

# Doorways: a sustainable schools assembly series

## *for secondary school headteachers and school leaders*

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### Introduction

Headteachers and school leaders 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 the enthusiasm and support of headteachers and school leaders.

Schools can play a part in delivering sustainable development, and in doing so improve their performance by other measures. Children's interest in the issues can translate into higher standards of achievement and behaviour. Schools that consume less energy, water and materials, and produce less waste, are simply more cost-efficient. Sustainability opens up many avenues for school-community cooperation with practical and mutual benefits. These are important advantages that help meet our aspirations for schools and young people in this country.

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.

Sustainable development means much more than recycling bottles or giving money to charity. It is about inspiring people in all parts of the world to find solutions that improve their quality of life without storing up problems for the future, or impacting unfairly on other people's lives. Schools can understand sustainable development as **a commitment to care**:

- care for oneself (our health and well-being)
- care for each other (across cultures, distances and generations); and
- care for the environment (near and far).

Schools are becoming aware of sustainable development through different routes and at different speeds. Some are starting on 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 whole-school approach, defining what they mean by a sustainable school making this part of everything they do.

The range of concerns covered by sustainable schools extends from areas like food and travel that affect the immediate well-being of pupils, to wider issues like local quality of life and global justice. A common idea runs through all these issues: the need for a long-term, joined-up approach to addressing children's needs now and in the future – truly the inspiration of [Every Child Matters](#) (DfES, 2005).

In order to help schools draw together these issues, and link them to existing agendas, the DfES has developed a [National Framework for Sustainable Schools](#) (2006) comprising eight sustainability 'doorways' or areas that schools should consider when thinking about their sustainability performance.

The doorways are: food & drink, energy & water, travel & traffic, purchasing & waste, buildings & grounds, inclusion & participation, local well-being, and the global dimension. These different ways of approaching the task of building a sustainable school 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.

Each doorway is also associated with a recommendation on what schools should be achieving by 2020. Though Government is laying down its long-term aspirations in this way, it is encouraging schools to define their own routes and approaches to success without prescription.

**These assemblies are offered as tools for headteachers and school leaders to introduce the Framework's doorways and recommendations, and for opening a dialogue about these issues with pupils and staff. These assemblies are not intended to be simply an interesting intellectual discussion, but a prelude to the school taking action or scaling up its efforts towards sustainable development.**

We recognise that each doorway is broad, and that our recommendations can be addressed in a many ways. However, for the purpose of practicality, these assemblies focus on *just one* aspect of each the doorways. We hope that they will help you capture the interest and imagination of your school and catalyse efforts to address the challenges ahead.

About the assemblies

Guidance on nine assemblies is provided to help headteachers and school leaders present secondary school assemblies for 50 – 200 pupils. **The guidance may need to be modified for presentations to younger audiences in primary schools, and for assemblies that involve larger or smaller numbers of pupils.** They have been designed to last about 15 – 20 minutes, although they can easily be extended or reduced. All the assemblies follow a standard format:

### Assembly name

#### Learning outcome

Describes what the pupils will be able to do having taken part in this assembly, with particular emphasis on the National Framework for Sustainable Schools.

#### Preparation

Indicates what the assembly leader needs to know about the Government's expectations for schools. This section also includes links to selected relevant resources that can offer additional background information (if needed).

#### Resources needed

Lists what is needed to carry out the assembly. Many of the assemblies suggest the use of ICT equipment. Suggestions are offered for how to run these assemblies if this equipment is not available.

#### Procedure

A suggested step-by-step guide to carrying out the assembly. Topicality can enliven assemblies. It is recommended that assembly presenters consider how current

events that relate to the topic – in or outside school – can be used to enhance the assembly.

#### Reflection

Questions are offered that can be used to encourage pupils to reflect on how they might take their ideas forward through further learning or action.

#### Further links

Suggests additional resources that pupils and teachers can use to further explore the doorway theme.

### Assemblies at a glance

Number	Title	Doorway
1	<a href="#">Making our school a sustainable school</a>	Overview
2	<a href="#">Getting smart about fish</a>	Food & drink
3	<a href="#">Saving energy and water</a>	Energy & water
4	<a href="#">Sustainable travel to school</a>	Travel & traffic
5	<a href="#">Make fair trade your habit</a>	Purchasing & waste
6	<a href="#">A sustainable school estate</a>	Buildings & grounds
7	<a href="#">Decisions in our school</a>	Inclusion & participation
8	<a href="#">Happiness and well-being</a>	Local well-being
9	<a href="#">Climate chaos</a>	Global dimension



## Assembly 1: Making our school a sustainable school

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### Learning outcome

Pupils will:

- understand what is meant by 'living sustainably' and a 'sustainable school'

### Preparation

The Government has set out its UK Sustainable Development Strategy, detailing its long-term aims ([Securing the Future](#), 2005). Schools have an important role to play and so the DfES has set out a National Framework for Sustainable Schools within which schools are free to develop their own distinctive ethos and approach.

The Government wants to help people make the right choices now in order to secure the future of our children and our children's children. 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 all 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.

The education we provide to help children understand the changes they will see in their lifetimes is not a substitute for action by adults now. But at the same time, the problems are real, and we must do everything within our power to help children feel confident about finding solutions.

The Chief Adviser to London Schools, Tim Brighouse, says our task is to help children and young people "take responsibility for their own futures." But how do we actually do this? How do we help children become part of the solution to global challenges, rather than part of the problem as we view ourselves?

Clearly school is only one of numerous situations experienced by children, yet it is an important one that many children recall throughout their life. For schools to be successful in empowering pupils to make a difference they need to ensure several things are in place:

- Children gain first-hand experience of identifying the challenges and finding solutions in the school, local area and at home – otherwise the issues will remain too abstract and confidence will not be built.

