

## Sustainable Schools

For pupils, communities and the environment



### **Consultation Paper**

#### department for education and skills

creating opportunity, releasing potential, achieving excellence

#### **AT A GLANCE**

## The future holds many challenges for young people.

Climate change is one of the most significant; global poverty is another. Closer to home, many people are worried about the rise of obesity, fresh water scarcity, the build up of waste, and the cohesion of local communities.

#### Young people have a high stake in the future.

Indeed some of them may live to see the twentysecond century. There is general agreement that everyone should have the knowledge, skills and values that enable them to contribute to a future where they live in safety, dignity and prosperity, and where the environment is respected and sustained.

### Schools have a special role to play in securing the future for young people.

Around the world, nationally, and in our schools, we are faced with the challenge of creating vibrant communities while reducing the harm we are doing to the environment. As places of learning, schools are central to cultivating a new understanding of ways we can secure a good quality of life for everyone - now and into the future.

## A sustainable school prepares young people for a lifetime of sustainable living.

Issues that matter to young people, from the state of the local park to global warming, are used as a context for learning across the curriculum so that time in school is relevant to their lives, not abstract or disconnected from their futures. In this way pupils gain the confidence to improve their own circumstances and communities, and to act as good citizens later in life.

## The Government would like every school to be a sustainable school.

Many schools are already some way down this path. They are integrating high standards of achievement and behaviour with the goals of healthy living, environmental awareness, community involvement and citizenship - many of the same aspirations as Every Child Matters.

### From pupils to governors, everyone has a role to play.

Our joint task is to tap into the enthusiasm for sustainable development evident in many parts of the education world, turning a challenge that may seem overwhelming at times into a force for innovation and improvement in schools.

## Sustainable Schools

For pupils, communities and the environment

### **Consultation paper**

For:	Schools, local authorities, regional government, government departments, community and non-profit organisations, unions and professional associations, private sector, central government and its agencies
Relevance:	School leadership, management, governance, planning, evaluation, improvement, consultancy, advice, investment

### Context

The Department for Education and Skills (DfES) has reaffirmed its commitment to sustainable development by publishing a two-year action plan to achieve outcomes to underpin a sustainable society. Schools are a key strand of this action plan and are invited to become models of sustainable development for their communities. This consultation paper seeks views from schools and their stakeholders on how we can work together to turn issues like climate change, global justice and local quality of life into engaging learning opportunities for pupils - and a focus for action among the whole school community.

Your views will help shape the way forward. Section 6 has details of how you can respond.

## **Contents and Summary**

#### Section 1 introduces sustainable development and sustainable schools

Sustainable development is an important, global issue with serious implications for the way we all live and work. Everyone has a part to play, from the Government to the individual, and schools have a particularly important role in educating our young people.

#### • Section 2 sets out our approach to sustainable schools

The Government has a long-term strategy for sustainable development, which schools can help deliver. The National Curriculum outlines our current expectations of what schools should teach about sustainable development, and the DfES has just introduced high environmental criteria for school building projects. Many other existing Government initiatives also encourage schools to become more sustainable. But this is an important area where every school can build on its current achievements and do still more to excite and enthuse pupils, staff and the community.

#### • Section 3 looks at the wider support needed by children and young people

Outside the school there are also important opportunities to learn about sustainable living. From early years to university, and health care to youth work, children and young people can be supported in their learning across the range of services they experience as they grow up.

#### • Section 4 offers a national framework for developing sustainable schools

There are good reasons for schools to embrace sustainability, from improving pupil motivation to saving money. Ofsted has identified some characteristics of schools that have been successful. Every school is invited to consider its achievements so far and to plan what more it can do over the long term to help the UK meet its 2020 sustainability targets. Action can be taken in many areas, for example:

- Food and drink Buildings and grounds • Inclusion and participation **Energy and water** Travel and traffic Local well-being • Global dimension. Purchasing and waste 17 • Section 5 looks at how government and others can promote sustainable schools There are lots of ways that others can help schools. But schools are busy institutions with many responsibilities, and it is important that these others bear in mind how schools operate and offer their help appropriately. 37 49 • Section 6 describes how to participate in the consultation
- Section 7 provides a list of helpful resources for schools
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# Section 1: Sustainable development and sustainable schools

#### Introduction

- The future holds many challenges for young people. Climate change is one of the most significant; global poverty is another. Closer to home, many people are worried about the rise of obesity, fresh water scarcity, the build up of waste, and the cohesion of local communities.
- 2. Young people have a high stake in the future. Indeed, some of them may live to see the 22nd century. We don't know what that will be like - except that it will be very different from today. Some fuel reserves may be exhausted. The polar ice caps may have melted. World population may have doubled. And much more of Africa may

have become a desert. On the other hand, some people may benefit from dramatic improvements in medicine, and drive silent, emissions-free cars. Amid the potential dangers are fantastic opportunities and prizes.

3. Schools have a special role to play in securing the future for young people. As places of learning, they can help pupils understand our impact on the planet. And as models of good practice, they can be places where sustainable living and working is demonstrated to young people and the community. Tomorrow's solutions to the world's problems may be found by the children in our classrooms today.

Sustainable development will not just be a subject in the classroom: it will be in its bricks and mortar and the way the school uses and even generates its own power. Our students won't just be told about sustainable development, they will see and work within it: a living, learning place in which to explore what a sustainable lifestyle means.

Tony Blair, September 2004

- 4. The Government would like every school to be a sustainable school. In practice this means integrating high standards of achievement and behaviour with the goals of healthy living, environmental awareness, community involvement and citizenship many of the aspirations set forth in Every Child Matters (2005).
- 5. Schools can prepare young people to take an active role in finding solutions to local issues while addressing broader global problems, and can take an integrated approach to the curriculum (teaching provision and learning), the campus (values and ways of working), and the community (wider influence and partnerships). They can prepare young people for a lifetime of sustainable living.

#### Sustainable development

- 6. Sustainable development means more than recycling bottles or giving money to charity. It means finding solutions that improve people's quality of life without damaging the environment, and without storing up problems for the future, or transferring them to other parts of the world. It is an innovation agenda, not a slow-down agenda, inviting us to rethink how we organise our lives and work so that we don't destroy our most precious resource - the planet.
- 7. The past 30 years have seen a growing realisation that our current model of development is unsustainable. From over-fishing to climate change, our way

of life is placing an increasing burden on the planet, which cannot be sustained. Things which were once taken for granted such as a secure supply of energy, or a strong manufacturing base, do not look so permanent now. Citizens need information and education to enable them to prosper amid high levels of uncertainty, complexity and change.

- 8. In short, to maintain our progress towards a healthier, more inclusive and fairer society, both here and around the world, we need to make a decisive move towards sustainable development - both because it is the right thing to do, and because it is in our own long-term best interests.
- 9. There are many definitions and interpretations of sustainable development. According to 'Securing the Future', the UK's 2005 Sustainable Development Strategy, the goal 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



<sup>1</sup> HM Government 2005. Securing the future: delivering UK sustainable development strategy. TSO, London.

#### Sustainable schools

- 10. Education is recognised by governments the world over as a key part of the solution - and it features prominently in the UK Government's own sustainable development strategy. The idea appears under headings such as Education for Sustainable Development, or Learning (or Education) for Sustainability. Recognising that schools can demonstrate sustainable development in the way they are run, as much as through their teaching provision, we are using the broader phrase 'sustainable schools'.
- So what is a sustainable school? We believe it is one that is guided by the principle of care:
  - care for oneself
  - care for each other (across cultures, distances and time)
  - care for the environment (far and near).



- 12. This concept has very practical repercussions, some of them predictable. For example, a sustainable school puts a high value on the well-being of its pupils. Its toilets are clean, safe places, regularly checked to ensure they are free of bullying, while its classrooms are welcoming, clean and reassuring environments places to learn. It takes a zero-tolerance approach to litter, graffiti and bullying, reinforced by staff who exemplify positive, caring behaviour.
- 13. Some repercussions are less obvious. Rainwater is collected from the roof, conserved through efficient flush mechanisms and taps are not left running. Paper towels are recycled, and cleaning agents are used that do not harm the environment. Low-energy lighting is installed, with movement sensors to ensure it is only used when required. Care is demonstrated in new ways and new contexts, opening pupils' eyes to the possibilities of sustainable living.
- 14. Care has further repercussions. For example, it is hard to imagine pupils showing respect for other people, cultures or the natural world if they don't possess an underlying sense of care. Care also breeds responsibility. Schools that involve pupils in the design of playing areas experience reduced incidents of bad behaviour, including bullying and vandalism. Pupils begin to feel, "This is my school and I want to look after it."

#### **Raising standards in County Durham**

Durham looks for dual outcomes from its work on sustainable schools: better operational performance and higher achievement among pupils.

- **Operational performance:** a small team of full-time staff offers support to schools for the improvement of school grounds, waste reduction and curriculum areas like global dimension education.
- **Higher achievement:** learning outside the classroom offers interesting, relevant, practical and real life learning opportunities that motivate young people and engage them more fully in learning.

Durham has drawn together outdoor learning and sustainability education under one umbrella and believes they are inextricably linked, the former being about how we learn and the latter about what we learn.

