
- The programmes for personal, social and health education and citizenship included important issues about the stewardship of the planet.
- Through assemblies, the eco society, the debating society and the sixth form lecture programme, the students experienced and discussed many aspects of sustainability.

The impact of inspection

63. The telephone call announcing this survey took most schools by surprise. Sustainability was not seen to be a high priority and schools were unaware that Ofsted was interested in assessing how schools were promoting and encouraging pupils to lead sustainable lifestyles. Although they did not have to do so, most schools chose to prepare for the inspector's visit by exploring documentation and guidance relating to sustainable development. Once they were aware of it, they found the information very useful.

64. As a result of the visit, most of the schools were keen to give a greater focus to sustainability in their development plans. Many found that it provided a useful vehicle for organising and coordinating aspects of Every Child Matters. Some schools reviewed leadership responsibilities for this area. One school appointed a coordinator and produced an additional action plan to ensure that the topic of sustainability permeated the curriculum. The inspector wrote:

The headteacher places a high priority on sustainability and is very keen that the school should reflect its local environment and exploit its position fully. His enthusiasm is shared by the governing body and parents and there is a strong sense of collective effort. The draft policy, prompted by the inspection, is a good starting point for development and improvement. The school plans to audit the curriculum. A survey of all staff has established their understanding of sustainable development, what they feel the school does well and what else could be done. Staff have also identified the contribution their own subjects make and what else could be done. This has provided a useful basis for the school to move forward.

65. One secondary school undertook a curriculum audit after the inspection and, as a result, the prompts for lesson planning across the school now include one to ensure that opportunities to develop pupils' understanding of sustainability issues are not missed. A middle school surveyed all teaching and support staff to determine their understanding of sustainable development, what they felt they already did about it, what worked well, what more needed to be done and what they could offer.
66. The headteacher of one school wrote:

Normally, the Ofsted phone call is received with some anxiety... we were delighted to receive notice of this inspection because we thought no one cared about all the energy and effort that staff give to education for sustainable development both within and beyond the school day. This school will never be top of any league table, but we went forward with confidence and totally stress free into our education for sustainable development inspection. The judgement was 'good with some features that are outstanding'. One member of staff, who has worked in areas of deprivation all her life, said, 'This is the first time I've been associated with anything outstanding in all my career ... Today staff morale is high in my school because someone came to inspect something we do better than many other schools. This inspection has been a wonderful experience for staff, pupils, parents and our many community partners. It has energised us to develop this area even further.'

Notes

The survey was conducted by two of Her Majesty's Inspectors (HMI) and three Additional Inspectors who visited 25 primary and 16 secondary schools in 35 local authorities during 2006/07. The schools were selected in order to include a representative sample of large and small schools, in rural and urban settings across England.

A survey by Ofsted in 2003 opened up the debate on education for sustainable development in schools in England.¹⁶ The current survey aimed to evaluate the progress schools were making towards meeting the Government's expectations set out in the *National framework for sustainable schools*, and to identify possible barriers to progress.

¹⁶ *Taking the first step forward – towards an education for sustainable development* (HMI 1658), Ofsted, 2003; available from www.ofsted.gov.uk/publications/1658

Further information

Publications

Building schools for the future: a new approach to capital investment (DFES/0218/2004), DfES, 2004; available from <http://publications.teachernet.gov.uk>

Developing the global dimension in the school curriculum, (DFES/1409/2005), DfES, 2005; available from <http://publications.teachernet.gov.uk>

Every Child's Future Matters, Sustainable Development Commission, 2007; available from www.sd-commission.org.uk/publications.php

Every Child Matters: change for children (DFES/1110/2004), DfES, 2004; available from www.everychildmatters.gov.uk/publications/

Learning outside the classroom manifesto, (DFES/04232/2006), DfES, 2006; available from <http://publications.teachernet.gov.uk>

Leading sustainable schools: what the research tells us, NCSL, Nottingham; available from www.ncsl.org.uk/sustainableschools/sustainableschools-research.cfm

National Curriculum for England, QCA, 2007; available from www.nc.uk.net

Planning a Sustainable School: driving school improvement through sustainable development, (DCSF/0045/2008), DCSF, 2008; available from <http://publications.teachernet.gov.uk>.

s3: sustainable school self-evaluation for primary, middle and secondary schools, DfES, 2006 (revised February 2008); available from www.teachernet.gov.uk/sustainableschools/tools/s3.

Strategic, challenging and accountable – a governor's guide to sustainable schools, (0045-2007BKT-EN), DfES, 2007; available from <http://publications.teachernet.gov.uk>.

Sustainable schools for pupils, communities and the environment: government response to the consultation on the Sustainable Schools strategy, DfES, 2006.

