LEARNING FOR SUSTAINABILITY

The report of the One Planet Schools Working Group



COVER IMAGE

In chaos theory the butterfly effect attempts to describe how a seemingly insignificant change can result in dramatic consequences elsewhere. Releasing the butterfly into the world symbolises the power local action has on global issues. Acting locally brings colour and light to a seemingly dark and bleak landscape.

Madeliene Stone and Billy McCafferty, King's Park Secondary School

CONTENTS

FOREWORD	03
INTRODUCTION	05
DEFINITION OF TERMS	08
HIGH LEVEL RECOMMENDATIONS	11
Learners	12
Practitioners and Leaders	14
Whole school approach	17
Buildings and grounds	20
National approach	2 3
APPENDIX I	26
Members of the Working Group 26	
Organisations consulted	27
APPENDIX II	28
Summary of recommendations	28
REFERENCES	31

FOREWORD

As we approach the end of the UN Decade of Education for Sustainable Development 2005-2014 (UNDESD), the Scottish Government's commitment to develop the concept of 'One Planet Schools' takes on added significance. Maintaining momentum and building on work undertaken in response to the Decade is of crucial importance as evidence mounts that our impact on the Earth's systems is such that we are not 'living within our means'. This is, in essence, the meaning of 'One Planet' living – ensuring that we only use resources at a rate that can be replenished, and in a manner that is equitable within, and between, nations and generations.

Concepts such as 'sustainable development education' and 'global citizenship' have been built upon contributions of distinguished Scottish thinkers including Sir Patrick Geddes who is widely associated with the concept of sustainability and the notion of 'thinking globally, acting locally'; conservationists such as John Muir who pioneered the National Parks movement; and ecologists such as Professor John Smyth who co-wrote the education chapter of the 1992 *Rio Declaration on Environment and Development*. Successive Scottish Governments have maintained this long-standing commitment through various initiatives; most recently those outlined in Scotland's UNDESD Action Plans, *Learning for our Future* and *Learning for Change*.

In addition to sustainable development education and global citizenship, we have placed equal emphasis on outdoor learning in exploring the manifesto commitment on One Planet Schools. Scotland has a distinguished tradition and international reputation in outdoor learning, and the Scottish Government has made significant commitments through the work of Education Scotland and the Outdoor Learning Strategic Advisory Groupⁱⁱⁱ.

Our report emerges at a time of other major education policy developments in Scotland. Curriculum for Excellence provides the overarching philosophical, pedagogical and practical framework and context in which the One Planet Schools recommendations presented here can be applied. Moreover, the focus on learning for sustainability and social justice in the values section of the revised General Teaching Council for Scotland's Professional Standards and the changes resulting from the Donaldson Review of Teacher Education, *Teaching Scotland's Future*, contribute to a fertile professional context for our recommendations. In taking these initiatives forward, Scotland is fortunate in having many practitioners and policy officers committed to a 'One Planet living' agenda and to providing the best learning opportunities for children and young people to understand and act on it.

Although our Working Group was drawn from a wide range of stakeholders from across diverse fields, we sought additional expertise in certain areas through meeting with colleagues with the requisite knowledge, skills and responsibilities. Through Education Scotland and the National Parent Forum of Scotland, the Working Group also sought the views of practitioners and parents. The findings of these consultations and those from additional research funded by the Field Studies Council and Forestry Commission Scotland^{iv} have informed the Working Group's recommendations around what practical measures need to be taken to bring about a step change in progress. This collaborative and consultative process provided key insights and informed our thinking, and we are grateful to our colleagues and consultees for their guidance and support.

At the forefront of our deliberations have been children and young people; the learners within the Scottish education system who will have such a key role in the future of our planet. We are grateful to those who informed our thinking, with particular thanks to Madeliene Stone and Billy McCafferty of King's Park Secondary School who conceptualised and designed the artwork for the cover of this report.

This report is our vision of how Scottish education can build on its world leading status and further contribute to sustainable and socially just practices throughout Scottish society. I am pleased to commend it to you.

Professor Peter Higgins, Chair

Ecologically literate



Eco-Schools Secondary Conference in the Scottish Parliament, 2012

INTRODUCTION

WWF's 2012 *Living Planet Report*'shows that globally, humanity is currently using 50% more resources than the planet can sustain. We are, in essence, living as if we had one and a half planets. The disproportionate overuse of resources by industrialised nations has raised living standards in many countries but at a huge cost to the health of the Earth's living systems. The UN Development Programme's *Human Development Report 2011*^{vi} provides clear evidence of the unequal distribution of this rise in living standards which has resulted in high levels of inequality and poverty within and between societies and has contributed to political tension and conflict across the world.

Our vision is of a flourishing Scotland where sustainable and socially just practices are the norm throughout society and our roles and responsibilities within a globally interdependent world are recognised.

This is a Scotland where learners are educated through their landscape and understand their environment, culture and heritage; where they develop a sense of place and belonging to their local, national and global community, and have a deep connection to the natural world. Here, learners will understand the significance of their choices, now and in the future.

Our expectation is that Scotland will provide leadership globally as one of the first sustainable, low carbon industrialised nations on Earth. By living within the limits of our planet's resources, and helping to ensure that these resources are shared fairly by all, our country, in transforming its own practices, will give others the inspiration and freedom to do likewise.

Scotland has done much to rise to these significant challenges. The Scottish Government's ambitions for a 'greener' and 'fairer' nation encompass many overarching strategic objectives; sustainable development, being one of the key National Performance Outcomes, features in many aspects of the government's work. A prime example of these commitments is the Scottish Government's ambitious targets, which have crossparty support, for reducing greenhouse gas emissions through the Climate Change (Scotland) Act 2009. The Act includes the target of a 42% Greenhouse gas (GHG) reduction by 2020 against 1990 levels.