- 15. Little is wasted in a sustainable school, such as energy, water, food, equipment and paper, and surplus items are recycled, composted or donated. Quality food and drink are sourced from suppliers with good environmental and animal welfare records. The school is seen to take health seriously rather than encourage unhealthy habits. It takes this message out into the community, and supports local suppliers where it can. Diversity in the community is celebrated rather than feared. Everyone is valued.
- 16. Sustainable schools are not just wellmanaged, caring schools. They are also great places to learn, where pupils develop self-esteem and reach high standards of achievement. Motivation is enhanced in two principal ways. Firstly, issues that matter to young people, from the state of the local park to global warming, are used as a context for learning across the curriculum so that time in school is relevant to their lives, not abstract or disconnected from their futures.
- 17. Secondly, the school estate and its local area are used as a learning resource, so that

pupils engage with real issues in real places among real people as a natural part of their learning. The school becomes a testing ground where pupils think through the problems and opportunities right on their doorstep, while studying the connections to larger, sometimes global challenges.

- 18. For example, the health of the local community could become a focus for learning across many subjects, with opportunities to examine the school's own food, drink and travel practices, and make comparisons with distant countries. Similarly, wildlife living in or around the school or places that the school is visiting provides a window onto the needs of other species. This can be exciting in its own right, but also draws pupils towards the question of conservation.
- 19. In this way pupils acquire the confidence to improve their own circumstances and communities, and to act as good citizens later in life. They leave school ready to take action to improve the world they live in. Case studies showing what is being achieved in schools are included in this paper.



# Section 2: Our approach to sustainable schools



- 20. Many schools are already some way to becoming sustainable schools and should be congratulated. It is implicit in their core business of raising achievement as well as in their contribution to the personal development of pupils, and to the wider concerns of healthy living, community cohesion, the environment and global citizenship. The question is: how do we make this the norm?
- 21. The Government has set out its UK sustainable development strategy, detailing its long-term aims. Schools have an important role to play and so the DfES is setting a national framework within which schools are free to develop their own distinctive ethos and approach. We do not want to prescribe a top-down approach for schools. Nor do we want to be laissez-faire when such important issues are at stake.

#### What the UK must do by 2020

- 22. We want to help people make the right choices now in order to secure the future of our children and our children's children. Our immediate priorities for action are as follows:
  - Sustainable consumption and production - working towards achieving more with less.
  - Natural resource protection and environmental enhancement protecting the natural resources on which we depend.
  - Sustainable communities creating places where people want to live and work, now and in the future.
  - Climate change and energy confronting the greatest threat.
- 23. In addition to these four priorities, changing behaviour also forms a large part of the Government's thinking on sustainable development. Education is one of the key ways by which the Government expects to realise this cross-cutting goal.

#### What schools must do

- 24. Towards these goals there are two main areas where we currently expect schools to deliver:
  - in the National Curriculum, where sustainable development is highlighted in four statutory subjects
  - in large building projects, where government funding is conditional on projects meeting high environmental criteria, and any planning requirements of local authorities.

#### The National Curriculum

25. The National Curriculum is clear about the need to promote awareness about sustainable development. Aim 2 reads:

It [the NC] should 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.

26. Sustainable development is a cross-cutting theme of the National Curriculum. It is linked formally to four statutory subjects (Citizenship, Design & Technology, Geography, Science) providing a firm foundation for teachers to build on. However, links are present to all subjects. For example, maths problems can be explored using data on bird observations or traffic congestion - possibly collected

through project work in other subjects. English can be used to understand the aesthetic and emotional connections between people and the natural world. We expect schools to be aware of these links and to be steadily improving the quality of their provision.

27. Evidence from the United States shows that using the environment as an 'integrating context' for learning boosts literacy and numeracy standards, while developing critical thinking skills and reducing behaviour problems.<sup>2</sup> This is attributed to the increased enthusiasm for learning produced by teaching that is grounded in real issues, people and places. Children (and adults too) need contact with the natural world for their own personal and emotional development.



<sup>2</sup> *Environment-based Education: Creating High Performance Schools and Students.* The National Environmental Education & Training Foundation, Washington, DC, 2000.

#### Argyle Primary School, Camden, London

Argyle Primary School has developed a unique, values-led curriculum which empowers pupils to lead rich and fulfilling lives now and as adults. As a mainly Muslim school with over 95 per cent of pupils from ethnic minorities, Argyle is using sustainable development and global citizenship to create a framework for teaching and learning about the world that is purposeful and real.

Learning at Argyle takes place through cross-curricular units of work. Wherever possible, links are made between subjects as pupils learn about and apply their skills and understanding to the world around them. Pupils are encouraged to think about how they can effect change in their community through concrete activities like recycling and cleaning up their local parks. During Geography, pupils learn how to map the local area, for instance mapping derelict areas within parks. They identify local decision makers who impact the community through their roles, and write them persuasive letters explaining their ideas and proposals for change, bringing together PSHE and literacy. Pupils also have the opportunity to discuss their proposals with other young people through an online forum during their ICT class.

Argyle's curriculum is the result of its senior team working with curriculum coordinators to break down sustainable development and global citizenship into manageable objectives with concrete teaching methods and examples of hoped-for outcomes in the classroom. Like many schools in London, Argyle has high staff mobility and, to ensure continuity, an explanation of the background, aims and values of the curriculum is a core feature of staff induction. According to Helen Adams, Deputy Headteacher, "Sustainable development has given the curriculum direction and purpose. Far from being an extra initiative to be struggled with, it has enabled us to achieve the school improvement we all wanted."

With 25 per cent of their pupils refugees, Argyle has the additional challenge of communicating across cultures and languages with both children and parents. Having integrated sustainable development within the curriculum, they are now seeking to engage parents in understanding the value of this approach.



#### School building design

- 28. Our capital investment in school buildings has the potential to create a generation of advanced, eco-efficient primary and secondary school designs, with significant savings on running costs as well as reduced impact on the environment. To this end it is a condition of capital funding that newbuild and refurbishment projects achieve at least a "very good" rating under the BRE's environmental assessment method for schools ('BREEAM Schools'). This covers:
  - primary school projects costing £500k or more
  - secondary school projects costing £2m or more
  - all projects involving remodelling or complete refurbishment of more than 10% of the total gross internal floor area of a school.

Smaller-scale projects are also encouraged to apply the same methodology.

- 29. The Standard is intended to guarantee a minimum level of environmental performance in school building designs, without specifying particular solutions. Compliance with the Standard is inspected by a team of licensed assessors and schools and local authorities need to make sure their building projects register with BRE at the outset. For more information see: www. breeam.org/schools
- 30. Many sustainable design features should cost no more if they are factored in from the start. What's more, reduced running costs can lead to substantial value-formoney gains over the lifetime of school buildings. Our BREEAM "very good" requirement is a minimum standard, not a ceiling, and we would welcome projects that go further to create schools that are not only highly eco-efficient but which provide pupils with a daily experience of sustainable living.



#### **Kingsmead Primary School, Cheshire**

At Kingsmead, sustainability is underscored throughout the building's fabric and forms a key part of how the pupils learn each day. The building's frame is constructed of timber and the walls are superinsulated. Solar panels and a biomass boiler provide energy and heat to the school while recycled rainwater is used for flushing lavatories. Sustainable design enhances the use of space and connection with the



natural environment, providing an exceptional place to learn, work and play.

The school cost approximately £2.4m to build, broadly equivalent to similarly sized primary schools. Although the sustainable design features have resulted in slightly higher initial costs, they are expected over time to reduce running costs by up to 50 per cent compared to a typical primary school. Kingsmead's Headteacher can already see the benefits this brings to pupils and staff. For example, the school's highly insulated windows open and shut automatically based on weather conditions, helping pupils to retain an awareness of temperature fluctuations throughout the day. Children can also view plant and animal life in the grounds using the CCTV cameras that double as security monitors at night. The cameras contribute to lower maintenance costs by reducing the rate of vandalism.

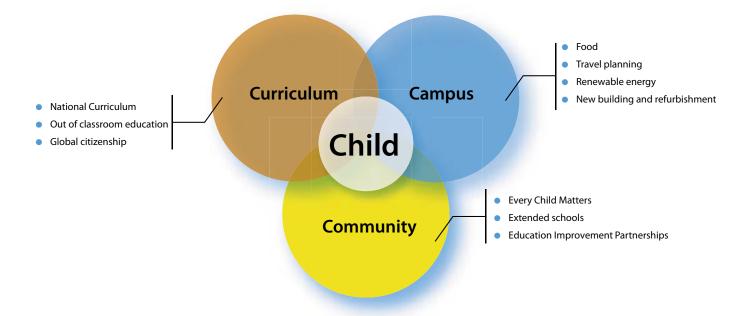
As most of the building's features can be used as learning tools, Kingsmead has included an eco-awareness commitment within all job descriptions. The aim is to encourage teaching staff to embed sustainability across the school's curriculum. In Year 5, pupils relate what they are learning about water to how water is received and transported throughout the school. As rainwater collects on the roof, it is funnelled down through a clear rainwater pipe into the school's entrance hall so passers-by can see how much rain the school is collecting. Weather monitors feed information on rainfall, barometric pressure, wind speeds and temperatures into a measuring system displayed in the hallway enabling pupils to track fluctuations in weather conditions using line graphs. Such information also helps to promote an environmental and sustainability interest within the wider Kingsmead community.

#### What schools are encouraged to do

31. The National Curriculum and building Standards are the bare minimum. But there is much more that schools can do, and are already doing, to become sustainable - indeed, many of our current initiatives and programmes encourage schools in this direction. For convenience these are highlighted under three areas of school life - curriculum, campus, community - as illustrated in Figure 1. We see these initiatives as a starting point on which to build rather than a whole solution. In future years more of our initiatives will be aligned with sustainable schools.