- Teaching about sustainable development is mirrored by actions within the school, otherwise we risk producing a generation of cynics.
- Parents and the wider community are involved at an early stage of initiatives, particularly in areas like school food and travel where their own behaviour may need to change.

The National Framework for Sustainable Schools offers schools a series of doorways (entry points or areas of focus) onto sustainable development where they can develop or deepen their practices. These doorways have been selected because the issues that have distinctive causes, effects and interventions. But they are all related, and an integrated approach offers greater potential benefits to the pupils, school and local community.

**For more information:**

[Sustainable Schools area of TeacherNet](#)

A variety of resources may be downloaded or ordered from TeacherNet including a [poster](#) outlining the National Framework for Sustainable Schools.

[Resources needed](#)

Download the Assembly 1 photos from the [WWF Learning](#) website.

**Note that these are copyright protected and that they may only be used for educational purposes.**

1. Clearing of tropical rainforest for plantations, Sumatra, Indonesia. Credit: © WWF-Germany/M. Radday
2. Catch on the deck of a deep sea fishing trawler North Atlantic Ocean Project. Credit: © WWF-Canon / Mike R. Jackson
3. Child suffering from malnutrition in a hospital. Credit: © WWF-Canon / Elizabeth Kemf
4. Irrigation of a strawberry field Spain. Credit: © WWF-Canon / Michel Gunther
5. Spraying strawberry field with pesticides Spain. Credit: © WWF-Canon / Michel Gunther
6. Cooling towers, coal-fired power station, North Rhine, Westphalia, Germany. Credit: © WWF-Canon / Andrew Kerr
7. Wind turbines, Victoria, Australia. Credit: © WWF-Canon / Tanya Petersen
8. Cracked, dry earth. Credit: © WWF-Canon / Adam Oswell
9. Traffic at a crossroad, bicycles and taxis. © WWF-Canon / Michel Gunther
10. Municipal collected paper to be recycled, Uppsala, Sweden. Credit: © WWF / Kjell-Arne Larsson
11. The Ivory Park EcoCity, just outside Johannesburg, South Africa. Credit: © WWF-Canon / Chris Marais
12. Young people playing, boy and girl on bicycle in South Africa. Credit: © WWF-Canon / Martin Harvey
13. Queues of refugees waiting for emergency food rations. Chiteta, Angola. Credit: © WWF-Canon / Jo Benn

Depending on the number of pupils at the assembly, the photos may be printed or projected using a digital projector.

You will also need:

- Flipchart and marker pen or interactive whiteboard
- Three globes or three pictures of the Earth

## Procedure

### **Introduce the headline issues.**

- Explain that since the 1960s there has been a growing realisation that the way of life of many people is making too high demands on the Earth. We are living beyond the means of the planet to sustain us. The effects can be seen everywhere.
- Invite three pupils to come to the front of the room. Give them each one globe (or a picture of the Earth). Ask the pupils in the audience what they think these represent. Explain that if every person on the planet used as many resources and produced as much waste as the average person in the UK, it would take three planets to provide all the resources and assimilate all the wastes. What happens when we're using resources and generating waste at this unsustainable rate?
- Show pupils photo 1 of a tropical rainforest clearing in Indonesia and photo 2 of a trawler catch from the North Atlantic to illustrate deforestation and over-fishing which are taking place around the world.
- Explain that more than 800 million people are suffering because they do not have enough to eat. Show photo 3 which shows a malnourished child in a developing country.
- Ask pupils what they think these problems have to do with them or their school. Record their ideas using an interactive whiteboard or flipchart.

### **Explain what is meant by 'sustainable development'.**

- Explain that governments have been trying to address these and other global problems through a new approach to the ways we manage natural resources, businesses and government and fairly address peoples' needs. This new approach is called 'sustainable development'. There are many definitions and interpretations of sustainable development. According to the '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.'
- Put over the point that we must all find ways to contribute to sustainable development – we all have a part to play. Young people need to understand that not taking action will bring its own consequences and so new ways must be found to change our lifestyles if we are to secure a sustainable future.

### **Explain what is meant by a 'sustainable school'.**

- Introduce the aim of making your school a sustainable school and why this will make it a better place for everyone in the school. A sustainable school is guided by a commitment to care: care for ourselves, care for others (across cultures, distances and generations), and care for the environment (both locally and globally).
- Tell pupils there are eight key areas or 'doorways' through which we can start to build a sustainable school and briefly describe each of these

### **Introduce the eight sustainable schools doorways:**

- **Food & drink** One way we can easily contribute to living more sustainably is to buy as much of our food as possible locally. This cuts environmental pollution caused by transporting goods into and around the UK. We can buy

food that is in season, for instance English strawberries in June and not imported Spanish strawberries in winter. Show photo 4, irrigation of a strawberry field in Spain. We can buy more organic food too. Show photo 5, crop pesticide spraying.

- **Energy & water** There is potential to make major savings in our energy and water use in school. The use of renewable energy could provide some or even all of the school's energy supply. Show photo 6, cooling towers at a coal-fired power station, and photo 7, a wind turbine. Water shortages are now a major problem in parts of the UK. We understand how this affects people, but we often overlook the negative effects that overuse of fresh water has on soil and wildlife. Show photo 8, cracked earth.
- **Travel & traffic** If everyone in school travelled to school by walking, cycling or public transport this would lead to less traffic and pollution and fewer road accidents. During term time cars account for 16 per cent of early morning traffic (this fact could be omitted for primary pupils). Show photo 9: a busy road junction.
- **Purchasing & waste** We can recycle our waste and even better we can reduce our waste by repairing and reusing as much as possible. Show photo 10: huge piles of paper collected for recycling. It's also important for us to think before we buy and try to make sure that the people who make or grow the things we buy get a fair price for what they do.
- **Buildings & grounds** There are many ways we can improve our school buildings and grounds. An easy thing is purchasing building lumber or wood products – like classroom furniture – that are made from wood that has been cut from sustainably managed forests. These products have an FSC (Forest Stewardship Council) quality mark. There are also environmentally friendly paints that do not release volatile organic chemicals as they dry. In some places, entire communities are built using these and other sustainable technologies. Show photo 11, an eco-village in South Africa, which shows that sustainable buildings also make pleasanter homes for the community.
- **Inclusion & participation** To create a sustainable school we all need to value cultural and religious differences, value everyone's participation and contribution, and keep a welcoming atmosphere.
- **Local well-being** In a sustainable school the well-being of everyone in the school is important, as well as the well-being of the local community and local environment. Show photo 12, a happy boy and girl playing.
- **Global dimension** There is a global dimension to all our lives, for instance the food we eat and clothes we wear link us to people, environments and economies all over the world. Global poverty is a major challenge that could impact on all our lives in the future. One in five of the world's population lives in extreme poverty. Ten million children die before their fifth birthday, most of them from preventable diseases. Show photo 13, queues of refugees waiting for emergency food rations in Angola.

