

Inspiring leaders to
improve children's lives



National College
for School Leadership

Schools and academies

The journey of sustainable schools: developing and embedding sustainability

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Resource

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Valuing our future

Our toolkit offers practical tips, case studies and advice about sustainable practices you can develop in school. www.nationalcollege.org.uk/valuing-our-future-toolkit.htm.

Executive summary

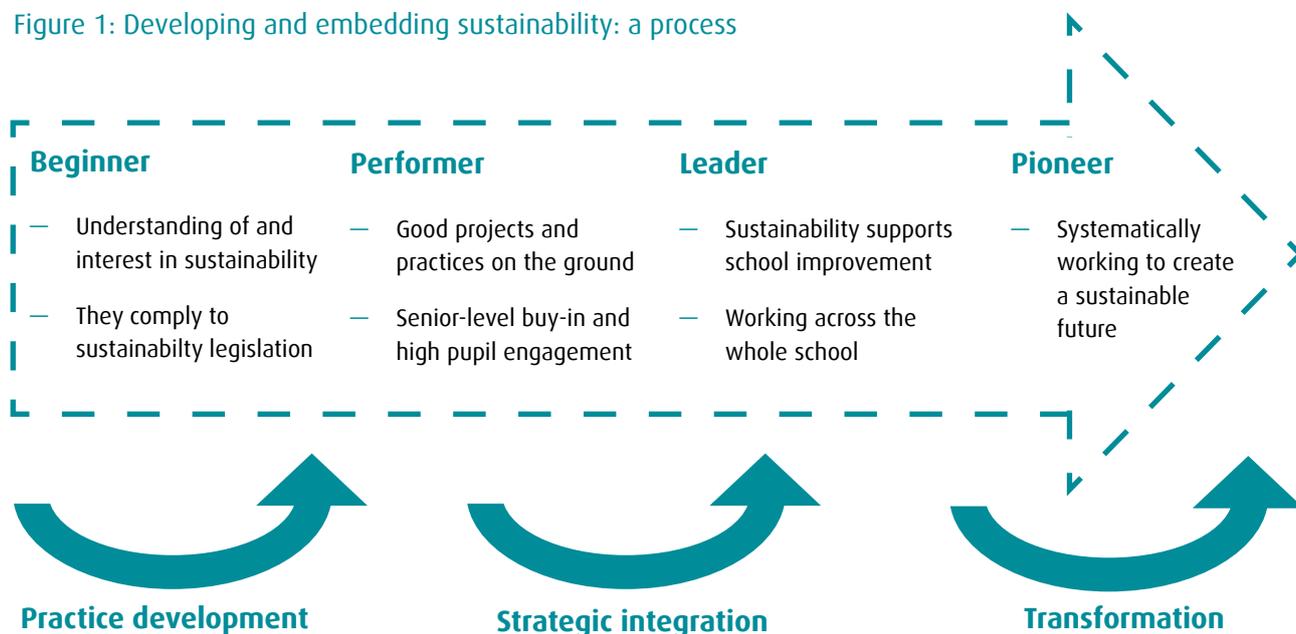
This report is for school leaders who are leading and developing sustainable schools. It summarises the findings from Forum for the Future and the Institute of Education’s 2009-10 research for the National College for School Leadership into how school leaders are developing and embedding sustainability¹ within their schools and communities, and includes examples of the skills, tools and activities school leaders are using to do this. The report also builds on the last phase of research (Birney & Reed, 2009b) which set out the key characteristics and benefits of a sustainable school, providing advice on how schools can get started with sustainability, and the leadership qualities they need to develop a sustainable school.

The schools involved in this phase of research were involved in action research², and were required to engage with their community and other local schools by developing a community of practice³. This study showed that the process of developing

and embedding sustainability within a school can be categorised into four stages; beginner, performer, leader and pioneer (figure 1, see below).

This study also highlighted that there are two distinct phases of innovation as schools make the transition from one stage to another. These phases are practice development and strategic integration (see figure 1). There is also the possibility of a third transition; transformation as schools move from leader to pioneer. Overleaf is a description of these transitions.

Figure 1: Developing and embedding sustainability: a process



¹ Sustainable development is a dynamic process which enables all people to realise their potential and to improve their quality of life in ways which simultaneously protect and enhance the Earth’s life support systems. (Forum for the Future, 1996:1). A sustainable school is guided by the principle of care: care for oneself, care for each other and care for the environment.

² Action research is learning by doing, where the school leader is identifying sustainable practices he or she can implement in the school, implementing these practices and spending time reflecting and evaluating the impact of this

³ Communities of practice are groups of people who come together because they share a common concern. (Wenger, 1998:3). They could involve any stakeholders or members of the community including other schools, community groups and pupils. See page 25 for further details.

Transition 1: practice development

The transition from beginner to performer is about bringing sustainability alive. From this we can suggest the following strategies and actions that might assist schools on their journey:

- Use the sustainable school doorways to assess what the school is already doing and to identify other sustainability projects and practices the school can develop⁴.
- In terms of identifying projects, pick something that is meaningful – a project that the school will value or an area the pupils are interested in.
- Get inspiration and ideas from other schools.
- Engage the pupils, and get them to inspire others.
- Seek to engage more and more people who are interested, within and outside the school.
- Start to model sustainable practices, for example through energy savings, growing food and inclusive behaviour.

How to lead: create energy and enthusiasm for sustainability by inspiring others; encourage pupils to lead their learning for sustainability; although it starts with one or two individuals, seek ways to involve more people and to grow this work hence creating strength in numbers.

Transition 2: strategic integration

Transitioning from performer to leader is about moving sustainability to the heart or core of the school, so it is not seen as just another initiative or a series of unrelated projects. From this we can suggest the following strategies and actions that might assist schools on their journey:

- Build a vision for the school with sustainability playing a central role in this vision.
- Create school policies and plans based on sustainability.
- Integrate sustainability across the curriculum.
- Engage everyone in a whole-school approach.

- Work with other schools through a community of practice, helping them to develop sustainable practices.

How to lead: be clear, reflective and explicit about what the school's vision is and what is required; and find structures, processes and operating systems for an ever-growing group of people to take responsibility for sustainability practices.

Transition 3: transformation

Schools that are leading on sustainability find it energising and are starting to show glimpses of what it might take to pioneer a new way of doing things. These leaders have strong evidence of the positive difference sustainability is making to pupil outcomes in terms of achievement and attainment as well as building a sustainable future. They are finding ways to provide legitimacy and permission for others to engage in sustainability by creating effective communities of practice comprised of other leaders.

How to lead: create a community of practice and sustain interest. Look for ways to support the implementation of sustainability across the whole school system.

In summary we can suggest to schools the following strategies and actions that might assist them on their journey:

- Develop practice that engages pupils and seeks to reach out to others across your community.
- Step back and look at what this practice means in terms of how you run your school. What strategic implications does it have? For example, what are the implications of sustainability across the curriculum, as part of the school vision and its policies and plans?
- Help to make the case for your work through inspiring stories, as well as strategic evidence collection about the value sustainability brings to your school. Provide legitimacy and permission for others to engage in sustainable schools.

⁴ The doorways (sustainability themes), of which there are eight, are discrete entry points or places where schools can establish or develop their sustainability practices.
<http://www.nationalcollege.org.uk/index/leadershiplibrary/leadingschools/sustainable-schools/developing-a-sustainable-school/valuing-our-future-toolkit.htm>

1: Background and context

This report is for school leaders who are leading and developing sustainable schools. It summarises the findings from Forum for the Future and the Institute of Education's 2009-10 research into how schools are developing, embedding and maintaining sustainability⁵ within their school and community, and includes examples of the skills, tools and activities school leaders are using to do this. The report also builds on the last phase of research (Birney & Reed, 2009b) that set out the key characteristics and benefits of a sustainable school, advice on how schools can get started with sustainability, and the leadership qualities required to develop a sustainable school.

This research focuses particularly on schools that are looking to develop a whole-school approach⁶ to sustainability, to maintain its momentum and to reach out to their communities to develop sustainability. These schools are also looking at how to help other schools beginning this journey to develop and embed sustainability.

There is real urgency to these findings. A growing body of scientific research tells us that we are running out of time to create a more sustainable society:

We humans are unique among living creatures, in our capacity for both creativity and destruction. We learnt to use the earth's resources very quickly. As a result, we have produced enormous advances in civilisation, health and quality of life. Our ability to make the most of nature's resources and services has also enabled us to multiply at an extraordinary rate. In the last 150 years the human population has grown from one to six billion. Only very recently have we come to realise that we cannot continue indefinitely at such a rate of expansion and impact. Our habits of production and consumption are

taking us beyond critical thresholds in the use of the earth's resources. The effects of this – air pollution, climate change, loss of biodiversity, deforestation, soil erosion and water scarcity – are increasingly visible everywhere.

Cook, 2004

These findings aim to help all schools to play their part in creating a secure future for their children. In doing so we hope they will be able to learn from the journeys of the participating schools and find their own route to sustainability.

Research process

This phase of research began in September 2009, with two action inquiry groups called Nationwide and Going Local made up of school leaders⁷ from across England that had already been involved in the previous research during 2008-09. The school leaders were selected because they were already developing and promoting sustainability within their schools and local communities. An action research method was used, whereby the school leader introduces sustainable practices to the school and researches and evaluates the impact of them, sharing what they have learnt with other leaders. This allowed the school leaders to learn together by creating change in their schools and communities, and from this to develop good practice.