Action is also being taken to reduce our local and global environmental impact by moving towards a Zero Waste Scotland^{vii}, minimising the use of the Earth's resources and increasing the use of renewable energy. Work is also underway to improve the built environment and protect our natural heritage for present and future generations.

Furthermore, the Scottish Government has placed great emphasis on tackling the significant inequalities in Scottish society and in creating sustainable communities which

promote physical, emotional, mental and social wellbeing for all our nation's citizens. In addition, it has reaffirmed its commitment to a global agenda through its *International Development Policy*^{viii}which articulates the vision of Scotland's place in the world as a responsible nation within the global community; committed to playing its role in addressing the challenges faced by our world.

Educating for change

The Scottish Government has rightly recognised the crucial role of education and learning in bringing about attitudinal and societal change in relation to these areas.

Within the first half of the United Nations Decade of Education for Sustainable Development, themes relating to sustainable development education, global citizenship and outdoor learning were firmly embedded within Curriculum for Excellence and feature prominently in the experiences and outcomes. The support given to Eco-Schools Scotland has also helped Scotland to have one of the most successful Eco-Schools programme in the world with over 98% of local authority schools participating in the programme and 45% awarded Green Flag status.

In 2013, the Scottish Government will bring forward further legislation through the Children and Young People's Bill^{ix} which will enhance the existing policy framework in relation to Getting it Right for Every Child^x and ensuring that children's rights are taken into consideration across the whole of the public sector, including education, in line with the United Nations Convention on the Rights of the Child^{xi}.

Against this backdrop, the One Planet Schools Working Group was established on behalf of Scottish Ministers to provide strategic advice and direction to support the implementation of the 2011 manifesto commitment:

"We welcome proposals for the creation of One Planet Schools, and will look at ways of developing this concept. This will include action to continue the development of professional standards around sustainability education and leadership within our schools on environmental issues."

SNP Manifesto, 2010

The terms of reference for the Working Group, membership information and minutes of meetings have been published on the Scottish Government's website^{xii}.

The Working Group examined the concept of One Planet Schools in a holistic sense, giving consideration as to how sustainable development education, global citizenship and outdoor learning can be woven together to assist in the delivery of other high level educational priorities including raising attainment, improving behaviour, supporting inclusion and promoting health and wellbeing.

In bringing forward our report and its recommendations, this report does not ask anything of educators that is not already implied by Curriculum for Excellence, the revised General Teaching Council for Scotland (GTCS) Professional Standards and *Teaching Scotland's Future*.

We are not proposing a new initiative, scheme or award; rather our recommendations form an agenda for strategic change that will create an enabling framework, remove barriers, and build on existing excellent practice. Our intention is to ensure that learning relating to sustainable development, global citizenship and outdoor learning is experienced in a transformative way by every learner in every school across Scotland.

Active global citizens



Pupils for King's Park Secondary School interview Duncan McLaren of Friends of the Earth and James Curran of SEPA at a Human Rights Conference

DEFINITION OF TERMS

Sustainable development education, global citizenship and outdoor learning each makes an essential contribution to building the values, attitudes, knowledge, skills and confidence needed to engage positively with the challenges our society and the world face. These three share much common ground but also have their unique features.

Bringing these areas together to create a coherent whole school approach that encompasses the curriculum, campus, culture and community of the school, and the wider community in which the school sits, is required if we are to realise our objectives. Many schools¹are already successfully weaving these together to develop a holistic and coherent whole school approach where learning about sustainable development and global citizenship is brought to life through outdoor learning as part of successful implementation of Curriculum for Excellence and an approach to learning which is more relevant, connected and meaningful.

The Working Group felt the repeated use of the terms *sustainable development education, global citizenship and outdoor learning* to be cumbersome and that none of these individual terms encompassed the full breadth of what this report is intended to address. Finding an appropriate alternative, which was universally acceptable, proved a challenging task but the issue of terminology should not present a distraction or divert us from our key objectives.

The Working Group has agreed on the term *learning for sustainability* as it related most closely to the remit of the Working Group, and this is the term used by the GTCS in the revised Professional Standards. The Working Group defines learning for sustainability as:

A whole school approach that enables the school and its wider community to build the values, attitudes, knowledge, skills and confidence needed to develop practices and take decisions which are compatible with a sustainable and equitable society.

The GTCS has contributed to this definition and indicated its intention to continue to ensure convergence between this and that used in the revised Professional Standards. This is not to suggest that sustainable development education, global citizenship and outdoor learning are absorbed into this term or that this limits any of these educational domains but rather that, in taking a whole school approach to learning for sustainability, *all* must feature.

8

-

¹ The term 'school' denotes any education establishment or community setting where 3-18 years formal education takes place including early years centres, primary, ASN and secondary schools and colleges. It can also be taken in its widest sense to encompass learning communities.

Learning for sustainability is a broad agenda and encompasses a wide spectrum of issues and approaches (see Figure 1). Most schools will recognise that many of these are already part of their learning and teaching, and the life of their school.

Learning for sustainability is not intended to replace what schools are already doing but to build on it by providing a linking thread that draws these together into a coherent whole, united by the aim of building learners' capacity to develop practices and take decisions which are compatible with a sustainable society.

The Working Group is very clear that the term *learning for sustainability* should not be understood to relate exclusively or solely to the environment and 'green issues'. We use sustainability in the way it is understood by UN agencies and countries across the globe to incorporate the inextricable link between environmental, social and economic issues.

When we speak of a more sustainable world, we mean in terms of all three spheres of sustainable development – society, economy and the environment. Unfortunately, a misconception still exists that sustainable development and environmental conservation are synonymous. United Nations documents related to sustainability make it clear that social and economic issues are also at the heart of sustainability. In the educational community, this translates to incorporating into the curriculum social justice issues as well as ecological and economic topics.