By our own understanding and actions we can all help make a difference and become good global citizens.

### Reflection

- Review the list that pupils generated at the start of the assembly. Which of these have links to actions that could be taken at school
- It's important to emphasise that pupils can become part of the solution to the challenges of securing a sustainable future for everyone – and especially for young people. The best places to start are where they live – at home, in the local community and in school.
- Now is a good opportunity to introduce pupils to the goals the school may have for addressing one or more of the sustainable school 'doorways'. Let pupils know that the themes of future assemblies will be about creating a sustainable school.

### Further links

- [Sustainable Schools area of TeacherNet](#)
- [Ofsted: Taking the first steps forward towards education for sustainable development](#)
- [WWF One Planet Living](#)
- [WWF: Pathways: a development framework for school sustainability](#) (PDF) also available as an online version on [TeacherNet](#)



## Assembly 2: Getting smart about fish

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### Learning outcome

Pupils will understand that:

- there is a dilemma in eating enough fish to keep healthy while also protecting declining fish stocks worldwide.
- the care agenda – care for ourselves, others and the planet – can be turned into questions that can help pupils explore the sustainability of a range of personal behaviours and choices.

### Preparation

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

By 2020, Government would like all schools to be model suppliers of healthy, local and sustainable food and drink, showing strong commitments to the environment, social responsibility and animal welfare in their food and drink provision, and maximising their use of local suppliers.

The dilemma to be explored in this assembly is how we can ensure that fish consumption is sustainable. There are many very good nutritional reasons why people should eat fish, but the stark fact is that we have over-fished many of the more familiar species with enormous impact on marine biodiversity.

### For more information:

[Sustainable Schools National Framework: food & drink](#)

[Soil Association: Food for life](#)

### Resources needed

- flipchart and marker pen, interactive whiteboard or overhead projector
- four 'dilemma cards', printed separately on paper or projected using the interactive whiteboard or overhead projector
- three 'care questions' displayed on a flip chart or projected using the whiteboard or overhead projector.

### Procedure

To introduce the dilemma, revisit the three care statements. Display the care statements and questions on a flip chart or using the whiteboard or overhead projector. Explain that the practice of sustainable development requires us to care for oneself (our health and well-being), each other (across cultures, distances and generations), and the environment (near and far).

Ask pupils to consider how they would modify the questions if they were applying them to the role of fish in school meals.

**Care Statement 1: Care for oneself.**

Care Question 1: **Is it good for me?** Does it improve my quality of life?

Care Question 1: Ideas for modification:

- Is eating fish good for me?
- What are the benefits?

**Care Statement 2: Care for eachother.**

Care Question 2: **Is it fair** to others in my community and around the world? Will it limit the choices of future generations?

Care Question 2: Ideas for modification:

- How does my eating fish affect people in other parts of the world?
- If I eat less fish will I be depriving fishers of their livelihood?
- Will my need/right to eat fish now, affect the needs/rights of future generations?

**Care Statement 3: Care for the environment.**

Care Question 3: **Will it harm the environment** or biodiversity?

Care Question 3: Ideas for modification:

- What is the effect of eating fish on the biodiversity of the marine environment?
- Does eating some fish species have less damaging effects?

Record pupils' ideas for modifying the three care questions.

Making sustainable schools decisions often involves resolving dilemmas that have no single correct solution. There are many such issues around things as seemingly simple as what we serve in our school meals.

Take fish for example. . .

What do we know about fish? Ask four pupils to read out the information on the each of the following four cards. Clarify information as needed. Note that questions that you cannot answer can be followed-up at future assemblies or in individual classrooms.

**Dilemma Card 1: The health benefits of eating fish**

Fish contain Omega-3 oils – essential fatty acids that our bodies cannot make naturally. These oils are essential for normal brain development, nervous system function and eyesight. They reduce the risk of developing arthritis, high blood pressure, some cancers and heart disease. Fish such as salmon, herring, mackerel – and other so called oily fish – are particularly rich in Omega-3s.

Fish is also a good source of vitamin D which helps the body maintain blood levels of calcium and phosphorus. The result of vitamin D deficiency is rickets in children and osteomalacia in adults. The richest sources include fish liver oils, particularly those of halibut and cod, and saltwater fish including: herring mackerel salmon and sardines.

### **Dilemma Card 2: Fish catch trends**

The world fish catch is a measure of the productivity and health of the marine ecosystem that covers 70% of the earth's surface. The extent to which the world demand for seafood is outrunning the sustainable yield of fisheries can be seen in shrinking fish stocks, declining catches, and collapsing fisheries.

In 1950 the fish catch person was 18.7 million tons. It peaked in 2000 at 95.5 million tons and in 2003 it was 90.2 million tons<sup>1</sup>. The most over-fished species are those used for 'fish and chips' such as cod, haddock and plaice. Salmon – another popular fish is also in danger.