The first group, Nationwide, was made up of school leaders from nine schools that met for three one-day workshops between September 2009 and March 2010 and attended the sustainability conference held at the National College in March 2010. The group explored how they were developing, embedding and maintaining sustainability within their schools and immediate communities through discussion at the workshop and by taking action between the workshops. They were asked to devise two questions that were connected to their learning

⁵ 'Sustainable development is a dynamic process which enables all people to realise their potential and to improve their quality of life in ways which simultaneously protect and enhance the Earth's life support systems.' (Forum for the Future, 1996:1). A sustainable school is 'guided by the principle of care; care for oneself, care for each other and care for the environment'.

⁶ A whole-school approach brings together the entire school community or an equitable representation of all the stakeholders. This enhances the potential for members of the school community to govern themselves and strengthen the variety of relationships that exist.

⁷ A school leader in this context is defined as both those formally leading their school as well as those taking on leadership for sustainability.

from previous research and to respond to a number of themes (see Appendix 1).

The second group, Going Local, was made up of school leaders from 12 schools that attended two webinars between September 2009 and March 2010. This group explored how they were working with their local communities including other schools to develop and embed sustainability within their schools, and what resources they were drawing on from their communities in order to do this. To be able to answer this question the schools were required to hold a local event with their community based on the work they were doing on sustainability and how the community could be involved. The schools were thus developing a community of practice⁸. These schools also attended the sustainability conference held by the National College which allowed them to discuss their learning.

Both groups submitted reports summarising their findings.

National College research on sustainable development

In 2008 the National College published the findings of its first piece of research on leadership for sustainability aimed at describing what schools are currently doing on sustainability and the skills and qualities required to move this agenda forward (Jackson, 2008).

This study included a literature review, practical case studies, dialogues with practitioners and a national survey of opinion about sustainability and its role in education. The report highlighted the mismatch between what schools were saying about the importance of sustainability and what they were actually doing. Whilst there was almost universal agreement (98 per cent) that the previous government's sustainable schools strategy was important or very important, when asked how actively their school was addressing the areas of sustainability, less than 45 per cent stated that their school was dealing with any area of sustainability as a high priority, with over 80 per cent citing barriers such as time and finance stopping them from pursuing sustainability further.

Following this research, the National College

developed a toolkit to help schools overcome some of these barriers and to get started in developing sustainability (National College, 2008). The toolkit, entitled Valuing our Future⁹ enables school leaders to shape and develop their work on sustainability, containing lots of examples and practical ideas for how to do it.

The National College also commissioned Forum for the Future in partnership with the Institute of Education to conduct further research with school leaders who were currently leading the way in developing and promoting sustainability in their schools and wider communities. The school leaders were involved in a year-long process to find out how they were leading and developing sustainable schools and the key characteristics and benefits of developing a sustainable school (see Appendix 2). This work made a significant contribution to what is known about school leadership for sustainability and the difference that it makes. The main findings were written up in the report published in 2009 by the National College entitled Sustainability and Renewal: findings from the Leading Sustainable Schools research project (Birney & Reed, 2009b).

⁸ A community of practice is a group of people who have a shared interest and actively work together (Wenger, 1998).

⁹ <http://www.nationalcollege.org.uk/index/leadershiplibrary/publications/publications-practical-resources/valuing-our-future.htm>

2: Overview of findings

The majority of the schools that have been working on this agenda have been integrating sustainability into their school through developing innovative practices. Examples of these practices include: gardening and activities that extend the outdoor curriculum and promote more ecological pedagogies; partnering and learning from countries around the globe; and involving pupils in understanding their energy use, waste and food. These practices symbolise the beginning of the journey which involves parents and community members so as to spread and develop their understanding of sustainability. These practical starting points are often having amazing and inspiring effects on the engagement and learning of pupils.

This study shows that as schools progress on this journey, they realise the need not just to address sustainability in one or two areas of the curriculum. The research from 2008-09 found one of the characteristics of a sustainable school was the movement from sustainability being a partial, add-on initiative to 'becoming the core purpose from which a school develops all aspects of its policies, strategies, planning and day-to-day operations' (Birney & Reed, 2009a:5). Sustainable schools also engage in curriculum change and development as sustainability is embedded across the whole curriculum. The 2008-09 research also found that, 'when a school places sustainability at the core of its activity, it supports adults and young peoples' learning, their contribution to and improvement of their community and the sustainability of our planet' (Birney & Reed, 2009a:3).

This research, as with the previous research, has shown that not only does sustainability have the power to create very effective learning, but it also has the power to develop leaders. Sustainability 'itself becomes a great connector' and widens the sphere of concern for a school as 'a life-giving property' (Birney & Reed, 2009b:55). As school boundaries become more open, leaders start to redefine their role and have the confidence to act and broaden engagement to more schools and their community.

It is during this process that leaders start to look at the strategic integration of sustainability into the core processes of the school. They also realise the need to take the initiative to promote the benefits of embedding sustainability, not just within schools but within their communities, other schools and the education system as a whole.

What does a sustainable school look like?

Areas identified by the schools that took part in this research:

- sustainable practice at its heart an integral part of its vision, school improvement plan and curriculum
- a continual focus on reducing its carbon emissions to zero
- a policy of reducing, reusing and recycling waste
- staff and students who take individual responsibility for measuring and reducing energy and water consumption
- a healthy food policy, eg using locally sourced, seasonal produce; a commitment to reducing food miles; healthy eating
- travel-to-school initiatives such as car-sharing, walking, buses and cycle schemes to conserve energy, reduce traffic and pollution and promote healthier lifestyles
- a tight rein on procurement, seeking out local and ethical producers wherever possible
- a commitment to sharing its resources with the community to build social capital and community cohesion
- an ethos of life-long learning – the learning school
- a strong pupil voice and pupils who are empowered through responsibility
- a commitment to safeguarding the social and emotional wellbeing of staff, students and families
- a respect for individual difference and cultural diversity, within school and beyond
- a commitment to inclusion and participation for everyone with special needs
- an enthusiasm for outdoor learning that connects pupils with the natural environment and promotes physical and mental health, using school grounds to cultivate fruit and vegetables
- a commitment to collaboration and partnership working with other schools, groups and organisations locally, nationally and internationally
- an understanding of global issues such as poverty and climate change and our interdependence with other societies, economies and the environment

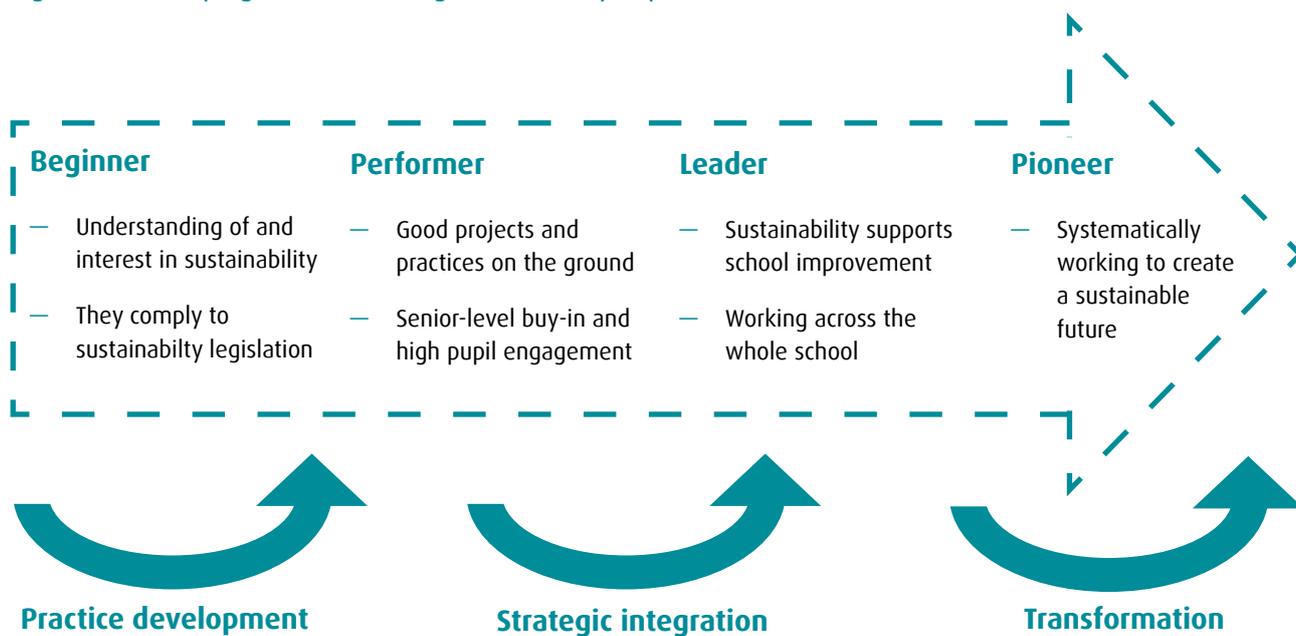
Research by Nationwide Schools group, 2010

An emerging framework

The journey for school leaders, as observed and supported by this study, has been one of developing and embedding sustainability into their schools and communities. Through this research it has become clear that we can see this journey is made up of four stages: beginner, performer, leader and pioneer. There are also two distinct phases of innovation, practice development and strategic integration as the schools make the transition from one stage to another, with the possibility of an emerging third transition of transformation.