McKeown, R. and Hopkins, C. (2010)xiii

Learning outdoors



Outdoor learning with pupils from Bellahouston Academy

Margaret Canning/Bellahouston Academy

FIGURE 1: THE BREADTH OF LEARNING FOR SUSTAINABILITY

social justice pupil participation peer learning school linking peace and conflict engaging with democracy local to global progression using school grounds developing political literacy climate change energy and water use poverty growing food and other plants expressive arts to explore ideas contact with nature understanding interdependence respecting social and cultural diversity exploring ethical issues waste reduction and recycling learning for sustainability global dimension to learning involving learners in meaningful decision-making reducing overuse of the planet's resources exploring different perspectives addressing discrimination and prejudice discussing controversial issues enquiry-based problem-solving addressing equality and fairness taking action developing ecological literacy cooperative learning outdoor learning and play human rights critical and systems thinking collaborative group workenvironmental stewardship parental involvement addressing real life issues addressing real life issues community involvement biodiversity active citizenship reflective learning active travel

HIGH LEVEL RECOMMENDATIONS

The over-riding ambition of the Working Group is to ensure that learning for sustainability becomes the everyday experience of every learner in every school in every community in Scotland. This necessitates a step-change in terms of the progress that is being made so that the excellent and inspiring practice that exists in many settings and classrooms becomes the universal norm.

To achieve this we need to move from a system which is often reliant on the enthusiasm and commitment of individuals, to one where a learner's access to learning for sustainability is recognised as core to their learning experience. This proposed shift towards a structurally embedded entitlement lies at the heart of our recommendations.

The following represents the high level recommendations of the Working Group. These recommendations are explained in further detail in the subsequent sections of this report.

- 1. All learners should have an entitlement to learning for sustainability
- In line with the new GTCS Professional Standards, every practitioner, school and education leader should demonstrate learning for sustainability in their practice
- 3. Every school should have a whole school approach to learning for sustainability that is robust, demonstrable, evaluated and supported by leadership at all levels
- 4. School buildings, grounds and policies should support learning for sustainability
- 5. A strategic national approach to supporting learning for sustainability should be established

LEARNERS

All learners should have an entitlement to learning for sustainability

At the heart of this report lies the desire to improve outcomes for each and every learner in Scotland. The 21st century has presented us with new challenges and opportunities and requires a different approach to learning. In our fast changing world, it is necessary for learners to have the skills to adapt and to thrive.

The big issues that affect our planet such as climate change, loss of biodiversity and global poverty, require a population committed to living equitably within ecological limits and to finding solutions that enable them to do so. Democracy needs people who recognise the importance and value of participation and of making their voice, and the voices of others, heard. Addressing the injustices and inequalities in and between societies requires people who care about social justice and human rights, who recognise that our lives are inextricably linked and that, in our interdependent and globalised world, we all have a role in both creating and addressing injustice. We are part of rather than apart from nature, and so the threat to biodiversity is a threat to ourselves, and understanding and acting to preserve biodiversity calls out for people who are ecologically literate and are deeply connected to the natural world. Our communities need to be enriched and revitalised by learners who have a strong sense of place and who are committed to the common good.

As many practitioners are discovering, sustainable development education, global citizenship and outdoor learning provide motivational, relevant, challenging and creative learning experiences which engage learners and improve behaviour, attitudes and attainment - a view supported by a growing body of evidence and research^{xiv}. In addition to this, with regard to outdoor learning, direct experience of the landscape and the natural and cultural heritage of Scotland helps all young people and teachers understand the Earth's systems, develop respect and care for our planet, create a personal connection with the environment^{xv} and, as recent research has shown^{xvi}, improves their physical, mental and emotional health and wellbeing. As such, outdoor learning² is a key aspect of learning for sustainability and should be a core pedagogical approach in its delivery.

Education Scotland's *3-18 Curriculum Impact Reviews for Sciences* and *Social Studies*^{xvii} show that this approach to learning and teaching is becoming increasingly commonplace in Scottish schools with both reports citing many examples of learning for sustainability within their good practice case studies. However, they recommend that more needs to be done to involve learners in decisions about learning and, in primary schools, they recommend that further work is done to improve knowledge and understanding of democracy and the rights and responsibilities of citizens. Furthermore, they report that in best practice, children and young people are given opportunities to show leadership and be active citizens.

² This refers to Outdoor Learning as defined in *Curriculum for Excellence through Outdoor Learning* using locations including school grounds, the local area, day-long experiences and those farther afield including outdoor centres and national parks. Ideally all such locations should model best practice in their approach and facilities.

The best practice experienced by some learners needs to be the everyday experience of *all* learners if we are to bring about the significant and widespread change we seek. A greater strategic impetus is required if we are to move towards the principle of entitlement and the recommendations in this report are intended to address this.

Learning for sustainability, and the pedagogy that flows from it, provides a means of achieving Scotland's educational aims in a way that also contributes to our ambition to be a low carbon, equitable, sustainable nation. An estimated 130,000 jobs^{xviii} will be created in Scotland by 2020 as we move towards a successful, low carbon economy. By developing valuable skills for learning, life and work through learning for sustainability, we will improve the life chances of children and young people. This will enable access to exciting careers, in the emerging industries and other sectors and help us tackle inequality and exclusion in our society.

RECOMMENDATIONS

1 All learners should have an entitlement to learning for sustainability

- 1.1 As part of this entitlement, outdoor learning should be a regular, progressive curriculum-led experience for all learners.
- 1.2 As part of this entitlement, learners should have opportunities within their curricular experiences to engage with democratic processes and to connect and contribute to their communities, locally, nationally and internationally, as active global citizens.
- 1.3 As part of this entitlement, learners should have active curricular learning experiences that develop their understanding of the inter-relationship of environment, society, economy and inequity, of the ecological limits to development and the interdependence of ecological and human wellbeing.
- 1.4 The Scottish Government and Education Scotland should put in place mechanisms to determine how well the learning for sustainability entitlement of learners is being met.