### **Dilemma Card 3: Fish farming**

As the demand for fish outgrows supply, some see fish farms as the solution. Farmed fish are raised in pens filled with water and fed on factory-made fish food. Fish farming has brought down prices for some kinds of fish and made fish supplies steadier and more dependable. Salmon farming is an important industry in the UK.

Unfortunately there is a downside to this picture. Fish faeces, uneaten food, parasitic lice, chemical and antibiotic residues build up and leak out into the surrounding waters. This threatens the survival of smaller native salmon species and the predators that rely on them.

Greenpeace says that although 'fish farming now accounts for over 30% of all fish protein consumed annually in the world.... it is single-handedly responsible for the destruction of countless ecosystems and the fishing communities that rely upon them.

### **Dilemma card 4: School meals and fish**

In the Soil Association's 'School meals action pack', published in 2006, they recommend that there should be a shift from white to oily fish, served at levels that meet nutritional needs within sustainability limits (i.e. once every three weeks, as recommended by the School Meals Review Panel). Fish should be sourced from a recognised and verifiable sustainable fishery, such as the Marine Stewardship Council (MSC) certified fisheries.

A government report on standards for school lunches said that from September 2006 fish should be available once per week in primary schools and twice per week in secondary schools. Of that fish, oily fish should be available at least once every three weeks.

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<sup>1</sup> Source: Compiled by the Earth Policy Institute from UN Food

### Reflection

Return to the 'care' questions one at a time (focusing on the modified questions that the pupils suggested). These might include more questions for further research and thought.

Conclude with a discussion about action that can be taken in school?

Prompt questions could include:

- To what extent should fish be offered in school meals?
- How do we, as a school, resolve the kinds of dilemmas highlighted in this assembly?

Finally, suggest that the three 'care questions' could be applied to a range of choices and decisions pupils make everyday:

- Is it good for me?
- Is it fair?
- Does it harm the environment?

### Further links

- [Food-based standards for school lunches](#) from September 2006
- [Soil Association](#)
- [The Sustainable School](#)
- [BBC background information](#)
- [Scottish Environment Protection Agency \(SEPA\)](#)



## Assembly 3: Saving energy and water

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### Learning outcome

Pupils will understand why it is important to reduce the school's use of energy and water and learn some ways they can help achieve this.

### Preparation

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

By 2020, Government would like all schools to be models of energy efficiency, renewable energy use and water conservation, showcasing efforts such as wind and solar energy, and rainwater harvesting, to pupils and the whole community.

### For more information:

[Sustainable Schools National Framework: energy & water](#)  
[Sustainable Learning](#)

This assembly could be linked to that on [Global dimension, Assembly 9](#) which focuses on the problems caused by climate change.

### Resources needed

- Flipchart and marker pen or interactive whiteboard

### Procedure

Conduct a short quiz on energy and water.

- Read the statement. Ask for a show of hands if they think the statement is true.
- After the show of hands introduce the actual energy and water data and display it using a digital projector or write it on a flipchart.

**Statement 1.** The power industry produces 25% of the world's carbon dioxide emissions worldwide.

FALSE

The power industry produces **37%** of the world's carbon dioxide emissions. The power industry is responsible for the greatest emissions of carbon dioxide, the chief gas leading to climate change.

**Statement 2.** Up to 13% of energy is wasted in homes by keeping equipment on stand-by power?

TRUE

Leaving the nation's TV sets and other home electronics on standby accounts for **13%** of home energy use in the UK. This is equivalent to the output of a large power station. This energy is completely wasted.

**Statement 3.** By being more energy efficient people in the UK could save up to 15% of our energy use and at no extra cost.

FALSE

By simply being more energy efficient, people in the UK could reduce energy use by **20-30%** -- all this before purchasing low energy appliances.

Statement 4. Each person in Britain is estimated to use 30 litres of water a day.

FALSE

Each person in the UK uses, on average, **160 litres** of water every day. The World Health Organisation estimates that 19 litres of water meet one person's daily needs.

Statement 5. Up to one litre of water a day can be wasted by a dripping tap.

FALSE

A dripping tap can waste up to **four litres** in one day.

Statement 6. Up to five litres of water a minute can be wasted by washing your hands under a running tap.

TRUE

On average, we use **five litres** of water to wash our hands. Automatic shut-off taps and aeration taps can reduce the amount of water used for hand washing by more than half.

Introduce pupils to the importance of saving energy and water in school.

- Our increasing energy use is creating climate change. [Climate change](#) is responsible for a global rise in average land temperatures and altered precipitation and weather patterns. It has been brought about by the human-generated build-up of carbon dioxide in the atmosphere.
- Increasing water use is contributing to water scarcity, as well as to higher energy consumption as a lot of energy is needed to purify water before we use it.

Suggest to pupils that there is high potential to save energy and water in schools.

- A recent study has shown that the least energy-efficient schools use over three times as much energy per pupil as those schools considered as most energy efficient and that is in the same type of building.
- Careful water management can greatly reduce water use from 12 to 4 cubic metres a year.

### Reflection

- Brainstorm with pupils their ideas on how energy and water use could be reduced in school and record these using an interactive whiteboard or flipchart. Remind pupils that some of the measures they can think of will offer greater potential for energy and water conservation than others. Simple things are as important as more complex solutions and every little bit helps.