#### Figure 1: Current impetus for sustainable schools



- $\bigcirc$ **Curriculum - teaching provision and learning:** The National Curriculum sets out in broad terms what is to be taught in schools, not how it is to be taught, allowing schools to be creative in the way they plan and facilitate learning. Through its focus on issues that matter to young people, and through its links to practical activities in the school's buildings, grounds and local area, sustainable development can stimulate curriculum and teaching innovation. Learning about real issues in real settings - inside and outside the classroom - can boost motivation across all ability levels, while developing skills such as communication, problem-solving, teamwork and organisation. We believe this approach can help to retain pupils within the education system and improve pupil behaviour, self-esteem and achievement.
- Campus values and ways of working: Ο Schools that manage their operations sustainably provide a powerful example for their staff and pupils to follow. By encouraging everyone to participate, the whole school can become a medium for acquiring positive, sustainable habits. The benefits to the school can be considerable. Better catering can improve pupils' health, concentration and learning outcomes. Greener travel arrangements contribute to the safety, fitness and alertness of pupils. Efficient management of school buildings can result in lower energy and water bills. Employment practices like staff development and local recruitment can contribute to regeneration. A strategy of 'reduce, reuse and recycle' can result in less purchasing, less cost and less waste.

And the use of school grounds for food growing and nature conservation can lead to exciting learning opportunities.

Community - wider influence and Ο partnerships: Schools are well placed to exert a broader influence in their communities. Through their contact with parents and carers, suppliers and local organisations, an extensive well-being agenda can be advanced among local people. Pupils are required in school for less than 15% of the year. What they experience outside school has a significant impact on their self-esteem, achievement and behaviour. By promoting safer, stronger, healthier and greener (i.e. sustainable) communities, schools are therefore also helping themselves. Schools have much to give in terms of their facilities and hosting of local services, and in their influence on local affairs. And the goals of a sustainable community are attractive to many parents, providing a focus for their involvement with the school.



#### Table 1: How sustainable development can contribute to school improvement

#### CURRICULUM (teaching provision and learning)

Teaching and learning	The school estate and its local area provide a virtually limitless resource for learning about sustainable development, as well as providing an engaging context for teaching core subjects.
Pupil achievement	Sustainable development concerns real problems in real places among real people, including on the school's doorstep. It motivates pupils by making learning relevant to their lives. It breeds self-esteem, confidence and teamwork skills by involving them in the solutions.
Pupil well-being	A safe, caring environment for pupils is good for children's physical and emotional well-being, and also good for their learning and achievement. Healthy food, water to drink, safe and comfortable facilities, and enhanced fitness through walking or riding to school can increase pupil's concentration and alertness in the classroom.

#### CAMPUS (values and ways of working)

Operating and capital expenses	Environmental management saves money through energy, water, waste and purchasing efficiency. Doing 'more with less' produces a classic 'win-win' for the environment and school budget.
Pupil involvement	When pupils are involved in caring for, and in some cases designing, their school environment, they are less likely to damage or disrespect it, drop litter or bully others.
Staff morale	Many staff are switched on by the values of sustainable development. Efforts in this area will give them an added sense of purpose, with an impact on morale, performance, retention and recruitment.

#### COMMUNITY (wider influence and partnerships)

Trust	Working with local people on shared concerns like diet, litter, drugs, teenage pregnancy, congestion, safety and respect demonstrate a school's commitment to its community, and builds trust.
Parental involvement	Projects addressing environmental, community or global concerns provide opportunities to involve parents and other stakeholders in school improvement, tapping into their time, energy and expertise.
Local influence	A green image can improve the reputation of a school in a sector increasingly influenced by parental choice, helping to attract pupils, support development/ expansion plans, and influence local affairs.

# Section 3: Wider support for children and young people

33. Formal education is just one of numerous services offered to children and young people en route to adulthood. As such it is part of a bigger context that includes integrated education, care, family support and health services, as well as local amenities, voluntary groups and youth work.

#### **Every Child Matters**

- 34. 'Every Child Matters', the Government's agenda for children's well-being, identifies five outcomes for children: be healthy, stay safe, enjoy and achieve, make a positive contribution, and economic wellbeing. The outcomes very nearly provide a blueprint for child-centred sustainable development. The area underrepresented is the environment or, more specifically, the environmental well-being of children, which has a major influence on their health, safety and overall life chances, sometimes very starkly. A loss of respect for the environment can lead to a downward cycle of litter, vandalism and crime, especially when combined with difficult family situations or other forms of hardship in the community.
- **35.** Children and young people need opportunities to develop a sense of care for their neighbourhood, based upon an appreciation of its qualities, history and challenges. A sense of place, and of

belonging within a locality, encourages respect for open spaces and amenities, and of course for people and property. Activities can be constructed in and outside schools to provide opportunities for children and young people to form some of these attachments, to contribute positively to their local areas, gain important skills and have fun - all critical factors in the achievement of ECM outcomes. 'Youth Matters', the Government's 2005 green paper on youth services, describes these activities as "positive things to do, places to go".



36. Through their strong connections with local people and through the extended services that many are beginning to offer, schools have an important role to play in realising the goal of sustainable communities. Our commitment is to see all schools provide access to a core package of services by 2010 and to use their teaching and wider influence to address the needs of the local environment and community.

#### Participation and empowerment

- 37. The environment is an important issue for children and young people. The Government recognises the need to move beyond mere listening to their views, which can seem tokenistic and feel patronising, to engage their creativity and energy for finding solutions. Some of the best examples of sustainable schools and youth work in England are ones where children and young people are empowered to take the lead.
- 38. Becoming aware of the need for sustainable development cannot start early enough.By five years old key values and ways of

living are already established. Besides, a consistent and continuous message about our dependence on the environment, and on the rights of future generations, is needed through the education chain, from early years to university. Children and young people also need to observe sustainable practices when they interact with health, youth and social services.

39. Much of the guidance available to schools on sustainable development is applicable to early years settings, children's centres and youth services: helping children and young people to understand what factors contribute to their well-being; providing opportunities to experience the natural environment first hand; getting them involved in practical projects tackling real issues in their local areas; and ensuring that they are involved as far as possible in the solutions.



# Section 4: National framework for sustainable schools

40. Schools are becoming aware of sustainable development through different routes and at different speeds. Some are starting their journey by helping to tackle problems like poor health in the community, or an accident risk caused by traffic outside the school gate. Others are building on initiatives like Healthy Schools and Extended Schools, or developing their practice through curriculum areas like Citizenship, Geography, Science and Design

& Technology. Some are taking a wholeschool approach, defining what they mean by a sustainable school and establishing a route map for long-term success. There are lots of ways to approach this and we want to reassure schools that they are all welcomed by Government.

**41.** Table 2 lists the success factors identified by Ofsted when it evaluated sustainable development in schools in 2003.

Success factor	Description
Experimental	A record of experiment over a number of years
Whole-school	A whole-school commitment, led by senior management, to integrate sustainable development into the work of the school
Local network	A well-developed local support network, eg involving the local authority, other schools, parents and NGOs
Wider classroom	The school, its surroundings and local community are used as a resource for learning
Pupil responsibility	Pupils given individual and collective responsibility for looking after and improving their learning environment, eg through school council or eco-committee
Positive thinking	A culture of positive attitudes, values and problem-solving to develop pupils confidence to make a difference
Curriculum planning	A well-planned curriculum, which addresses key sustainability issues, rights and responsibilities, with links to the local area and community
Focus on results	Clear objectives on the part of the teachers that include physical outcomes (eg a pond or a recycling scheme) or pupils' attitudes and behaviours (eg attitudes to asylum seekers)
Active involvement	Pupils involved in practices that promote sustainable development, eg energy conservation, recycling, improvement of the school environment, social inclusion
	Adapted from Ofsted 2003 <sup>3</sup>

#### Table 2: Success factors for sustainable schools

3 Taking the first step forward...towards an education for sustainable development: Good practice in primary and secondary schools. Ofsted, 2003.

- 42. The crucial step is to get started and many schools have done just that. More than 4,500 schools are registered with the Eco-Schools certification scheme, with over 450 of these obtaining a green flag. More than 600 schools have received an International School award for their work on the global dimension, while over 8,000 have achieved Healthy School status. Many further schools are working on sustainable development with partners from the non-profit and business sectors, often with impressive results for both the community and the school.
- 43. We recognise that schools will require clear and straightforward guidance if they are to achieve our expectations. They will also need considerable time. For this reason we are proposing a national framework to clarify what Government would like schools to be achieving by 2020 in order to contribute effectively to the UK's sustainable development strategy. The framework will sit within a package of support measures designed to help schools evaluate, plan and achieve sustainable development comprises:
- Framework: a clear statement of expectations across eight sustainability themes, together with pointers on how to achieve them. Intended to help schools define their own road to success.
- Web service: key information, tools and links to organisations and networks that can support schools across all the themes identified in the framework. The web site will contain a series of case examples from

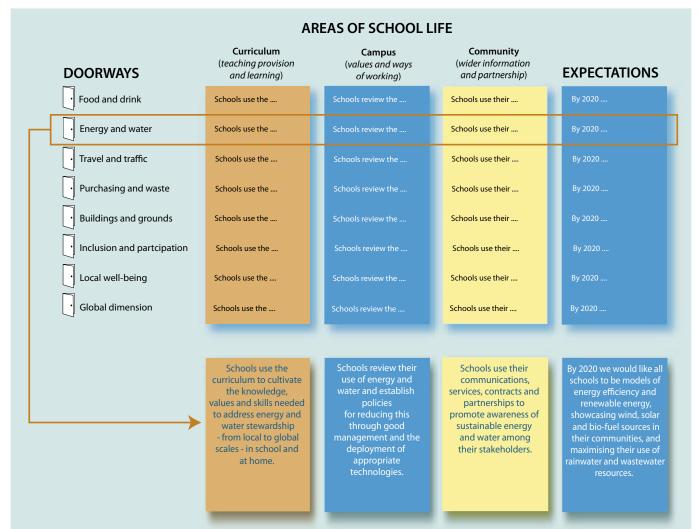


leading schools, and will also allow schools and other stakeholders to upload their own stories and information.

