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Title: The Ebb and Flow of Environmental and Sustainability Education in UK Schools

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Abstract: This chapter describes and reflects upon the recent history and contemporary situation regarding Environmental and Sustainability Education (ESE) in the UK. It discusses how ESE is practised and understood in schools and other educational institutions and describes influencers (e.g. policy) on the practice and conceptualisation of ESE. While the focus is on the situation in England, the chapter also refers to publications and policy about ESE in Wales, Scotland and Northern Ireland; in so doing the chapter illustrates what may be known as the ‘green school movement’ elsewhere. A picture emerges of multi-directional influences including policy, public opinion, civil society organisations and businesses, academic research and schools. To illustrate this varied landscape, the chapter includes three case studies, one from policy, one from school-based practice and one from civil society. The chapter concludes with commentary on the influence of the Sustainable Development Goals, wellbeing and nature connectedness and the potential of social media to shape ESE in schools in the future.

Introduction – and a question of definitions

While the term ‘green schools’ is more commonly used in the US, the UK has a strong tradition of formal schooling addressing parallel issues. In the UK, schools that tackle ‘green’ issues are most likely to be ‘eco-schools’ or ‘sustainable schools’. Both of these terms are significant because they arise from international policy initiatives and so demonstrate the interplay between practice in schools and the policies of both national and global initiatives. The international Eco-Schools programme, that claims to reach 18 million children worldwide, has influenced the adoption and proliferation of this label. This programme of the Danish-based Foundation for Environmental Education has been particularly successful in the UK, although this varies a little across the devolved parts of the UK. In England, according to current data, around 18 000 schools (approximately two thirds of all schools across England) have registered on the scheme with 12 000 of these holding an Eco-Schools award comprising Bronze, Silver or a Green Flag¹. In Scotland 3 000 schools are registered with the programme through Keep Scotland Beautiful, which is also about two thirds of all of the schools in Scotland; the programme is also prevalent in schools in Wales and Northern Ireland. Alongside this, the term ‘Sustainable School’ was promoted under the National Framework for Sustainable Schools (NFSS) launched by the Department for Children, Schools and Families (DCSF) in 2005 building on

¹ ¹According to the <https://www.eco-schools.org.uk/about-us/> website, accessed on 18/07/2018

the work of WWF-UK's Pathways framework (Hren and Birney, 2006). This Labour Government initiative was dropped in 2010 when the Coalition Government came to power. The NFSS aimed to respond to the global movement toward Sustainable Development supported by the United Nations and was arguably one of the most forward-thinking environmental education strategies of its time (Scott 2013). Whilst the Framework remains unsupported by the current Conservative Government it is still being promoted by NGOs such as SEEd (the Sustainability and Environmental Education charity) and the Sustainable Schools Alliance (SSA) as well as by schools across the UK, so it persists in the ESE landscape nationally. Moreover, the concept continues to be supported in Northern Ireland by their devolved government's Department of Education, although the strategy is somewhat different to the original NFSS².

These policy initiatives and international organisational approaches were responding in part to pressures from civil society to address urgent planetary problems and so it could be claimed that the labels originate from social pressures rather than policy initiatives. What this demonstrates is the complex, interconnected nature of the interplay between policy and practice at school, civil society and state level. Demonstrating the impact of the green schools movement on the broad and inclusive notion of Environmental and Sustainability Education, as this book sets out to do, involves untangling these multi-directional influences, some of which will inevitably remain obscure because it is impossible to determine in every case where the influence *on* ESE begins, goes and ends. Figure 1 below aims to illustrate some of these influencers. We present this as a working model which we hope will inspire research and further development.