PRACTITIONERS AND LEADERS

In line with the new GTCS Professional Standards, every practitioner, school and education leader should demonstrate learning for sustainability in their practice

To develop learners as global citizens, we require practitioners who are themselves active global citizens. Similarly, if we want learners to be committed to sustainability and to be connected to their natural environment and local communities then we need practitioners who model these values, attitudes and behaviours and are enthusiastic about taking learning outdoors.

Enabling the profession to grow and develop on such a scale presents a significant challenge but recent policy developments and initiatives have provided a window of opportunity. The GTCS is currently reviewing and updating the national Professional Standards^{xix} for teachers. Learning for sustainability and social justice will be embedded in the professional values and personal commitments sections of the three new Professional Standards relating to Registration, Career-long Professional Learning and Leadership and Management.

In addition, *Continuing to Build Excellence in Teaching*^{xx}, the Scottish Government response to *Teaching Scotland's Future*^{xxi}, states that:

"...all teachers should have the opportunity to develop their skills and knowledge in relation to important cross-cutting themes across the curriculum, such as international education, sustainable development, citizenship, enterprise and creativity".

These policy developments and existing good practice provide a foundation on which strategic progress can be made. This will require a renewed focus on teacher education to enable practitioners and school leaders to develop the values, attitudes, knowledge, skills and confidence required to embed learning for sustainability within the curriculum, within their approaches to learning, including outdoors and off-campus, within the way the school campus is managed, within the culture of the school and within the way the school community works and reaches out to the wider world.

Career-long professional development

Achieving the ambition for all schools to have a whole school approach to learning for sustainability will require a sustained and coordinated programme of career-long professional learning for practitioners across Scotland.

Meeting the professional development needs across the spectrum of education from newly qualified practitioners to those aspiring to headship requires a blended programme that is broad in scope and allows for progression. It should also encompass the professional development of those in Teacher Education Institutes, local authorities and other bodies that support schools in achieving a whole school approach to learning for sustainability.

There are already high quality professional learning programmes relating to learning for sustainability available from a wide variety of local and national providers. However, realising the ambitions of this report will depend on bringing together providers – local, national, statutory, non-statutory and voluntary – in a collaboration that results in the coordinated, coherent, strategic national provision of professional development.

Much practitioner expertise relating to learning for sustainability already exists within the Eco-Schools and Forest Education Initiative Cluster Group networks, local authority Outdoor Learning networks, Outdoor Education Centres, Development Education Centres' Networks and in Education Scotland's Outdoor Learning 3-18 Places Projects and the Global Citizenship Peer Support and Collaboration Programme, amongst others.

For a national programme of professional development to be successful it must ensure quality and consistency of standards appropriate to the aims of learning for sustainability. It must encompass professional networks and peer collaboration to ensure practitioners are able to share, collaborate, mentor and support each other on an on-going basis. This will require coordination to avoid duplication and ensure the coherence of programmes and networks locally, regionally and nationally.

Initial teacher education (ITE) and the early phase of teacher professional development

The ongoing process of ITE course revision in the Teacher Education Institutions prompted by Curriculum for Excellence, the revised Professional Standards and *Teaching Scotland's Future* provides a timely opportunity to ensure that learning for sustainability is embedded in the professional development of all beginning teachers in Scotland.

Progress has already been made through the on-going Global Learning Project (GLP) and other projects initiated by the International Development Education Association for Scotland (IDEAS). Work over a six year period has promoted research, capacity building and partnership working across Scotland's seven teacher training universities around global citizenship themes, with relevant links to sustainable development education and outdoor learning. The changes initiated by the GLP and the research findings, approaches, tools and collaborations developed, provide a model and a foundation for progress on learning for sustainability in the early phase, and this is complemented by a growing body of independent research-informed practice in the Teacher Education Institutions.

RECOMMENDATIONS

- In line with the new GTCS Professional Standards, every practitioner, school and education leader should demonstrate learning for sustainability in their practice.
- 2.1 Education Scotland, in partnership with key stakeholders, should continue to develop a coordinated national strategy for professional learning and peer collaboration relating to learning for sustainability and accomplished teaching.
- 2.2 Learning for sustainability should be included in the self-evaluation of all practitioners, school and education leaders through the Professional Development and Review (PDR) process.
- 2.3 Under National Partnership Group Proposal 9, Education Scotland should include learning for sustainability in the online resources produced to support effective PDR.
- 2.4 In line with the new GTCS Professional Standards, learning for sustainability is a core responsibility of every teacher educator and a programme of professional learning and peer collaboration relating to learning for sustainability for teacher education should be established.
- 2.5 Learning for sustainability should be embedded in the GTCS's frameworks and procedures for programme validation and revalidation.

WHOLE SCHOOL APPROACH

Every school should have a whole school approach to learning for sustainability that is robust, demonstrable, evaluated and supported by leadership at all levels

It is right that we celebrate and congratulate the many schools that have made excellent progress in making sustainable development education, global citizenship and outdoor learning central to their approach. Scotland's success is internationally recognised and it is inspiring to see the innovative practice continuing to be developed and implemented the length and breadth of the country. Scotland's Third Sector expertise and passion in supporting schools in making this progress is also recognised globally.

A whole school approach is often summarised as the 'four Cs' approach - curriculum, campus, culture and community. It is fair to say that despite what has been achieved so far, much remains to be done to achieve the potential of all schools in learning for sustainability. In some schools, progress has been slow because it has mistakenly been seen as a diversion from the drive to improve standards and attainment. In other situations, schools have relied too heavily on the efforts of one individual and a small group of learners to take forward work on behalf of the school. It can be extremely difficult for these groups and individuals to gain support from colleagues and engage the wider school in the face of so many competing priorities and pressures. Unsurprisingly, this work can also falter or lose momentum when a key individual leaves the school or changes remit.