- Self-evaluation tool: for schools to assess their current level of progress and plan next steps across each of the eight performance themes. The tool is structured around Ofsted's self-evaluation headings to reinforce the link to school improvement.
- Performance indicator: we are considering ways of measuring progress towards sustainable schools, including the extent to which schools are equipping young people with the knowledge, skills and values to live sustainable lives. In the years ahead this indicator will tell us whether our expectations are being met.
- 44. Care is a wide-ranging concept, and the range of concerns covered by the framework necessarily extends from the well-being of pupils to the quality of life of the local community, the environment and

global justice. A common idea runs through all these issues: the need for a long-term, joined-up approach to securing the future for all our children.

- **45.** In developing this framework, we've tried to find a way for schools to draw together all of these issues and activities, link them to other agendas, and highlight the opportunities for school improvement. For example, core to Every Child Matters is the principle that every child should have the opportunity to positively shape society, and their own future. By embedding sustainable development in school life, schools can help children grasp that opportunity.
- 46. The framework is illustrated in Figure 2. It asks schools to consider how they can extend their commitment to sustainable development through eight key areas - or 'doorways'. The doorways are just different ways of approaching the task of building a sustainable school. They all interconnect, providing different openings onto a set of common challenges. Each can be taken forward through the major areas of school life - the curriculum, campus and community.
- **47.** One row of the table (the energy and water doorway) is expanded as an example. The central columns indicate what progress



#### Figure 2: A national framework for sustainable schools

might look like in each area of school life, while the final column indicates the Government's expectation by 2020. The full framework is introduced doorway by doorway in subsequent pages.

- 48. We recognise that these are demanding expectations, but then so are the challenges we need schools to help address. Though we are laying down our long-term aspirations for schools, we are encouraging them to define their own route maps and approaches to success without prescription.
- 49. Inevitably, the UK's priorities for sustainable development will evolve as the consequences of new research permeate policy making and potential responses are thought through. That means that our expectations of schools to 2020 may also evolve over that timescale. Sustainable development is better viewed as a learning journey than as a specific destination, and actions taken now by schools will stand them in good stead for the challenges ahead.



## Doorway 1: Food and drink



An unhealthy diet contributes to obesity and poor pupil concentration. Healthy, ethically sourced food can reverse these effects while protecting the environment and supporting local producers and suppliers.



#### By 2020 we would like...

...all schools to be models of healthy, local and sustainable food and drink produced or prepared on site (where possible), with strong commitments to the environment, social responsibility and animal welfare, and with increased opportunity to involve local suppliers.

#### This can be achieved through an integrated approach to the:

**Curriculum** (teaching provision and learning)

**Campus** (values and ways of working)

Schools use the curriculum to cultivate the knowledge, values and skills needed to address the health and sustainability of food and drink, and reinforce this through positive activities in the school and in the local area. Schools review the impact of their food and drink choices on human health, the environment, the local economy and animal welfare, and work with suppliers to provide options that meet the highest standards. **Community** (wider influence and partnerships)

Schools use their communications, services, contracts and partnerships to promote awareness of the wider impact of food and drink choices among their stakeholders.

## Here's how one school is tackling the challenge ...

#### St Matthew's Primary School, Belfast

St Matthew's is located in one of the most deprived wards of Northern Ireland. Almost 50 per cent of parents are unemployed and 70 per cent of the school's 316 pupils qualify for free school



meals. Like their parents, children rarely venture beyond the immediate boundaries of the community and some lack access to basic health and dental services. Mental health and trauma are significant community concerns.

Three years ago the school suffered serious behaviour problems as pupils' feelings of anger and fear boiled over in classrooms and the school yard. Smashed windows and break-ins were commonplace. The school knew that if pupils did not feel good about themselves they would be unlikely to reach their potential. Poor diet was a problem in the community, so this is where they decided to start.

The school wanted to go further than simply banning junk food - it wanted to have a lasting impact on the eating habits of pupils and their families. So after consultation, the school decided to provide only milk, water and fruit at break times. Out of this grew a fruit cooperative scheme in which fair-trade fruit is sourced from local traders and sold to children each morning.

The school and governors worked hard to explain

the benefits of the scheme to parents, and ensured it was inclusive by investing the profits from fruit sales into savings accounts for every pupil. As a result the children and their families are enthusiastic, with pupils consuming more than 88,000 pieces of fruit in around three years.

The profits have also allowed the school to buy water units that provide chilled, filtered water to pupils throughout the day, and each child has a reusable plastic bottle to carry their water.

As Headteacher Joe McGuinness explains, "We didn't know we were doing sustainable development until somebody told us. We were just trying to meet the needs of our children."

Pupil behaviour has improved markedly and standards of achievement are rising. Litter has ceased to be a problem, and broken windows, once a regular sight, are now rare. Most importantly, St Matthews is now widely respected by its community. It still has many problems on its doorstep but is now in a stronger position to help pupils and their families find solutions.



## Doorway 2: Energy and water



Rising demand for energy and water is storing up problems for future generations. Energy and water conservation can tackle this problem while saving schools money.

#### By 2020 we would like...

...all schools to be models of energy efficiency and renewable energy, showcasing wind, solar and bio-fuel sources in their communities, and maximising their use of rainwater and wastewater resources.

#### This can be achieved through an integrated approach to the:

<b>Curriculum</b> (teaching provision and learning)	<b>Campus</b> (values and ways of working)	<b>Community</b> (wider influence and partnerships)
Schools use the curriculum to cultivate the knowledge, values and skills needed to address energy and water stewardship - from local to global scales - in school and at home.	Schools review their use of energy and water and establish policies for reducing this through good management and the deployment of appropriate technologies.	Schools use their communications, services, contracts and partnerships to promote awareness of sustainable energy and water among their stakeholders.

## Here's how one school is tackling the challenge ...

#### Cassop Primary School, Cassop, Co. Durham

Cassop Primary School is located within open fields between two former mining villages in County Durham. The closure of the collieries in 1983 led to a loss of self-esteem within the community, and the School has subsequently used the environment and its local surroundings as a source of inspiration and learning for pupils.

Cassop's journey began with reducing the energy and water consumption of the school. Lowenergy light bulbs are used throughout the school and elected pupils, known as Energy Monitors, graph and analyse the school's energy and water use to identify opportunities for reduction. As Cassop's Headteacher Jim McManners explains, "At one point we discovered a high increase in the amount of water being used, resulting from a malfunctioning valve on a toilet. The school was shocked to learn how much water was wasted by what seemed to be a small problem."

Having improved its eco-efficiency through relatively simple measures, Cassop welcomed an invitation from Durham County Council and Northern Electric in 1998 to fund a 50kW

wind turbine in the school field, and hence became the first wind powered school in the UK. When erected, the turbine was expected to pay back the costs of its construction in 20 years. Seven years on, the turbine provides approximately 33 per cent of the school's requirements for electricity and the school has an arrangement by which it sells power to Durham Council when supply exceeds demand. The school is now heated by locally-produced, recycled wood waste and has solar PV (photovoltaic) panels which also contribute to its electricity production.

By producing its own energy,



the school has reduced its energy bills by one third. It has also created an exceptional tool for promoting environmental awareness in the school and beyond. The solar PV panels installed on the school's south-facing roof are positioned so that pupils can safely climb onto the roof to look at them before testing their own tiny solar cells in a classroom. These activities are linked to major issues like energy supply and climate change, allowing pupils to learn how their energy and water use impacts on the environment.

As a 'village school', Cassop aims to be the centre of its community and is taking steps to open its doors to others through its commitment to the local environment. In 2004 Cassop ran courses for 12

> schools and hosted five adult groups, allowing them to make use of the school's facilities and encouraging groups of all ages to become more knowledgeable and enthusiastic about environmental issues. In doing so the school is helping to build environmental awareness in their community, as well as a sense of pride among its pupils.



## Doorway 3: Travel and traffic



Rising vehicle use adds to congestion, road accidents and pollution. Car-sharing and public transportation help ease these concerns, while walking and cycling also boost fitness and well-being.



#### By 2020 we would like...

...all schools to be models of sustainable travel where vehicles are used only when absolutely necessary and facilities for healthier, less polluting or less dangerous modes of transport are exemplary.

#### This can be achieved through an integrated approach to the:

#### Curriculum

*learning*)

(teaching provision and

#### Campus

(values and ways of working)

Schools use the curriculum to cultivate the knowledge, values and skills needed to address travel and traffic issues and reinforce this through positive activities in the school and in the local area.

Schools review the impact of their behaviour and establish policies and facilities for promoting walking, contracts and partnerships cycling, car-sharing and public transport use to lessen their environmental impact and promote healthier lifestyles.

#### Community

(wider influence and *partnerships*)

Schools use their communications, services, to promote awareness of travel decisions among their stakeholders.

## Here's how one school is tackling the challenge ...

#### Kesgrave High School, Ipswich, Suffolk

Kesgrave High School is a specialist technology college located in the suburbs of Ipswich, but also attracting pupils from surrounding rural villages. A 2005 survey found that of its 1550 pupils, an astounding 360 pupils choose to walk and over half (roughly 800) cycle to school every day.