² The strategy for NI schools can found here: <https://www.education-ni.gov.uk/publications/schools-future-policy-sustainable-schools> accessed on 17/12/2018

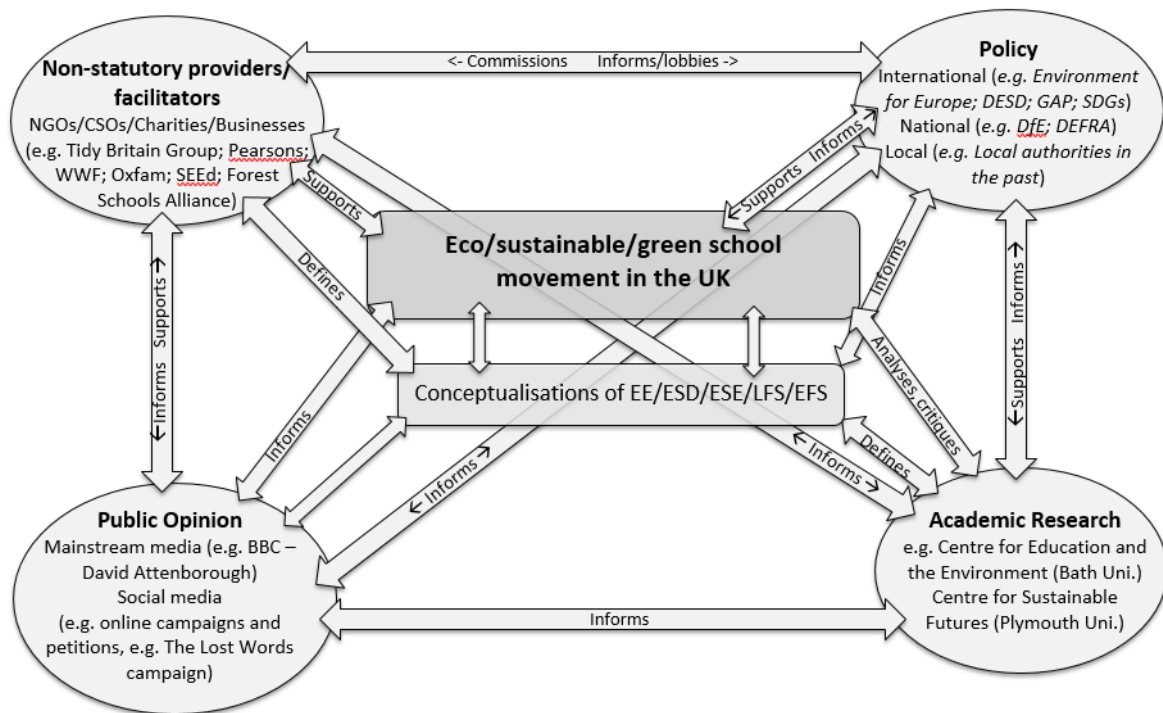


Figure 1: A model of multi-directional influencers and processes underpinning the conceptualisation of ESE in UK schools.

Insert Figure 1 here.

While this book focuses on the way that practice influences theory and policy, it is more common to look at things from the other direction; this can mean that the conceptualisation (in academic and political circles) of a body of knowledge becomes divorced from its actualisation in practice. In re-establishing these links this book, this chapter included, can make a significant contribution across policy, practice and theory. Of course this matter has been raised before. In a thinkpiece entitled ‘New Worlds Rising’ Scott (2010; See also Scott, 2011) discusses schools as members of learning societies and asks what they might (and do) contribute to sustainability through their work on ‘supporting young people in the *early* stages of their education, acquiring the wide-ranging understandings, skills and capabilities that they will need to continue to develop for successful and fulfilling engagement with, and living in, the world.’ (p. 597). Scott goes on to emphasise the need to keep questioning the purpose of schooling to highlight the tension between education and social change. This is an important question, championed by the work of academics at the Centre for Research in Environmental Education or CREE based at the University of Bath. The prevalence of this question, alongside government policy and other factors, has been significant as it has meant that the balance between what schools do to educate children and facilitate learning has not been

overwhelmed by the agendas of organisations or government departments seeking to inculcate sustainable living practices. Indeed, the development of what might be termed ‘green schools’ in other countries has been shaped by a wide variety of factors, not least the desire of professionals to facilitate learning, the promotion of sustainability by civil society organisations, the policies of Government departments in response to international agreements and perceived voter demands (or civil society pressure) and a neoliberal achievement agenda that has promoted competition between schools. Before exploring the historical context further, we set out briefly what we mean by ESE.