Ideas may include the following:

- Switch off the computers and electrical devices, instead of leaving them on standby
- Close the doors
- Switch off lights when leaving a room
- Change light bulbs to energy-saving ones
- Don't open windows when the heating is on
- Appoint pupil energy and water monitors to check lights, electrical equipment and taps are switched off around your school
- Turn off/fix dripping taps
- Don't leave the tap running while washing your hands or anything else

- Install water saving taps and loo cisterns.
  - Put up stickers and posters to remind everyone in school about switching off lights and taps when not needed and keeping doors shut.
  - Further hints and tips are available on the [Sustainable Schools area of TeacherNet](#).
- Introduce pupils to the idea of having school action plans to save energy and water as these could result in even greater savings. Encourage pupils to develop action plans for energy and water-saving with the help of staff. Visit the [Sustainable Learning](#) website for more information and help. This site includes information on the DfES Energy Certification for Schools scheme. The scheme promotes sustainable energy management and efficiency in schools and rewards schools that are successful in reducing their carbon dioxide emissions. Encourage pupils to take part in [World Water Day](#), which is held in March each year.

#### Further links

- [Energy Chest](#) 8-14 years
- [Think Energy](#) has sections for 7-11, 11-14, 14-16 and 16-18 years
- [Carbon Trust/Save Energy](#)
- [World Water Day](#)



## Assembly 4: Sustainable travel to school

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### Learning outcome

Pupils will know that by walking, cycling or using public transport or car sharing to travel to school, traffic congestion and emissions of gases that cause air pollution will be reduced, and that there could also be safety and health benefits.

### Preparation

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

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

### For more information

[Sustainable Schools National Framework: travel & traffic](#)

[Sustrans](#) works on practical projects to encourage people to walk, cycle and use public transport.

The [Department for Transport](#) website has an introduction to school travel plans for parents, teachers and governors.

### Resources needed

- Flipcharts and marker pen or interactive whiteboard
- Access to 'Walk to School Week' campaign posters including one on the international theme; available to download or buy on the [Let's Walk to School](#) website (optional)

### Procedure

- Ask for a show of hands for those who came by different travel modes that are practical/possible for pupils at your school e.g. car, car-share, bus, train, bike or by walking. Record the numbers of pupils who travelled by different modes on an interactive whiteboard or flipchart.
- Discuss the numbers of pupils under each mode. Which is the largest? Which is the smallest?
- If it's practical to walk or bike to school but pupils didn't use these modes, ask for reasons why not and write these on one of the flipcharts. Reasons could include:
  - It's too far to walk to school
  - There isn't time to walk – driving is much quicker
  - There is too much traffic so its too dangerous to walk to school
  - Some motorists drive too fast
  - The pavements are dirty with dog mess
  - The school has no bike shed
- Now ask pupils who walk or cycle to school for the reasons why they think this is a good way to get to school and write these on the interactive whiteboard or

another flipchart. If no pupils walk or cycle, ask what they think the potential benefits would be. Reasons could include:

- A good way to learn road safety
  - Cuts down on the number of cars on the road
  - Keeps you fit
  - Saves problem of finding somewhere to park the car
  - Cuts down on air pollution
  - Saves money as there are no fuel costs
  - Saves fuel so reduces use of valuable natural resources
  - Cuts down on carbon dioxide pollution and so helps to reduce climate change
- Repeat for travel to school by school bus, public transport (bus or train) or a car-share (where all passenger seats are occupied). Reasons for not using these modes could include:
    - Cost of travel
    - Fears of bullying by other pupils
    - Over-crowding
  - Ask pupils who use a school bus, public transportation, or a car share (with all passenger seats occupied) what they perceive the benefits are of this form of transport. If no pupils use these forms of transport, ask pupils what they think the benefits may be. Benefits of using these modes could include:
    - Pupils enjoy travelling to school with their peers
    - Environmental benefits of cutting pollution and saving natural resources.
    - Fewer vehicles on the road and safer school entrance areas

### Reflection

Ask pupils to think for a few minutes about the different modes of travel to school. Which are the most sustainable? What are their reasons?

Now ask pupils to think about the distance they travel to school and if it is possible for them to walk, cycle or use the bus or train to travel to school instead of by car. If it's too far or impractical to walk, cycle or travel by bus could their parents pool the car journey with neighbours? What would make it easier for them to walk, cycle, or use public transport (or car-sharing) to travel to school? What could they do to make these options more practical or safer?

If walking or cycling to school is a practical option for your pupils, consider encouraging them to take part in Walk to School week (two weeks annually, in October and May) or in International Walk to School month (October each year).

### Further links

- [Walk to School Week](#) and [International Walk to School Month](#)
- [The Sustainable School](#)
- [Sustainable School Travel Database](#)



## Assembly 5: Make fair trade your habit

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### Learning outcome

Pupils will know that by buying fair-trade goods they will ensure that farmers and workers in poor countries receive a fair price for their products and have the opportunity to improve their lives. Fair-trade practices also offer benefits for the environment.

### Preparation

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.

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

### For more information:

[Sustainable Schools National Framework: purchasing & waste](#)

[The Fairtrade Foundation](#)

[Oxfam](#)

Have pupil volunteers practice reading out their presentations in advance of the assembly (see procedure). Prepare flipcharts or a Power Point presentation to display the 'Fair trade quality mark guarantees' and 'Facts on UK fair trade' (see procedure).

### Resources needed

- A digital projector (optional)
- Flipchart and marker pen or interactive whiteboard
- Download the Assembly 5 photos from the [WWF Learning website](#).

1. Ripening bananas Credit: © WWF-Canon / John E. Newby

2. Shipping of bananas often occurs by sea – it takes 6 days to reach UK ports from the Caribbean. Container port on the North Sea Credit: © WWF-Canon / Michel Gunther

### Procedure

This assembly can also be linked to the [Global dimension doorway \(Assembly 9\)](#).

- Ask pupils what they think is meant by 'fair trade'. Record their responses on the flipchart or whiteboard.
- Display or project the photographs and have pupil volunteers read out the following information: (Note that pupil presentations could be substituted for these and that similar material and other examples are available at the web-links provided.)

### Photo 1.

Bananas are our most popular fruit. They are the highest cash-value food item that supermarkets sell, so there is fierce competition amongst supermarkets to offer the cheapest bananas. The supermarkets pressure their suppliers to cut prices and then the suppliers do the same to banana growers. The cheapest bananas are grown on huge plantations. Small farmers cannot compete and are often not able to make enough money to support their families.

