



Sustainability and renewal: findings from the Leading Sustainable Schools research project

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Resource

A research study highlighting the characteristics of sustainable schools and the leadership qualities required to develop sustainable schools.

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Executive summary

Context

The Leading Sustainable Schools research project took place in 2008–09 and involved fifty six schools around the country who are currently leading the way in developing and promoting sustainability in their school and wider community. They were invited to share and disseminate their expertise by leading a community of practice in their area over the year and to reflect on the leadership, action and outcomes of this work. Through this research, seven characteristics of sustainable schools and the key leadership qualities and processes required for creating a sustainable school were identified.

Evidence from this research suggests that **the leadership in these schools has contributed substantially towards these schools becoming sustainable.** The research also showed that **when a school places sustainability at the core of its activity, it supports adults and young people’s learning, their contribution to and improvement of their community and the sustainability of our planet.** The school leaders represented here have brought improvement, change, learning and leadership into a new relationship with each other and their community of practice for a different and bigger purpose.

Sustainability defined

Sustainability is a complex concept to define and describe. For this project, it has included environmental, social and economic sustainability. The Department for Children, Schools and Families (DCSF) describes a sustainable school as one that is ‘guided by the principle of care: care for oneself, care for each other and care for the environment’². This central principle of care is not new to schools but it is the addition of the reference to care for the environment and its global citizens as a whole school priority that moves a school from being a good school to a sustainable school.

Sustainability is about the relationship between people, their purpose and their place. It is about engaging, learning and leading to create a positive, empowering future for our children and their children. Sustainability as both a goal and practical activity is by its nature life-giving for communities, educators and the children and young people in their care; it brings life to learning and learning to life.

¹ Communities of practice are groups of people who share a common concern that they are passionate about, in this case sustainability. In a school context, they could involve any stakeholders or members of the community including pupils. They come together on an ongoing basis to deepen their practical knowledge in this area, to reflect and to support change (Wenger, 1998).

² Sustainable Schools – How National Recognition Schemes can support your school in practice: DCSF

Background

In the first phase of the work on leadership for sustainability for the National College, it was noted that the task for sustainable leadership was to:

- move the agenda from its current partial status in schools to being fully embedded
- make sustainability the responsibility of everyone rather than the personal commitment of a few
- move sustainability from being an additional priority to being a fundamental way that a school thinks and acts
- make the transition from sustainability being part of some people's personal beliefs to becoming a set of collective properties
- be outward-looking instead of inward-looking
- help sustainability to be seen as a whole-school approach

Ofsted's recent report (Ofsted, 2008³) supports this analysis, indicating that sustainability in the majority of schools remains unprioritised, partial and unco-ordinated.

This research aims to show that sustainability can move from this status to becoming embedded in schools, and to illustrate the clear benefits of doing this as well as the leadership qualities required for this to be achieved. The schools involved in this research have been engaged in a rich range of sustainability activities working with their communities of practice using DCSF's eight-doorway framework⁴.

³ <http://www.ofsted.gov.uk/Ofsted-home/Publications-and-research/Browse-all-by/Education/Leadership/Management/Schools-and-sustainability>

⁴ DCSF's National Framework for Sustainable Schools articulates the importance of sustainability, setting a requirement for all schools to be sustainable by 2020. Schools are asked to have an integrated approach using the framework's eight doorways which are: global dimension, food and drink, energy and water, travel and traffic, purchasing and waste, buildings and grounds, inclusion and participation, and local well-being.

Findings

The characteristics of sustainable schools

Characteristics of a sustainable school are listed below.

1. Sustainable schools give attention to their broader social and ecological footprint.

- This creates outcomes on campus and for communities.

Some schools looked at growing food, using allotments, their grounds and gardens to do so. This often had a positive effect on healthy living, but also brought about benefits in terms of biodiversity and environmental improvements to their campus and community. Others looked at reducing their waste and changing their purchasing decisions.

“Students have looked at how we can improve the biodiversity of our site through research and action.”

School Leader

- It also builds social capital and stronger links to the community.

“We have succeeded in establishing strong and sustainable links with the local community.”

School Leader

Our findings echo those found by Leadbeater & Mongon (2008) that schools and leadership can create value for their communities, in the form of valued social outcomes.

2. Sustainable schools view their ethos and purpose within a broader global context, and develop an understanding among stakeholders, including students, of that purpose.

- This produces a 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.

“It’s at the heart of everything we do.”

School Leader

- It also helps to develop an educational philosophy and ethos aimed at achieving a sustainable society, enabling children and young people to have the knowledge, skills and understanding to lead for that purpose.

3. Sustainable schools create positive benefits for pupils including student engagement, participation and leadership.

- Sustainability creates direct benefits for students, including opportunities of involvement and participation which in turn leads to better behaviour.

“It was clear while gathering evidence from the schools in this study that there is a strong link between effective learning for sustainability... and the general socialisation of children as they progress through the education system.”

Researcher

- It enables students to become more readily engaged in the complex issues and dilemmas of sustainability. Evidence shows that their participation and enthusiasm are part of what equips pupils with the capacity to learn and become leaders.

“Being chosen as a student representative to work with staff and students or with trainee teachers became a coveted position!”

School leader

4. Sustainable schools allow the development, integration and connection with other educational policies and initiatives.

- Sustainability informs, strengthens and integrates other current initiatives, especially in relation to Every Child Matters (ECM), but also other initiatives such as healthy schools.
- This provides a way of building coherence across all the activities and purposes of a school.

“It is my firm belief that the issue of sustainability underpins what we do as school leaders... enabling all other agendas to fall into place and be brought together like a jigsaw.”

School Leader

“The ECM agenda... can be very well supported through work on sustainability generally.”

School Leader

Sustainability outcomes that support ECM include pupils adopting healthy lifestyles, enjoyment of their education, good behaviour and making positive contributions to their community.

5. Sustainable schools provide direction and focus that bring about school improvements, including the ECM outcomes, and supports raising achievement and attainment.

- Sustainability provides a clear direction and purpose in terms of what schools should be focusing on, which in turn brings about school improvement outcomes, including those of Every Child Matters.

- It builds school leaders' confidence, efficacy and sense of achievement by enabling them to create concrete outcomes and real results in terms of improvement.

“The school feels more united... in 2008–09 our results are the very best they have ever been... attributed to a rise in pupil and staff satisfaction and involvement in sustainable development.”

School Leader

“Sustainable development is becoming an integral part of our curriculum and impacting positively on pupil achievement.”

School Leader

6. Sustainable schools focus specifically on improving the learning of children.

- A focus on sustainability enhances learning for everyone, but particularly for the participation and engagement of students.
- It provides a rich range of opportunities, contexts and activities for learning.

The pupils are interested in it because it is real, they can see their future and it's about their world.”

School Leader

“Staff feel strongly that learners' involvement in sustainable development and their growing global awareness has motivated them to learn and helped raise standards.”

School Leader

From the reports⁵, the kind of learning that is taking place is described by the leaders as:

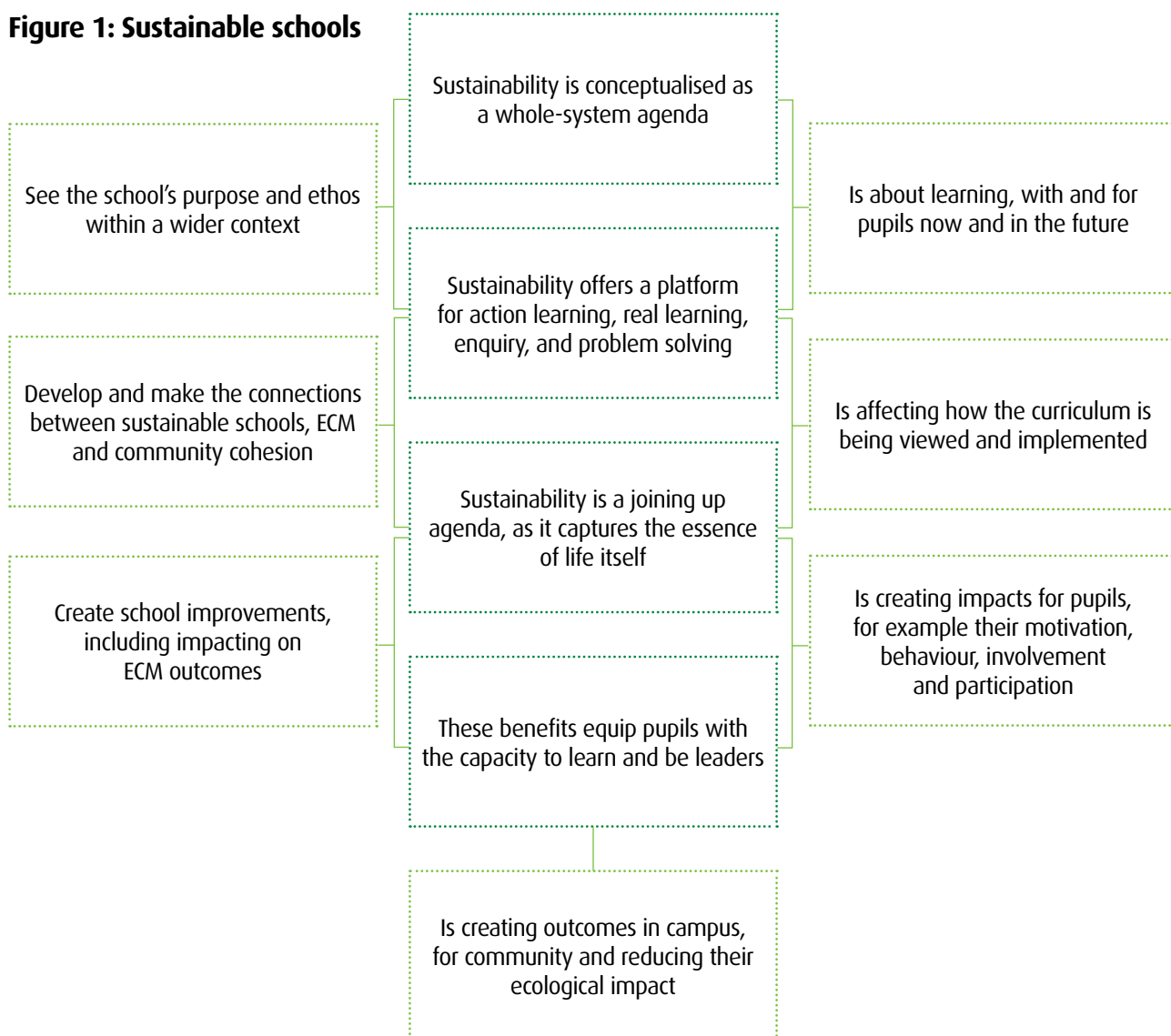
- practical and hands-on, with pupils able to see what impact they are having and learning from that
- outdoors and based locally
- engaged in the community both by bringing in people and learning about local issues

- aligned to citizenship and community cohesion as it involves a pupil learning as a person in the world rather than as a pupil in a school, and aligned to cross-disciplinary working, with all departments involved

7. Sustainable schools engage in curriculum change and development as sustainability is embedded across the whole curriculum.

- Sustainability affects the way in which the curriculum is viewed, structured and implemented.

Figure 1: Sustainable schools



⁵ For this research all schools taking part had to submit a report.

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- Sustainability is becoming a cross-subject, cross-curriculum, cross-school approach.

“It has enriched our curriculum.”

School Leader

“Activities and resources used in the project have strengthened the way the curriculum is planned and approached and activities developed to engage children.”

School Leader

The processes that help bring about the seven characteristics

The following three processes that help schools become sustainable were identified through the research.