This is consistent with other research (Dunphy et al, 2007) and with Forum for the Future's wide experience of working with many of the world's leading public and private organisations on sustainability. We can define organisations within four stages of development, expressed here as a leadership spectrum, from beginner to pioneer. After these years of investigation we have now been able to apply this model to schools, understanding what 'good' looks like at each stage as well as what is required at each transition as schools move from one stage to the next (figure 1 overleaf).

Figure 1: Developing and embedding sustainability: a process



Below is a description of these transitions.

Transition 1: practice development

The transition from beginner to performer is about bringing sustainability alive. From this we can suggest the following strategies and actions that might assist schools on their journey:

- Use the Sustainable School Doorways (National College, 2008a) to assess what the school is already doing and to identify other sustainability projects and practices the school can develop .
- In terms of identifying projects, pick something that is meaningful – a project that the school will value or an area the pupils are interested in.
- Get inspiration from other schools.
- Engage the pupils, and get them to inspire others.
- Seek to engage more and more people who are interested, within and outside the school.
- Start to model sustainable practices, for example through energy savings, growing food and inclusive behaviour.

How to lead: create energy and enthusiasm for sustainability by inspiring others; encourage pupils to lead their learning for sustainability; although it starts with one or two individuals, seek ways to create strength in numbers.

Transition 2: strategic integration

Transitioning from performer to leader is about moving sustainability to the heart or core of the school, so it is not seen as just another initiative. From this we can suggest the following strategies and actions that might assist schools on their journey:

- Build a vision for the school with sustainability playing a central role in this vision.
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- Engage everyone in a whole-school approach.
- Work with other schools through a community of practice, helping them take a strategic approach to developing sustainable practices.

How to lead: be clear, reflective and explicit about what the school's vision is and what is required; and find structures, processes and operating systems for an ever-growing group of people to take responsibility for sustainability practices.

Transition 3: transformation

Schools that are leading on sustainability find it energising and are starting to show glimpses of what it might take to pioneer a new way of doing things. These leaders have strong evidence of the positive difference it is making to pupil outcomes

and wider school improvement as well as building a sustainable future. They are finding ways to provide legitimacy and permission for others to engage in sustainability by creating effective communities of practice.

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In summary we can suggest to schools the following strategies and actions that might assist them on their journey:

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- Help to make the case from your work through inspiring stories, as well as strategic evidence collection about the value sustainability brings to your school. Provide legitimacy and permission for others to engage in sustainable schools.

Table 1 describes what a school looks like at each stage.

About this report

The transitions which move from beginner to pioneer provide the structure for this report. This report takes each transition and explores the following factors:

1. The common barriers: What are the perceived barriers that typically prevent or dissuade leaders from moving onto the next stage of sustainability?
2. Strategies and actions: What are the actual events, initiatives and actions that leaders have taken to move onto the next stage of sustainability?
3. Leadership qualities and processes: What did the leaders themselves do to bring about the transition? This also refers to the leadership qualities and processes identified in Birney & Reed, 2009a.

Table 1: Transition stages of sustainable schools

Beginner	Performer	Leader	Pioneer
Looking for ways to start	Incremental	Strategic	Systemic
Mainly doing what has been asked of them, but are now perhaps interested in moving forward and have an understanding of the issues at hand. Unlikely to have senior management buy-in.	Doing projects, a group of people are leading this in the organisation with senior buy-in.	See sustainability as an opportunity to improve their school. They are working across the whole school and senior managers are actively involved and have a clear vision.	The school is systematically working to create a sustainable future.
Looking to see what others are doing and starting to look at the Doorways – sustainability themes.	Working on some or all of the Doorways, which can be at a very high standard.	Work has been done to integrate sustainability across Curriculum, Campus, and Community. It sits in the School Improvement Plan and they are starting to address the 7 characteristics of Sustainable Schools (see overleaf).	A school that truly places the Care agenda at its heart, but also so that all its outcomes are creating a sustainable future. Schools are working with others to help them get started – developing communities of practice. (This requires a shift not only for schools but also the education system around them).

Characteristics of a sustainable school

In the previous research seven characteristics of a sustainable school were identified. The leading schools involved in the research found that the more they made the connections between these characteristics, the more they strengthened and reinforced school improvements. Therefore these characteristics are hallmarks of a leading sustainable school.

1. Sustainable schools give attention to their broader social and ecological footprint.
2. Sustainable schools view their ethos and purpose within a broader global context, and develop an understanding among stakeholders (including students) of that purpose.
3. Sustainable schools create positive benefits for pupils including engagement, participation and leadership.
4. Sustainable schools allow the development of, and integration and connection with, other educational policies and initiatives.
5. Sustainable schools provide direction and focus that bring about school improvements, including raising achievement and attainment.
6. Sustainable schools focus specifically on improving the learning of children.
7. Sustainable schools engage in curriculum change and development as sustainability is embedded across the whole curriculum.

3: Practice development: transition 1

This section explores how schools have successfully made the first transition from beginner to performer. Schools who are ready to make this transition are likely to have developed a number of sustainability projects and initiatives and these are starting to join together, with increasing numbers of people being involved and a growing sense of what sustainability means for the school.

Where do I start? The perceived problems and obstacles

Many schools across England are doing something to address sustainability, from recycling to addressing issues of climate change in geography. However fewer than 15 per cent of schools surveyed by the National College in 2008 felt they were addressing sustainability in key areas such as energy and water, travel and traffic and purchasing and waste (Jackson, 2008).

Many who are just beginning their journey feel that there is no clear permission to give a serious focus to becoming a sustainable school, as the agenda is not directly included in the Ofsted inspection process. Even when schools are enthusiastic, they can quickly see what a large and all-encompassing agenda this is, and can become unsure of what it really means and where to start.

This section describes how schools have started to overcome resistant attitudes and gain commitment by demonstrating what is possible and the value of sustainability projects in terms of pupil engagement and enriching the curriculum.

Bringing sustainability alive: strategies and actions

This section explores the strategies and actions schools used to get started, gain commitment and involve others in sustainability.

Seeing where we are

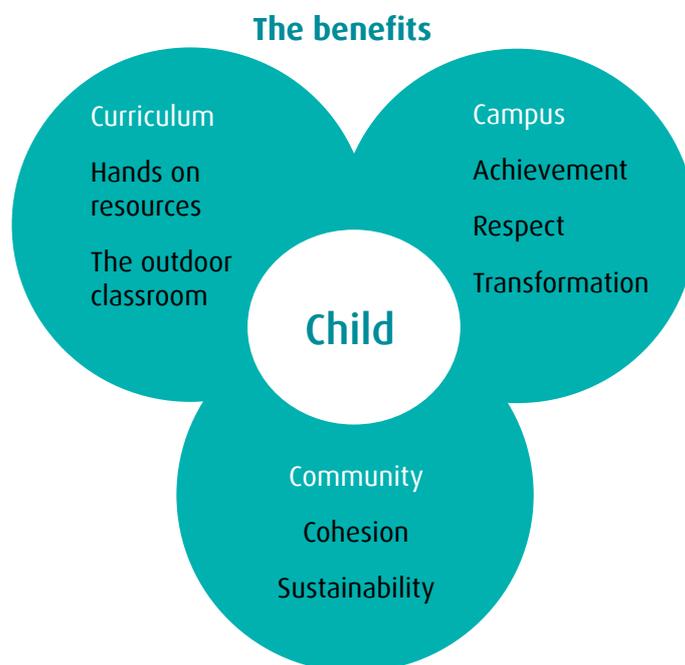
Many schools have for a long time been doing something that relates to the environment and the natural world, for example an environmental study in their curriculum or using their campus in outdoor learning. So the starting place is finding out what is already happening in school and recognising this work as part of the sustainability agenda.

One school involved in this research stated that they found it motivational to initially take stock of all the things they were currently doing on sustainability. The leaders perceived that teachers could be teaching about sustainability, particularly in geography or science, without realising its significance and/or realising how it joined and connected with teaching and learning in other subject areas. This was identified by conducting an initial audit to understand what schools were currently doing. It also enabled teachers to start to consider sustainability across all teaching and learning provision (as opposed to isolated subjects), parent engagement, and how sustainability could impact on achievement and attainment.

Other schools began by measuring or estimating their current environmental impacts, identifying where they could have the biggest influence. For example, when one school started to measure its energy usage, pupils immediately linked it to what they could control, eg turning computers off at the end of the day. So measurement led directly to behaviour change.

Figure 2: Connections: curriculum, campus and community

Why did we get involved?



Case study 1: Batley Girls' High School

At Batley Girls' High School there has been a real focus on becoming more strategic about the sustainability agenda. The senior leadership team (SLT) has been involved in addressing the question 'What is a sustainable school?' and in order to answer this has drawn on the curriculum, campus and community, seeing them as interconnecting aspects of the whole school (see figure 2). They use this simple working model to address whole-school priorities such as community engagement, student achievement and sustainability. The students, their wellbeing and development and their entitlement to be part of a sustainable school are at the centre of all the school does.

Picking something meaningful: picking something local and meaningful has been an important impetus and has provided a stimulus to enable schools to get on and do something. For example, one school turned a section of the playing field into a vegetable patch and involved the children in planting and growing vegetables that were then cooked for lunch.

This had the effect of making sustainability tangible for both teachers and pupils, raising its profile and generating curiosity about the agenda. One community of practice chose to develop the school grounds and wildlife areas so that Forest School¹² activities are now feasible.

