

future perfect

Cultivating a culture of sustainability amongst tomorrow's global citizens is more important now than ever before – and what we do in our schools is crucial, says Jane Davidson...

The understanding that sustainability could make an important difference to children's services, education and wider wellbeing has led to the emergence of The National Framework for Sustainable Schools and a target set for all schools in England to become 'sustainable schools' by 2020. In Wales, where from the beginning of the National Assembly in 1999 there was a constitutional duty for the government to have regard to sustainable development, schools have been required as a statutory part of the Welsh curriculum to teach Education for Sustainable Development and Global Citizenship since 2006. In both countries, there is a greater understanding of the importance of sustainability education in developing the skills sets we need for the future, educating young people to become creative problem solvers and active citizens in an uncertain world. In 'Our Common Future' 1987, the World Commission on the Environment and Development chaired by Dr Gro Harlem Brundtland, then the Director General of the World Health Organisation, defined sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs".

 UK schools could save around £70 million per year by reducing their energy costs, also reducing CO2 emissions by up to 300,000 tonnes

SOURCE:
CARBONTRUST.COM

This definition has been picked up worldwide, reflecting an increasing concern that actions are being taken across the globe that put this concept in peril. The idea of acting more sustainably has emerged in response to global concerns about social justice as well as the state of the planet. In particular, current concerns focus on the threat to human wellbeing presented by climate change at the same time as concerns remain about the integrity of ecosystems.

What is sustainable development? For me, sustainable development is about ensuring individual and community well-being and a better quality of life. It is about making better decisions for the longer term rather than short term 'quick fixes'. It is about balancing the needs of the present and the needs of the future. It is about meeting economic and social needs whilst being fully aware that we only have one planet and we must recognise the environmental limits in which we live. It is about thinking about the impacts of today's actions on



future generations and protecting and enhancing the natural environment by learning to live within our environmental limits. It is about making sure that the children of today are better educated to face the challenges of tomorrow.

There is substantial public support for the sustainability agenda. In a general population poll undertaken by IPSOS Mori in November 2011, 64% thought the needs of future generations were more important than the needs of any particular generation such as their own or their children's. 46% (the largest group) indicated that a healthy planet is the most important legacy to hand on to future generations; 67% thought the UK Government has failed to consider future generations enough in the decisions it makes today.

If we are to ensure a sustainable planet for future generations then it is essential that we all begin to look at the world through a 'sustainability lens'. An important step in this process is to educate our young people on the importance of living sustainably. But how many of us in the education sector fully appreciate what it means to be sustainable? And how easy is it to cultivate a culture of sustainability within our school environments?

Creating a sustainable environment for learning

Sustainable development is more than a theory; it requires a change in attitudes and, more importantly, behaviours. As we know, encouraging behaviour change in young people can sometimes be a challenge, but the prospects of success are known to be enhanced if the messaging is delivered in a school environment that places sustainable practice at its core. One way of doing this is to consider measures to reduce your school's impact on the environment, starting with its carbon footprint.

A carbon footprint is most commonly defined as the total set of greenhouse gas (GHG) emissions caused directly and indirectly by an individual, organisation, event or product. It is labelled a carbon footprint as commonly the total GHG emissions are converted to CO₂ equivalent (CO₂e) emissions.

The 2008 Climate Change Act requires the UK to reduce its greenhouse gas emissions by at least 34% below 1990 levels by 2020 and by at least 80% by 2050.

According to a UK Government Department of Education report, carbon emissions in the school sector arise from energy use in schools, procurement of goods and services by schools, and school travel. The report reveals that "schools account for around 2% of UK greenhouse gas emissions, roughly the same as all the energy and transport emissions of Manchester, Newcastle and Bristol combined. This is equivalent to 15% of the country's public sector emissions."

Much is being done to limit the environmental impact of schools and these measures are having a positive

impact across the country. By adopting a strategy to reduce, reuse and recycle, schools are actively delivering plans to: reduce their waste, energy and water consumption; increase the proportion of sustainable energy used; reduce carbon emissions including those produced by car travel; and increase recycling.

And it's not just the pupils who benefit. Introducing measures to reduce energy consumption can save schools significant amounts of money. According to the Department for Education and Skills in Wales, the average cost of energy per school is £27,000, although secondary schools can have bills of over £80,000 – double the amount spent four years ago. Case study evidence suggests that an average secondary school could save up to 20% off its energy bills through replacement of heating, lighting and cooling equipment.

While introducing such measures seems straightforward in principle, the effective integration of sustainable practice requires a school-wide commitment to working together so that any new schemes are managed successfully and as simply as possible. Without clear intentions being communicated appropriately, there is a danger that at best, there is insufficient buy in to propositions to make environmental and energy changes at a school, and at worst, active non-cooperation. Creating a sustainable school requires a team effort and pupils must be invited to play an influential role in this process.