1. Starting from where people are, building leaders and celebrating what we are doing already

This includes using tools and processes that help people find their role and connect to the agenda. This might be using the DCSF doorways model and/or tools such as the National College’s Sustainability Toolkit⁶ or the sustainable schools self-evaluation form to help the processes of engagement.

2. Providing a context from senior management for others to lead

The research found that the role and commitment of the headteacher coupled with strong leadership is critical and necessary to enable sustainability to take root.

Some leaders have also sought to influence the thinking and practice of the senior leadership team, including changing from a more authoritative and solo leadership style to democratic and inclusive leadership.

3. Helping pupils and adults to grow as leaders

Many leaders talked about using the expertise and creating the knowledge- base within others so they could take forward the sustainable schools agenda. Leaders recognise that they need to give permission to others to take forward this agenda as well as cultivating their own capabilities:

“It has been important in our community of practice to recognise, highlight and use the talents and expertise of others and not try to be expert at everything yourself.”

School Leader

Recommendations for leaders wanting to engage in this agenda

Through this research, leaders were asked what advice they would give to a school leader embarking for the first time on a journey of leadership for sustainability. Here are their suggestions, grouped into ten categories.

1. Involve students.

- Form an action team of pupils.

2. Envisage what you want.

- Have a vision of the sort of school you want to be and create it with the whole staff: it is important that everyone develops it together!

⁶ <http://www.nationalcollege.org.uk/index/leadershiplibrary/leadingschools/leading-change/key-initiatives/sustainable-schools/developing-sustainable-school-toolkit>

3. Network, share with partners and visit others.

- Visit other institutions to see how education for sustainable development operates in practice.
- Set up communities of practice or other support networks to allow interested parties to work together.
- Engage interested partners, including community partners, on projects that will benefit them and add value to their work.
- Provide support at a local and regional level.

4. Plan, and put it in your school development plan.

- Sustainable development should be a school improvement target.
- Include the work in your development planning and leadership framework.

5. Be patient, flexible and creative with change and take risks.

- Have patience and a belief it will happen.
- Don't expect change to happen overnight.
- Be flexible and creative.
- Be prepared to allow risk-taking behaviour in yourself and others.

6. Evaluate, prepare and reflect.

- Allow time for preparation, processing and measuring your progress.

- Evaluate, evaluate, evaluate.

- Use leadership tools, for example the sustainable schools self-evaluation form, to facilitate development, monitoring and review.

- Share your findings with the school community, at staff meetings, on training days and via a newsletter.

- Create an action plan and monitor progress.

7. Make what resources you can available.

- Provide a budget.

- Give time (and if possible money) to allow the work to move forward.

- Take the initiative to look for funding.

8. Encourage and distribute leadership and involve the senior leadership team.

- Distribute leadership across as many areas, teams and staff as possible.

- Encourage the commitment of staff and make sure shared commitment is not driven by just a few people.

- Identify key leaders and make people accountable.

- Be outward-looking and link to other organisations.

- Set up network groups.

- Share good practice.

9. Make connections

- Make the connection between sustainability and other development issues for the school so that heads and the senior leadership team support the programme.
- Produce DVDs about what has been achieved so far to communicate the practicalities and achievements in a way that is accessible. It is spiritually satisfying to see success stories told by the people involved and it makes you feel you can do it too.
- Build sustainability into all aspects of the development and assessment of school facilities and performance.

10. Extend learning

- Look for every opportunity to extend learning. Seize these opportunities and exploit them.
- Take risks and learn.
- Share your experiences and rewards, however small.
- Learn from each other.
- Listen to staff, parents and the community. They often have the answers to the questions we spend ages contemplating.

Working with a community of practice

The schools highlighted many success stories of working within a community of practice and there was a rich and wide variation in types and size of communities of practice among schools. Some report that they use a whole-authority approach (where the local authority was relatively small); one has a dispersed e-learning community while many are small groups of three or four schools. Some communities of practice are based on existing networks and some are establishing totally new groups.

“Communities of practice join together to explore issues and questions as peers. They value everyone’s expertise.”

School Leader

“Everyone is involved in developing and generating knowledge.”

School Leader

The purposes and processes of the communities of practice were also wide-ranging and identified by participants in a range of examples, which included having a flexible agenda while remaining true to purpose, developing contacts and identifying enthusiasts, the lead school developing curriculum materials for everyone, spreading the message, different uses of the eight doorways and getting everyone on board.

“Through system leadership, the community feels that higher achievement has been made than would have occurred if schools were working in isolation.”

School Leader

Leadership for sustainability

Broad characteristics

This study identified a number of consistent themes in the leadership of effective sustainable schools. In broad terms, it found such leadership to be exciting, inspiring and challenging. Moreover, it found strong parallels between the leadership practice displayed in these contexts and the principles that underpin transformational leadership theory (eg Bass & Avolio, 1994). These centre on:

- 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

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 systemic⁷ commitment to sustainability that is essential to achieving the broader vision of the sustainable school:

“It is important to recognise that the sustainable schools agenda is too big and diverse for just one person to implement. If change is going to happen then schools must ensure leadership is distributed.”

School Leader

The themes are explored further below.

The qualities of sustainable leadership

Passionate and outward-focused

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:

“Sustainability covers all aspects of school and community life – it is not an add-on. Therefore it requires effective leadership that is at the heart of whole-school development at a strategic level and throughout all aspects of school life. It requires everyone to be outward-looking and have the ability to see how organisations and roles link together to create effective partnerships.”

School Leader

“A vision that I share with all within the school and I actively take out to others who form part of the school’s wider community, reflecting on outward-looking leadership style which has resulted in extensive partnership working supporting education for sustainable development across the school. This has been a key driver throughout this project, particularly in getting our COP on board, where as a lead school, I have shown to others my commitment and passion for education for sustainable development, ensuring others can see how it underpins all that I do in my school and the difference it has and does make in daily school life.”

School Leader

⁷ Systemic’ is a term used in organisational development and drawn from the theory of cybernetics. A useful definition is drawn from O’Connor & McDermott (1997): ‘Something that maintains its existence and functions as whole through the interaction of its parts’.

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 others to develop their ability to lead:

“It’s about creating people that are confident.”

School Leader

“It’s important to recognise and reward individual effort and involvement and take a back seat yourself sometimes.”

School Leader

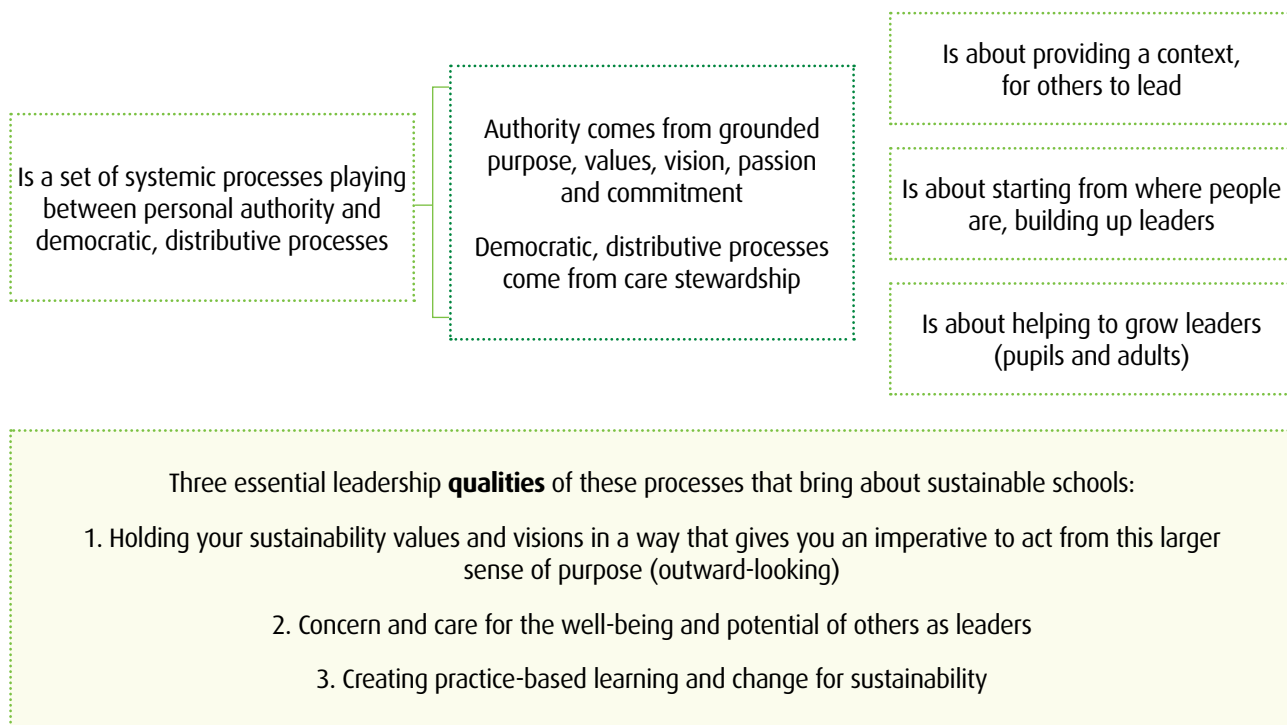
Demonstrating courageous agency

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 practice and change:

“For me, our sustainability project was a new venture and took me out of my comfort zone dealing with issues I had never faced before.”

School Leader

Figure 2: Leading sustainable schools



Conclusions

The school leaders represented here have brought improvement, change, learning and leadership into a new relationship with each other and their community of practice for a different and bigger purpose. They are contributing to a powerful shift for the school system by bringing these four educational goals and aspirations to life. Fostering greater sustainability becomes a process of nourishing, freeing and restoring the relationships and connections between people, their school and community and its environment; between people, their purpose and place.

The approaches described by the school leaders in this research are highly innovative as they seek to achieve what has not been done before, leading in the absence of a blueprint and seeking to create the future they wish to see for the next generation. We can see from these school leaders the power and benefit of leadership for sustainability.

Placing sustainability at the heart of school culture, ethos, policies and activities is a challenge

Throughout this research the schools show there is no single approach or one person who can take it on and be successful by themselves. If a whole-school approach is to be achieved and the partial status of sustainability overcome, it cannot be a journey that is travelled alone. Sometimes school leaders for sustainability are headteachers or part of senior leadership teams. Sometimes they are teachers, governors, teaching assistants or parents, and often a combination of these. Sustainable schools are particularly successful in enabling students of all ages to become leaders:

**“Sustainability gives us a strategy for working in relation with schools for creating a ‘new story’ for education.”
(Birney et al, 2009)**

Holding sustainability as a moral imperative, seeing everyone as a potential leader, learning through action and developing communities of practice are in combination a powerful force to influence the school system.

The findings from this research demonstrate that sustainability offers something to schools that is more than just another initiative or agenda to follow. Sustainability is life-giving to people and their organisational purposes, policies, practices and processes. It gives meaning when it provides a robust moral framework to operate within, as it addresses the fundamentals of life – the need for a strong, healthy and just society, that can only continue to operate now and for future generations within our planetary environmental limits.

We have seen evidence in operation in these schools that sustainability offers leaders a way to join up and build coherence, within their context and around the multitude of educational priorities. This life-giving property offers a strong platform for learning and leadership, learning that is based within the challenges we all face, which in turn makes for active, real and meaningful leadership that nourishes those who are engaged.