The eight doorways (National College, 2008a; see Appendix 3) are a good way to identify which areas schools should focus on in terms of sustainability. The eight doorways self-assessment questionnaire has been used by schools enabling them to identify particular gaps in terms of sustainability which they could subsequently focus on (see Appendix 3).

Look at what other schools are doing: looking at what sustainable practices other schools are doing and emulating these is a good way to get started on developing a sustainable school. The National College website¹³ has clear information and tips to help schools get started, including case studies. Sharing ideas in terms of what other schools are doing within a community of practice can also help.

Engaging pupils and inspiring others: a common process of getting started has been involving the pupils, an example of which is their participation in the school eco-committee. This raises the profile of sustainability and generates excitement about the work. The Long Eaton School has found this to be a very effective way of getting more staff interested and involved.

¹² <http://www.forestschools.com/>

¹³ www.nationalcollege.org.uk/sustainable-schools

Case study 2: Ashley Church of England Primary School

This school of 270 pupils began its journey by measuring the energy usage of the school buildings. The children got involved by monitoring the results, which led them to target and address the energy peaks they saw, for example by asking teachers to use the photocopier less by finding alternatives to paper handouts.

The school then set a target regarding energy usage to remain below 100kWh per day and compared its results every Friday, with awards for achieving the target.

The school also invested in low-energy technologies such as light sensors, a biomass boiler and solar panels on the roof of a new building. In the first year this halved its electricity usage and won it the Ashden award for sustainable energy in 2009.

Adults in schools can be the main barrier, so working with pupils can help to persuade teachers and other stakeholders, such as parents, to see the value of sustainability. 'The involvement of pupils in decision-making and in sustainable activities can be a powerful motivating force within and across school communities' (Campbell, 2010:3).

A key way to engage pupils is through the curriculum, using resources for teaching and learning and involving non-governmental organisations and other community groups to help enrich the curriculum around sustainability topics such as Forest Schools and global dimensions. This also involves looking at how sustainability works alongside literacy and numeracy or personal, social and health education (PHSE). World Wildlife Foundation (WWF) provides a number of resources on sustainability for schools to use (WWF-UK, undated)¹⁴.

Extending activity: having engaged pupils, another strategy schools use is to start to extend sustainability activity by involving more people both in and outside the school, and widening the nature and shape of the work. For example, one school led a local climate change convention, working with the local authority to plan and design the event.

Another example is Aintree Davenhill Primary School which focused on waste. It began by involving the local council to find out what happened to its waste

and what other forms of waste it could recycle. It then developed a waste policy, held an assembly to highlight the issue and provided suitable bins in all the classrooms. The children were involved throughout, leading to a shift in the teacher-pupil relationship, with the children becoming more proactive and inclined to find solutions.

It is worth noting that planning for more complex activity is then more likely to be put into the school's development plan, thereby raising its status and priority.

Modelling sustainability: the research found that schools moved from teaching about sustainable development in theory to starting to model it on campus. For example, teaching about climate change might lead to looking at energy use and the school's carbon footprint. One school raised the profile of sustainability by raising £2,500 in three weeks to fund the first wind turbine in a primary school in the south east. This "provided a working example of renewable energy which was metered by the children to better appreciate the concept of free energy" (headteacher, Ashley CE Primary School).

Involving the local community: many of the schools have involved their local communities (including other schools) in developing sustainability within their school. By involving others, schools build momentum and commitment and further activity spirals out.

Getting started on this activity can be a long and uphill struggle. Many take a project-driven approach that involves discrete activities, for example creating a reusable bag for the local community. One school involved in this research employed a local expert to work with a group of schools beginning to develop sustainability and then researched the impact. "As a result of the extra support being provided... we made sustainability a priority within our school development plan because of the potential engagement of the children" (spokesperson, Hagbourne Primary School).

This work on sustainability creates a snowball effect as it develops and extends its involvement to others. The initial projects open communication channels with the community and other schools which lead to other projects, creating further participation and interest.

From previous research, the community of practice has become an established way of building a cohort of people involved in a shared endeavour. Schools in this project have developed communities of practice

¹⁴ www.wwf.org.uk/what_we_do/working_with_schools/resources/

with other schools, individuals and groups in their community, where they have shared best practice and have taken the lead in moving ideas from the community of practice forward. They visit each other, hold shared events and reflect on what they are doing together. These communities of practice also provide encouragement and build confidence among schools in taking forward the sustainability agenda.

Farnborough Grange School led an initiative with other schools in its community of practice. The schools worked at a class-based level focusing on pupils' life stories. They asked, 'What has life been like for you while being part of a school community?' Stories and pictures were created by the children and shared with peers and children. This project linked up areas of the curriculum and showed how sustainability could bring different topic areas to life.

Strategic foresight: sometimes starting with an idea and working towards it helps to get processes off the ground. For example, when one leader started as head, her school had no clear school vision and was in special measures. It needed quick wins and so started with the healthy school agenda, which was something the children could enjoy and staff could see the children benefit from. This started to bring the community together and prepare the ground to develop a more strategic vision.

Where to focus?

With limited time and resources, two key dilemmas emerged that schools starting out need to address:

Breadth or depth? Leaders can easily be torn between focusing on doing one project really well, or creating many projects across many of the doorways.

Internal or external? With limited time and resources, school leaders either focus on getting their own house in order or involving others in the community to create a supportive group on a shared journey.

What does it mean to be a performing sustainable school?

- A school that is fully engaged in sustainable schools is starting to touch on some of the core elements within the school. For example, sustainability is being addressed in teaching and learning through subjects such as science and geography, as well as playing a core part in extra-curricular activity, for example eco-councils and campus development.
- These schools are starting to value this work and identify what it means for them, for example the relevance it has for learning and engagement, and the behavioural outcomes it creates.
- Many or all of the doorways are being addressed. These projects are embedded as a core part of what the school does, as part of its identity. They are likely to appear in the school development plan.
- They can therefore be having a positive impact on the community and reducing the school's ecological impact.
- These schools are really starting to get to grips with the issues and see the benefits of sustainability.

Creating enthusiasm and energy: leadership qualities and processes

Those who are beginning to lead their schools towards becoming a sustainable school are doing so by galvanising the enthusiasm and energy of those around them, from pupils to staff and community.

The people leading this agenda are inspiring and typically have qualities of experimentation and innovation about them. This means they take action despite the barriers and issues they encounter. Their starting place is often with the pupils, as this is a place of least resistance, creating an infectious wave of engagement that spills out into other areas of the school and community.

Students are encouraged to play a key role in leading their learning for sustainability. As a leader this requires you to provide permission, opportunity and the space for them to lead. This then creates tangible examples for others to follow. For example, one school created five raised garden beds and allocated one to each of the school's houses. Pupils were given roles and responsibilities so that leadership was distributed among them as they took ownership of the beds.

At the beginning schools are driving sustainability through a small group of adults who are excited by the projects. The leaders then seek, as they progress, to involve more and more people so as to share and spread the sense of ownership. Through this process they often seek permission from their senior leadership team (SLT) to legitimise these actions. Some schools mentioned the tension of trying to get the SLT to own such work so there was permission, including resources, to ensure that the enthusiasm of the children was sustained.

St Francis Xavier Primary School developed a community of practice to reach out to schools with little or no experience of sustainability. It aimed to engage senior leaders from these schools using a coaching approach. Staff began by holding an initial awareness-raising and planning meeting for senior leaders. They shared their own journeys and were candid about the benefits and challenges. The doorways were used to expand the sustainability agenda beyond eco-schools and identify activities for participating schools. The schools had regular activities and reviews to help them focus and maintain momentum within the community of practice. Many of these activities required collaboration between schools across the local authority that worked really well. They used the Sandwell Sustainable School Award¹⁵ criteria to initially assess current performance and then track the progress of the schools. This led to the successful accreditation of all the schools involved and helped to move on from only a few individuals taking it forward.

¹⁵ www.sustainableschoolsaward.co.uk

4: Strategic integration: transition 2

This section explores how schools have successfully made the second transition from performer to leader – these are schools that have a wealth of sustainable practice across the school and are now seeking to think more strategically about how sustainability can be fully integrated into the whole school. Leading schools are developing a clear vision for sustainability across the curriculum, campus and community and recognise that sustainability is an opportunity to improve attainment and achievement.

‘Not another initiative’: perceived problems and obstacles

The schools involved in this research have developed some excellent performance in terms of sustainable development, and are really addressing what it means for them, with the agenda touching many if not most aspects of the school, for example teaching and learning, recruitment and the school brochure (see figure 3 on page 20).

This represents the transition from performer to leader. We estimate that schools going through this transition represent somewhere between 5 and 10 per cent of English schools. They start to realise that sustainable schools cannot be just another initiative, but rather requires them to think about what is happening at the core of their schools: their policies, curriculum development and school development plan.

Many of the leaders in this transition were seeking to address the following challenges:

Initiative overload

Many of the school leaders in this research reported feeling overwhelmed by the volume of government initiatives that they were expected to implement. This presented two potential risks:

- First, the other initiatives drew teaching and management attention away from the sustainability agenda, leaving leaders reluctant to adopt it.
- Second, if it was seen as just another initiative, it risked becoming compartmentalised and seen as a passing fad.

What does ‘good’ look like?

By bringing together school leaders and sharing their progress in this research, many of the schools were surprised at just how much further ahead other schools in the group were compared with them in particular areas. This made them question their definition and expectation of what it meant to be a ‘good sustainable school’, with different areas of good practice emerging from different schools. From this, the schools involved in this research realised that there is no fixed point to be reached in order to become a ‘good sustainable school’. When working on sustainability there is always something more to do and improve, as it is both an evolving journey and a dynamic destination.