This has been accomplished through a mixture of encouragement and investment in safe routes to school. A separate entrance for those arriving by car or bus provides peer support for walking and cycling, while a ban on pupil cars and motorcycles ensure older pupils are not driving. Cycling also enables pupils to participate in activities that would be inaccessible without some pupils having their own means of transportation. As the school does not have enough minibuses to transport all pupils, having the majority of pupils cycling means they can use the vehicles for those without bikes or who are disabled. For example, this allows Year 11 pupils to go to nearby sporting facilities for tennis, swimming and badminton for PE.

With over 70 per cent of pupils either walking or cycling, transport safety and security are important issues. Pupils are not permitted to cycle on school grounds and designated cycle parking (sufficient for 800 cyclists) is located apart from the school building. Five staff members, one of whom is specifically tasked with ensuring that cars and buses do not enter the car-free zone, oversee the arrival and departure of pupils.



There has been a significant increase in cycling at Kesgrave's feeder schools. All the primary schools now have travel plans in place and Kesgrave benefits from pupils entering the school with sustainable travel methods already firmly in mind.

As Kesgrave's Deputy Headteacher Brian Hawkins explains, "Kesgrave High School aims to be at the heart of a life-long learning community. Through our commitment to sustainable travel we are making a significant contribution towards reducing carbon emissions while improving the health of our pupils."

## Doorway 4: Purchasing and waste



#### By 2020 we would like...

...all schools to be models of resource efficiency, using low impact goods that minimise (or eliminate) disposable packaging from local suppliers with high environmental and ethical standards, and recycling, repairing and reusing as much as possible.

> Waste, and the throw-away culture that encourages it, can be addressed through sustainable consumption. Schools can reduce costs and support markets for ethical goods and services at the same time.

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#### This can be achieved through an integrated approach to the:

<b>Curriculum</b> (teaching provision and learning)	<b>Campus</b> (values and ways of working)	<b>Community</b> (wider influence and partnerships)
Schools use the curriculum to	Schools review their purchasing	Schools use their
cultivate the knowledge, values	and waste choices in order to	communications, services,
and skills needed to address	reduce whole-life costs, support	contracts and partnerships
sustainable consumption and	local economy, and establish	to promote awareness of
waste through positive activities	policies for reducing, recycling,	sustainable consumption
in the school and in the	repairing and reusing as much as	and waste minimisation
local area.	possible.	among their stakeholders.

CANE

### Here's how one cluster of schools is tackling the challenge ...

#### Warrington schools, Mersey Valley, Cheshire

'Winners or Binners' is a waste-minimisation education programme led by Groundwork Mersey Valley in partnership with 20 primary and secondary schools in an urban area of Warrington. Funded by Warrington Council, pupils visit a landfill site, incinerating plant, or recycling centre to understand the sheer volume of waste produced in their local area and learn about its impact on the environment.

At Culcheth High School, a comprehensive with approximately 1,200 pupils, the project has enriched the delivery of the key stage 3 Geography curriculum. As the school's Head of Geography, Laura Lakin, says, "It gave a new dimension to what is already delivered. Active learning strategies were used and the site visits were fantastic."

Culcheth teachers introduced pupils to environmental issues before an expert from Groundwork led a two-hour session with pupils on sorting waste into piles of items that could be reduced, reused and recycled. The waste that remained provided a valuable focus for discussion about waste minimisation and the 'throw-away culture' that pupils are accustomed to, culminating in a visit to a landfill site.

Groundwork liaises closely with the school's teachers to embed waste issues within the core subjects of the National Curriculum. For example, in Literacy pupils write reports on their trips to the sites, or instructions on how to recycle. In Design & Technology they make recycled paper



for use in posters to raise awareness of recycling and waste reduction around the School (this campaign was driven by the pupils themselves). The school now has paper recycling bins in all classes and offices.

Warrington Council and Groundwork now hope to extend the programme to other local schools while helping past participants to continue with their own waste-minimisation measures. At Culcheth, the next steps include setting up an action group to lobby Warrington Council and the local MP to introduce plastic recycling, and to look into the feasibility of composting food waste in the school grounds.



## Doorway 5: Buildings and grounds





By 2020 we would like... ...all schools to be regarded as living, learning places where pupils see what a sustainable lifestyle means through their involvement in the improvement of school buildings, grounds and the natural environment. Good design of school buildings and grounds can translate into improved staff morale, pupil behaviour and achievement, as well as opportunities for food growing and nature conservation.

- School buildings have the power to teach through the observable use of sustainable design principles, choice of appropriate technologies, interior furnishings and environmental management.
- The design and management of school grounds affects the richness of opportunities available to pupils for learning and play, as well as the school's environmental impact.

#### This can be achieved through an integrated approach to the:

Cumculum
(teaching provision and
learning)

Curriculum

**Campus** (values and ways of working)

**Community** (wider influence and partnerships)

Schools use the curriculum to cultivate the knowledge, values and skills needed to appreciate how the built environment affects well-being and how it impacts on the natural world, and reinforce this through positive activities in the school and local area. Schools review the way their estate influences the behaviour, learning and well-being of pupils and staff, and take steps to enhance interior and exterior spaces, and to use the estate for food growing and nature conservation. Schools use their communications, services, contracts and partnerships to promote the importance of sustainable design and management practices in buildings and grounds among their stakeholders.

## Here's how one school is tackling the challenge ...

**Thomas Tallis School, Greenwich, London** Thomas Tallis School, a mixed comprehensive in South London with 1,500 pupils, has large grounds that are used for recreation, learning and food growing.

A science teacher first had the inspiration to explore environmental issues with pupils when he noted that many lived in housing estates with few opportunities to experience or learn about the natural world. That led to the creation of the Eco-programme, led by a school council subcommittee, the Eco Working Party. Every two years this group leads an environmental audit in which all students, staff and interested parents identify areas for improvement in the school. For example, during PSHE lessons pupils use a blown-up map of the school estate to discuss what they would like to see changed.

One audit identified the need to improve two areas in the middle of the concourse, which had been ignored for years. With support from staff, pupils decided to create a garden that would look attractive and be suited to the specific growing conditions. The school now has a cottage garden with flowers and an herb garden, with the herbs being used in recipes during food technology.

Another audit resulted in pupils deciding to make the pedestrian entrance to the school (built in 1972) more attractive and welcoming, and the school attracted a grant from Learning Through Landscapes and London Electricity to paint the school's gates. Sensing an opportunity, a staff member from the deaf and hearing-impaired unit got his pupils visibly involved in the project. The unit was in its second year at the time, and benefited from new, modern rooms that were unavailable to other pupils, leading to the unit feeling detached from the rest of the school.. But as pupils watched the unit transform the gates into a much brighter entranceway that better reflected the culture of the school, their attitudes towards the unit changed.

Based on this experience the school has applied for grants for further projects. Because pupils are fully involved in such projects, the end results do not attract graffiti or vandalism.

The pupils are now contributing to a travel plan that will allow the school to expand its facilities for walking and cycling, encouraging healthier travel choices and providing a further avenue for exploring environmental issues across the curriculum.



# Doorway 6: Inclusion and participation



#### By 2020 we 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 and creative expression. Schools can promote a sense of community by providing an inclusive, welcoming atmosphere that values everyone's participation and contribution, and challenges prejudice and injustice in all its forms.

#### This can be achieved through an integrated approach to the:

<b>Curriculum</b> (teaching provision and learning)	<b>Campus</b> (values and ways of working)	<b>Community</b> (wider influence and partnerships)
Schools use the curriculum to cultivate the knowledge, values and skills needed to promote inclusion and participation, and reinforce this through positive activities in the school and local area.	Schools review their approach to promoting inclusion and participation, and establish policies that promote a culture of mutual respect and care such that all pupils enjoy their day-to-day experience of school.	Schools use their communications, services, contracts and partnerships to promote the values of nclusion and participation among their stakeholders.

## Here's how one school is tackling the challenge ...

#### **Glebe School, Bromley, Kent**

Pupils at Glebe School in Kent are finding motivation and encouragement grows in their schoolgrounds. The special school serves 180 pupils aged between 11-16 with moderate learning difficulties from the West Wickham area.

In 2003 Glebe developed an area of its school grounds as a wildlife pond, outdoor classroom and walking trail. The project involved school staff, parents and some of the school's more disengaged pupils. Its focus on 'real activities' in a practical setting was so successful at improving the motivation and performance of pupils that it was expanded to include an organic fruit, vegetable and flower garden, which in turn became the Bromley Garden Project (BGP), a joint initiative involving three other local schools.

As the lead school in the BGP, Glebe uses its geography curriculum to ensure all pupils have the opportunity to work in the school grounds, choosing between mending fences, picking up litter, and tending crops in the garden. The school links this practical work to learning about issues such as organic production, food miles, and people's habits as consumers.

Produce grown in the garden is used in the school tuck shop and sold at three local farmers' markets. The markets help pupils build bridges with farmers, stallholders and market staff, and gain valuable skills in organising and running the stall - as well as the satisfaction of serving returning customers. As one year 10 pupil recently said, "I really like working at the farmers' market because we did all the work to get it ready and it was good seeing people buy our stuff." The project has contributed to improved pupil behaviour and has provided a useful means of including pupils of different races, genders and abilities in shared endeavours.

Glebe is now learning



how to establish the garden as a long-running programme with stronger links to its curriculum. Local residents have helped by finding and offering a low-rent allotment to the school, providing opportunities for pupils to learn about gardening and farming methods from members of the community.

As Martin Crabbe from Glebe School puts it, "The Bromley Garden Project has provided a focus for real-world learning that has motivated students to become collaborative learners. It has helped them to develop self confidence and a realisation that they can contribute positively to their communities."