1 Introduction

This report is based on research carried out for the National College with fifty six schools and their leaders in the 2008–09 Leading Sustainable Schools action research project. At the heart of the research are stories of school leaders who are engaging with the challenge of creating a sustainable future with and for their pupils through their schools and communities. The paper 'Leadership for every child's future'⁸, recently written for the National College, discusses the challenges of creating an education system that can contribute to a more sustainable society.

Writing for the Worldwatch Institute, Lester Brown suggests that the changes that will secure human life for the future need managing with unprecedented speed (Brown, 2008). This has big implications for all those involved in education today Teachers, policy-makers and educationalists must fundamentally re-appraise the degree to which the curriculum, the operation of schools, and the dominant values that underpin education are falling short of what is now required. Education and in particular learning will either have a leading role in taking us out of this social and ecological crisis, or will prevent us from doing so.

Although these schools were selected for their existing experience and good practice, not all the following achievements can be attributed entirely to being part of this programme though our evidence suggests that this opportunity has taken all the participants further. It has consolidated and extended their activity and developed and honed their skills and expertise. At the outset few of these leaders were reflecting on their leadership and the difference it was making. This capability has been greatly enhanced by this research and development process.

The content and processes of education that address a sustainable society, planet and future have until recently been viewed as an optional add-on, usually led by enthusiasts and mainly taught in geography or science classrooms, or in global and environmental studies programmes. A recent Ofsted inspection report found that sustainability remains a marginal enterprise for the majority of schools (HMCI, 2008).

However, the National College initiative on sustainable schools has demonstrated that teachers in schools involved in this project are taking the urgency of the environmental and social agenda seriously, as they know it affects their pupils' future. As a result they are moving it from its marginal status to become central to their schools' goals, activities and operating procedures. **These schools are leading the way in testing, designing and realising the changes to values, mindsets, priorities and pedagogies that are going to be needed if schools, education and learning are to have the capacity to contribute to creating a more sustainable world and a safe future for people across the globe.**

⁸ Every Child's Future: Leading the Way (2009) Jonathon Porritt, David Hopkins, Anna Birney, Jane Reed

This report sets out to explore the evidence in the school reports in relation to the following three questions:

- What does school leadership for sustainability look like in practice?
- What are the key qualities and processes that leaders use to create, develop and lead sustainable schools working with a community of practice?
- How does sustainability enable and enhance ECM, as well as wider educational outcomes?

The research had a second and equally important aim of stimulating change and identifying specific outcomes. The project has enhanced and made more visible changes already under way as well as creating additional outcomes for pupils, leaders, schools and communities. It is starting to affect the wider social system of education and the environment of these schools.

2 Context

2.1 The story and creation of sustainable schools

The story told in the reports of the schools involved in this project is one of individuals and groups, adults and young people, grappling and engaging with the challenges of how we create and act together for a sustainable future. It is one of finding ways for schooling and education to be part of ensuring a strong, just and healthy society within environmental limits now and for future generations. At its heart it is a story of care, concern and action. It is part of the 'new story' (Mongon & Leadbeater, 2008) needed for education as well as for the wider public sector if they are to find more harmonious and ecological ways to live on the planet.

The Department for Children, Schools and Families (DCSF) describes a sustainable school as one that "is guided by the principle of care: care for oneself, care for each other and care for the environment". This central principle of care is not new to schools but it is the addition of the reference to care for the environment and its global citizens as a whole school priority that moves a school from being a good school to a sustainable school.

Education across England is currently undergoing a series of changes, from bringing together education and children's services into one strategy to implementing ECM (DfES, 2003) and the Children's Plan (2008). This has started to have significant implications for schools and the societal context in which they operate. The government, through its 21st century schools agenda, requires a more community responsive approach from schools: a greater focus on understanding community need and how to promote greater community cohesion, partnerships with parents and personalised learning.

Although many schools across the system are therefore involved in extending an ethic of caring for themselves and each other to their communities, a recent survey of opinion showed that most of them do not include an explicit emphasis on care for their planet. Their major pre-occupation is to involve parents and carers in raising and maintaining academic attainment (Birney et al, 2009). Ofsted's recent report supports this analysis, indicating that sustainability in the majority of schools remains unprioritised, partial and un-coordinated (HMCI, 2008). Too many leaders are 'not feeling equipped to lead this debate... they think they have to comply'⁹. Even where an individual member of staff may have the energy to move things forward, their work remains isolated and focused on small-scale projects such as gardens and recycling, rather than whole-school approaches.

2.1.1 Leadership – leading for a sustainable future

Leadership is about creating a domain in which human beings continually deepen their understanding of reality and become more capable of participating in the unfolding of the world. Ultimately leadership is about creating new realities. Jaworski, 1998

The goals of the National College are to develop excellent school leadership that transforms children's achievement and wellbeing, to develop leadership within and beyond the school and identify and grow tomorrow's leaders all within a college fit for purpose. There is growing evidence to demonstrate that educational leadership, over the past decade in particular, makes a positive difference to children's lives through the development of schools and communities.

⁹ Every Child's Future: Leading the Way (2009) Jonathon Porritt, David Hopkins, Anna Birney, Jane Reed

Evidence shows that leadership by staff, students and other stakeholders transforms children's achievement and their wellbeing. This research goes further by investigating how to do this by holding values about a sustainable future at the centre of leadership.

In March 2007 the National College made a commitment to supporting leadership for sustainable schools when it published its Sustainable Development Action Plan setting out goals and actions concerned with its internal operations and work with school leaders. In September 2007 it published the findings of its first piece of research on leadership for sustainability, aimed at informing what schools are currently doing on sustainability and the skills and qualities required to move this agenda forward¹⁰.

This first phase of the research identified a number of characteristics of effective leadership for sustainability that fell into six broad areas:

- sustainability perceived as central to the school, its vision and values and a way of delivering other initiatives including ECM
- an outward orientation, global perspective and work with the community based on a systemic understanding of the interrelation of these to the environment
- a strong emphasis on learning for everyone
- democratic, inclusive, participative approaches and distributed leadership
- a strong role for the pupils in decision-making and participation
- qualities of resilience persistence, optimism and risk taking

Since then the National College has developed a toolkit for school leaders entitled 'Valuing Our Future' (National College, 2008). The toolkit is designed to help school leadership teams develop sustainability in their schools. Based on the eight doorways of the DCSF's National Framework, it provides ideas for action that will enable schools to operate in a more sustainable way. The toolkit shows how the doorways are interrelated and how they map to the five outcomes of ECM. The eight doorways are:

- Food and drink
- Energy and water
- Travel and traffic
- Purchasing and waste
- Buildings and grounds
- Inclusion and participation
- Local well-being
- Global dimension

The National College has also integrated modules on leading sustainability into the redesigned National Professional Qualification for Headship (NPQH) and the school business management leadership development programmes, as well as leading building projects for sustainable schools.

In January 2009 the National College awarded a £5,000 grant to fifty six schools that had a strong track record in sustainability and leadership. This was to support them to develop their understanding of how to lead sustainable schools and spread their practice more widely by leading a community of practice enabling them to share ideas and learn together. The intention was to:

¹⁰ <http://www.nationalcollege.org.uk/docinfo?id=17264&filename=leading-sustainable-schools.pdf>

- build leadership expertise and capacity within schools and local areas
- develop innovative and effective approaches and a strong evidence base for how to lead sustainable schools
- inform policy and practice in this area

The findings from these schools as they worked with their communities of practice are described in this report.

2.2 The philosophical basis for the research

Sustainability is a complex concept to define and describe, especially when trying to draw in those who are new to it. For this project it involves environmental, social and economic sustainability. One definition of sustainable development which is widely used is development that meets the needs of the present without compromising the ability of future generations to meet their own needs¹¹.

The main challenge behind this definition points to the capacity and knowledge we need to sustain human society on our planet when consumption, overpopulation and demand for resource outweighs what the planet can provide. We are living on a planet that is rapidly running out of the resources we need it to continue producing. A relationship between human society and the environment based on preservation, renewal, respect and value is urgently needed.

Previous researchers and the authors of the parallel paper 'Leadership for every child's future'¹² have already made the arguments about the role of leadership in fostering education for sustainability. Sustainability is not a passing whim or fad, at its core are questions about the future of us all. Being explicit about this is an important part of the task of leadership for sustainability.

Sustainability can be described as the relationship between ourselves and that which sustains us, together with the resulting ability to bring our human technologies and systems into alignment with that relationship. This gives new vitality to the relationship between people, their purpose and their place as an understanding of the connection between them becomes more explicit.

The following principles are already known to underpin successful action for sustainability and are embodied in the processes of action research used by the fifty six schools in this research:

- It is important to have a global perspective and an understanding of the interrelated nature of the world.
- Learning is with and for everyone.
- Democratic, inclusive and participative approaches should be used.
- This co-created knowledge is about and should be used to promote sustainability.

¹¹ World Commission on Environment and Development 1987

¹² Every Child's Future: Leading the Way (2009) Jonathon Porritt, David Hopkins, Anna Birney, Jane Reed

2.3 Action research

Action research was the methodology used for this research. A report written for the National College called 'Insider action research projects' (Coghlan, 2001) describes action research as:

- involving change experiments on real problems in social systems
- involving repeated cycles of identifying a problem, planning, acting and evaluating
- typically involving 're-education' (changing established patterns of thought and action in individuals and groups); the effectiveness of this depends on the degree of clients' participation in diagnosis, fact-finding and action
- being undertaken from a participatory perspective
- contributing to social action and social science – with no sacrifice of scientific rigour or loss of relation to practice

2.3.1 Communities of practice

Communities of practice are groups of people who share a common concern that they are passionate about, in this case sustainability. In a school context they could involve any stakeholders or members of the community including the pupils. They come together to deepen their practical knowledge in this area, to reflect and to support change (Wenger, 1998). Cultivating communities of practice is a practical way to transform practice, rather than simply creating networks that share information. Communities of practice can encourage and enable leaders to develop local solutions to leadership while spreading practice progressively across a system such as education.

3 The research process

The schools involved in the project have been undertaking action research within their community of practice using the key questions they wanted to ask about leadership for sustainability. After attending a launch event in January 2008, which introduced the scheme, including the concepts of action research and communities of practice, schools were asked to identify an initial research question that would help guide their work going forward and an action plan that looked at how they would work with their community of practice and the evidence they would collect. They discussed the topics that they felt most needed attention, which are summarised below.

1. Practice development in schools:

- creating outputs related to activities and doorway themes, eg food and drink, energy and water, travel and transport
- the wider education culture – using other policy drivers to get to sustainable development, eg ECM
- teaching, learning, curriculum, pedagogy
- pupil empowerment and engagement

2. Leadership of schools:

- pupils as leaders
- adults as leaders
- leadership through school structures – for example policies and development plans

3. Leadership of networks:

- grant school influencing and leading the network to change
- community of practice influencing and leading change collectively
- engagement of wider (local) stakeholders, eg businesses and local authorities
- acknowledging and dealing with diversity across communities of practice

Most schools looked at themes that crossed these three areas. Forum for the Future, the Institute of Education, University of London, and the World Wildlife Fund (WWF) were involved in supporting the schools in undertaking this action research, while capturing and synthesising the new knowledge about effective leadership for sustainability that was emerging across the schools.

The aim of this project for the schools was for it to be a reflective process about leadership. The process that was laid out for the schools was non-prescriptive, in that they were able to choose where and how they worked (primarily on their own question and research area), while also providing a strong purposeful structure that placed sustainability at the heart of the research and development process. It engendered reflexivity through action research both as individuals but most importantly collaboratively through communities of practice.

3.1 The process of support and research

3.1.1 Initial regional events in summer 2008

This set of events was designed to find out how the schools were progressing with their action research plans and their communities of practice as well as providing an opportunity to share findings, methods and learning to support them through the process.