ESE has come to be used to refer to what was previously known as Education for Sustainable Development (ESD) and Environmental Education (EE). Whilst we see EE and ESD to be very close we do not perceive the terms as interchangeable. We understand Environmental Education as having a focus on the education that arises from engaging with environmental issues, including social learning, learning that takes place in the outdoors or learning about economic justice, *inter alia*. So the purpose of EE is an educational one, rather than one which enables sustainable development (which is how we think education *for* SD is often viewed (Scott and Gough, 2003)). However, we acknowledge the work of Vare and Scott (2007) on the ESD1 and ESD2 model that effectively encompasses a broader conceptualisation of environmental education. We also recognise the many other variants of the concept such as Sustainability Education and Learning for Sustainability. Rather than engage in the long running debates around which term is more appropriate, we choose the ESE variant that acknowledges the diversity of the field by including the terms environment *and* sustainability while acknowledging current global policy debates arising from the United Nations Sustainable Development Goals that are affecting practice in schools and elsewhere. Target 4.7 of Goal 4 explicitly refers to ESD which has been picked up by many governments and organisations around the world and is reinvigorating practice in this arena in the UK. Target 4.7 also discusses Global Citizenship Education (GCE) and this juxtaposition is important as it has highlighted overlaps between the two areas which have been the topic of hot debate within UNESCO and elsewhere (e.g. Parker & Wade, 2008; Chung & Park, 2016) as we will discuss.

At this point we should emphasise that what we write here is based on reviews of academic and grey literature, policy documents and website searches alongside our own experience of practice in the field. It is not the outcome of empirical research. As a team of authors our experience of working in this area is broad, encompassing practice in schools, higher education, policy and non-governmental organisations, and business and this facilitates our ability to be inclusive. However, we cannot and do not claim to be entirely objective nor completely inclusive. What we present here is a provocation for further discussion and knowledge development and we trust that it will be read in that light.

ESE History in the UK

Before proceeding with this brief history, it is important to understand that the way the UK is governed, with devolved jurisdictions in Scotland, Wales and Northern Ireland and with English policy decided by the UK Government, has strongly influenced the development of ESE in this country. The changing and increasing devolvement of power to Scottish, Welsh and Northern Irish governments over the past five decades has led to an uneven landscape with a greater or lesser focus on ESE being determined by devolved policies on Education and the Environment under the different jurisdictions. These issues are discussed in depth in Vare's contribution to Jucker (2015) which we draw on here to explain the history of ESE across the UK; hence there is some overlap between this chapter and that one. We also draw on Reynolds and Scott (2011) who discuss the policy context up to 2011 in England and on the UNESCO report on ESD in the UK in 2010 (UNESCO, 2010).

Whilst there is a long tradition of Natural History teaching in the UK dating back to before compulsory schooling (1883), which included nature walks and nature drawing, up to the 1960s, Rural Studies, with an emphasis on agriculture, provided the only widespread option for those interested in outdoor or environmental education. This was to change with a growing awareness of environmental issues fired by seminal texts such as Rachel Carson's *Silent Spring* in 1962 which highlighted the environmental impacts of industrial society, focusing on the use of DDT. As concern grew with publications such as *The Population Bomb* (Ehrlich, 1968) and *The Limits to Growth* (Meadows et al., 1972), recognition of the need for an educational response to these challenges prompted the emergence of a defined environmental education (IUCN, 1970; UNESCO-UNEP, 1978; Disinger, 1985). The term 'environmental education' (EE) first appeared in the UK parliamentary record in 1968 (Hansard, 1968). The mid to late 1980s were characterised by much creativity around environmental education, often led by urban wildlife groups, local school advisors and WATCH (the youth section of the Wildlife Trusts). WWF was active with its *Lifelines* publication and a UK-wide networking NGO, the National Association for Environmental Education had a large membership of teachers and educationalists across the country. The Council for Environmental Education (CEE) brought together local government workers, rangers, NGOs and others and attempted with some success to provide an interface with Government. The Town and Country Planning Association, which published the Bulletin on Environmental Education (BEE) at around this time, was also influential (Burke, 2014). Meanwhile another NGO network, the Development Education Association (DEA), was drawing together the work and creativity of educationalists with an interest in development education and international learning.