## Doorway 7: Local well-being



#### By 2020 we would like...

...all schools to be models of good corporate citizenship within their local areas, enriching their educational mission with active support for the well-being of the local community and environment.

> With their central locations and extensive facilities, schools can act as hubs of learning and change in their local communities, contributing to the environment and quality of life while strengthening key relationships.

#### This can be achieved through an integrated approach to the:

<b>Curriculum</b> (teaching provision and learning)	<b>Campus</b> (values and ways of working)	<b>Community</b> (wider influence and partnerships)
Schools use the curriculum to cultivate the knowledge, values and skills needed to understand and address local issues and reinforce this through activities school and local area.	Schools consider the challenges facing their local surroundings and community, and identify areas where the school's decisions, practices and services can contribute to local well-being.	Schools use their communications, services, contracts and partnerships to promote awareness of local environmental and social challenges among their stakeholders.

### Here's how one school is tackling the challenge ...

### Bowbridge Primary School, Newark, Nottinghamshire

Bowbridge is a large primary school at the centre of a 9,000-resident housing estate. Of its 500 pupils, 34 per cent receive free school meals and many enter the school below national performance expectations. Bowbridge recognises that the success of its pupils is dependent on the success of the wider community, so since it opened in its present form in 2001 it has embarked on a series of initiatives designed to improve the health, economic well-being and environment of local people.

For example, the school discovered that some pupils were missing a healthy breakfast, making it difficult for them to concentrate during lessons. Headteacher, David Dixon, explains, "We responded by setting up a breakfast club which now provides breakfast to almost 100 pupils a day. This is a practical solution for children whose parents leave early for work, or who are experiencing difficulties at home. It is also fun for children who are surrounded by their friends and signals the importance of healthy eating to the community." Food provided is locally sourced and ethically produced.

The school also discovered that low incomes and lack of energy efficiency in homes were contributing to high levels of fuel poverty in the community. The school talked with pupils about their use of energy and water, and suggested practical measures to save money and reduce their impact on the environment. This popular initiative



was highly effective within families, leading to a reduction in energy usage.

Bowbridge's extended services are designed for parents and the wider adult community, with many free classes provided. The school's relationship with the community is much enhanced by these classes and other initiatives including a community café and library. The school has taken the opportunity to embed sustainability topics into these sessions - for example, by holding a parenting class focusing on cooking which draws the link between healthy eating and children's achievement.



## **Doorway 8: Global dimension**



#### By 2020 we would like...

...all schools to be models of good global citizenship, enriching their educational mission with active support for the well-being of the global environment and community.



Growing interdependence between countries changes the way we view the world, including our own culture. Schools can respond by developing a responsible, international outlook among young people, based upon an appreciation of the impact of their personal values, choices and behaviours on global challenges.

### This can be achieved through an integrated approach to the:

Campus

**Curriculum,** (teaching provision and learning)

(values and ways of working)

Schools use the curriculum to cultivate the knowledge, values and skills needed for pupils to act as globally aware citizens, and reinforce this through positive activities such as school partnerships and exchanges. Schools review the extent to which their management and purchasing choices affect people and the environment globally, and establish policies that reflect a commitment to global citizenship. **Community** (wider influence and partnerships)

Schools use their communications, services, contracts and partnerships to promote respect for the well-being of other cultures, countries and the global environment among their stakeholders.

### Here is how one school is tackling the challenge ...

### Alderbrook Primary School, Wandsworth, London

Alderbrook is located in Wandsworth, an ethnically diverse area of southwest London that is undergoing a period of regeneration. Of its 220 pupils about 60 per cent are from minority backgrounds and 40 per cent speak English as an additional language. Placing a global dimension in its curriculum has not just made learning more interesting and relevant to pupils, it has also helped pupils to appreciate each others' cultural backgrounds and differences.

Issues such as justice, human rights, interdependence and sustainable development feature prominently in Alderbrook's teaching. So when a local Ghanaian woman offered to broker a link with a school in her hometown of Akropong-Akuapem, the school readily accepted. Photographs of the Ghanaian children working on their garden inspired Alderbrook pupils, who had noticed that their own garden had become neglected. Using a Global Curriculum Project grant and an eco-schools grant from Wandsworth Borough Council, they established a vegetable plot. The whole school now contributes by placing their fruit and vegetable waste in a large compost bin for use in the soil. With a much larger garden that suits their rural setting, the children in Ghana use compost from a nearby poultry farm.

The experience of growing food has helped pupils understand the problems faced by farmers in developing countries, and to appreciate the value of the fair trade movement. While



Alderbrook pupils grow carrots, beans and tomatoes, their peers in Ghana grow plantain, cassava and gourds, sparking a discussion about seasonal changes, climate and vegetation in different parts of the world.

Caring for the vegetable plot directly supports the school's ethos of working as a team and caring for people and for the environment. And the links to Ghana underline the school's commitment to building cross-cultural understanding and respect within the community, and beyond.

The confidence of a number of pupils has increased, notably those with an affinity for practical work. One boy commented that he "took part in the project because he wanted to be talented at something and now he knows he is." Home-school ties have emerged as gardeners among the families and carers of the pupils have been attracted into the project. Building on its success, the school is currently applying for a further grant to invite a sculptor to help pupils design a work of art for the garden.

# Section 5: How government and others can promote sustainable schools

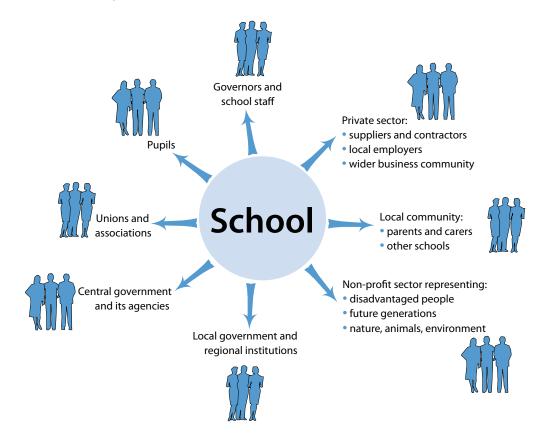
### Helping appropriately

- 50. Many people and organisations are interested in sustainable development, and so have an interest in promoting sustainable schools. But we all recognise that schools are busy front-line providers with an important job of education. Support therefore needs to be offered in ways that respect schools' professionalism in raising achievement standards and focusing on the needs of their pupils.
- 51. Schools are also becoming more autonomous, influenced by government policy but also free to develop their own ethos and approach independent of state control. This "new relationship with schools" is outlined in Table 3.
- 52. With funding now mainly devolved to the frontline, schools have greater scope to direct their funding and resources towards activities that promote sustainable development. In fact they will need to do this in order to meet the expectations set out in this paper, and we encourage them to consider this opportunity carefully. Putting time and money into the areas highlighted for action in this paper will benefit the school and beyond, and is a fully justified use of school resources.
- 53. Some of the stakeholders associated with schools are highlighted in Figure 3. All of these groups can work together indeed need to work together in order to help the education system deliver sustainable schools.

	· · · · · · · · · · · · · · · · · · ·
Old mindset	New mindset
Central planning	Strategic framework, local autonomy
Ring-fenced funding	Streamlined, delegated budget
Top-down prescription	Bottom-up / peer-to-peer innovation
Multiple bidding, planning and reporting requirements	Single conversation, single development plan
Communicate everything	Self-service documentation and web sites
Detailed inspection	Light-touch inspection based on self-evaluation

### Table 3: The Government's new relationship with schools

### Figure 3: Some of the key stakeholders in schools



54. Our joint task is to tap into the enthusiasm for sustainable development evident in many parts of the education world, turning a challenge that may seem overwhelming at times into a force for innovation and improvement in schools. There is an opportunity for everyone to exercise a leadership role here.

### **Pupils**

55. The most important participants in sustainable schools are pupils. Not only do they learn a great deal by being involved in sustainable schools activities, but they can help to shape the way they are prioritised and approached. Decisions about what to focus on, what levels of aspiration to set, how to publicise and celebrate successes - all of these areas can and should be influenced by pupils. Pupils can also take their own initiative, querying school

practices they believe should be changed, and generally ensuring the school is alive to the issues. Sharing responsibilities with pupils can help to increase their confidence and self-esteem.

### Governors and school staff

56. Governors can play an important role in supporting progress towards sustainable schools, from the initial impetus to ongoing ideas and encouragement. They can assess the school's performance in key sustainability areas, and help formulate the case for improvement. They can urge the head teacher to set ambitious, motivating targets, and review progress on a regular basis. Their outside contacts and knowledge allow them to channel expertise into the school, for instance from organisations that have prior experience of sustainable development.

#### **Sustainability Governors Network**

As part of its support for schools, Worcestershire County Council has established a network of governors to help schools learn about and become involved with sustainable development. The network, which so far covers 57 per cent of schools in Worcestershire, is designed to support governors who have been nominated by their school to champion good practices. The governors receive a newsletter with information on resource materials,



key contacts at the County Council and funding opportunities. Biannually, a half-day seminar is hosted on environmental themes such as energy conservation, with practical ideas for application in schools.

The enthusiasm felt by the governors is often passed on to school staff, acting as a catalyst for new initiatives and generally providing teachers with room to make sustainable development part of their work. As one of its members, Caroline Palethorpe from Tenbury Primary School, says, "At Tenbury, the pupils make positive contributions to the sustainability of the School and learn the importance this will play in their adult life."