3.1.2 The design of an action research reporting tool

Responding to these needs the research team designed an action research reporting tool. The purpose of this tool was to support the grant schools to facilitate and write up the findings of their research so as to provide first hand evidence and reflections on the impact and experience of leadership for sustainability in the community of practice.

There were four central questions for the schools to address so as to cover these areas:

- What happened, and what has changed in your school, and in your community of practice?
- What were the qualities and processes of leadership that enabled this to happen in your school and in the community of practice?
- What influence and impact did the community of practice model and your leadership of it have on the schools?
- What are your plans and recommendations for moving forward?

3.1.3 Regional events in autumn 2008

The purpose of this round of events was to present the action research reporting tool. These events also gave schools another opportunity to come together and share progress and challenges, and feed into the emerging research findings of leadership for sustainability being analysed by the research team.

3.1.4 Support, interviews and school visits

In order to provide support and to authenticate the emerging findings we were seeing, a third of the schools were visited and all were interviewed over the telephone. National College staff were also involved in the process. In order to do this the researchers took on a style that was empowering, developmental, dialogic and learning focused rather than judgment based.

3.1.5 The project national two-day conference in spring 2009

The purpose of this event was to bring together the schools including those from the community of practice to celebrate their achievements to date. It offered opportunities for participants to share their leadership learning and to help create themes and learning for the final report.

3.1.6 School reports

Each leader and school was asked to submit a report, following the format of the action research reporting tool by March 2009, and to present their observation and reflections on:

- the impact of the changes they had made
- their personal experience of leadership – qualities and processes
- their community of practice's experience of leadership
- their suggestions and recommendations for moving forward

3.1.7 Final report writing

The findings are pulled together from the reports that were submitted as well as the school interviews, visits and regional and national events. An overview was written for each one emphasising the findings about impact on the school and the leadership processes and practices that were reported by the schools. These overviews were then all read and the recurring themes, patterns and insights were identified noted and mapped. These were then brought together into a summary of the emerging findings and key messages of the Leading Sustainable Schools project. Each finding was then related to either the nature of a sustainable school, which began to show the impact of the activity, or to the leadership activity and processes. Evidence was then extracted from across the reports to illustrate the findings.

3.2 Research issues

A great deal has been achieved during this project considering the schools have only been running their communities of practice for a short time. There is a wealth of new knowledge being created and found in these schools and communities. Cycles of action research are continuous in day-to-day practice and we were interested in uncovering more about the leadership journey the leaders are currently on, in order to bring them alive and share them with others.

It is not unexpected to find that the leadership models vary across the schools that have been working on this project, there is a wide spread of models in the reports. What we are commenting on and identifying here are schools that are in the process of becoming sustainable schools. The report celebrates the very positive nature

of the school reports and identifies the leading practice and edge in the field. Our sample deliberately included schools that had a strong commitment to sustainability, leadership and management. We have worked with them to ensure that the evidence they reported was robust and triangulated; we have done a systematic analysis of the evidence and presented this using an appreciative enquiry approach. What we are describing is a positive move towards an emerging, new leadership paradigm.

The schools have shown a wide range of approaches to creating sustainable schools with many different starting and end points. Some schools and communities have not fully drawn on the suggested reflective and developmental approach and have developed their own approaches. This has implications for the quality of the overall research, where researchers need to make choices about where to put their attention round the often 'messy work' of action research (Bradbury & Reason, 2006, 349). We have sought to synthesise the learning through observing common patterns while highlighting particular examples, taking an appreciative approach to emerging practice and the experience of the school leaders involved.

We have decided not to reference the individual schools. Unattributed quotes presented in italics come either from schools' reports or are direct quotes from the regional and national events. The data from the schools and partners in the communities of practice schools is found alongside the lead schools.

4 Findings

“Educating the whole child is about all things environmental.”

Primary headteacher

The school reports are rich accounts of large and small-scale change and development in their local communities. Teachers, pupils and communities of practice have given us a picture of how they are leading and creating sustainable schools. Case studies are published on the National College’s website, www.nationalcollege.org.uk.

What is new for this research is to find considerably more insight and evidence than we have had before of the nature and features of a sustainable school. This is because the leaders of the schools involved, prompted by the process of action research, have been studying, reflecting and portraying the process and outcomes of what they are doing and how they are doing it in much greater depth. We are struck by the amount and extent of the activity they are involved in, and the hope and optimism they and their communities show about how it is possible to change the way schools function to serve sustainability.

This research demonstrates that a key aspect of leadership for sustainability is its systemic nature; the parts and whole affect and interact with each other. The leadership flows across and through traditional boundaries and categories and begins to connect otherwise disparate or disconnected thinking, activity and planning through the school and its community of practice. Senge (2000) comments that the patterns of social organisation that pervade many schools are still nearer to an industrial than an organic or ecological model and that schools have evolved in relation to the needs of an increasingly industrialised and mechanised society rather than their environment.

This echoes what the reports have told us: **the practice of creating sustainable schools is not about adding on to what they do already but about changing and reordering the relationships between learning, leadership and change that are being created for sustainability in pupils, schools and community.**

We demonstrate in the findings our emerging understanding of the way the parts and aspects of a sustainable school come together in new relationship with each other as a holistic picture.

What we now can begin to understand and describe is how the leadership and the school interact with each other and their community of practice to produce learning, growth and change for sustainability. We have summarised our findings by drawing on our knowledge of systems thinking to portray the complexity of what is happening on the ground.

4.1 Becoming sustainable schools

From the research findings of this project so far we can identify that sustainable schools are characterised by seven different interacting, interdependent, interrelated outcomes, processes and purposes, which themselves are developing, growing and changing. The data from the reports gives us a more detailed picture of the difference that can be made to the curriculum, the campus and the community of a school when sustainability is at the heart of the agenda. Comments from the schools have been drawn together to give us a picture of the journey towards becoming a sustainable school and the outcomes that their leadership has and is producing.

1. Sustainable schools give attention to their broader social and ecological footprint.

- This creates outcomes in campus and for communities,
- and builds social capital and stronger links to the community

Within all the reports there are stories of the impact these schools are having on society and the environment. There are stories of how schools have reduced their energy by over 40 per cent, helping them to reach carbon reduction commitments and addressing issues of climate change:

“Electricity consumption reduced by up to 47 per cent per month.”

School Leader

“Our electricity consumption has dropped 48 per cent in just one year.”

School Leader

“Energy emerged as a shared commitment in our community of practice and we were able to engage a group that has responsibility for one of the most significant changes in sustainable energy.”

School Leader

“If prioritised in schools then education can really lead the way in energy conservation.”

School Leader

Some schools looked at the topic of growing and using allotments, school grounds and gardens. This often has an impact on healthy living, and brings biodiversity and environmental improvements to the campus and community. Others attempted to reduce their waste and change their purchasing decisions:

“Students have looked at how we can improve the biodiversity of our site through research and action.”

School Leader

Communities were being involved through the communities of practice and by creating informal relationships or specific community projects and activities. This enabled stronger links to be formed between the schools and their communities.

“[The school sees] this as an important part of building our community cohesion and raising aspirations of our young people in the future.”

School Leader

“Sustainability has contributed a great deal to making a positive contribution to the community.”

School Leader

“We have succeeded in establishing strong and sustainable links with the local community.”

School Leader

Our findings here echo those found by another piece of National College research into leadership for public value (Leadbeater & Mongon, 2008): schools and leadership can create value for their communities in the form of valued social outcomes.

2. Sustainable schools view their ethos and purpose within a broader global context, and develop an understanding among stakeholders, including students, of that purpose.

- This produces a movement from sustainability being a partial 'add-on' initiative to becoming the core purpose from which a school develops its policies, strategies, planning and day-to-day operations.
- A sustainable school develops an educational philosophy and ethos that is aimed at achieving a sustainable society, enabling children and young people to have the knowledge, skills and understanding to lead for that purpose.

All the reports describe this journey of embedding a sustainability ethos within their whole school. This journey happens through a movement from incremental initiatives and ideas that usually stem from one or more areas of practice and people within the organisation. This emergent activity is then pulled together through policies, planning and strategies so that a more deliberate process of holistic integration begins to draw activity into an intelligible whole. This transition seems to be a deliberate and conscious step for a school.

Leaders said:

[This brings] the school together under a common vision and purpose of building a better world.

Society, the individual and the environment [are] dependent on each other.

[This] provides us all with exciting opportunities to create a better future.

Sustainability should be at the heart of the school.

Leaders described their own change of perceptions and their insights about the holistic nature of sustainability:

At the beginning I thought it was all about recycling and saving energy. Now I can understand how the parts fit together and have an impact upon society locally, nationally and globally. The best part is that the pupils and I are learning together; we've made mistakes and turned the cul-de-sacs sometimes but because of that we have an ever better holistic understanding of SD [sustainable development].

The leader has understanding of how society, the environment and the individuals are all connected and dependent upon each other.

The school has succeeded in preparing pupils for a lifetime of sustainable living, through its ethos, teaching and day to day practices... it is truly embedded.

A pivotal moment for me was when I realised that I could engage my staff by reassuring them that sustainable development was not another initiative or a project that you start and then complete but a process: it was going to become part of the ethos and values for our community.

3. Sustainable schools create positive benefits for pupils including student engagement, participation and leadership.

- A sustainable school creates direct benefits for students, including involvement and participation, which in turn leads to better behaviour.
- A sustainable school enables the students to become engaged in the complex issues and dilemmas of sustainability thus becoming leaders.

Sustainable schools have value in bringing many benefits to students. The reports include many stories of the ways in which sustainability provides a way for students to become more engaged in the bigger picture of their education and to learn from real world issues and challenges. Some activities have been set up in order that students, particularly the older ones, can take the full initiative to organise and lead other students; others have been teaching them the skills and giving them the experience that will enable them to do this. Understanding more about the possibilities and nature of student leadership will be a very important priority for future research in this area.

Some examples follow to give the flavour of the importance of sustainable schools. In sustainable schools overall behaviour is improved, there can be less bullying and pupils with special needs can benefit.

There is evidence in the reports that the focus on sustainability in a school has a beneficial impact on pupil behaviour:

Behaviour is notably better in lessons or activities that involved sustainable development (particularly that involved a hands-on approach).

Pupils who find it difficult to engage with learning in the classroom thrive during environmental projects.

There are almost no instances of bullying and most pupils are well adjusted individuals who see themselves as being custodians of where they live.

One of the most heartening aspects of the work has been the engagement of the students who need learning support, whether for learning or behavioural difficulties. This work has provided a positive outlook for several children previously labelled as naughty.

Where pupils were involved in monitoring, recording and reporting the effectiveness of the measures taken to improve sustainability within the school, or involved in planning changes in the school or local community, there were valuable educational outcomes and increased pupil motivation.

It was clear while gathering evidence from the schools in this study that there is a strong link between effective learning for sustainability... and the general socialisation of children as they progress through the education system.

This remark comments on the way in which particular groups can benefit:

Our intake is extremely diverse. The 80 per cent of pupils speak English as an additional language and many of them are entitled to free school meals. Many of our families also come from war-torn countries and have had harrowing experiences. It is therefore essential that at the heart of our teaching is a child's social and emotional well-being. The pupils at our school are extremely privileged to have regular sessions with our environmental gardener. Children who struggle in the classroom generally thrive in our green space. They are visually and kinaesthetically stimulated by activities carried out. For some children these activities act as a kind of therapy that soothes and focuses them.