### Photo 2.

Some farmers, for instance some on the Windward Islands in the Caribbean, now sell their bananas to the Fair Trade market. This ensures that the farmers get a guaranteed and fair price for their bananas. The price for bananas not sold as Fair Trade goes up and down. Farmers can earn more because they are not spending so much on chemicals as Fair Trade guarantees a greater respect for the environment. They also get extra money called a social premium, which is spent on programmes that benefit the whole community.

- Use an interactive whiteboard or flip chart to display the guarantees of the FAIRTRADE quality mark and have a pupil volunteer read them out:
  - Farmers receive a fair and stable price for their products
  - Producers have the opportunity to improve their lives through a social premium (extra money)
  - Greater respect for the environment
  - Smaller farmers have a stronger position in world markets and,
  - A closer link between shoppers and producers
- Use an interactive whiteboard or flip chart to display the following 'Facts on UK Fairtrade' and have a pupil volunteer read them out:
  - In the UK today there are more than 1500 Fairtrade products available, such as coffee, fresh fruit and juice and sports balls.
  - All the leading supermarkets sell a wide range of Fairtrade products including Fairtrade bananas.
  - Around five million people – farmers, workers and their families from over 58 countries in Africa, Asia and Latin America now benefit from the sale of Fairtrade products.

*[Facts from The Fairtrade Foundation [www.fairtrade.org.uk](http://www.fairtrade.org.uk)]*

### Reflection

- Ask pupils to think about more than the price tag when they shop. By buying Fairtrade goods, we may pay a little more, but we can be sure that the farmers and factory workers who produce the goods are getting a fair price for what they produce and the environment is benefiting too.
- Introduce pupils to Fairtrade Fortnight, which is held in March every year. Encourage them and the school to take part. See The Fairtrade Foundation website.

### Further links

- [Oxfam Cool Planet](#)
- [BBC Education](#)



## Assembly 6: A sustainable school estate

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### Learning outcome

Pupils will know that: there are many ways the school building and grounds can be improved to make it more sustainable, and that if there is an opportunity for a new school build or extension there are a wide range of measures that can be taken to ensure this is sustainable.

### Preparation

The design and management of the school estate affects its environmental performance, and its ability to help pupils learn sustainable living. A well-designed and cared-for estate provides a rich resource for learning and play – not only about the environment but more widely – benefiting pupils' well-being and behaviour.

By 2020, Government would like all school buildings – old and new – to make visible use of sustainable design features and to choose green building technologies, furnishings and equipment as opportunities arise. Through their grounds, we would like all schools to enable pupils to learn about the natural world and sustainable living, for example through food growing and biodiversity conservation.

### For more information:

[Sustainable Schools National Framework: buildings & grounds](#)

[The Sustainable School](#)

[Ecological Design Institute](#)

### Resources needed

- A digital projector (optional)
- Flipchart and marker pen or interactive whiteboard
- Download the Assembly 6 photos from the [WWF Learning](#) website.
  1. Wind turbines, Victoria, Australia Credit: © WWF-Canon / Tanya Petersen
  2. Solar panels to heat the water for a new building on the Mediterranean Sea front. Turkey Credit: © WWF-Canon / Michel Gunther
  3. The Ivory Park EcoCity outside Johannesburg, South Africa Credit: © WWF-Canon / Chris Marais
  4. A domed building like this one uses fewer materials than a normal one with the same volume, and can be built rapidly around a huge blown-up balloon. This one will become Ivory Park EcoCity's crèche. Republic of South Africa Credit: © WWF-Canon / Chris Marais

### Procedure (includes Reflection)

- During the assembly a brief summary of pupils' ideas can be recorded using an interactive whiteboard or flipchart.
- Ask pupils if they had to describe a school site, what would they say it had to have? Classrooms, playground, gym, dining room, library, ICT rooms, science labs as well as offices, the staff room etc.

- But a school is not just a set of rooms. Ask pupils what else they need for learning? Desks and tables to work on, display boards to show off your work, chairs to sit on, plus computers, books and pencils.
- But this is not all! A school is a community. Without the people a school is just a building. But it's more than just a group of people. A school is a group of people working and learning together.
- If pupils have not mentioned this already, point out we need to be comfortable when we work, for example, warm in winter and to see properly when it's dark. So we need energy. We know that energy has to be produced and used in a sustainable way or otherwise we are making climate change worse and there will be energy shortages.<sup>2</sup>
- Ask for pupils' ideas on creating the school's energy using renewable sources (the concept of renewable energy sources may need explanation). Some UK schools are successfully producing their own energy using wind turbines or solar panels on the roof. The photos of wind turbines and roof solar panels could be shown here using a digital projector or copies passed around to pupils.
- Pupils can also be asked for their ideas on making the school building more energy efficient, such as insulating the roof and double glazing the windows to prevent heat loss. There is a link here between this doorway and the Energy & water doorway, which focuses on saving energy and water.
- Here are some other suggestions that could be made to pupils to help make the school building sustainable:
  - Use environmentally friendly paints that are made from natural pigments
  - Use materials from sustainable sources, for example wood with the Forest Stewardship Council logo, which guarantees the wood comes from a sustainably managed source
  - Install water butts that collect rainwater from the roof
  - Have the cleaners use environmentally-friendly cleaning products
- Sometimes schools need an extra classroom or new building, such as a shed. This provides a wonderful opportunity to put into place a range of measures to ensure the building extension or new building is sustainable.
- Discuss the building design with pupils. An innovative design and pleasant, light surroundings are important. They provide a good environment for learning and imaginative thinking. Pupils can be shown photos illustrating the Ivory Park EcoCity, just outside Johannesburg, South Africa. This is a showcase of how eco-friendly living is also community friendly. All the buildings are constructed for maximum energy-efficiency, using recycled materials wherever possible. Heating and cooking methods are energy-efficient.
- The Ecological Design Institute has some inspiring ideas on principles of ecological design (see weblink).