- 57. Head teachers and senior managers set the tone for others to follow, and their attitudes towards sustainable development are crucial. Strong leadership is essential if the shared vision of sustainable schools is to be communicated effectively to all school staff, pupils and wider stakeholders. Very few schools will become successful at sustainable development without their direct enthusiasm and support. As a strategic school improvement agenda, sustainable development deserves serious attention from school leaders and needs to be resourced adequately.
- 58. Teachers and their assistants can explore links between their subject areas and global issues such as climate change, poverty, waste, injustice and insecurity, motivating their pupils in the process. For

example, Maths can be taught using data from bird observations or climate change statistics, and linked to project activity in the school. English can be taught through world literature, exposing pupils to different perspectives, and challenging their own attitudes and behaviours. Projects outside the classroom, in the school grounds and surroundings, can provide a focus for linking subject areas, boosting pupil confidence and life skills as well as contributing to the local quality of life.

59. The wider workforce - those involved with the administration of the school, its facilities, grounds, catering and safety - have an opportunity to influence the sustainability of their schools through the introduction of enlightened policies and practices. For example, the most efficient

schools use three times less energy than the least efficient schools, even when occupying similar types of buildings. That represents a significant reduction in costs. Other leverage points for sustainable development include school food, travel planning, purchasing and waste policy, as well as facilities to ensure the school is safe and accessible for all.

### **Local community**

60. School is one of many influences in children's lives, with family life, peer influence and the influence of cultural norms being equally, if not more significant. Parents and carers therefore have an opportunity, and a responsibility, to encourage a sustainable lifestyle in the home, garden or wherever children and young people are growing up so that messages received at school are reinforced by life outside. The converse is also true: parents and carers can encourage schools to take a more active and enlightened approach to sustainability so that their own values are not undermined.



61. Some of the best advice about sustainable schools undoubtedly flows from the experiences of other schools. There is a wealth of good practice to draw on in England, not only from the schools that have dedicated time to sustainable development over many years, but from many less well-known schools that have achieved exciting results with limited capacity and investment. When local schools work together, good practices can be co-created and potentially shared more widely in the local area among existing networks and Education Improvement Partnerships.

### Central government and its agencies

- 62. The DfES' primary role is to articulate a common set of aspirations around the concept of sustainable schools, as we are doing in this paper. This vision, necessarily high-level, is for others to turn into reality inside schools and their surrounding communities. Although our expectations of how schools will be performing in 2020 are challenging, we believe they can and must be achieved in the interests of current and future generations.
- 63. The DfES is committed to applying the same principles to its own operations and impacts on society. Its 2006 Sustainable Development Action Plan sets out a series of challenging commitments across the five DfES sites and in a range of policy areas. Progress with the Plan will be reported in December 2006 and scrutinised by the Sustainable Development Commission.

- 64. A number of other government departments have an interest in sustainable schools:
- The Department of Environment, Food and Rural Affairs (Defra) works for the essentials of life - food, air, land, water, people, animals and plants, weaving together economic, social and environmental concerns in the pursuit of sustainable development. To that end, Defra has a keen interest in helping schools to promote sustainable development at home and across the world.
- O The Home Office aims to make a difference in the real world, helping to build a society in which people are safer from crime and there is equality and fairness for all. Schools have a major opportunity to help children grow into active citizens with the motivation, skills and confidence to speak up for their communities, say what improvements are needed and work with partners on shared solutions.
- O The Office of the Deputy Prime Minister aims to create prosperous, inclusive and sustainable communities for the 21st century, places where people want to live, that promote opportunity and a better quality of life for all. It has a particular interest in the role of schools in supporting sustainable communities and showcasing sustainable buildings.
- The Department for International Development (DfID) manages Britain's aid to poor countries and works to get rid of extreme poverty. It has a strong interest in

raising people's awareness of sustainable development and other international issues, and has long supported the work of development education centres.

- The Department of Health (DH) aims to improve the health and well-being of people in England. As a partner in the Healthy Schools programme, the DH has a particular interest in pupil's well-being and fitness in schools, and more broadly in communities.
- The Department of Transport (DfT) oversees the delivery of a reliable, safe and secure transport system that responds efficiently to the needs of individuals and business whilst safeguarding our environment. It has a particular interest in school travel planning and transport infrastructure.
- The Department of Trade and Industry (DTI) works to create the conditions for business success and help the UK respond to the challenge of globalisation. The DTI and DfES are committed to supporting renewable energy projects in schools and funding has been made available from the 2006 Budget to support microgeneration schemes in schools.
- **65.** A number of government agencies also have an important role to play:
- Ofsted is the inspectorate for children and learners in England. It contributes to the provision of better education and care through effective inspection and regulation. We encourage Ofsted to develop its capacity to highlight and reward schools' efforts to become

sustainable, and welcome its decision to conduct a focus survey on sustainable schools in 2006 to explore how well sustainable development is being taught and practised in schools, as well as its impact on school improvement. This builds on a smaller study published by Ofsted in 2003<sup>4</sup>, and a longitudinal study initiated with the DfES and University of Reading in 2005.

# Ofsted's 2003 study: 'Taking the first step forward...'

"In the majority of schools, where [school] councils are playing an increasing role in raising issues and effecting change, ESD has given this process a clear focus. More generally, teachers remark that where pupils feel responsible for their environment, incidents of vandalism have decreased."

'Taking the first step forward...toward an education for sustainable development: Good practice in primary and secondary schools', HMI 1658 Ofsted, 2003

The Qualifications and Curriculum Authority (QCA) maintains and develops the National Curriculum and associated assessments, tests and examinations; and accredits and monitors qualifications in colleges and at work. We encourage the QCA to continue to embed sustainable development within the National Curriculum, the planned review of GCSE and 'A' levels, and the development of 14-19 diplomas. Through its 'Futures' programme, we welcome the QCA's decision to think through the forthcoming influences on the National Curriculum, and urge it to give full consideration to the goals of the UK sustainable development strategy.

### QCA's Futures programme

The Futures programme informs the curriculum and assessment development work of the QCA. Among other things it has identified that helping learners to look after the needs of future generations as well as the present should be one of the aims of a future curriculum. It has also thrown up the need for the curriculum to encourage young people to take responsibility for themselves, for others and for the environment by focusing on issues such as social and cultural change, globalisation and sustainability. By building on learners' own lives and experiences, the curriculum should stimulate interest and encourage participation in community life.

 $\mathbf{O}$ The Training and Development Agency (TDA) raises children's standards of achievement and promotes their wellbeing by improving the training and development of the whole school workforce. Schools need teachers who are knowledgeable and confident about sustainable development in order to inspire their pupils and school communities. The TDA can and should ensure that teachers are prepared for this challenge. We encourage the TDA to raise the profile of sustainable development substantially in its work, including its support for workforce remodelling and extended schools.

<sup>4 &#</sup>x27;Taking the first step forward...towards an education for sustainable development: Good practice in primary and secondary schools', Ofsted, 2003

 $\bigcirc$ The National College for School Leadership (NCSL) provides career-long learning and development opportunities, professional and practical support for England's existing and aspiring school leaders. We encourage the NCSL to build the capacity of school leaders to meet our 2020 expectations. Good leadership is frequently cited as a critical ingredient of sustainable schools success. We welcome NCSL's decision to include an environmental module within its Certificate of School Business Management, and look forward to seeing sustainable development embedded more generally across its programmes and support for head teachers.

# NCSL's learning module on environmental management

A common reaction from candidates in NCSL's new environmental module in its Certificate in School Business Management (CSBM) is, "Why can't all the modules be like this one?" The module adopts a wholeschool philosophy that links physical and human resource management with learning and teaching, the core activity of schools. In this way the module helps school business managers to help their schools to practise what they teach. Since its introduction, there has been a noticeable increase in the number of case studies produced by candidates that focus on environmental topics, with many believing that the module should be a mandatory unit in CSBM.

Partnerships for Schools (PfS) is the delivery vehicle for the Government's Building
 Schools for the Future (BSF) programme
 - a large-scale programme of rebuilding



and renewal of secondary schools to ensure they deliver a 21st century vision of education. All of its projects should demonstrate high standards of sustainable design in their buildings, grounds and overall landscape impact. As long-term features of the communities they serve, new and refurbished schools should act as exemplars of sustainable design to their occupants and wider community.

The Specialist Schools and Academies Trust (SSAT) exists to give practical support to the transformation of secondary education in England by building and enabling a world class network of innovative, high-performing secondary schools in partnership with business and the wider community. We welcome SSAT's commitment to promote sustainable development among its network of nearly 3000 schools, and its decision to introduce environmental management systems within its own offices.

# Local government and regional institutions

- 66. Local government's role in planning, organising and quality assuring children's services puts it in a unique position to promote sustainable schools, with knockon benefits across its range of services. For example, thoughtful introduction of eco-efficient practices in schools can reduce spending on waste services, transport, and building and maintenance costs; and schools that contribute to local regeneration and well-being projects directly support the goal of creating safer, stronger, cleaner and greener (sustainable) communities. Local authorities have numerous opportunities to engage schools through their service provision, governor development, financial support and other functions, including the commissioning of school building projects. We urge local authorities to explore this area as a priority and seek ways to capture the many benefits.
- 67. More broadly, sustainable schools directly support the ideal of sustainable communities - an increasingly prominent goal in the apparatus of local government, to be featured in Local Strategic Partnerships, Local Area Agreements and Sustainable Community Strategies. It is difficult to envisage a sustainable community that is not integrally supported by its local schools.

### The view from Hampshire

"Sustainable development impacts on areas as diverse as healthy schools, energy and water conservation, school travel plans, building and landscape design, biodiversity, purchasing, waste and recycling, climate change, curriculum advice and outdoor education. In order to support schools effectively we have established a Sustainable Schools Forum which allows departments to share expertise and coordinate their activities with schools. Our aim is to help schools see beyond individual projects to the wider picture of sustainability, and we welcome government interest in this work."