There is evidence that the participation and enthusiasm of pupils helps to equip them with the capacity to learn and be leaders:

Being chosen as a student representative to work with staff and students or with trainee teachers became a coveted position!

Pupil participation is about building community aspirations of young people in the future.

There are benefits for the students and their involvement becomes more assured:

Pupils shape our work.

Now we are able to say that our pupils are able to make a considerable contribution to the development of our school and we are working towards Investors in Pupils to evidence this.

Pupils transferring from our school to high school frequently do so with a very high knowledge and understanding of how to care and respect our world, both in relation to physical and human aspects.

The eco committee decided to 'encourage' the teachers by organising posters and an assembly to show how valuable such activities would be... they now feel empowered to pressurise the staff to become involved.

Sustainability is important as a focus in the curriculum:

So along with the measuring and monitoring, we must look for ways of capturing our children's imagination so that it really does matter to them what kind of world they grow up in.

Children need opportunities for collaborative decision-making and setting goals for themselves in everyday life... In this way young people gain autonomy, a sense of self-worth, respect for other people's perspectives and negotiation skills.

4. Sustainable schools allow development, integration and connection with other educational policies and initiatives.

- Becoming a sustainable school means the big picture of sustainability is interconnected with, informs, strengthens and integrates other initiatives that schools are working on, especially in relation to ECM, and others such as healthy schools.
- Becoming a sustainable school provides a way of building coherence across the activities and purposes of a school.

Many of the schools report the way in which sustainability becomes a way of joining up and making sense of other activities so it isn't a bolt-on initiative. There was no evidence that any of the schools were treating it as an add-on. Creating a whole-school ethos centred on sustainability is a journey to bring activity together into a more holistic frame. It requires a school to look at the education policies and initiatives they need to respond to and decide how they wish to place them together and in what relationship.

Many of the schools in the project have begun to reach this level of development and are beginning to see, or have made considerable progress towards seeing, sustainability as a way to support coherence-making and integration:

The scheme came at the right time... drawing together all school plans into a 3 year development plan... ensuring sustainability is at the heart of everything we do... Sustainability is now the force that drives school development and it is at the centre of whole-school decision-making.

It provides a coherent intellectual framework to guide learning.

It is my firm belief that the issue of sustainability underpins what we do as school leaders... enabling all other agendas to fall into place and be brought together like a jigsaw.

We were in need of finding ways to bring this, the principles of health schools and other such initiatives together, also that they unite and support each other rather than appearing to be additional 'add-ons' to our already complicated purpose. It is here that our involvement in sustainable schools started... as a school we were ready for something new to invigorate our approach to school improvement.

The leadership within our school has always attempted to integrate the assessment culture, ECM and the sustainable schools agenda.

The sustainable schools framework creates an umbrella to deliver EcfM, Sustainability covers all aspects of school and community life, it is not an add-on.

A challenge for the project was to show that sustainability is not an add-on but a key vehicle for delivering [the] ECM agenda.

5. Sustainable schools provide direction and focus that bring about school improvements, including the ECM outcomes and supports raising achievement and attainment.

- Sustainability provides a clear direction and purpose in terms of what schools should be focusing on, which in turn brings about school improvement outcomes, including those of ECM.
- Becoming a sustainable school builds school leaders' confidence, efficacy and sense of achievement by enabling them to create concrete outcomes and achieve better results.

The reports include plenty of evidence of how becoming a sustainable school helps to raise achievement and attainment. The initiative is supportive of and contributes towards achieving statutory outcomes and results, and the journey to becoming a sustainable school is beneficial for school improvement. In the reports are references to how schools have enhanced their status in an Ofsted category, or improved their image and reputation with the community.

One school cites how working with its community of practice contributed to its school evaluation form:

Being upgraded from good to outstanding.

Another school reported that becoming a sustainable school assisted their progress out of special measures to becoming a good school:

By becoming a sustainable school and being guided by the principles of care we can create a high achieving learning community in which pupils develop into healthy, responsible citizens with the confidence and skills to take action to improve the world in which they live.

In the following examples the leaders comment on the impact and positive benefits that they can see for their profile, status and results:

The school feels more united... in 2008/9 our results are the very best they have ever been... attributed to a rise in pupil and staff satisfaction and involvement in sustainable development.

Our school was in special measures in 1998 but outstanding in 2007 – Sustainability was seen by [the] head as [a] key aspect of this journey.

We aren't able to definitely say that it raises attainment in English and maths due to catchment area and very low starting levels of children but it has a true impact on some aspects such as science and geography and raising standards in PDL.

Sustainability has had positive improvements on all areas of the school improvement plan.

SD [sustainable development] is becoming integral part of our curriculum and impacting positively on pupil achievement.

Sustainability was also mentioned as an attractive dimension to a school:

Over 40 per cent of next year's intake noted a commitment to sustainability as a factor for choosing the school.

I feel that the school has moved forward in this area during the year from good to outstanding because of the way the pupils have become involved in shaping ESD in relation to the curriculum rather than just the physical aspects of the environment.

One report includes comments from the school's Ofsted report:

Older pupils are mature, responsible young people who make an excellent contribution to the school and wider community. Pupils in all year groups develop exceptional awareness of their responsibility to help sustain the environment now and in the future.

The clear emphasis given on ecological sustainability is greatly appreciated by older pupils and has an excellent impact on pupils' personal development and their strong sense of responsibility to others.

Young people have sophisticated understanding of sustainability and are actively involved in decision-making – bringing informed judgements to the process and really making a difference.

Outcomes that support ECM include pupils adopting healthy lifestyles, enjoyment of their education, good behaviour, making positive contributions to their community and enterprise education:

The ECM agenda... can be very well supported through work on sustainability generally. All five of our UK settings reported that the ECM agenda was enriched by this work.

We do know that there is strong evidence to suggest that it may not be possible to deliver [the] ECM agenda unless the issue of environmental responsibility is addressed.

Work on ECM and SS can and does impact on standards, perhaps albeit indirectly in some instances.

6. Sustainable schools focus specifically on improving the learning of children.

- A focus on sustainability enhances learning for everyone through the participation and engagement of students.
- It provides a rich range of opportunities, contexts and activities for learning.

All the school reports and the meetings held during the past year give rich pictures of learning for everyone, in particular the students. Sustainability provides a platform for action learning, learning in real contexts, enquiry and problem solving. This is an inclusive, organic, evolutionary approach to learning that is perceived to have more value than more top-down, initiative-based approaches to classroom change.

The leaders note the value of this kind of learning in the following examples:

Problem solving is actually at the heart of sustainable schools.

The pupils are interested in it because it is real, they can see their future, it's about their world.

Pupils understand the effect and impact that we have as living beings in the world.

The sustainability agenda creates a wealth of opportunities for young children to be engaged, active and working on real, practical tasks that have meaning and relevance to their lives. Involvement in working in a garden is a good opportunity for them to not only learn new knowledge and skills but also see the product of sustained effort in food that can be harvested and enjoyed. Knowledge about foods that are healthy and safe further enhances the curriculum.

As a place of learning, we can help pupils understand the impact of human activity on our planet and by modelling good practice we can be a place where sustainable living and working is demonstrated.

Sustainability makes a difference to learning, both in terms of the critical questions it raises and how it can actively engage pupils in improving their school and wider communities. It provides a relevant and engaging context for pupils to learn about what it means to live in the world and to be a citizen. It engages them in everyday decision-making while also providing them with visions and a sense of the wider world and their future. This enhances the quality of provision in the classroom and can have an impact on pupils' achievement.

The leaders comment further on the value of the learning:

Staff feel strongly that learners' involvement in sustainable development and their growing global awareness has motivated them to learn and help raise standards.

I believe passionately that we must nurture the right values, values that they not only understand and integrate in their thinking but values that they truly live out through their daily attitudes and behaviour.

Pupils soon realised that they were playing a major role in not only the development of the school grounds but helping the school to become more sustainable.

The emphasis on critical thinking and an active approach are likely to encourage a deep, rather than superficial learning... the link between enquiry and action is radically different to many current teaching scenarios.

From the reports the kind of learning that is taking place is described by the leaders as:

- practical and hands-on, pupils can see what impact they are making and learn from that, they are learning through doing it
- outdoor and locally and place based
- engaged in the community, through bringing in people and learning about local issues
- aligned to 'creating citizens' and 'community cohesion' as it is more about pupils learning as people in the world rather than as pupils in a school
- aligned to cross-disciplinary working, as all departments get involved

7. Sustainable schools engage in curriculum change and development as sustainability is embedded across the whole curriculum.

- A focus on sustainability affects how the curriculum is viewed, structured and implemented
- Sustainability is becoming a cross-subject, cross-curriculum, cross-school approach.

As part of day to day curriculum and extra extended schools activity, all the schools report on a large and varied number of activities that they have undertaken either separately or with their communities of practice. There are examples across the reports of each of the eight doorways from the DCSF's sustainable schools strategy providing a stimulus for activity inside, outside, in the community and between schools. It is not our remit to report on the activities themselves but it is important to comment on the way that **every opportunity has been taken to demonstrate the way in which sustainability can be used to enhance subjects and themes of the curriculum.** Sustainability can give coherence to the curriculum. The school reports and the research process have identified ways that sustainability is being embedded in the curriculum:

It has enriched our curriculum.

The reports identify how this has been happening and the benefits that are resulting in the following examples:

Activities and resources used in the project have strengthened the way the curriculum is planned and approached and activities developed to engage children.

We have reviewed our work on sustainable development and have identified where these issues can be more fully integrated into all curriculum topics; through observations and discussions our pupils have a good grasp on sustainable education issues.

Our involvement in the research project has encouraged us to develop a creative approach to curriculum planning.

We can see that the new skill-based creative curriculum will allow schools to pursue education for sustainable development topics as a great vehicle for the curriculum.

Children were really enjoying the revised curriculum that embraced sustainable development even more closely and confidently.

The process of cross-curricula change and development is identified in several reports:

A sustainable school curriculum, as in teaching and learning in the classroom, can not be looked at in isolation and therefore I changed the name to learning plan to create a wider focus... this has been a useful tool in developing cross-curricular links.

The emphasis has shifted from a narrow focus on environmental education to a whole-school approach linked to the Doorways. We recognise the need to think across boundaries. This means that sustainable development is a priority in curriculum planning.