What about activities that are not addressing sustainability?

In most schools there are still activities taking place that remain untouched by the focus on sustainability. One headteacher reported a sense of discomfort that although the school had sustainability so much at its heart, the staff and parents were all involved in international air travel for holidays and business. Schools have had to decide how they will respond to these kinds of ethical issues.

What are our ethos and values as a school?

As schools explored the far-reaching and all-encompassing nature of sustainability, they questioned what this meant for the schools’ values and ethos. They explored how the values supported sustainability, or how they needed to be revised to incorporate what sustainability meant for the school. This highlighted the need for schools to have a clear vision of where they are going and for sustainability to be at the heart of this vision.

What would it mean to realign all our activities around sustainability?

As the sustainability agenda shifts from activities led by individuals into the heart of the collective processes of the school, performing schools begin to ask what the school would look like if all the activities incorporated sustainability and what the potential obstacles are to this.

How do we communicate, engage and make explicit what is happening?

Performing schools also grapple with how to frame, articulate and illustrate what they are doing with their various partners, from pupils to governors. This is required as a wider range of stakeholders are involved in the agenda.

No matter how much a school is doing it is unlikely to be on track for sustainability in any reasonable timeframe unless it has a vision for its place in a sustainable future, redefines its purpose and aligns its strategies and practices with this.

Looking at the core: strategies and actions

This section outlines the practical steps and approaches the schools took to overcome the barriers to becoming a leading sustainable school.

Building a vision

A vision emerged as a powerful tool for creating a compelling sense of direction that could galvanise and inspire the school's pupils, teachers and partners. This also articulated where the schools wanted to be in terms of sustainability, thereby creating a dynamic tension between that and where the school was currently. This tension provided focus for improvement and innovation. The vision needed to include the school's ethos and core vision – not just a vision for sustainability within the school, but rather a vision for the school based on the principles and values of sustainability.

Hemsworth College wanted to engage other schools in its local area in sustainability. Consequently it set up a community of practice of local schools and invited the heads to a workshop. During the workshop the heads were asked what they wanted to achieve and the college shared the lessons that it had learnt. From this they worked on what the community of practice wanted to achieve together by developing a vision. This provided a focus for them to work towards. What worked well in this community of practice was distributing the leadership across the community of practice and allowing individuals to take risks.

The National College has materials available to support schools in the development of a vision (National College, 2010). Appendix 4 can also help you with this.

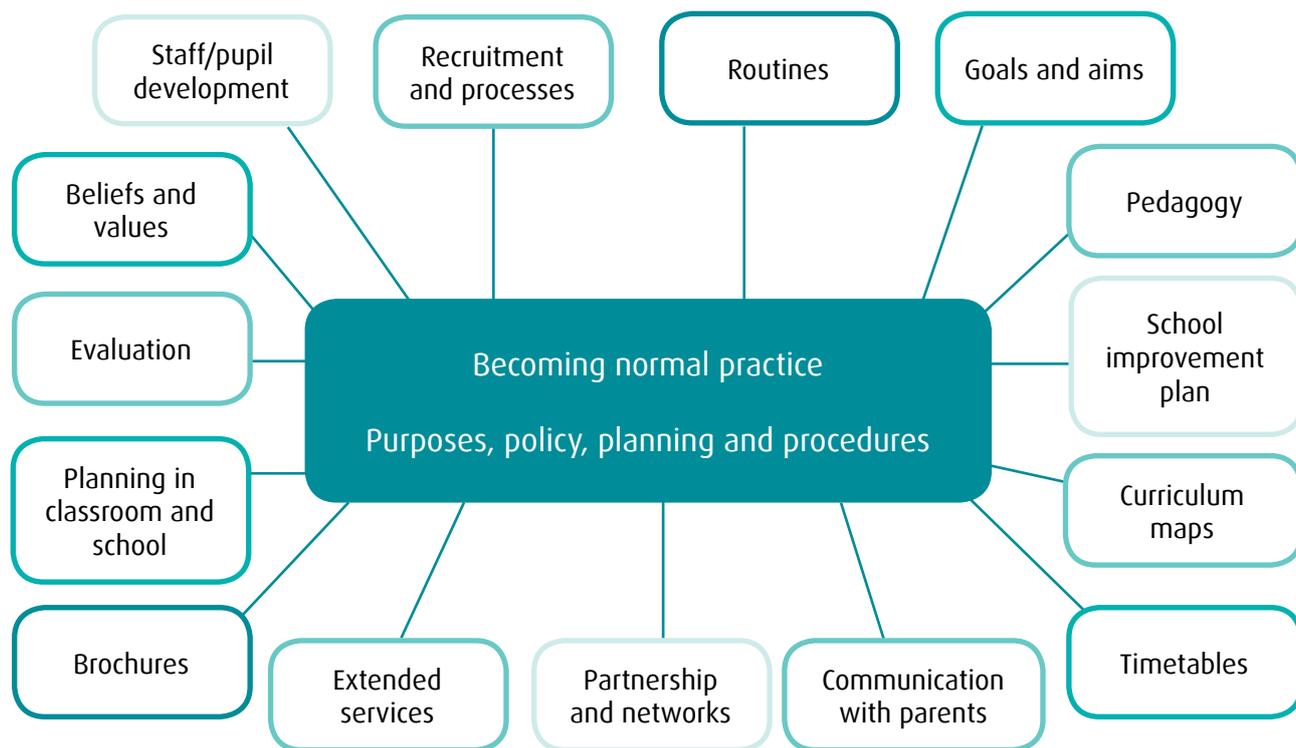
Getting the strategy right

Given the demands on school leaders, it is important that schools have a strategic focus to ensure they prioritise their time and effort on the right areas. This avoids diluting their efforts and slowing or stalling progress. The research highlighted that this was easier for schools that had a vision of where they were going, and knew their current impacts, or where they were starting from. The tension between the two enabled these schools to make an informed choice on where to focus, that both addressed their current impacts and took them in the direction of their vision. In doing so they could see more clearly which initiatives would provide a flexible platform for future developments.

For example, many schools included sustainable practices within their school improvement plan. This added formality and legitimacy to the agenda and showed how it was integrated into wider school activities and contributed towards improved attainment and standards. Appendix 3 shows how Lark Rise Lower School has developed a clear sustainability plan, giving a strategic focus to sustainability.

In figure 3 overleaf we can see the areas these leaders identified as areas sustainability can inform.

Figure 3: Sustainability as a whole-school concept



Integrating it across the curriculum

Integration involves introducing sustainability in all lessons and lesson planning, and being able to name the pedagogy required to transform the way schools think about teaching and learning. Schools at the leadership stage were demonstrating that sustainability can be integrated across the curriculum. For example, one school used the WWF-UK pathways tool (WWF-UK, undated; Appendix 4) to look at the different characteristics it wanted to cultivate in the pupils at different key stages. It then used this as a way to plan the whole curriculum. Other schools looked at key topics that have a central sustainability message, such as rainforests, India, Africa, recycling, green energy and climate change, and looked at how these could be addressed through the curriculum.

Over the last year, Edwalton Primary School has started to develop a creative cross-curricular programme that embeds sustainable issues, so that all classes study sustainability issues as a main focus of work, for example using climate change ideas in literacy, and design and technology. The school feels that sustainability provides real-life contexts, making the work more relevant to pupils in all subject areas.

In secondary schools it can be harder to embed sustainability across the whole curriculum, due to the specialisation in subjects with different teachers. However looking at how sustainability helps deliver the curriculum can help inform all aspects of teaching and learning.

In terms of the curriculum, our teachers are experienced in working in a cross-curricular way, but also use their pupils' interests and experiences to enhance learning. They also encourage pupils to come up with questions that they want to find answers to. Teachers always refer back to previous learning so pupils have excellent opportunities to apply their skills and knowledge. All pupils have a reflections book where they keep a record of their feelings, changes in attitudes, reactions etc to different experiences. We consider that this helps with their writing as they can express themselves confidently, without fear of ridicule. Pupils know that they are listened to, and their learning, engagement and achievement becomes a two-way partnership rather than something that is done to them.

School leader, workshop, describing how she engages with sustainability through the curriculum

Engaging all

These schools are also starting to find ways to engage all stakeholders, from pupils, teaching assistants, parents, community members, governors and teachers to staff in partner schools, so they are creating a whole-school approach to defining, planning and implementing sustainability. For example, one school has merged its eco-committee into a whole-school participation process, so that all pupils can have a say in the way forward on environmental issues and more importantly beyond.

One school wanted to engage the local community in carbon reduction. Being in a deprived area, the focus was put on saving money, thereby linking to alleviating fuel poverty. The initiative was launched at a local pub in the form of a quiz, which 70 people attended. The quiz questions took the form of challenge sheets that tested knowledge of which actions resulted in which cost savings. In addition to this, two schools in the community of practice held green days, which were attended by 150 parents. Again the challenge sheets were used to raise awareness of what they could do to save energy and money.

Strategic engagement through the community of practice

The intention of using communities of practice as a method of engagement was to enable schools that were leading the field to share ideas and engage with other schools, supporting them with their journey. As many of the schools joining these communities of practice were just beginning their journey, leading schools are only just starting to look at how to help these schools think strategically about their work. Many of these communities of practice hope to continue working together and

are looking to address some of these strategic integration issues over the coming year.