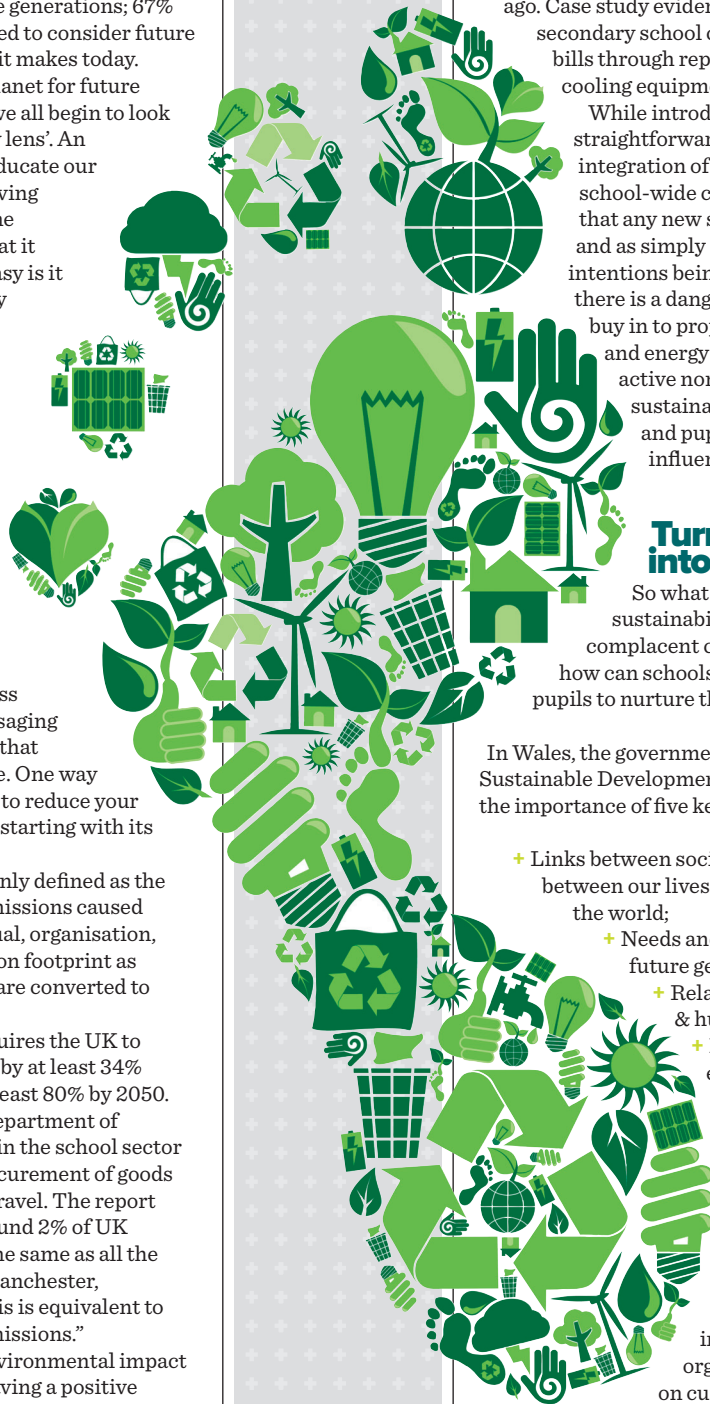
Turning theory into practice

So what is being done to ensure that sustainability in schools doesn't become a complacent concept, lost in its meaning? And how can schools successfully engage with their pupils to nurture this culture of sustainability?

In Wales, the government action plan for Education for Sustainable Development and Global Citizenship highlights the importance of five key themes:

- + Links between society, economy, environment and between our lives and those of people throughout the world;
- + Needs and rights of both present and future generations;
- + Relationship between power, resources & human rights;
- + Local and global implications of everything we do; and
- + The actions that individuals and organisations can take in responding to local and global issues.

There is an important set of links in the guidance between social justice now and for future generations and the role of individuals, communities and organisations in identifying and acting on current and future challenges. If we



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want the learners of the future to have particular attributes such as being active citizens – able to appreciate the importance of environmental, social and political contexts to their studies – and creative problem solvers – able to think creatively, holistically, and systemically and make critical judgements on issues – then we have to change the way we teach and the outcomes we expect.

The international Eco Schools programme is a good example of a scheme that is helping to embed sustainability into the school system. Established in 1995, the initiative provides a highly structured system for environmental management of schools and encourages pupils to engage with environmental and sustainable development issues.

By using it as a learning resource, pupils take key roles in decision-making and participation in order to reduce the environmental impact of their school. Eco-Schools aims to empower pupils to be the change our sustainable world needs by engaging them in fun, action-orientated learning.