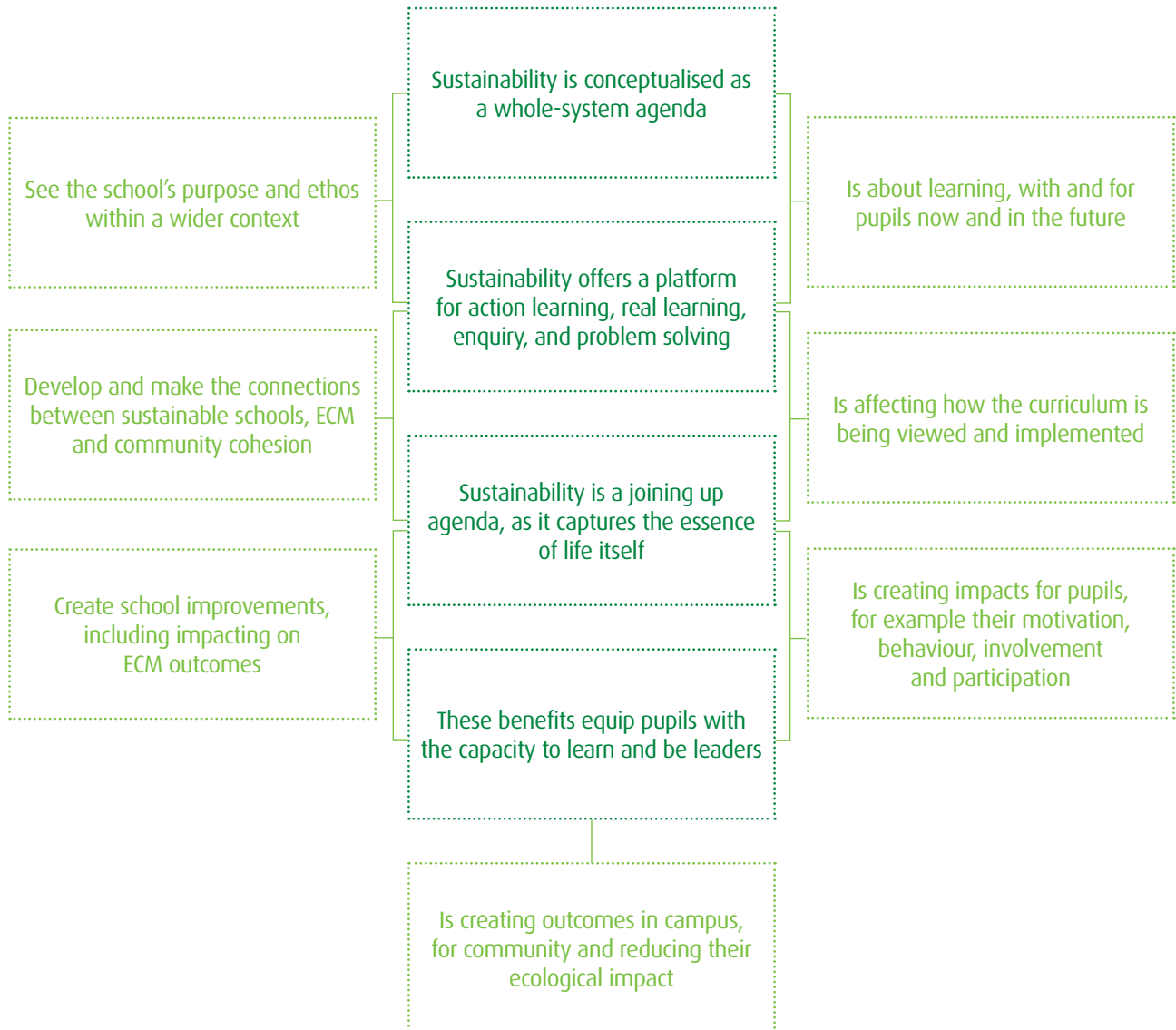
One of the most significant outcomes of this process has been the cross-curricula work going on in schools.

Teachers "recognised the powerful impact [that] the school's cross-curricula thematic approach has on real learning by pupils". Fuller impacts are still felt most in geography and science; however, it has been used in and affected development in other subjects:

Achievement in writing is more imaginative when it is done in a green space.

We organised a meeting to discuss how MFL [modern foreign languages] could be implemented into environmental projects.

Figure 1: Sustainable schools



4.1.1 Becoming sustainable schools: summary

The schools in this project are currently leading the way in developing and promoting sustainability in their school and wider communities; they are becoming sustainable schools. Their reports are a testimony to this and that is why we have used the language of 'becoming'. It best matches what is described in a wide range of ways. They wouldn't assume to have reached or be near to reaching a final destination, if indeed that is possible. The findings outlined above give us substantially more information than we have had before of what characterises this process of becoming and the rich range of learning and change that occurs.

The process of becoming a sustainable school is primarily defined by a move from seeing sustainability as a separate, add-on initiative to one that is central to its purpose, values and operating procedures. It is a move from being present in the intentions of one or a few people to becoming the responsibility of everyone, from taking place in subjects that include environmental studies to being integrated in the curriculum as a whole. The process is best characterised by seven different interacting, interdependent, interrelated **outcomes, processes and purposes** outlined above, which themselves are developing, growing and changing as they co-produce a sustainable school. These relate to purpose, connection to other initiatives, school improvement outcomes, learning, curriculum, benefits for pupils and ecological footprint. We now go on to describe the leadership that brings about a sustainable school and what is required of school leaders.

4.2 Leading sustainable schools: leading sustainability

The success of any sustainable journey relies on the leadership of the project.

Secondary co-ordinator for sustainability

Sustainability is intertwined with leadership. As a leader of future generations I have a responsibility to inculcate the skills of good citizenship and the care agenda. It is my duty to prepare children for the unknown: a world and a plethora of technology that currently doesn't exist. The only certainty is that if I don't promote the values that underpin sustainable practice, there won't be a world to live in!

School Leader

The schools describe their leadership of sustainable schools as follows:

Sustainability is unlike any other initiative that takes place in our schools. If it is to be successful, it needs to be managed well and led using a variety of styles appropriate to the job in hand and the skill levels of those involved in the initiative.

The leadership at all levels within school promotes a caring ethos, whether... for oneself, others within and out of our local community, globally and for the environment. The sustainable schools agenda builds on this ethos. It is worth remembering that it is strategically vital that a sustainable school develops the leadership potential of its pupils.

I did use an authoritative approach in the beginning of this work by suggesting that we use the idea of school gardens linked to our international work. I did have initial ideas of a rough structure to the project (a clear vision) and I did seek to persuade my team to 'buy in' to it. **But**, I was genuinely seeking the views, and tapping into the experience, of staff. **I drew on their knowledge of the existing curriculum and their views on the reaction of other members of staff to [the] proposal in the context of workload and relevance to the curriculum.**

Leading sustainability within a school requires passion and effective organisation and communication skills.

From this research we have identified three interrelated processes and three main qualities that underpin the leadership and that can be seen in, between and across the leaders we have been working with. Three additional, practical processes have also emerged from the picture of the reports as a whole, which help provide the development space and context for the qualities and processes to flourish and for a sustainable school to take shape.

In summary leading sustainability can best be described as the interplay of three processes that:

- are relational and systemic
- use personal authority
- are democratic and distributive

The leadership qualities are:

- having outward focused passion
- cultivating the potential of others
- demonstrating courageous agency

The practical processes that support development and bringing about the seven characteristics are:

- helping to grow pupils and adults as leaders
- starting from where people are, building up leaders and celebrating what we are already doing
- providing a context, from senior management, for others to lead

When we use the term leaders, we do not refer only to senior managers, or even individuals. In this context the term leaders is used for individuals and groups of people who are leading and advancing sustainability whether in their schools or communities of practice. The leaders represented here include a broad range of people and groups of people, from headteachers to teaching assistants, from all the staff and pupils of schools to individual pioneers, from improvements in one school to improvements across the community of practice schools.

4.2.1 The three processes that lead sustainability

4.2.1.1 Processes that are relational and systemic

Relational and systemic processes are those that are generative – capable of producing or creating – and about learning. Members of one school have:

a belief that an inclusive, organic and evolutionary approach that builds on existing links and organisational structures is likely to be more effective than an initiative-based, school or individual centred, or time and resource limited one.

This is reflected in many instances across the leaders, demonstrating the multi-dimensional nature of the leadership qualities.

The characteristics of leaders are relational and systemic. Leaders:

- are relaxed, connected and flow in an organic fashion between different spaces and tasks, thus understanding the systemic nature of the organisation
- are open to what is happening and they enable rather than control power relations; they are outward focused
- see themselves as a key part of a system, not in sole charge of it, thus they work from inward to outward critical reflection; they have a shared focus to bring about outcomes
- see their influence and concerns on different scales; they see their school in its position within its place or locality and within the world; they therefore see how the school can contribute to this bigger picture

- work with feedback
- are risk takers and resource gatherers and creators
- are hopeful, creative and imaginative, with a capacity to look for new solutions

4.2.1.2 Processes that use personal authority

The personal authority of leaders of sustainability comes from having a clear and grounded purpose of the school leaders' values and vision. The vision of sustainability comes from school leaders sense of moral purpose, which creates an outward commitment and passion, and promotes efficacy. Leaders want to bring about and effect change and impacts for sustainability which affect others directly.

These leaders have articulated this 'moral purpose' in a variety of ways as described in the examples below:

I am very aware of my own strong commitment and passion to the development of education for sustainable development within my own [school] and others schools and the particular passion I have [had] for 10 years plus to see education for sustainable development embedded in all early years work to continue sustainable development learning as part of my CPD. A clear belief in education for sustainable development highlights a strong [emphasis] that I have on leadership with moral purpose and values based leadership, which is reflected through the project and the way the school and local community work together.

K gave the group a clear direction of what we were intending to achieve within a desired time limit. She motivated the group in responding and meeting the goals... and challenged all members to take part with an inspirational enthusiasm.

If it had been an area they felt less passionate about then it might not have impacted so clearly on our school.

Often these values develop from a personal viewpoint.

4.2.1.3 Processes that are democratic and distributive

Democratic and distributive leadership is about processes of care and stewardship. The processes of distribution portrayed in the reports are about more than giving out responsibility and flattening hierarchy. They are about the development of relationships, knowledge, power and know-how, and about passing on expertise to others enabling them to be members of a sustainable school. Through the 'distribution' or 'leading through relationships' staff become able to make decisions and drive change and improvement:

"Everyone is involved, everyone is empowered."

School Leader

One school commented that distributing leadership results in pupils and teachers feeling "at the heart of the work". Middle leaders can be more "lively, positive and engaged".

These are some comments by teachers about distributing leadership responsibilities:

I have really promoted and encouraged participation among as many schools as possible and then brought other people into the project through presenting at the conference. This gave them ownership of specific areas of sustainability.

Sustainability is not the responsibility of individuals but a whole-school approach and more active senior leadership were needed to ensure its development.

It is important to recognise that the sustainable schools agenda is too big and diverse for just one person to implement. If change is going to happen then schools must ensure leadership is distributed.

4.2.2 The leadership qualities that underpin the processes that lead sustainability

Three essential leadership qualities underpin these processes and particularly seem to support the creation of schools that are leading for sustainability.

4.2.2.1 Having outward-focused passion

Leaders hold sustainability values and visions in a way that gives them an imperative to act from a larger sense of purpose, one that is outward looking, looking beyond their school into their community and its environment.

Almost all of these leaders refer to their values in what they are doing and their passion and commitment to sustainability. The following examples illustrate this and the importance of leaders sharing this opinion with their community of practice:

We found everyone in the COP [community of practice] agreed that there was a degree of 'moral purpose' to education for sustainable development... there was an overall consensus that their education for sustainable development was about common good and safeguarding the world and its communities for future generations. As leaders we feel it is vital to share our views on sustainability and it was interesting to note that these views were shared more widely (though [they had] not necessarily been articulated prior to the formation of the COP).

A vision that I share with all within the school and I actively take out to others who form part of the school's wider community, reflecting on outward looking leadership style which has resulted in extensive partnership working supporting ESD across the school. This has been a key driver throughout this project, particularly in getting COP on board where as a lead school I have shown to others my commitment and passion for ESD ensuring others can see how it underpins all that I do in my school and the difference it has and does make in daily school life.

Sustainability covers all aspects of school and community life; it is not an add-on. Therefore it requires effective leadership that is at the heart of whole-school development at a strategic level and throughout all aspects of school life. It requires everyone to be outwards looking and have the ability to see how organisations and roles link together to create effective partnerships.

4.2.2.2 Cultivating the potential of others

Leaders show concern and care for the well-being of others and facilitate their potential. Through inspired vision and care, they provide people with the opportunity to develop as leaders. This leadership style is inclusive, caring and ambitious for others to develop as leaders.