The second Education Act of 1986 included a ban on 'political indoctrination' forbidding "the pursuit of partisan political activities... and ... the promotion of partisan political views" (HM Government 1986: para. 44(1)). This was important because lobbying for environmental issues was seen as both political and partisan and so it became difficult to incorporate these issues into school curricula without contravening the articles of this act. In 1988 the Education Reform Act in England and Wales

instituted the first National Curriculum which set out clearly what schools should be teaching and further exacerbated attempts to include environmental issues in the curriculum. Whilst this process of standardisation and streamlining of Education in schools was taking place in the UK, globally there were moves to try to balance green issues with economic development issues. Indeed, the World Commission on Environment and Development defined *sustainable development* (WCED, 1987) in an effort to integrate the goals of expanding economic development and avoiding transgressing environmental limits.

ESE in national education policy

Whilst the standardisation arising from the 1988 National Curriculum aimed to ameliorate some of the inequalities in the Education landscape across the country, it also curtailed the professional freedom of teachers through its accountability procedures. This meant that teachers who wanted to focus on ESE had to find a way to do so within the confines of the curriculum and without contravening the Education Act. All this had to be done in competition with many other subjects that were also not central to the new curriculum and at a time when government had an increasing level of influence. Successful lobbying from inside Parliament (Hansard, 1988) and beyond led to Environmental Education becoming one of five cross-curricular themes to be covered by official curriculum guidance (NCC, 1990); this version of EE echoed the Tbilisi objectives (UNESCO-UNEP, 1977). In line with this thematic guidance there were 400 environmental education advisors in Local Authorities who advised on practice and curriculum integration who influenced school-based practice in terms of ESE. However, by the time publication was achieved “the NCC document itself was perceived as being redundant by many schools” (Palmer, 1998, p.25).

At around this time WWF-UK’s and Oxfam’s influence was important. These two NGOs were championing a whole-school approach that was founded on the work of Stephen Sterling (2001) and John Huckle (Huckle and Sterling, 1996). This collaboration between NGOs suggests the validity of our model in Figure 1 and was instrumental in the founding of the London South Bank University (LSBU) Masters course on Learning for Sustainability, which has trained many teachers and run conferences that have supported practice in schools. The LSBU course eventually led to the creation of the extant Teacher Education for Equity and Sustainability Network (or TEESNET) at Liverpool Hope University which continues to influence contemporary school-based practice.

Despite these positive developments in ESE in the 1990s, when questioned about the teaching of sustainable development in 1992, Eric Forth MP replied that it was covered in the ‘orders’ for Geography (Hansard, 1992). However, the following year, the Government removed Geography as a mandatory subject from an overloaded curriculum while subsequent Secretaries of State “discouraged any further discussion of cross-curricular work” (Lawton, 1996, p.35). The outcome of these different interventions was to effectively remove ESE from the compulsory curriculum.

In 1997 the New Labour Government declared its support for ‘environment and development education’ (Hansard, 1997) and established the inter-departmental Sustainable Development Education Panel (SDEP) (Defra, 1998) with a five-year remit. The first SDEP output, the Holland Report, linked education outcomes to seven *sustainable development* principles. While this suggested coherence between ESD and SD, its failure to define ESD in terms of *educational* principles or structures was problematic as it impinged on attempts to integrate it into mainstream education. The SDEP report did provide a broad definition of ESD together with a simplified version for the school sector:

Education for sustainable development enables people to develop the knowledge, values and skills to participate in decisions about the way we do things individually and collectively, both locally and globally, that will improve the quality of life now without damaging the planet for the future. (Defra, 1998, NP)

The Crick Report (QCA, 1998), that was released concurrently with the establishment of SDEP, called for pupils to learn a range of skills, knowledge and values that would give them the choice to be active in their own communities and nationally. This was an important opening for ESE from an educational perspective as active citizenship is seen as a central goal of an environmental education (Scott, 2013). The Crick Report refers to environmental and sustainable development as one of many strands that provides “important contexts and content to support the aim and purpose of citizenship education in schools” (QCA, 1998, p.41) This combination of neoliberal reforms with the communitarian language of sustainable development and citizenship demonstrated New Labour’s wider political discourse, the ‘Third Way’ (Giddens, 1998), with its centre-ground political focus on ‘what works’ (David, 2007).