To make strategic and sustained progress towards every school in Scotland having a whole school approach to learning for sustainability, strong leadership at all levels is required. The influence and guidance from school leaders and senior local authority staff is pivotal in ensuring that learning for sustainability is in the school improvement plan and embedded in related policies, and that programmes move forward in a coordinated and strategic way. Central to a whole school approach is the involvement of all to promote a culture of democracy and participation so as to effectively embed learning for sustainability across the four contexts for learning: ethos and relationships, curriculum areas and subjects, interdisciplinary learning and opportunities for personal achievement.

The drive to improve the sustainability of school buildings and grounds is also part of a whole school approach. Across Scotland, acres of playground tarmac are being replaced with wilderness gardens and vegetable patches to facilitate contact with biodiversity and the natural world, and provide stimulating environments for learning and play.

In some ways, use of the term *whole school approach* may appear limiting: learning for sustainability is a *whole community approach* that bridges the gap between the school and the wider community in which it is situated. Learning for sustainability involves learners actively participating in environmental stewardship, social justice and democracy in ways that develop a sense of connection to the local, national and global community to build understanding of their own and the school's role within these communities. Programmes like the Junior Climate Challenge Fund support this approach, in providing young people with resources and support they need to take action on climate change in their community.

Learners need to experience belonging to groups; actively protecting, conserving and transforming their physical environment; building relationships with local people, and engaging in genuinely reciprocal partnerships across generations and nations. This fosters attitudes of love and care, and a high regard for interdependence and collective wellbeing.

Learning of this nature requires schools to be outward looking; viewing the school as a valued part of the community, and the community, in its widest sense, as a valued part of the school. The manifestation of this is the forging of partnerships 'beyond the school gate.

Key to this is the recognition of parents and carers as partners in learning. Establishing collaborative relationships between parents, carers and school staff with regard to the school's culture, ethos, values and aspirations for its pupils is an essential aspect of a whole school approach to learning for sustainability. Fostering productive relationships with parents and carers has long been viewed as vital to a child's learning and an essential part of building a vibrant, successful school.

Local authorities

Local authorities have many responsibilities and legislative commitments including Best Value^{xxii} and the Public Sector Climate Change Duty^{xxiii} which are aligned to the ambitions and scope of this report. They also have a quality and improvement role for schools in their area. Despite many pressures and financial challenges, a number of local authorities launched significant outdoor learning strategies for their schools as this report was being written. Others have developed innovative partnerships with recycling, waste and energy officers to help schools to become more sustainable.

Many local authorities have set high expectations in relation to the involvement of their schools in programmes such as Eco-Schools, Fairtrade Schools and Rights Respecting Schools and have provided professional learning opportunities and have established strong networks of practitioners to support on-going innovation and improvement with respect to sustainable development education, global citizenship and outdoor learning.

The impact in many cases has been significant and demonstrates the crucial role local authorities have in taking many of the recommendations in this report forward. In this context, it is vital that local authorities continue to support these activities in the long term and promote learning for sustainability as a priority.

Third Sector and other support for schools

A number of Third Sector organisations have already been highlighted for their role in what has been achieved to date. These, and others such as WWF Scotland, RSPB, Oxfam, the Red Cross, Christian Aid, SCIAF and the Development Education Centres provide schools with frameworks, approaches and expertise that support them in establishing a whole school approach.

Whilst they cannot, and should not, replace mainstream provision, they play a crucial role in supporting it. In establishing a strategic national approach to learning for sustainability,

it is essential that these programmes and organisations are viewed as key stakeholders and partners.

RECOMMENDATIONS

- 3 Every school should have a whole school approach to learning for sustainability that is robust, demonstrable, evaluated and supported by leadership at all levels.
- 3.1 Education Scotland, in partnership with stakeholders and other education bodies, should develop resources, guidance and support for schools, to enable schools to develop a whole school approach and self-evaluate the progress they are making towards implementing this approach. See also 5.4
- 3.2 A national strategy should be developed to build the capacity of school leaders in establishing and sustaining a whole school approach to learning for sustainability. See also 5.8
- 3.3 Scottish Government, ADES and CoSLA should encourage local authorities to maintain high expectations in relation to learning for sustainability and the adoption of a whole school approach.

School and community links



Pupils from Bellahouston Academy work with older community members to build mobile phone skills

SCHOOL BUILDINGS, GROUNDS AND POLICIES

School buildings, grounds and policies should support learning for sustainability

Pupils learn through their entire experience at school, not just through the formal curriculum. The design and management of the school campus has a strong influence on what pupils understand about learning for sustainability. Research demonstrates the significance of 'buildings as pedagogy'; children learn from the buildings and grounds themselves, and what the adult world values in building and managing them the way they doxxiv. Failure to exemplify principles of sustainability in the school campus will undermine learning for sustainability. School estates also have a contribution year-on-year to the reductions in greenhouse gas emissions introduced by the Climate Change (Scotland) Act 2009, as well as leading by example in matters of environmental performance and social inclusion.

School campuses can support learning for sustainability by growing food, supporting active travel, reducing energy and waste and providing well-designed environments for outdoor learning and play. They have the potential to be accessible hubs that engage with and serve their local community, celebrate local diversity and distinctiveness and offer pupils and the community, meaningful opportunities to make the school and local community more sustainable.

Many of these concepts are well captured in the Scottish Government's School Estate Strategy, *Building Better Schools*^{xxv} (BBS), particularly in stating the guiding principles that schools should serve their communities, be 'greener', more sustainable and environmentally efficient and have grounds that are an integral part of the learning environment.

New schools

Over the next 10 years, we are likely to re-build around 5% of our school estate. New schools represent a unique opportunity to create a more sustainable school estate based on the BBS guiding principles. Building Standards on extending non-domestic sustainability labelling to all new school buildings are currently out to public consultation. Included within proposals are two user guides: one relating to optimising the building's performance; another relating to enhancing biodiversity and promoting ecology. This offers a further opportunity to align with the principles of learning for sustainability in the development of new schools buildings and grounds.