Anne Green-Wilkinson, Hampshire County Council



### **Bradford Sustainable Catering Service**

Bradford schools attest that sustainably sourced lunches are fresher, more nutritious, and help deliver measurable health benefits, and that this has been accomplished without raising prices. In fact the meals produced by Bradford's Education Catering Service (ECS) remain some of the nation's cheapest at £1.25 per day, despite most of the food ingredients being sourced locally.

Roger Sheard, the business operations manager at ECS, explains, "Local sourcing also made it easier to reduce the amount of processed food on the menu, allowed us to move more rapidly to a simpler and more standardised healthy menu, made it possible to cut down on how much packaging we had to deal with and allowed us to simplify delivery arrangements in ways that would provide smaller deliveries better suited to primary schools."

The quality of the food, and knowing where it comes from, has attracted more customers, raising uptake to 58 per cent by June 2005. Many schools have also developed interesting curriculum links to issues like farming, seasonality, food preparation, and wider environmental impacts arising from the food chain (such as packaging wastes and road congestion). The fact that the issues come to life every day in the dining hall give added weight to their efforts.

Adapted from 'Double Dividend? Promoting good nutrition and sustainable consumption through healthy school meals', Sustainable Consumption Roundtable and Soil Association, 2005, p. 51-55

A number of English regions have 68. established networks to share good practice and otherwise facilitate sustainable development in schools, colleges and universities. They are an essential response to the diversity of stakeholders contributing to sustainable development in different parts of the country. Regional institutions like Government Offices, RDAs and **Regional Assemblies and Roundtables can** support these networks and build bridges to key regional strategies and initiatives around children's services, education and skills, building on their convening power and familiarity with central government priorities. They can lead the way in demonstrating how sustainable development can be made a core concern of children and young people's services.

### Unions and subject associations

69. Many people who work in schools are well disposed to the values of sustainable development, which can contribute added purpose to their day-to-day activities. Schools that recognise the energising effect of sustainable development can create more welcoming, enjoyable conditions for their staff with positive impacts on morale, productivity and occupational health - areas of interest for unions and representative bodies.

> Every subject has a role to play in equipping young people with the values, knowledge and skills they need in order to prosper in a world full of uncertainty and change. A curriculum designed to achieve this would place pupils at the heart of the learning process, focused on issues of

relevance to their present and future lives. The principles of sustainable development provide a powerful context for both curriculum and teaching innovation towards more meaningful, connected learning provision. Through their extensive memberships, subject associations have an opportunity to lead this process.

### **Valuing Places Project**

The Geographical Association's 'Valuing Places' project is a staff development-led curriculum development project exploring how teaching about places in key stages 2 and 3 can develop pupils' understanding of global interconnections. Viewing globalisation as 'out there' and beyond our control is dangerous, leading pupils to think of it as an uncontrollable force that no one can influence. The Valuing Places project counters this perception by helping pupils to find a global presence in their local areas.

As Stephen Pickering, its West Midlands regional coordinator, explains, "We mapped out a huge range of ways in which UK-based school children were linked to distant places through economics, trade, culture, music, travel...the list goes on. In discussing our ideas and theories we kept coming back to the notion that for children to fully understand more distant places they needed to have an understanding of their own local area - and in creating this, to gain a sense of personal identity."

#### **Private sector**

70. Suppliers and contractors to schools, including those involved in the construction and management of school buildings, can contribute to sustainable development by ensuring that their goods and services demonstrate high environmental standards that symbolise energy efficiency, waste minimisation and conservation of natural resources. They can show their commitment further by ensuring that they offer decent terms and conditions for their workers, and by asking their own suppliers to meet similarly high standards of business.

### **Scottish & Southern Energy**

"Renewable energy technologies provide a useful way to educate young people about how energy is produced and used, how it affects the climate and what solutions are potentially available to us. Seeing and using renewable energy in a school is more inspiring than learning about it second hand. It can also help to promote awareness about energy efficiency and climate change in the community."

Keith MacLean, Head of Sustainable Development, Scottish & Southern Energy



- 71. Local employers can exert a powerful influence on schools keen to see their leavers get established in careers. If employers made it known that they were seeking applicants with knowledge and skills in sustainable development this would be a significant signal indeed. Many larger employers already do so, not always out of a desire to build a better society, but because the skills of sustainability are crucial to success in volatile, international markets where innovation and competitiveness are key. Sustainability is saving firms huge sums of money through eco-efficiency, as well as opening doors to new markets and relationships.
- 72. The wider business community (i.e. national and international business) can demonstrate its commitment to corporate responsibility by supporting sustainable schools. Companies of any size can offer assistance to schools wanting to establish projects in the school or local area. Their staff can transfer know-how to schools through volunteering programmes, and they can invite schools to make use of their own, often extensive, facilities. They can also connect schools to additional sources of support and partners. Companies can expect to benefit in numerous ways including improved staff morale and corporate reputation.

### **HSBC and Beaverwood School for Girls**

Beaverwood School for Girls is a successful secondary school in Chislehurst with pupils from a wide range of backgrounds. As one of four schools participating in HSBC's programme of investment in 'carbon neutral' schools, it is working with the company to find bespoke solutions to its energy efficiency and renewables needs, including solar PV panels and a ground source heat pump for a planned school extension. Collaboration with the private sector has been positive for the school, providing it with the impetus and resources to achieve real improvements in their environmental perfe



achieve real improvements in their environmental performance.

As Dame Mary Richardson of the HSBC Education Trust, puts it, "We want to help schools reduce their impact on the environment, save money and include environmental education in the curriculum. Acquiring knowledge, understanding and skills during their formative years, including in this very important area, helps young people become confident, ambitious and responsible adults."

### Non-profit sector

73. The non-profit sector has a leading role in sustainable development, particularly environmental, development and social justice organisations, animal welfare bodies, youth groups and voluntary and community organisations established by local people. A number have a successful track record of working with schools and young people; some are dedicated to doing so, often with exceptional results. The nonprofit sector has a great deal of expertise to offer schools but often relies on funding being made available from public and private sources. Creative partnerships between schools, non-profit organisations, government and business are an obvious way forward.

### Conclusion

74. We would like all these stakeholders to work together towards a common vision of sustainable schools. We believe that in this way schools will receive the encouragement and support necessary to reach the 2020 expectations set out in this paper.

### Section 6: How to respond

This paper sets out the Government's approach to promoting sustainable schools. We now welcome your views about the paper, in particular your responses to the following three clusters of questions:

- whether you are clear about the vision set out in this paper, clear about your own roles and responsibilities in helping to achieve it, and the degree to which you are doing this already in practice
- whether your school or the schools you work with have the capacity to establish and follow a clear plan to become sustainable schools; and if not your thoughts on how that capacity should be built
- whether you feel the benefits of sustainable schools will sell themselves or whether external incentives are required; if the latter, what form these should take in order to recognise and reward schools appropriately.

The easiest way to respond is via our consultations web site at: www.dfes.gov.uk/consultations

Here you will find this consultation paper, together with an online response form. If you prefer, you can download the response form and send it to us by post or email as follows:

Consultation Unit Area 1A, Castle View House East Lane Runcorn Cheshire WA7 2GJ

### Email: sustainableschools.consultation@dfes. gsi.gov.uk

Please make sure we receive your responses by Friday 1st September 2006.

For further advice and guidance on the consultation please contact:

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Email: david.serrant@dfes.gsi.gov.uk

# Section 7: Further resources

Sustainable schools web service (from 9 June 2006): www.teachernet.gov.uk/sustainableschools **Government information on sustainable development:** Web portal: www.sustainable-development.gov.uk Independent advisor and watchdog: www.sd-commission.gov.uk Indicators: www.sustainable-development.gov.uk/performance/sdiyp.htm DfES policy and action plan: www.dfes.gov.uk/aboutus/sd Other useful sites: Council for Environmental Education: www.cee.org.uk Development Education Association: www.dea.org.uk Eco-schools: www.eco-schools.org.uk Extended schools: www.teachernet.gov.uk/wholeschool/extendedschools Every Child Matters: www.everychildmatters.gov.uk Global gateway: www.globalgateway.org.uk Growing schools: www.teachernet.gov.uk/growingschools Healthy Schools: www.wiredforhealth.gov.uk International schools: www.britishcouncil.org/education/schools/award.htm Learning to Last (further education portal): www.learning2last.org QCA's education for sustainable development web site: www.nc.uk.net/esd

### **Research:**

'Taking the first step forward...toward an education for sustainable development: Good practice in primary and secondary schools', HMI 1658, Ofsted, 2003

'Whole-school approaches to sustainability: An international review of whole-school sustainability programs,' Henderson, K. and Tilbury, D. Report prepared by the Australian Research Institute in Education for Sustainability (ARIES) for The Department of the Environment and Heritage, Australian Government, 2004

'A National Review of Environmental Education and its Contribution to Sustainability in Australia: School Education', Tilbury, D., Coleman, V. and Garlick, D. Australian Government Department of the Environment and Heritage and Australian Research Institute in Education for Sustainability (ARIES), Canberra, 2005

*'Environment-based Education: Creating High Performance Schools and Students',* The National Environmental Education & Training Foundation, Washington, DC, 2000

### Sustainability considerations



in India.

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the EMAS and ISO 14001 environmental management standards. A lithographic print process was employed using vegetable inks throughout.

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Climate Care, we have offset the CO2 emissions arising from all printing and distribution, consultation events, and response routes. The money used to offset these will go towards sustainable energy projects, like the production of energy efficient cooking stoves for schools

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