As a leader of sustainability of both primary and secondary schools within its locality, Southgate School has developed an interesting strategy that combines a website, outreach support and meetings to communicate with its community of practice. The aims of the community of practice are “to provide practical strategies to implement the sustainable schools agenda in your school.”

Lark Rise Lower School noticed that a number of schools had been enthused by the idea of sustainability, as a result of the children presenting their work. This was a real point of inspiration, so this year it is starting a professional support group based on sustainable schools involving around 15 schools.

Being clear: leadership qualities and processes

Those who are leading this transition from performer to leader are starting to give form and structure to the work of sustainable schools. They are doing this by being more reflective and explicit about what is required, their purpose, and how they intend to create and are creating a sustainable school. They are being clearer about what leadership is required and above all what the leadership is for.

Their sphere of concern starts to expand, for example sustainability goes from being an issue for their school to being one for their community, including other schools. They are therefore deepening their level of ambition, personally and for the school. These leaders are really starting to get to grips with sustainability by asking hard questions and also being able to communicate clearly the benefits of developing and embedding sustainability.

What does it mean to be a leading sustainable school?

You might have outstanding performance and be leading in some areas but unless you are taking a whole-school approach you cannot fully transition to being a leader in sustainable schools.

- Having it as part of the school ethos and vision is thought of as key. This is something to explore at interviews for new staff. See it as an umbrella agenda – helping to pull all the bits of the jigsaw together, something that can integrate healthy schools, eco-schools, international marks etc.
- The curriculum is underpinned by sustainability values and principles, influencing what is taught and how children learn.
- The school sees itself as an embedded part of its community, and therefore takes a role in engaging and encouraging others through a community of practice, to start or deepen its sustainability journey.
- It is starting to recognise and promote the values of sustainable development.

Rather than one person driving this forward, leadership refers to a larger group of people taking responsibility for the whole school's direction; this often includes the wider community and pupils.

The contract between teachers and pupils changes, from one where they are independent of each other, to more of an interdependence to enable mutual learning to take place. What leaders are doing is framing the bigger strategic challenges for others to connect with, so that they can flourish and start to become leaders themselves. This requires structures, processes and operating systems for pupils and other stakeholders to do this.

When Edwalton Primary School was designing its curriculum to include learning for sustainability, it wanted to ensure that it valued the input of children and parents to help shape it and give useful feedback on progress. It distributed planning grids to all pupils, which they took to their parents or carers to identify what they already knew about the topics as well as ideas they wanted to understand more about. Teams of teachers then planned the term's topics accordingly.

The point where leadership is being thought about and not just enacted is a significant step on the journey at this stage. For example, Brabins Primary School hosted a reflective event for the leadership of the community of practice. This focused on looking at the skills, attributes and qualities leaders in their associated sustainable schools are using to effectively motivate and engage their pupils, teachers, parents and the wider community, and the challenges they have to overcome. Participants were asked to reflect on questions about their leadership. From this work they developed a common agreement for moving forward in terms of what leadership skills to use to develop sustainability, agreeing that leaders were enjoying managing change, reflecting on their practice and having sustainability at the centre of school improvement.

5: Transforming the sector: a third transition?

The school leaders who have been a part of this journey over many years and who are leading the field are starting to show us a glimpse of what might be possible if we were to take the challenge of sustainability into the heart of education.

The national group of teachers discussed as part of this enquiry:

We need a discussion about the aims of education.

What we want for our children:

- a holistic understanding of quality of life
- that we are thinking about them now and most importantly for their future
- an understanding that our survival depends on living within our environmental limits
- we need to be community focused

In 2009 the National College published a think piece by Jonathan Porritt and David Hargreaves entitled *Every child's future: leading the way* (Porritt & Hargreaves, 2009). It outlined the challenges we will all have to face in the future, for example rising consumption levels leading to demands on resources that exceed what the Earth can regenerate, and growing inequality gaps. If we take these challenges on board, education needs to start to address these issues today.

The leaders at the cutting-edge of practice are not only seeking to transform their own school and other schools within their communities of practice, but see the challenge as one for the education sector as a whole.

What are the challenges facing these pioneering schools?

Not just a single-school issue

One head was pondering the question, "If I leave the school, would it continue to focus on sustainable schools?" There is a risk that no matter how much sustainable schools is embedded, and is a

core foundation of what the school does, a new head might come along and change that focus, with sustainability becoming marginalised again. Organisations are dynamic, people come and go – how can the journey be maintained when new staff members do not understand the issues? Or when potential heads have not come into contact with the agenda yet, or don't prioritise it in the same way? Without wider systemic changes to education, maintaining this agenda by focusing on what is happening within the school may be futile.

Leaders are asking questions about what we need to place value on and how schools should be judged. They feel there needs to be a conversation about this with bodies such as the Department for Education and Ofsted. If this is not part of the core purpose of education, and the money and prioritisation aren't there, it is hard to continue to lead.

These leaders are showing courageous agency, a quality identified in Birney & Reed (2009b), meaning leaders are stepping up, and asking difficult questions about the direction education needs to take. How do we engage others in education in a dialogue about what should inform this purpose? If we see sustainability as about everyone's future – where it's a basic entitlement for children to have the means to flourish in their future as previous generations have – it changes and reframes our understanding of a whole school seeking sustainability through everything that it does.

The headteacher at St Martin at Shouldham CE Primary School sees sustainability as informing everything that the school does, from initiatives to curriculum design as well as a moral dimension, for example moving from a prescribed code of conduct to a personal value system that informs behaviour. It also has a spiritual dimension, as a way to help us see the outward manifestation of who we are, how we relate to each other and how we are interdependent, giving us a sense of place, hope, joy and wonder.

She describes this journey over the last 10 years as having 3 phases:

- initially learning about sustainability, where the school builds knowledge
- second learning through sustainability, where one-off sustainability events are part of each topic
- finally learning as sustainability where each cross-curricular topic has sustainability at its heart

Making the case

One of the sustainable schools working with the National College reported that it had enhanced its status in an Ofsted category, from good to outstanding, and another school reported that becoming a sustainable school assisted its progress out of special measures to becoming a good school, as well as many others reporting the impact and positive benefits that sustainability brings in terms of profile and results¹⁶. While there is growing evidence of the impact of sustainability in schools,¹⁷ it is often difficult to collate, especially when we look to measures of success that are over long timescales and are impacting on the quality of life of the wider community.

As the current political focus for schools is to reduce their bureaucracy, freeing them up to spend time on their priorities, this is an ideal time for leaders to begin to shape a more sustainable future. School leaders who were part of this research can start to lead the way and support other schools by their example or through their communities of practice.

There is a need to prepare for the future. We are teaching children about technologies and experiences yet to happen. The children of the 21st century no longer need giving information but need skills to search for answers themselves, prepare for a future we do not yet know.

Participant, workshop 3

Evidence of the impact of sustainable schools is supported by growing research, policy, and practitioner literature, in the main from the UK but also internationally. Multiple sources of evidence now show that being a sustainable school raises standards and enhances well-being. This is because sustainable schools engage young people in their learning therefore improving motivation and behaviour; they also promote healthy school environments and lifestyles. In addition, the evidence shows that sustainable schools advance community cohesion by making valuable connections between the school and its parents, carers and the wider community.

DCSF, 2010:2

¹⁶ Sustainability and Renewal: findings from the Leading Sustainable Schools research project (Birney & Reed, 2009b)

¹⁷ Previous DCSF report - Evidence of the impact of Sustainable Schools (DCSF, March 2010)

Communities of practice: a method of widening engagement

A community of practice is a group of people who share a common concern and are passionate about doing something to address it. By coming together as a community on an ongoing basis they deepen their individual and collective knowledge and expertise in this area (Wenger, 1998). In this case their common concern is how school leaders develop, embed and lead sustainable schools.

The schools who were engaged by the National College in this research were required to form a community of practice. Action research was the process that lay behind this approach, whereby schools would develop sustainable practices in their schools, evaluate the outcome of these practices and share their learning including the leadership skills employed with their community of practice.

Six types of activity were identified as the communities of practice developed, usually but not always progressing through the types. These were as follows (see Appendix 4 for a tool to help you use these in scoping your community of practice):

1. Engaging other schools and community partners (including the local authority and existing groups)
2. Forming the communities of practice and scoping out work together
3. Training, coaching and providing support to other schools
4. All schools active in developing sustainable schools and sharing their experience
5. Working together on a project (with different levels of equal ownership)
6. Members of the community of practice expanding and facilitating engagement and practice development with others

Through the course of the whole National College project, 56 communities of practice were formed with between 3 and over 20 members in each, some lasting the course of a year whilst others are now being maintained and continued into the future.

Why this approach?

Sustainable schools is not just another initiative that has been fully developed and needs to be disseminated to schools. Instead it is a journey that schools will continue to investigate and develop with local solutions for their own context. Communities of practice are therefore the ideal approach to help them not just share already established best practice but also to actively support the cultivation and development of sustainable schools, both in schools that are beginning and those that are looking to be pioneers.

This approach allows schools to self-determine their own path into the future within a supportive environment, spreading progressively throughout the education system whilst making it locally relevant.

6: Maintaining the momentum

Through this research we now have a better understanding of what a sustainable school looks and feels like, observing practices that galvanise and energise learning and the wider community as well as seeing the transformative qualities sustainability can have when driving a curriculum and the whole school community. We have articulated these as characteristics of a leading sustainable school.