Taking the first step forward – towards an education for sustainable development (HMI 1658), Ofsted, 2003; available from www.ofsted.gov.uk/publications/1658.

UK schools carbon footprint scoping study, Sustainable Development Commission, 2006; available from www.sd-commission.org.uk/publications.php

Websites

British Council International School Award. An award scheme open to all schools across the UK that recognises good practice in international work in schools.

www.britishcouncil.org/learning-international-school-award.htm

Building Schools for the Future. The capital investment programme that aims to help transform secondary schools and academies in England, delivered by Partnerships for Schools.

www.p4s.org.uk

Department for Children, Schools and Families (DCSF) position on sustainable development.

www.dcsf.gov.uk/aboutus/sd

Development Education Association, a registered charity that promotes education for a just and sustainable world.

www.dea.org.uk

Eco Schools, an international award programme that provides a framework to help schools embed the principles of sustainable development into the heart of school life.

www.eco-schools.org.uk

Every Child Matters. The Government's approach to the well-being of children and young people from birth to age 19.

www.everychildmatters.gov.uk

Extended schools. Advice for schools and local authorities on setting up extended services.

www.teachernet.gov.uk/wholeschool/extendedschools

Global gateway. Help and funding advice on linking activities or networks in the UK, Europe and globally.

www.globalgateway.org.uk

Growing schools. Encouragement and inspiration for teachers who want to use the 'outdoor classroom' as a context for learning across the curriculum.

www.teachernet.gov.uk/growingschools

Learning outside the classroom. Information about the *Learning outside the classroom manifesto*, which calls for every young person to experience the world beyond the classroom as an essential part of their learning and personal development.

www.teachernet.gov.uk/learningoutsidetheclassroom

National Healthy Schools Programme. A long-term initiative to help young people and their schools to be healthy.

www.wiredforhealth.gov.uk

Qualifications and Curriculum Authority (QCA) curriculum dimensions, including issues of global significance and sustainable development.

<http://curriculum.qca.org.uk/cross-curriculum-dimensions>

Sustainable Development Commission. The Government's independent watchdog on sustainable development, reporting to the Prime Minister, the First Ministers of Scotland and Wales and the First Minister and Deputy First Minister of Northern Ireland.

www.sd-commission.org.uk

Sustainable Development Unit. Based in the Department for Environment, Food and Rural Affairs, the unit's role is to embed, monitor and report on sustainable development across Whitehall and the UK. An update of the Government's sustainable development indicators is available from their site.

www.sustainable-development.gov.uk/progress/

Sustainable Schools Programme, including links to publications, tools and other resources.

www.teachernet.gov.uk/sustainableschools

Annex A

Schools visited for this survey

Abbas and Templecombe C of E Primary, Somerset
 Baylis Court Secondary School, Slough
 Bellerive FCJ Catholic College, Liverpool
 Blackrod Anglican/ Methodist Primary, Bolton
 Brixham Community College, Devon
 Carleton Community High School, Wakefield
 Chingford C of E Infants, Waltham Forest
 Churchstanton Primary School, Somerset
 Colonel Frank Seeley Comprehensive School, Nottinghamshire
 Cottage Grove Primary School, Portsmouth
 Cottingham Primary School, Hull
 East Oxford Primary School, Oxfordshire
 Eatock Primary School, Bolton
 Edenham High School, Croydon
 Evesham Simon de Montfort Middle School, Worcestershire
 Grangefield School and Technology College, Stockton-on-Tees
 Hambridge Community Primary, Somerset
 Harby C of E Primary, Leicestershire
 Harrogate High School, North Yorkshire
 Hazelhurst Primary School, Bury
 Holly Springs Infant and Nursery School, Bracknell Forest
 Joseph Ruston Technology College, Lincolnshire
 Little Waltham C of E Primary School, Essex
 Manor Park Infant and Nursery School, Nottinghamshire
 Nonsuch Grammar School, Sutton
 Norfolk Community Primary School, Sheffield
 Oaklands Community School, Southampton
 Park Street Church of England Primary School, Herefordshire
 Sir John Lawes Secondary School, Hertfordshire
 Southfield Primary, Northamptonshire
 Springfield First School, West Sussex
 St Albans Roman Catholic Primary School, Blackburn and Darwen
 St Bedes Catholic School, North Lincolnshire
 St Columbia's Catholic Community Secondary, Bexley
 St Francis Catholic Primary School, Birmingham
 St Philomena's Roman Catholic Primary School, Kent
 Stuart Bathurst Catholic High School, Sandwell
 Sutton Veny C of E Primary School, Wiltshire
 Talbot Combined, West Sussex
 Temple Normanton Primary School, Derbyshire
 Whitehouse Common Primary School, Birmingham