The explicit expression of 'care' as a predominant ethic in sustainability has an effect on the style of the leadership in use in a sustainable school. Leaders in these schools pay attention to the well-being of the planet, their community, staff and pupils. This is as important as their attention to targets and standards, which is a strong theme in almost all the reports. There is also a particularly strong emphasis on working with and alongside others coming through the reports: a need to inspire colleagues with the agenda and for them to come to it themselves:

Development of sustainability should be viewed as co-operative rather than competitive.

This is not an approach that is egocentric or self-serving, as the following examples demonstrate:

You need to be able to take on others' opinions and ideas so that you can take things forward in school. Everyone has an opinion about sustainability because it is out in the community and media etc... it raises interest. They have responsibility. It affects them and their future.

It's important to recognise and reward individual effort and involvement and take a back seat yourself sometimes.

It's about creating people that are confident.

It's essential to engage with the issues at a personal, emotional and spiritual level, rather than wait for an initiative to provide a solution. As a school leader I considered stewardship and sustainability as a journey and process rather than an end product or destination.

4.2.2.3 Demonstrating courageous agency

Leaders take the initiative; they do not wait to be told. They create practice and change towards sustainability that requires risk taking and energy to bring it about.

Throughout all the reports are stories of risks being taken, pushing boundaries, resilient determination and a willingness to go with the unknown rather than the safe. This form of leadership takes courage as well as the ability to get on and do something about creating the change you wish to see in the world.

Some leaders have found their own confidence to take forward what they see needs to happen, or they have found energy from the journey to sustainability itself; others have been given the space and permission to develop this approach by others. The size of the playing field they find that they are now operating on and the urgency of the agenda together seem to inspire and give courage:

"The only certainty is that if I don't promote the values that underpin sustainable practice there won't be a world to live in".

School Leader

This quality provides the knowledge and understanding needed for the bigger picture. It's about changing mindsets and aiming to instil a sense of urgency in staff:

The school population involved is approximately 7000. Multiply this figure by the number of people in each family, and the wider family networks, as well as past pupils and their families, and it is safe to say that most households in M area have links with at least one of the schools. The potential for change, therefore, on a theme which is intrinsically linked to the community, such as sustainability, is enormous.

For me, our sustainability project was a new venture and took me out of my comfort zone dealing with issues I had never faced before.

4.2.3 Processes that support development and bringing about the seven characteristics

The Leading Sustainable Schools project also needs the space and time to develop. Through the research process we have also identified three core development and contextual processes that have enabled these leadership processes and qualities to flourish and are noted across the schools.

“Very few headteachers are aware of the eight doorways though most are engaged in some aspects of sustainability”.

School Leader

4.2.3.1 Starting from where people are, build up leaders and leadership expertise and celebrate what we already are doing.

This includes using tools and processes that help people find their role in and connect to the agenda. This might be using the doorways model in the Sustainable Schools Framework, and/or reviewing tools such as Valuing our Future or the Sustainable Schools Self Evaluation (S3) to help the processes of engagement. These are all ways to help to celebrate and demonstrate that many schools are already on the path to sustainability. Schools are already engaged in many great initiatives within this agenda, as the following examples illustrate:

We use the SS [sustainable schools] doorways [model] as a flexible and approachable tool to promote the sustainability agenda within the school.

Start from the beginning... back to basics, don't get over ambitious... they needed a manageable focus, for example growing food.

Take each school from its own starting point, be fluid.

It is what they are already doing! It lets teachers see things that they already are doing that fall within the sustainable schools remit.

Schools highlighted the importance of networking and sharing ideas:

An effective leader may look for points of common interest between their own and other people's priorities, such as gaining a local sustainability forum... seeking common themes in differing agendas.

First find out if you have an agenda that is shared with others – what vision for you [and] your school do stakeholders hold and what values underpin this vision?

Network – find out who can help. You'll be surprised who comes out of the woodwork!

The process the schools are engaged in has been a starting place for a wider discussion and dialogue but one leader urges caution about how we move from this starting place:

The doorways did give some structure to the action plan but also box-ticking... They do not focus specifically on learning; they emphasise box-ticking over the facilitation of real vision and purpose.

For example, the doorways could be seen as opening up into separate rooms instead of different doorways opening up into the same room, which has a shared culture and ethos to it.

4.2.3.1 Provide a context from Senior Management for others to Lead

Although distributive, relational processes are key; the role and commitment of the headteacher and strong leadership is critical and necessary to enabling sustainability to take root:

To ensure sustainability is at the heart of the school, strong leadership from the senior management team is vitally important. At [our school] this has been demonstrated [through] the support and commitment shown by our headteacher. Through his vision, shared by the staff and wider community, we are now a model of good practice in the borough.

For a sustainable school to be successful there has to be a commitment and involvement from the senior leadership team at a strategic level.

Some leaders have also sought to have an impact on senior leadership thinking and practice, as can be seen within the reports. For example, change from more authoritative and solo leadership styles to democratic and inclusive leadership and towards more coaching, as described in the following examples:

I could step back and allow teaching staff to take the role of experts.

Allow people to follow their dreams; don't put a lid on people's ambitions, as a couple of passionate and committed people can perform miracles.

School Leader

4.2.3.3 Helping Pupils and Adults grow as leaders

Many leaders talked about using the expertise within others and creating a knowledge base to take forward sustainable schools. In many cases this took the form of providing a space for others to experiment and take risks, so as to continue on their leadership learning journey. This is about **leaders recognising that they need to give permission to others to take forward this agenda and cultivate their own capabilities:**

It has been important in our community of practice to recognise, highlight and use the talents and expertise of others and not try to be expert at everything yourself.

K fostered our enthusiasm and directed us in a way that would develop our own leadership skills or professional practice.

Working with other schools has provided a springboard for staff to lead strangers towards common goals.

They have been empowered by the scheme to develop their leadership skills within their own schools and direct involvement in the programme of activities... through practical learning activities rather than traditional Inset courses.

There is more confidence in school staff to take the lead now.

4.3 Developing leadership in communities of practice

The communities of practice can be the crucible for this different form of continuing professional development that is 'Not Inset': School leaders noted below:

Communities of practice join together to explore issues and questions as peers. They value everyone's expertise... Everyone is involved in developing and generating knowledge.

The pass-it-on theory recently favoured amongst celebrity chefs could be very relevant to work on SD [sustainable development].

Through system leadership the community feels that [there has been] higher achievement... than would have occurred if schools were working in isolation.

The journey from organising events and sharing good practice continues to grow within communities of practice, as all schools get involved, and their contributions are valued, promoted and encouraged. People's individual talents are also brought in. These communities are "encouraging all participants to get involved and to take personal responsibility for developing sustainability". At their most influential, they can have become quite large and "become a mini-LA [local authority] exerting influence".

The research highlighted that there is a need for training among communities of practice:

It is unrealistic to expect individuals or small groups to suddenly develop the capacity to make complex decisions and become involved in major projects. They need training or better still the opportunity to learn formally and informally to develop confidence and trust each other

The power of locality or place, having a sense of geographical ownership with their community, is extremely important to this process. This community can encompass families, small businesses and civil society. Many of the networks are communities of interest and place, galvanising whole communities in spreading outwards their interest in creating sustainable places.

4.4 Sustainable schools: leading sustainability

Placing sustainability at the heart of school culture, ethos, policies and activities is a challenge. The reports from the schools show there is no single approach to set about it or one person who can take it on and be successful by themselves. If a whole-school approach is to be achieved, and the partial status of sustainability is to be overcome, then it cannot be a journey that is travelled alone. Sometimes school leaders for sustainability are headteachers or part of the senior leadership team. Sometimes they are teachers, governors, teaching assistants and parents, and very often a combination of all of these. Sustainable schools are particularly successful in enabling their students of all ages to become leaders.

4.5 The leadership of sustainable schools: summary

The leadership of sustainable schools is the second part of the picture in this report. For a school to become sustainable, it is necessary for everyone in the school to take responsibility for and be enthusiastic about sustainability. The seven characteristics are brought about, interact with and are enabled by particular use of leadership qualities and processes, most of which are not new but combined in new ways to bring about the journey to being a sustainable school and based on values about the nature of sustainability and its importance.

Leadership of the process of becoming a sustainable school is relational, empowering and connecting. It plays out at the interface between personal authority and democratic, distributive processes. The root metaphor is of a group of gardeners who are involved in planting, cultivating, growing, nourishing and nurturing. Leadership for sustainability is generative, locally relevant and contextual.

Figure 2: Leading sustainable schools



5 Conclusion

The school leaders tell the story in their reports that pursuing sustainability in their schools **brings improvement, change, learning and leadership into a new relationship with each other**. Bringing about a powerful systemic shift for the school system starts to bring these four educational goals and aspirations to life; they begin to have a purpose based in the real world. Fostering greater sustainability becomes a process of nourishing, freeing and restoring the relationships and connections between people, their school and the community and its environment, between people, their purpose and place. The outcomes described are innovative because what these leaders are achieving has not been done before; they are not leading and following instructions or a blueprint, but creating the future they wish to see for the next generation in their midst. In this report we can see from these school leaders the power and benefit of leadership for sustainability. We describe this emerging paradigm in the following way.

- Becoming a sustainable school is not just an innovation that is bounded within educational institutions; sustainable schools have boundaries that are open and responsive to the challenges and opportunities that sustainability presents. Sustainability takes place in a larger field of activity and sphere of influence; educational thinking and practices are extended by community and environmental development.
- The new knowledge and capabilities that this research and development programme has helped to build have the potential for transformation. The project has shown that schools can go beyond the demands of externally driven, instrumental initiatives and accountabilities.

They can co-create new outcomes for students by changing the way in which the relationship between schools, education and society has been traditionally seen. **They begin to see the relationship between people, their purpose and place in a new way.**

- This journey holds energy for those who are involved. It is not about creating a completely different education system but evolving it from where it is and renewing its potential contribution. It is about putting things together differently so that the relationships, energy and purpose between people, organisations, communities and their environment come together in more mutually beneficial ways.

Leadership for sustainability is about more than educational improvement and attainment outcomes. Its goal is bringing about a better future for everyone. In order to serve their future these school leaders realise they need to reach out, to build their schools within a community context so that they can together create human, intellectual, social and ecological capital and public value within the limits of our planetary environment.

Sustainability can enhance the direction of policy, curriculum development, accountability and teacher and leadership development. When seen as a whole system initiative it provides the foundations for the improvement of education as a self-improving, self-sustaining system. Permission and legitimacy are needed for school leaders who are more cautious than the schools involved in this research. Encouragement is needed to help them place their resources, time, money and energy into this enabling agenda. This will mean that all the way through the system, from national policy-makers to local leaders, relationships with schools and communities will need to be nurtured.

5.1 Sustainability as a life giving property

Sustainability gives us a strategy for working, in relation, with schools for creating a 'new story' for education. (Birney et al, 2009)

These findings demonstrate that sustainability offers something to schools that is more than just 'another initiative' or agenda to follow. Sustainability is life giving to people and their organisational purposes, policies, practices and processes. It gives meaning when it provides a robust moral framework to operate within, as it addresses the fundamentals of life – the need for a strong, healthy and just society, that can only continue to operate now and for future generations within our planetary environmental limits. The robust framework that we have seen in these schools offers leaders a way to join up and build coherence, within their context, around the multitude of educational priorities that come and go, as it addresses life itself; it is not something that will go away. This life-giving property offers a strong platform for learning and leadership, learning that is based within the challenges we all face, which in turn makes for active, real and meaningful leadership that nourishes those who are engaged.

5.2 Taking it forward: recommendations for leaders wanting to engage in this agenda

In the reports the leaders were asked to summarise the advice they would give to a school leader embarking for the first time on a journey of leadership for sustainability. Here are their suggestions, grouped into 11 categories.