How widespread is leadership for sustainability? We have seen that the base of practice – those beginning to engage with sustainable schools – is steadily increasing. This study has played a key part in that movement by enabling leaders to create communities of practice in their locality.

The schools that are really showing excellence are not only creating energy around sustainability projects but are also strategically integrating it into the core of their school, such as embedding sustainability within the curriculum or integrating it into school improvement plans. Those who support schools, including school leaders, local authorities and charities, need to consider how to support more schools in starting to engage and begin their journey so there is a mass of innovation but also to strategically integrate and embed this into their direction and vision.

The challenge for leadership is therefore how we can inspire and actively engage more schools and cultivate excellent and effective practice. Leadership through communities of practice has been an effective tool across the sector, especially for those who have combined energy and passion about sustainability with a strategic intent for broadening out and engaging more and more people, whilst ensuring they are explicitly asking fundamental questions about school, learning, community and all our futures.

Schools, and those supporting them, should consider all of the strategies and actions in each transition (see Appendix 4). Here is a summary of the key steps that will help a school move from a beginner to a pioneer.

1. Develop practice in sustainable school using the eight doorways (National College, 2008a) that engages pupils and seeks to reach out to others across your community.
2. Step back and look at what this practice means in terms of how you wish to run your school. What strategic implications does it have? For example, what are the implications of sustainability across the curriculum, as part of the school vision and its policies and plans?
3. Help to make the case from your work through inspiring stories, as well as strategic evidence collection about the value sustainability brings to your school. Provide legitimacy and permission for others to engage in sustainable schools.

This research has shown what leaders can do and what kind of leadership is required. Schools are inevitably at different stages and report a range of barriers that need to be overcome. The best schools and their leaders are increasingly seeing their role as being to work with other schools and to influence the wider system to achieve change. The new government's focus on freeing up schools from bureaucracy and trusting leaders will increase the scope for this kind of bottom-up change.

If we accept the dilemma and urgency we face as a society and the potential role education can play in society, schools and those supporting them should be asking themselves the following questions:

- What kind of education do we want and what does this mean for schools?
- What kind of future are we preparing our pupils for?
- How will you be leading if the future really matters?
- What is your school currently doing and measuring?
- How can you integrate this with what you are already doing? For example, working with the community, regenerating and managing the campus (including purchasing and waste) and developing the curriculum are all aspects that are enhanced by the sustainability agenda.
- What is your whole-school and community definition of a sustainable future and what does it mean for your vision?

Appendix 1: Themes and questions

The following themes were used to focus the research for the Nationwide and Going Local communities of practice.

- How do you motivate and embed sustainability within your school and community of practice? What practical tools and techniques do you use to do this?
- How do you embed the leadership qualities and the characteristics identified in Birney & Reed (2009b) and what challenges does this bring?
- Are new qualities and characteristics of becoming a sustainable school emerging beyond the seven identified in phase 2?

The leaders in the Nationwide group also looked at the responses to these questions:

- What is the impact of empowering pupils on the children themselves?
- How can we create an outdoor learning area (campus) that will be sustainable in the long term through the involvement of the community (students, staff and wider community)?
- How can we develop a sustainable creative curriculum that involves staff, pupils and parents in its design and realisation?
- How can we encourage students to take on leadership roles with sustainability projects?
- How can we provide a vehicle for students to progress and continue sustainability work when they have left school?

Appendix 2: Characteristics of sustainable schools

The seven characteristics of a sustainable school are listed below.

1. Sustainable schools give attention to their broader social and ecological footprint.
2. Sustainable schools view their ethos and purpose within a broader global context, and develop an understanding among stakeholders, including students, of that purpose.
3. Sustainable schools create positive benefits for pupils including student engagement, participation and leadership.
4. Sustainable schools allow the development of, and integration and connection with, other educational policies and initiatives.
5. Sustainable schools provide direction and focus that bring about school improvements, and help raise achievement and attainment.
6. Sustainable schools focus specifically on improving the learning of children.
7. Sustainable schools engage in curriculum change and development as sustainability is embedded across the whole curriculum.

Qualities of leadership for sustainability

The following leadership qualities were identified in phase 2:

- the presence of an inspirational and moral vision (an outward-facing passion)
- a commitment to nurturing the potential of others, thereby encouraging and enabling them to contribute to the realisation of the vision (cultivating the potential of others)
- consistently modelling the behaviours required to achieve the overarching vision

In order to develop these leadership qualities, the following are important.

Leading through relationships

A belief in and commitment to developing relationships with others is fundamental to each of these aspects, and was strongly evidenced throughout this study. Indeed, it was by nurturing relationships with and between others within the school, the broader partnership and the wider community that these leaders established the systemic commitment to sustainability that is essential to achieving the broader vision of the sustainable school.

Passionate and outward-focused

This means holding the values and visions of sustainability in a way that gives an imperative to act from a larger sense of purpose, one that is outward looking, where leaders look beyond the school and into their community and its environment.

Cultivating the potential of others

This requires leadership that is inclusive, committed to a shared vision, demonstrates care and concern, and develops ideas from others, thereby enabling them to develop their ability to lead.

Demonstrating courageous agency

The term 'courageous agency' is defined as seeing oneself as being able to make a difference and having the ability to change the status quo. It requires taking the initiative, as well as a willingness to take risks and having the energy to create new practice and change.

For more information on the characteristics please go to page five of the report Sustainability and renewal, a summary of which can be downloaded at:

<http://www.nationalcollege.org.uk/docinfo?id=33295&filename=sustainability-and-renewal-findings-summary.pdf>

Appendix 3: Transition tools

The eight doorways

The eight doorways through which schools may choose to initiate or extend their sustainable school activity (National College, 2008) focus on ways in which sustainable development can be embedded into whole-school management practices. The doorways provide practical guidance to help schools operate in more sustainable ways. The doorways are:

- Food and drink
- Energy and water
- Travel and traffic
- Purchasing and waste
- Buildings and grounds
- Inclusion and participation
- Local wellbeing
- Global citizenship

For more details, see www.nationalcollege.org.uk/index/leadershiplibrary/leadingschools/leading-change/key-initiatives/sustainable-schools/developing-a-sustainable-school/valuing-our-future-toolkit.htm

Self-assessment questionnaire

This tool was used to identify the perceived strengths and weaknesses of each school within the community of practice

My school promotes greasy food and drink products from multi-national companies	<p style="text-align: center;">Food and drink</p> <p style="text-align: center;">0 1 2 3 4 5 6 7 8 9 10</p>	My school is a model supplier of healthy, local and sustainable food and drink
My school consumes like an ageing carbon dinosaur eg. wasting significant amounts of energy and water	<p style="text-align: center;">Energy and water</p> <p style="text-align: center;">0 1 2 3 4 5 6 7 8 9 10</p>	My school is a model of energy, efficiency, renewable energy use and water management
My schools does not care about how people get to school as long as it is quick and comfortable	<p style="text-align: center;">Travel and Transport</p> <p style="text-align: center;">0 1 2 3 4 5 6 7 8 9 10</p>	My school is a model of sustainable travel
My school wastes resources and does not care what it buys and from where	<p style="text-align: center;">Purchasing and waste</p> <p style="text-align: center;">0 1 2 3 4 5 6 7 8 9 10</p>	My school is a model of waste minimisation and sustainable purchasing (procurement)
My school buildings are outdated, inefficient and uninspiring museums to the 20th-century excesses, whilst our school grounds are blank open spaces	<p style="text-align: center;">Buildings and grounds</p> <p style="text-align: center;">0 1 2 3 4 5 6 7 8 9 10</p>	Our school buildings make visible use of sustainable design features and develop their grounds in ways that help pupils learn about the natural world and sustainable living
My school dictates and prepares everything we do in the school that day	<p style="text-align: center;">Inclusion and participation</p> <p style="text-align: center;">0 1 2 3 4 5 6 7 8 9 10</p>	My school is a model of social inclusion, enabling all pupils to participate fully in school life
My school is an island within its surrounding community, not involved with any local initiatives	<p style="text-align: center;">Local well-being</p> <p style="text-align: center;">0 1 2 3 4 5 6 7 8 9 10</p>	My school is a model of good corporate citizenship within its local areas
My school is inward looking - never hearing or linking with anything beyond Devon and the UK	<p style="text-align: center;">Global dimension</p> <p style="text-align: center;">0 1 2 3 4 5 6 7 8 9 10</p>	My school is a model of good global citizenship

Sustainable schools self-evaluation: children's version

Developed by Lark Rise Lower School

Doorway	By 2020	What the school does
Food and drink	<p>The school gives children healthy, local and sustainable food and drink.</p> <p>It shows strong commitments to the environment, social responsibility and animal welfare.</p> <p>The school buys and grows fresh, locally sourced, ethically produced, healthy foodstuffs.</p> <p>The school protects the environment and improves pupils' understanding of food and where it comes from.</p>	
Energy	<p>The school uses energy efficiently.</p> <p>The school manages water use to make it energy efficient.</p> <p>The school uses renewable energy such as wind, solar and bio-fuel energy, low-energy equipment, freshwater conservation, use of rainwater and other eco-efficiency measures.</p>	
Travel and traffic	<p>The school encourages staff and children to use healthier, less polluting or less dangerous modes of transport.</p> <p>The children have a good awareness of road safety.</p> <p>The school promotes and encourages safe walking and cycling, car-sharing and public transport to lessen damage to the environment and help people have healthier lifestyles.</p>	
Purchasing and waste	<p>The school buys goods and services from local sources and ones that are environmentally safe and friendly.</p> <p>The school saves money by reusing, repairing and recycling as many goods as possible.</p> <p>The school has a policy and rules for sustainable consumption and waste minimisation (reduce, reuse, recycle).</p>	