#### Further links

- [Ivory Park Ecocity](#)
- [CABE Education](#)
- [School Works toolkit](#)

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<sup>2</sup> The concept of climate change may need explanation here for secondary pupils and could be omitted for primary pupils.



## Assembly 7: Decisions in our school

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### Learning outcome

Pupils will understand that everyone in school should value the participation and contribution from all pupils, including those of different races, cultures and with different religions valuing cultural and religious differences, valuing everyone's participation and contribution, and keeping a welcoming atmosphere in school are all necessary to create a sustainable school.

### Preparation

Schools can promote community cohesion by providing an inclusive, welcoming atmosphere that values everyone's participation and contributions. They can challenge prejudice and injustice in all its forms.

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

This assembly is focussed on pupil participation and an understanding of the decision making processes of schools.

These are some of the decisions for sustainable schools:

Who decides:

- Where our school food comes from?
- How we use water in our school?
- Where we get our electricity from and can we make our own?
- What's the best way to get to school?
- Who we buy school equipment from?
- How we use our school grounds?
- The school rules/school-home contract?
- How we work with our local community?
- Which charities do we work with and how do we get involved?

Choose three that are particularly relevant to your school and local context and write these questions on the top of three flipchart sheets. Choose more or fewer questions to fit the assembly time.

### For more information:

[Sustainable Schools National Framework: inclusion & participation](#)

### Resources needed

- Flipchart and marker pen or interactive whiteboard

### Procedure

- Introduce the assembly by referring to your school's ethos. The important point to get across is that participation in the school is open to all and the school values the contributions of everyone. This leads to the question '**how can I participate?**'
- Display the first flipchart sheet with its question. Ask the pupils who they think are **currently** involved in making this decision. If necessary explain the roles of bodies such as the school governors, Local Authority, DfES etc.
- Repeat this for the other two questions, extending the pupils suggestions as appropriate.

### Reflection

- Ask the pupils which of these decisions they think they should be involved in and how they could best be involved. Record their responses on the flip chart paper.

### Further links

[Hints and tips on the Sustainable Schools area of TeacherNet](#)  
[Unicef's 'rights respecting schools'](#)

[Oxfam Cool Planet](#)

[QCA Respect for All](#)



## Assembly 8: Happiness and well-being

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### Learning outcome

Pupils will understand that:

- Our well-being is closely linked to all our connections and trust in other people, our family and our friends, as well as our health, rather than money and material goods
- We are more likely to be happy by travelling less and staying close to our families and friends
- Valuing our family and friends, staying close to them and keeping healthy not only help to make us happy but mean we have a more sustainable lifestyle.

### Preparation

With their central locations, facilities and extensive networks, schools can act as hubs of learning and change in their communities. Problems on their doorstep offer relevant and engaging opportunities for pupils to learn, and a means of strengthening local relationships.

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

### For more information:

[Sustainable Schools National Framework: local well-being](#)

### Resources needed

- A digital projector (optional)
- Flipchart and marker pen or interactive whiteboard
- Download the Assembly 8 photos from the [WWF Learning](#) website
  1. Young people playing, boy and girl on bicycle. South Africa Credit: © WWF-Canon / Martin Harvey
  2. Young girl playing, bouncing and having fun on trampoline. South Africa Credit: © WWF-Canon / Martin Harvey

### Procedure

- This assembly focuses on having pupils reflect on what influences their well-being. As individuals and communities, well-being is one of our most important requirements.
- Display the two photos on a digital projector or print copies for pupils to view.
- Brainstorm with pupils their ideas on what makes them happy. Record their answers using an interactive whiteboard or on a flipchart.
- Discuss answers with pupils.

- Some may think that having more money or goods, such as new clothes or computers adds to happiness. But despite being better off in the UK than ever before, research shows that we are not any happier as a result. Data shows whilst economic output in the UK has doubled in the last 30 years, happiness levels have not changed. Ask for pupils for suggestions about why this might be. Research has suggested the reason is that we often compare ourselves with people who are richer than we are.
- This could lead to a discussion on the impact that advertising has on happiness. The science of happiness suggests advertising is a major cause of unhappiness because it makes people feel less well-off. Advertising can make us want things we can't afford to buy or do.
- Other suggestions by pupils on what makes them happy could include friends and family. It appears that our happiness is closely linked to all our connections and trust in other people, our personal family and our friends. Having supportive relatives and friends is very important for our well-being.
- According to scientists travelling long distances to and from work or school is really bad news for happiness. Not only is the journey often an unhappy experience, the time we spend travelling means we have less time to spend with our family, friends and at leisure.
- If health is not suggested by pupils ask how important they think health is to happiness. Research suggests there is a close link between happiness and health. If people are happy they are more likely to be healthy. One dramatic finding is that 'happy' people live up to seven years longer than 'unhappy' people.
- Ask pupils what they know about Bhutan – a small, remote Himalayan kingdom. Unlike governments of other countries, which are seeking to increase their economic wealth, measured by their countries' Gross National Product, Bhutan's government aims to increase the nation's Gross National Happiness. This policy is rooted in the country's religion of Buddhism. Buddhists believe that the ultimate purpose of life is inner happiness. Ask pupils what they think of this. The reference to Bhutan/Gross National Happiness could be omitted for primary pupils.
- Older secondary pupils could consider the nine pilot indicators of Gross National Happiness being used in Bhutan: living standard; health; education; ecosystem diversity and resilience; cultural vitality and diversity; time use and balance; good governance; community vitality and psychological well-being.