Existing schools

A bigger challenge is to develop campuses to support learning for sustainability across the 95% of the school estate which will not benefit from significant capital investment. The

task is to put in place mechanisms that will see the guiding principles of BBS become a reality in every school in Scotland, not just in new schools. This is a significant and long-term challenge and the mechanisms that are needed are different for new schools than for the existing estate.

The Eco-Schools programme is well-established in Scottish schools and supports significant, low cost, school-led development of campuses that support learning for sustainability. This school-led action needs to be complemented by more proactive local authority school estate management to support learning for sustainability. Broadening the framework of local authority School Estates Management Plans (SEMPs) could be an effective way of ensuring that the BBS guiding principles start to influence all of Scotland's schools and not just the new ones.

The legacy of PPP (Public Private Partnership) schools means that a number of recently built schools are significantly constrained in their ability to develop their buildings and grounds to support learning for sustainability. Some school communities have managed to negotiate meaningful improvements to their campuses and there is a need to draw out the lessons from these examples to support the process of change in other PPP schools.

School grounds

School grounds can play a significant role in delivering learning for sustainability. They provide an accessible space for curriculum-based outdoor learning and offer the opportunity for pupils to connect with nature on a daily basis and throughout the seasons. By helping to develop and look after their school grounds, pupils can become active stewards of the environment.

Good Places Better Health for Scotland's Children*xxvi recognises the importance of these childhood experiences in shaping the development of sustainable attitudes and behaviours in adulthood. It also highlights the importance of well-designed school grounds in supporting physical health and emotional wellbeing and the value of natural play in school as a means of nurturing resilience, developing interpersonal skills and supporting self-esteem.

A growing number of schools are demonstrating good practice in the use of their outdoor spaces, supported at national level by organisations such as Eco-Schools, Grounds for Learning, The Conservation Volunteers and the John Muir Award. However, too many of our pupils are growing up in 'sterile' and unimaginative outdoor environments and missing these vital childhood experiences. As with school buildings, there is a need for local authority school estate management to provide more proactive support for the development of school grounds that deliver learning for sustainability.

RECOMMENDATIONS

4 All school buildings, grounds and policies should support learning for sustainability

- 4.1 Every learner should have the opportunity for contact with nature in their school grounds on a daily basis and throughout the seasons through the provision of thoughtfully developed green space for outdoor learning and play.
- 4.2 The Scottish Government should develop a framework to ensure that local authority school estate management proactively develops campuses that support learning for sustainability.
- 4.3 Scottish Futures Trust (SFT) release of Scottish Government funding for new schools should be conditional on submission of a strategic design brief that meets the guiding principles of Building Better Schools.
- 4.4 The principles outlined in any users' guides for the sustainability labelling scheme should be adopted for existing school estates.
- 4.5 The Scottish Government should commission a study to identify PPP schools that have been able to significantly develop their campuses to support learning for sustainability and to identify principles that would support the process of change in other PPP schools.

School grounds for learning



Harvest time in the grounds of King's Park Secondary School

A STRATEGIC NATIONAL APPROACH

A strategic national approach to supporting learning for sustainability should be established

If a step-change in the rate of progress towards a whole school approach to learning for sustainability is to be achieved, then it is essential the major bodies that support education in Scotland prioritise learning for sustainability and use the mechanisms and opportunities at their disposal to drive the agenda forward in a strategic way.

Education Scotland

As the lead body in Scotland tasked with supporting quality improvement in Scottish education, Education Scotland has a major role to play with regard to learning for sustainability and, along with the contributions from its predecessor organisations, has been instrumental in the progress made to date. The launch of the new educational agency has created an exciting opportunity, and the cross-team working that has already taken place across the different functions of the organisation is to be welcomed and encouraged as it will enhance the capacity to deliver this agenda.

Education Scotland, in its inspection role, is also uniquely placed to gather evidence regarding the experiences of learners and in supporting schools in assessing their own progress towards establishing a whole school approach to learning for sustainability. The recently launched *3-18 Curriculum Impact Reports for Sciences and Social Studies* provide encouraging examples of this.

Inevitably, many of the recommendations and activities flowing from this report will be taken forward by Education Scotland in partnership with stakeholders. In doing so it is critical that Education Scotland gives careful consideration as to how it can use its resources and various functions most effectively to bring about strategic and lasting change within Scotlish schools, to ensure learning for sustainability is fully embedded. This will ensure significant progress is made on a broad front including children's rights, political literacy and democracy, health and wellbeing, *Getting it Right for Every Child* and community learning and development. These deliberations should include discussions to ensure long-term leadership and direction is in place to develop strategic partnerships with local authorities and other stakeholders to help build capacity.

Scottish Qualifications Authority

The development of the new National Qualifications provides an ideal opportunity to make further progress towards learning for sustainability. The Scottish Qualifications Authority has an important role to play in supporting Scotland's capacity to develop the necessary understanding and skills to take advantage of emerging opportunities in a future low-carbon economy. It has already increased the profile given to sustainable development education and global citizenship within many of the new qualifications and associated support materials. It is essential that this profile is represented across all new

qualifications, and further, that it highlights the role of outdoor learning and fieldwork in all subject areas.

The National Qualifications and associated support notes and course materials have been developed and launched during the life of this Working Group and it is recognised that there is flexibility to periodically review and amend these. The Scottish Qualifications Authority, in partnership with Education Scotland, should ensure that opportunities to embed learning for sustainability within the senior phase are sought, highlighted and maximised.

Teaching Scotland's Future

The National Partnership Group's (NPG) report to the Cabinet Secretary for Education and Lifelong Learning and the Cabinet Secretary's response, were published during the writing of this report. The actions contained within the NPG report will shape the form and content of teacher education in the coming years. It is important that learning for sustainability should be integrated into these changes.