Doorway	By 2020	What the school does
Buildings and grounds	<p>The school building is designed to have a low impact on the environment. Inside it has design features, new technologies, interior furnishings and equipment with a low impact on the environment.</p> <p>The lessons and curriculum teach children the knowledge, values and skills to understand the link between buildings, human wellbeing and nature.</p> <p>The indoor and outdoor environment and spaces are safe and good for health, learning and play.</p> <p>The buildings and grounds provide safe habitats for local wildlife.</p>	
Inclusion and participation	<p>The school allows all children to attend the school for learning. It has ways to allow all pupils to participate fully in school life. It teaches a long-lasting respect for human rights, freedom, cultures and creative expression.</p> <p>The school values difference and diversity.</p> <p>The school welcomes members of the community and has an atmosphere that values everyone's participation and contribution. The school discourages prejudice or injustice.</p>	
Local wellbeing	<p>The school's children and staff are good citizens in their local areas.</p> <p>When learning and at school, the children and staff do things that improve the environment and quality of life of local people.</p> <p>The school is a centre of learning about being sustainable and is supporting changes in local communities.</p> <p>The school gives pupils a sense of power and confidence that they can make a difference to their lives and communities and make decisions themselves.</p>	
Global dimension	<p>The school is a good example of global citizenship, with activities that improve the lives of people living in other parts of the world.</p> <p>The school helps children understand the wider world by being globally aware citizens who have been on exchanges and or are part of worldwide partnerships.</p> <p>Everyone in the school community has respect for the wellbeing of other cultures, countries and the global environment.</p>	

Appendix 4: Vision

Creating a vision

The natural step (TNS) principles can help you create a vision.

4 sustainability principles

Sustainability principle - 1

In a sustainable society, nature is not subject to systematically increasing concentrations of substances extracted from the earth's crust

Sustainability principle - 2

In a sustainable society, nature is not subject to systematically increasing concentrations of substances produced by society

Sustainability principle - 3

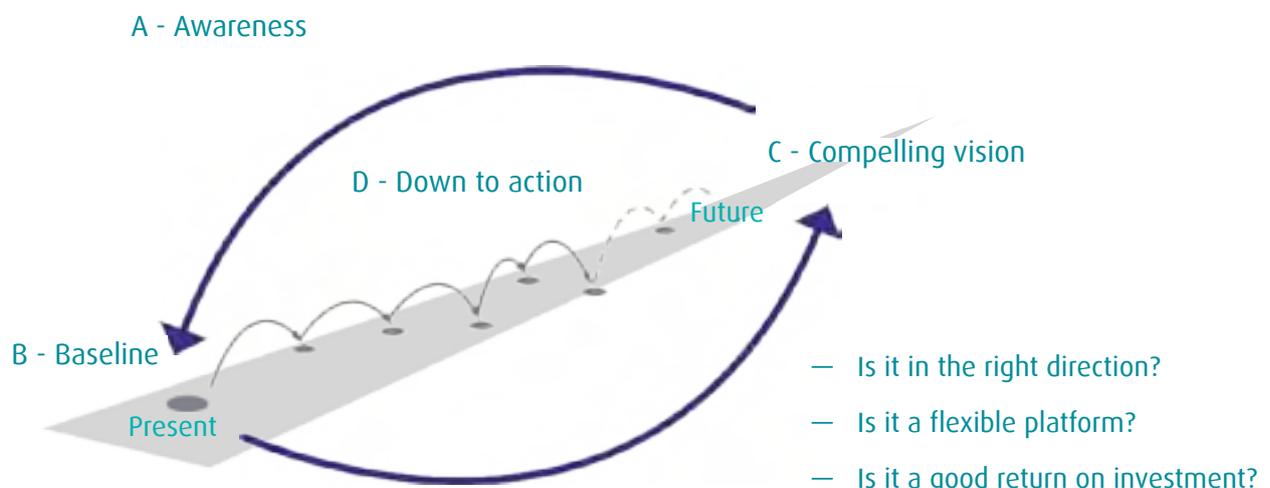
In a sustainable society, nature is not subject to systematically increasing degradation by physical means

Sustainability principle - 4

In a sustainable society, people are not subject to conditions that systematically undermine their ability to meet their needs

The TNS ABCD model can help you plan from this vision into a practical strategy.

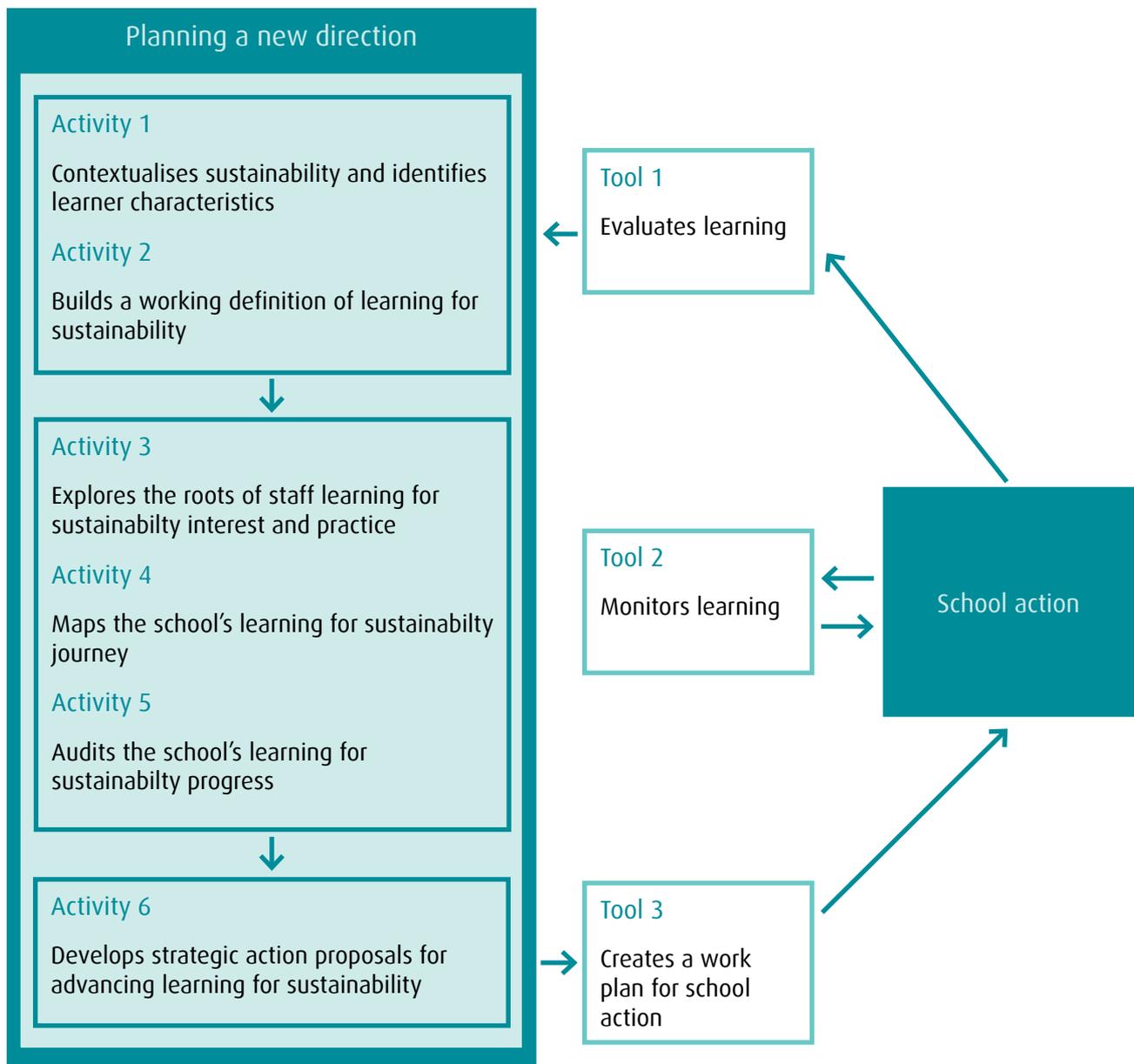
ABCD process



¹⁸ Images adapted from <http://www.naturalstep.org/en/our-approach> 4 system conditions: <http://www.naturalstep.org/the-system-conditions> ABCD principles: <http://www.naturalstep.org/en/applying-abcd-method>

WWF-UK: Pathways development framework

Some schools have used the pathways developed by WWF-UK to engage their whole school community in learning for sustainability. This document offers practical activities that help the school community develop strategic ideas and plans.



Source: WWF-UK (undated). See <http://assets.wwf.org.uk/downloads/pathways.pdf>

Table 4.1: Community of practice: helping to evaluate the stages of development.

Stage of development	Done?	What enabled it to take place?	What skills and qualities of leadership are in use?
Forming the community and scoping out your work together (initial meetings and events)			
Training, coaching and providing support for their work			
All schools are active in their practice development			
Working together on a project and equal ownership of the work, ie everyone is sharing the decisions and drawing out the conclusions			
Members of the community of practice are now expanding and facilitating the engagement of others and new practice development			

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