1 Involve students:

- Plan the job description for the children's green team. What do you want them to do?
- Form an action team of pupils.
- Involve the students.

2 Envisage what you want:

- Have an idea of the vision of school you want to be and create it with the whole staff: it is important everyone develops it together!
- Know your vision: visualise where you want the school community to be and work backwards.

3 Network, share with partners, visit others:

- Visit other institutions to see how sustainable development operates in practice.
- Set up communities of practice or other such support networks to allow interested parties to work together.
- Engage interested partners including community partners on projects that will benefit them and add value to their work.
- Provide support at a local and regional level.
- Ensure that any change is sustainable and not just centred around committed individuals.

4 Plan; put it in your school development plan:

- Sustainable development should be a school improvement target.
- Form an action plan of development – start small!
- Include the work in your development planning and leadership framework.
- Create an action plan.

5 Be patient, flexible and creative with change and take risks:

- Have patience and a belief it will happen.
- Don't expect change to happen overnight.
- Be flexible and creative.
- Be prepared to allow risk-taking behaviour in yourself and others.

6 Evaluate, prepare, reflect and use the Sustainable Schools Self Evaluation (S3):

- Allow time for preparation, processing and time to evaluate progress.
- Evaluate, evaluate, evaluate.
- Use leadership tools such as S3 to facilitate development, monitoring and review.
- Conduct an audit with the children (this can be organised at a cost by an external organisation, eg: Eco Active).
- Share your findings with the school community, at staff meetings, training days and via newsletters.
- Create an action plan and monitor the progress.

7 Make what resources you can available:

- Provide funding.
- Give time and (if possible money) to allow the work to move forward.

8 Encourage and distribute leadership and involve the senior management team:

- Distribute the leadership across as many areas/ teams and staff as possible.
- Encourage staff to be committed and make sure that commitment is not driven by just a few people.
- Identify key leaders and make it accountable.
- Be outward looking – link to other organisations. Set up network groups.
- Take the initiative to look for funding.
- Share good practice.
- Engage staff and governors through a staff green team.
- Get the backing of your senior management team, head and governor.

9 Influence the ITT agenda:

I would strongly advise that initial teacher training includes some focus on sustainability and would happily share our experience. The next generation of school leaders need both training and time to reflect on the state of the world

10 Make connections:

Make the connection between sustainability and the other development issues for the school so that heads and [the] SMT [senior management team] support the programme. Produce DVDs about what has gone on so far to communicate the practicalities and achievements in a way that is accessible to all. It is spiritually satisfying to see success stories told by the people involved and it makes you feel you can do it too. Build sustainability into all aspects of development and assessment of school facilities and performance.

11 Extend learning:

Look for every opportunity to extend learning. Seize these opportunities and exploit them. Take risks and learn... share your experiences and rewards however small... learn from each other. Listen to staff, parents and the community. They often have the answers to the questions we spend ages contemplating. See financial support in what you do but don't use this as an excuse not to move forward. Broaden your outlook on life.

5.3 Supporting leadership

The research team can build on what we have learnt about leadership qualities and processes to help us to understand how to support and develop leaders who are in themselves developing and growing leaders in their communities. The findings raise questions that will need to be taken into consideration for leadership development and support (and as a framework for evaluating these programmes).

Question: How can leadership development processes and programmes focus further on the current purpose of schools? How can we help leaders understand where their personal agency comes from, their values and frames for education? How do we enable leaders to become outward looking, to include wider societal and environmental dimensions?

Suggestion: Through programmes that are **values based**, which look at these values within education, the connections between the local, global and environmental dimensions.

Question: How can leaders lead their learning and the learning of others? How do we develop leaders' relational and cultivation skills? How can learning be co-constructed and created?

Suggestion: Through programmes that are **relational**, which enable people to work with others, especially where pupils are seen as co-learners and leaders.

Question: How can the active learning processes that are implicit be made explicit? How do we enable learning to take place in context, through action and inquiry? How can we give people the courage to take the necessary risks?

Suggestion: Through programmes that are **action-orientated** and contextual, which are working with people (from their starting places) to bring about real improvements and changes to their schools and communities. These programmes provide the legitimacy for sustainability to happen.

Question: What needs to happen to enable leaders to let go or reframe current expectations, norms and standards that they perceive are being placed upon them? What structures, processes and programmes will enable this approach to be taken forward?

Suggestion: This approach can be taken forward through **collaboration:** the model of action research and communities of practice has been a valuable tool in this leadership development process as it encourages enquiry-based learning, which drives action and change forward. Its benefits include:

- encouraging us to move away from set norms and create our own paths to the future
- requiring collaborative practice, which promotes an outward-looking approach to learning
- involving cycles of learning, which are both reflective and active
- being generative and open so that individuals gain a sense of personal agency for their leadership, and thus work to create the new patterns and ideas

- being highly contextual and situated, so it can be used within a variety of setting and localities
- creating practical outcomes and improvements with others

As sustainability provides a destination for these leaders and schools, they are able to hone their activity and make the relational link between intention, values and vision with the actions they undertake and the outcomes and impacts they are creating.

5.3.1 Implications for the National College's programmes of work, their regional networks and research

From this research we can say that leading sustainable schools or focusing on sustainability, rather than just promoting sustainable schools, can be a valuable route for the National College. It would assist the National College in achieving leadership for pupil outcomes in terms of ECM and standards, and it can help develop leadership in schools, for school improvement and curriculum, as well as leadership beyond the school. It can also be a way to enable the growth of the leaders of tomorrow from middle managers to pupils, while helping to address issues of succession and sustaining leadership.

So how can this agenda be placed more centrally within leadership development, with the added moral imperative that sustainability brings to ensuring the future of ECM? How can this not become a basis for school renewal in the next decade?

5.4 Informing policy and wider implications

What is the next shift that is needed in educational policy if we listen to this research?

The findings in this research raise questions for the purposes of education, the direction of DCSF policy and how schools are placed within this context. We know that many schools are embarking on this journey, a large number originating from grant schools. They are making significant waves in their schools and localities but they have also told us that it is hard for them to sustain this level of activity and change on its own. This is especially true unless everyone is willing to take the necessary risks to ripple outwards and overcome other conflicting expectations and barriers placed around and on them:

Education and sustainability both have [a] clear interest in the future... Education frequently focuses on short term targets; there is considerable scope for revisiting the nature and purposes of education.

School leaders are raising interesting questions about the ethos and philosophy of their schools and of education as a whole. From the central policy-making body through to the four agencies that help shape and take forward the agenda, national decision-makers need **to provide a strong legitimacy and permission for leaders** and their schools to refocus their purpose and reconfigure their relationships for sustainability. Within their roles, departments and bodies, decision-makers need to find ways to empower and give confidence to leaders to find their own narrative to addressing the challenges of a future for everyone.

The research team asks the four national agencies the following questions:

- DCSF: To what extent is sustainability an organising principle and ethos for educational policy such as the 21st-century schools white paper? What is the coherent message that schools are receiving and do these cause conflicts or a framework for their individual action?
- Training and Development Agency: What relationships are being made between initial teacher training and leadership development and sustainability? How are teachers to be trained as future leaders for sustainability, building on the leadership learning articulated here?
- Ofsted: How can sustainability offer a framework to support schools in self-organising and self-assessing? How can we put more emphasis on and value outcomes that are equipping children with the knowledge and skills to lead sustainability?
- Qualifications and Curriculum Authority: With movements to a new creative curriculum how can schools be empowered and enabled to use sustainability, both as a learning and teaching organiser and as an active pedagogy? What impact would this have on teacher training and leadership development?

Alongside considering how to place sustainability more centrally to their aims and purposes, we suggest it would be helpful if these departments and agencies communicate with each other about this agenda. They need to look at how they work together and act for and with the system. Their messaging needs to be consistent, logical and coherent in articulating education's wider purpose and thus not responding to sustainability through separate policies and agendas. They also need to play a stronger role in fostering and nurturing those who are leading education so that they can act for the moral purpose of sustainability.

5.5 Summary

The goal of this research was to investigate the implications that achieving a sustainable future has for schools and their leadership. It was hypothesised that the task for sustainable leadership was to move the agenda from:

its current partial status in schools to being embedded, from the personal commitment of a few to being the responsibility of everyone, from being an additional priority to being a fundamental way that a school thinks and acts, from it being part of some people's personal beliefs to becoming a set of collective properties, from looking inward to looking outward and lastly from a set of doorways to a whole-school approach.

This report has summarised its findings by investigating:

- what school leadership for sustainability looks like in practice
- the key qualities and processes that leaders use to create, develop and lead sustainable schools
- how sustainability enables and enhances ECM and wider educational outcomes

The practice of leadership for sustainability shows that there is no single approach, journey, person or even school that can take it on. It is about creating a variety of practices and actions that start you on your journey and engage others in the journey. This process is therefore one of changing relationships between people, their purpose and their place.

There are qualities that nourish and assist this journey. They can best be described as relational and coherence-making qualities where leaders have outward, focused passion. They can cultivate others and be courageous in putting a focus on this important purpose.

Where sustainability becomes embedded within the whole school and placed as the ethos and connecting goal for everything else it becomes a life-giving property. When this is done, learning becomes relevant and ECM and wider educational outcomes are strengthened, enhanced and enabled.

Sustainability, as an overarching aim and purpose, could therefore also be valuable for the National College as well as the other educational departments and agencies in achieving their objectives for pupils and schools and for the needed societal and environmental outcomes that a sustainable future offers.

5.6 Moving forward

We have been struck by the wealth and extent of the activity that has been carried out within these schools and their communities. This means there is a vast amount of data and ideas that could be used in further research. Some examples of questions to ask in future research include:

- What are the worldviews and biographies of leaders who take on sustainability? What has brought them to this perspective for themselves?
- What motivates leaders for sustainability? What values do they hold and how have they developed?
- How do we involve schools that are not yet engaged? How do we provide the permission and legitimacy for them to join us?
- What does pupil leadership for sustainability look like? What is authentic pupil leadership as opposed to something more tokenistic?

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Appendix

Schools taking part in the research

Aintree Davenhill Primary School

Alcester Grammar School

Ashley CE Primary School

Batheaston CEVC Primary School

Batley High School

Bishop Stopford School

Bowbridge School

Brabins Primary School

Brill CE Combined School

Brixham CE Primary School

Bydales School

Cassop Primary School

Cedar Mount High School

Churston Ferrers Grammar School

Colby Primary School

Crispin High School

Dennington Primary School

Diss Infants School

Edwalton Primary School

Farnborough Grange Nursery and Infant
Community School

Hackleton Primary School

Hagbourne Primary School

Hagley Primary School

Hampton Hill Junior School

Hawkshead Esthwaite Primary School

Hemsworth College School

Hethersett Junior School

Holly Lodge Girls' College

Hurst Park Primary School

Lampton Secondary School

Lark Rise Lower School

Lincroft Middle School

Long Eaton School

Malmesbury School

Meadows First School

Milton Mount Primary School

Monkchester Nursery School

Newstead Wood School

Pooles Park School

Ringwood School

Rowland Hill Children's Centre

Settle College School

Shire Oak Primary School

Silverhill Primary School

Sir John Thursby College

Southfields Junior School

Southgate School

St Martin at Shouldham CEVA Primary School

St Francis Xavier Primary School

Tarleton Holy Trinity School

The Ashcombe School

The Castle School

Upton Cross Primary School

Westhill Primary School

Wimbledon Park Primary School

Yeo Valley Primary School

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