Learning for Sustainability Implementation Group

Throughout this report, the Working Group has reiterated the need for collaboration, partnership and commitment from a range of stakeholders to deliver the ambitions of learning for sustainability. A National Implementation Group should be established, bringing together local, national, statutory, non-statutory and voluntary bodies to drive forward the recommendations in this report to ensure that progress is being made, and to maintain an on-going review of the strategy.

Although much expertise and good practice already exists in Scotland, further research and innovation will be necessary as learning for sustainability becomes established. A strong evidence and research basis will help to accelerate progress and secure the support of stakeholders. A key priority will be to undertake further research into the relationship between learning for sustainability and the performance indicators used widely by schools and local authorities relating to attainment, achievement, health and wellbeing and behaviour. A growing body of evidence suggests that learning for sustainability brings many positive benefits in these areas, but further robust research is required to show that learning for sustainability is the vehicle by which we can achieve many of the ambitions to secure a better future for our learners and our society as a whole, and in what ways we can be most efficient in doing so.

Scottish academic institutions and the Third Sector, with the full support of the Scottish Government are in the process of establishing a United Nations University accredited Regional Centre of Expertise in Education for Sustainable Development (RCE ESD) for Scotland, to generate research and innovation of this nature. The RCE is due to be established in early 2013^{xxvii} and will provide new opportunities for collaborative working between practitioners, academics, government and civil society.

RECOMMENDATIONS

- 5 A strategic national approach to supporting learning for sustainability should be established
- 5.1 The Scottish Government should ensure a coherent approach across Directorates in relation to learning for sustainability.
- 5.2 The Scottish Government should convene a National Implementation Group to drive forward the recommendations of this report, to encourage research on the relationship between learning for sustainability and key educational performance indicators, and to monitor and evaluate progress and impact.
- 5.3 Education Scotland and the Scottish Qualifications Authority should identify learning for sustainability as a key organisational priority which is reflected in their corporate strategies and work plans
- 5.4 Education Scotland, through the inspection process and other functions, should further encourage a whole school approach to learning for sustainability.
- 5.5 Education Scotland should consider undertaking an aspect review on learning for sustainability.
- 5.6 The Scottish Qualifications Authority should further embed learning for sustainability within the new qualifications.
- 5.7 Learning for sustainability should be identified as a key priority for professional learning by the Teaching Scotland's Future National Implementation Board.
- 5.8 The College for Educational Leadership should identify learning for sustainability as a key organisational priority.
- 5.9 The National Implementation Group should seek to work closely with the UN University accredited Scottish Regional Centre of Expertise in Education for Sustainable Development on research and innovation.

APPENDIX I

Working Group members

Prof Peter Higgins – Chair The University of Edinburgh

Alan Britton The University of Glasgow

Kate Campbell Sustrans / Eco-Schools Scotland

Margaret Canning Bellahouston Academy, Glasgow

Prof Kay Livingston Education Scotland

David Lonie King's Park Secondary School, Glasgow

Clare McCusker St Leonard's Nursery School, Edinburgh

Elizabeth McKendrick Lawthorn Primary School, Irvine

Ian Menzies Education Scotland

Rosa Murray General Teaching Council for Scotland

Brenna Nyznik International Development Education Association of

Scotland

Jason O'Flynn National Parent Forum of Scotland

Alastair Seaman Grounds for Learning

Morag Watson WWF Scotland & Sustainable Development

Education Network

Julie Wilson Education Scotland

Tanya Wisely International Development Education Association of

Scotland

Sally York Forestry Commission Scotland

Organisations consulted in the writing of this report

Association of Directors of Education Scotland (ADES)

Education Scotland

General Teaching Council for Scotland (GTCS)

International Development Education Association for Scotland (IDEAS)

National Parent Forum Scotland

Scottish Commissioner for Children and Young People

Scottish Futures Trust (SFT)

Scottish Qualifications Authority (SQA)

Scottish Teacher Education Committee (STEC)

Sustainable Development Education Network (SDEN)

APPENDIX II

Summary of recommendations

- 1 All learners should have an entitlement to learning for sustainability
 - 1.1 As part of this entitlement, outdoor learning should be a regular, progressive curriculum-led experience for all learners.
 - 1.2 As part of this entitlement, learners should have opportunities within their curricular experiences to engage with democratic processes and to connect and contribute to their communities, locally, nationally and internationally, as active global citizens.
 - 1.3 As part of this entitlement, learners should have active curricular learning experiences that develop their understanding of the interrelationship of environment, society, economy and inequity, of the ecological limits to development and the interdependence of ecological and human wellbeing.
 - 1.4 The Scottish Government and Education Scotland should put in place mechanisms to determine how well the learning for sustainability entitlement of learners is being met.
- In line with the new GTCS Professional Standards, every practitioner, school and education leader should demonstrate learning for sustainability in their practice.
 - 2.1 Education Scotland, in partnership with key stakeholders, should continue to develop a coordinated national strategy for professional learning and peer collaboration relating to learning for sustainability and accomplished teaching.
 - 2.2 Learning for sustainability should be included in the self-evaluation of all practitioners, school and education leaders through the Professional Development and Review (PDR) process.
 - 2.3 Under National Partnership Group Proposal 9, Education Scotland should include learning for sustainability in the online resources produced to support effective PDR.
 - 2.4 In line with the new GTCS Professional Standards, learning for sustainability is a core responsibility of every teacher educator and a programme of professional learning and peer collaboration relating to learning for sustainability for teacher education should be established.

2.5 Learning for sustainability should be embedded in the GTCS's frameworks and procedures for programme validation and revalidation.

3 Every school should have a whole school approach to learning for sustainability that is robust, demonstrable, evaluated and supported by leadership at all levels.