### Reflection

- Using an interactive whiteboard or flip chart summarise what research suggests makes us happy: valuing our family ties, friends and acquaintances, living and working close to them and keeping healthy. Contrast this with the goals of making more money, acquiring material goods and going on expensive holidays. The important point to get over to pupils is that what makes us happy also means having a more sustainable lifestyle.

### Further links

[Happy Planet Index](#)



## Assembly 9: Climate chaos

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### Learning outcome

Pupils will:

- know that pollution from our activities in the developed world is the main cause of climate change;
- understand some key damaging impacts of climate change around the world and that developing countries are suffering the most;
- understand that we in the developed world have the chief responsibility to help reduce climate change and so contribute to the well-being of people and environments worldwide.

### Preparation

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 their pupils, based on an appreciation of the impact of their personal values and behaviours on global challenges.

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

This assembly focuses on climate change – agreed by countries around the world to be the biggest threat to a sustainable future.

### For more information:

[Sustainable Schools National Framework: global dimension](#)

[WWF climate change information](#)

[Defra](#)

Have pupil volunteers practise reading out short presentations in advance of the assembly (see procedure for suggested texts).

### Resources needed

- A digital projector (optional)
- Flipchart and marker pen or interactive whiteboard
- Download the Assembly 9 photos from the [WWF Learning](#) website

1. Power plant Agios Dimitrios, near Kozáni, Western Macedonia, Greece. Credit: © WWF-Greece/Zisis Karabersis
2. Vis Island, Dalmatia, Croatia. Tourists on a beach in Komiza, Vis Island, Dalmatia, Croatia. Credit: © WWF-Canon / Emma Duncan
3. Icebergs in Ella 0 North East Greenland Credit: © WWF / Olivier Langrand
4. Solomon Islands Credit: © WWF-Canon / Soh Koon Chng
5. Dry river bed near Sasik Liman. Lower Danube river basin, Ukraine. Credit: © WWF-Canon / Anton Vorauer

6. Los Miskitos Indian child in Honduras carrying water from river. Typically the Indians have to carry water to their settlements from rivers, sometimes kilometres from their dwellings. Credit: © WWF-Canon / Nigel Dickinson

7. Children in flooded town Eastern Sabah Malaysia Credit: © WWF / Sylvia Jane Yorath

8. Child standing in the debris of Hurricane Mitch Tegucigalpa, Honduras Credit: © WWF-Canon / Nigel Dickinson

- Access to Defra climate change short film *Tomorrow's Climate Today's Challenge* from the [Climate Challenge](#) website. Can be downloaded online or a DVD copy can be posted on request (optional)

### Procedure

- Introduce climate change and its causes by showing the Defra film *Tomorrow's Climate Today's Challenge* (two minutes) if possible. Alternatively give pupils a brief introduction. The film's transcript is on the same website. This could be illustrated by showing [Photo 1](#) of a power plant in Greece. According to a recent WWF study this power plant is the worst climate polluter in Europe.
- Pupils need to know that climate change is one of the main challenges threatening our future lives and well-being.
- Display the above listed photos using a digital projector one-by-one or make printouts of the pictures to show to the pupils. Alternatively other pictures from the web-links provided could be used. The number of examples could be reduced and texts simplified for primary pupils.
- Have pupil volunteers read out the following suggested texts that accompany each picture.
  - [Photo 2](#) Tourists sunbathing on a beach, Croatia. The world is warming faster than at any time in the last 10,000 years. The year 2005 was the hottest on record. In the UK most of us enjoy a hot summer, but what will climate change mean for the people around the world?
  - [Photo 3](#) Icebergs in Greenland. In August 2006 scientists reported that the Greenland ice cap, the second largest in the world, was melting three times faster than shown by previous measurements.
  - [Photo 4](#) Solomon Islands. As icecaps and glaciers around the world are melting and water in the seas becomes warmer and expands, sea levels are rising. Small islands, like the Solomon Islands in the Pacific Ocean could lose large areas of land or even completely disappear under the waves.
  - [Photo 5](#) Dry river bed in the Lower Danube basin in the Ukraine. In some places there is far less rainfall than before so people are facing such bad droughts they can no longer grow crops.
  - [Photo 6](#) Indian child in Honduras carrying water from river. People in many places around the world are suffering from water shortages. Typically the Indians have to carry water to their settlements from rivers, sometimes kilometres from their homes.
  - [Photo 7](#) Flooded town Eastern Sabah Malaysia. Other parts of the world are receiving much more rain than before and are suffering from floods.
  - [Photo 8](#) Child standing in the debris of Hurricane Mitch, Honduras. As the world's climate changes storms are becoming more violent and are

happening more often. In October 1998 Hurricane Mitch developed in the Caribbean and became one of the deadliest Atlantic hurricanes ever recorded.

### Reflection

Ask pupils which countries do they think are:

- the main ones causing climate change?
- the ones being affected by climate change?
- the ones suffering the most from climate change?

The important points to get over to pupils are that:

- Responsibility for climate change lies with the developed world. Their emissions per person were many times higher than those of the developing countries. Additional information for older secondary pupils: in 1999, just eight nations (Canada, France, Germany, Italy, Japan, the USA and Russia), emitted nearly half of the world's emissions of carbon dioxide, the main global warming gas.
- All countries are being affected by climate change, but developing countries are less able to adapt because of their poor funds. Many developing nations that lie in the tropics and subtropics may also suffer from losses in farming production.
- The way we live our lives is directly impacting on millions of poor people around the world because of our high energy use, which is leading to global climate change.
- We all have a responsibility to take action now to help reduce climate change by cutting our energy use and so help to ensure the future well-being of the global environment and community. There are simple things we all can do in our personal lives and at school. Some of these were discussed in [Assembly 3](#).

### Further links

- [The Sustainable School](#)
- [Defra Climate Challenge](#)
- [BBC Weather](#)
- [Oxfam global citizenship](#)

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