Each school is given seven step change processes to empower their pupils to lead processes and actions wherever they can. Over time, improvement is promised in the learning outcomes, attitude and behaviour of students and the local community, and ultimately the local environment. Evidence of success in these areas eventually leads to schools being awarded ‘The Green Flag’. This international status is re-assessed and renewed every two years.

The seven steps recommended by the initiative for schools include: Eco-Schools Committee, Environmental Review, Action Plan, Monitor and Evaluate, Curriculum Work, Inform and Involve, Produce an Eco-Code.

Eco-Schools officer Gerry Taylor at Keep Wales Tidy, a charity and non-profit-making company that liaises with community partners to promote environmental and social responsibility in Wales, has carried out research into Eco-Schools Green Flag-holding secondary schools to see what they are currently doing to inspire their pupils. From his research, he listed tips that can be followed by schools wishing to adopt a sustainable outlook. Here’s a selection of examples from each of the seven steps:

1. Eco-Committee

Form a co-ordinating team – perhaps from key areas of PSE, science, geography or maths – rather than a single co-ordinator, and ensure a number of staff members are on board; possibly include ICT, site manager, ancillaries.

2. Environmental Audit

Organise students to carry out an initial environmental audit and then undertake an annual review of this.

3. Action Plan

Make sure the plan has specific goals and timescales. Also build in methods of data collection and evaluation. Targets may be further broken down into ‘action steps’. Estimated costs are useful, should fund-raising be necessary.

4. Monitoring & Evaluation

Use most initial data collection for baseline information – work from these data to make improvements, e.g. species richness in wildflower meadow, energy usage, amount of paper recycled, numbers walking & cycling to school, etc.

5. Linking with Curriculum

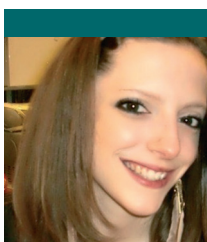
Engage the IT department to use raw data from surveys and campaigns, and interpret and display the results as part of the curriculum. Heads of department should review schemes of work in each subject area, to see where this is being tackled, and plan pro-actively where it is not.

6. Ways to involve the Whole School

Make contact with other Eco-Schools to share good practice and solve problems, and use assemblies to inform the school body of campaigns (and their results). Hold an ‘environment day’ but ensure there is follow-up so that all the effort is not immediately lost or forgotten. For example, a longer term curriculum project following a tree-planting session; a workshop on human rights following a talk from

TOP TIPS TO REDUCE ENERGY USE IN SCHOOLS:

1. If you only do one thing, education the staff and children to turn off energy-using appliances when not in use.
2. Use your building systems properly to save energy
3. Share information with pupils and school staff
4. Upgrade heating controls
5. Use energy efficient lighting
6. Install smart metering
7. Manage ICT (Information and Communications Technology) loads
8. Draught strip windows and doors
9. Renewable energy
10. Understand your bill and how much energy is used in school



ABOUT THE AUTHOR

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an Oxfam visitor, run a water-saving campaign following a WaterAid assembly presentation. Link with Tidy Towns Officers on longer-term community projects.

7. Eco-Code

Find novel ways to display the eco-code. The code could be a ‘mission statement’ rather than another list of rules.

In support of its ambitions for every school to be a sustainable school by 2020, the Department for Children, Schools and Families has developed a Sustainable Schools Framework, which sets out eight ‘doorways’ for schools who wish to become more sustainable (tinyurl.com/tsdoorways) These are entry points, where schools can establish or develop their sustainability practices. They encourage schools to consider eight simple steps to sustainability, such as supplying healthy, local and sustainable food and drink or considering ways to integrate energy saving and renewable energy across the curriculum, campus and community.

All governments want education systems to prepare young people for the future. There is increasing evidence that schools perform better when they take responsibility for their own improvement. These doorways are a guide to starting on the journey towards becoming more sustainable.

What are the benefits of becoming ‘sustainable’?

Research has shown that a sustainable school raises standards and raises the well being of its pupils. A sustainable school engages its young people in their learning, which enhances their behaviour and promotes healthy school environments and lifestyles. A sustainable school prepares its pupils for real life challenges.

Sustainability needs to be at the heart of what we do; as educators of the next generations, it is becoming increasingly and glaringly obvious that we cannot continue to use more resources than our one planet can support. Quite simply, we need to ‘future-proof’ what we do to create discerning pupils and staff.

Taking the necessary steps to embed sustainability at the heart of a school’s core mission can create an exciting opportunity for pupils and staff to recognise and tackle imaginatively unsustainable practices. Having sustainability at the core of everything it does can enable a school to provide a general reference point, language and concept for all pupils to engage with the sustainability agenda.

And ultimately, including a sustainability angle to educational activities will lead to a more promising and secure future within a more socially just, healthy, prosperous and bio-diverse world.