- 3.1 Education Scotland, in partnership with stakeholders and other education bodies, should develop resources, guidance and support for schools, and those that support them, to enable schools to develop a whole school approach and self-evaluate the progress they are making towards implementing this approach. See also 5.4
- 3.2 A national strategy should be developed to build the capacity of school leaders in establishing and sustaining a whole school approach to learning for sustainability. See also 5.8
- 3.3 Scottish Government, ADES and CoSLA should encourage local authorities to maintain high expectations in relation to learning for sustainability and the adoption of a whole school approach.

4 All school buildings, grounds and policies should support learning for sustainability

- 4.1 Every learner should have the opportunity for contact with nature in their school grounds on a daily basis and throughout the seasons through the provision of thoughtfully developed green space for outdoor learning and play.
- 4.2 The Scottish Government should develop a framework to ensure that local authority school estate management proactively develops campuses that support learning for sustainability.
- 4.3 Scottish Futures Trust (SFT) release of Scottish Government funding for new schools should be conditional on submission of a strategic design brief that meets the guiding principles of Building Better Schools.
- 4.4 The principles outlined in any users' guides for the sustainability labelling scheme should be adopted for existing school estates.
- 4.5 The Scottish Government should commission a study to identify PPP schools that have been able to significantly develop their campuses to support learning for sustainability and to identify principles that would support the process of change in other PPP schools.

5 A strategic national approach to supporting learning for sustainability should be established

- 5.1 The Scottish Government should ensure a coherent approach across Directorates in relation to learning for sustainability.
- 5.2 The Scottish Government should convene a National Implementation Group to drive forward the recommendations of this report, to encourage research on the relationship between learning for sustainability and key educational performance indicators, and to monitor and evaluate progress and impact.
- 5.3 Education Scotland and the Scottish Qualifications Authority should identify learning for sustainability as a key organisational priority which is reflected in their corporate strategies and work plans
- 5.4 Education Scotland, through the inspection process and other functions, should further encourage a whole school approach to learning for sustainability.
- 5.5 Education Scotland should consider undertaking an aspect review on learning for sustainability.
- 5.6 The Scottish Qualifications Authority should further embed learning for sustainability within the new qualifications.
- 5.7 Learning for sustainability should be identified as a key priority for professional learning by the Teaching Scotland's Future National Implementation Board.
- 5.8 The College for Educational Leadership should identify learning for sustainability as a key organisational priority.
- 5.9 The National Implementation Group should seek to work closely with the UN University accredited Scottish 'Regional Centre of Expertise in Education for Sustainable Development' on research and innovation.

REFERENCES

i<u>http://www.unep.org/Documents.multilingual/Default.asp?DocumentID=78&Article</u>ID=1163

iihttp://www.scotland.gov.uk/Topics/Environment/SustainableDevelopment/UNDecade

iii See the final report of the group at:

http://www.educationscotland.gov.uk/learningteachingandassessment/approaches/outdoorlearning/about/cfethroughoutdoorlearning.asp

iv Christie, B (2012). The impact of outdoor learning experiences on attainment and behaviour in schools: a brief review of literature. Prepared for Forestry Commission Scotland.

Christie, B (2012). The impact of outdoor learning experiences on attitudes to sustainability: A review of literature. Prepared for the Field Studies Council.

vhttp://www.wwf.org.uk/what we do/about us/living planet report 2012/

vihttp://hdr.undp.org/en/

viihttp://www.scotland.gov.uk/Topics/Environment/waste-and-pollution/Waste-1/wastestrategy

viiihttp://www.scotland.gov.uk/Publications/2008/05/06144819/ and http://www.scotland.gov.uk/Topics/International/int-dev

ixhttp://www.scotland.gov.uk/Topics/People/Young-People/legislation

xhttp://www.scotland.gov.uk/Topics/People/Young-People/gettingitright

xihttp://www.unicef.org.uk/crc?gclid=CJGp_vnw0LMCFUbKtAod7jwAkg&sissr=1

xii<u>http://www.scotland.gov.uk/Topics/Education/Schools/curriculum/ACE/OnePlane</u>tSchools

xiiiMcKeown, R., and Hopkins, C., (2010) *Global Citizenship and Sustainable Development: Transformation in the Initial Teacher Education of Teachers.* In Wisely, T., Barr, I., Britton, A. and King, B. Education in a Global Space. IDEAS

xiv Christie, B (2012). The impact of outdoor learning experiences on attainment and behaviour in schools: a brief review of literature. Prepared for the Forestry Commission Scotland.

xv Christie, B (2012). The impact of outdoor learning experiences on attitudes to sustainability: A review of literature. Prepared for the Field Studies Council.

xviSee e.g. Bird, W. (2007) *Natural thinking*.

http://www.rspb.org.uk/Images/naturalthinking_tcm9-161856.pdf

xvii http://www.educationscotland.gov.uk/learningteachingandassessment/curriculumimpact/index.asp

xviiihttp://www.scotland.gov.uk/Publications/2012/09/8987/4

xixhttp://www.gtcs.org.uk/about-gtcs/Consultations/consultation-revision-professional-standards.aspx

xxhttp://www.scotland.gov.uk/Topics/Education/Schools/Teaching/SGresponse090 32011

xxihttp://www.scotland.gov.uk/Publications/2011/01/13092132/0

xxii

http://www.scotland.gov.uk/Topics/Government/PublicServiceReform/14838/564

XXIII

http://www.scotland.gov.uk/Topics/Environment/climatechange/howyoucanhelp/publicbodies/publicsector

xxivOrr, D. (1997) Architecture as pedagogy. Conservation Biology, 11(3), 597-600

xxvhttp://www.scotland.gov.uk/Resource/Doc/285201/0086644.pdf

xxvihttp://www.scotland.gov.uk/Resource/Doc/348058/0124383.pdf

xxviihttp://rcescotland.org/