The term ‘sustainable development’ appeared for the first time in the National Curriculum for England and Wales in 1999, principally through Geography, Science, Design and Technology and Citizenship (QCA, 1999). In an analysis of this first appearance Chiatzifitou (2002) notes how:

subjects that deal with tangible knowledge like mathematics ... have a priority over subjects that deal with general or abstract notions like responsibility, justice or commitment to sustainable development. (p. 291)

If sustainable development was not a priority subject, at least in 2000 it made its way into the stated purpose of education. With the promise of a revised National Curriculum in 2000 came the prospect that schools could opt out of it by becoming ‘city academies’. These academies were funded directly from central Government and independent of local authority control, free to develop their own curricula. This mattered because it enabled more professional freedom to be regained, although the examination boards and league tables still dominated the agendas of the vast majority of schools.

In 2003 the renamed Department for Education and Skills (DfES) was the first government department to publish its Sustainable Development Action Plan (SDAP), the first of its four objectives being *education for sustainable development* with an accompanying framework (DfES, cited in EAC, 2004). Meanwhile, the decision by CEE and DEA to run a joint conference in 2004 exemplified the thinking around ESD/EfS at the time. As this educational remit was broadening, Defra published a new UK sustainable development strategy *Securing the Future* (HM Government, 2005). This included a chapter on education and featured this pronouncement from the Prime Minister:

Sustainable development will not just be a subject in the classroom: it will be in its bricks and mortar and the way the school uses and even generates its own power. Our students won't just be told about sustainable development, they will see and work within it: a living, learning place in which to explore what a sustainable lifestyle means. (Tony Blair, in HM Government, 2005, p.37)

The schools' inspection service, Ofsted, responded to this direction with two surveys and a longitudinal research project on ESD practice in schools that led to the publication of a report (Ofsted, 2009) that fed into more comprehensive guidance (Ofsted, 2010) for schools' inspectors. This report is an explicit example of where existing practice in schools (that might be termed 'green schools' because of their focus on environmental issues) helped to define policy guidance, and we will elaborate on their study in the next section of this chapter. It was a time when policy makers and ESE activists alike were cognisant of the forthcoming UN Decade for Education for Sustainable Development (DESD) 2005-2014 (UNESCO, 2004) while the United Nations Economic Commission for Europe was drafting an ESD Strategy (UNECE, 2005) with the involvement of a DfES civil servant (from the UK) on the Expert Drafting Group.

It is worth noting here that the connected notions of ESD and Global Citizenship Education were particularly influential in Wales where the Welsh Government provided clear policy support in this area throughout the DESD for schools to teach ESDGC, both within subjects and as a cross-curricular theme (UNESCO, 2010; Martin et al., 2015).

In England the *National Framework for Sustainable Schools* (NFSS – Teachernet, 2008a) launched in 2006 by the (re-named) Department for Children, Schools and Families (DCSF) responded to the call from UNESCO's DESD documentation (UNESCO, 2005). This development was supported by the UK Sustainable Development Commission and WWF-UK and included 5 regional support networks. This voluntary framework comprised three interconnected sections: (a) a commitment to care; (b) an integrated (whole school) approach linking campus, curriculum and community; (c) eight 'doorways' or thematic entry points. While the second section promoted connected thinking and the doorways provided simplified and achievable targets for schools starting out on the pathway towards greater sustainability, they also proved somewhat problematic:

... there are risks inherent in a doorways approach; for example, presenting sustainability as a series of fragmented and unrelated ideas in what is a rather conservative and limited approach to the issues we face. (CREE 2009, p.10)

Furthermore, the doorways omitted biodiversity, a crucial ESD component in terms of ecological understanding and pedagogical practice that promotes first-hand experiences of nature. This notion of nature connections has continued to gain in popularity in schools across the UK and elsewhere through its links to wellbeing and mental health (Turtle et al., 2017; Walshe et al., in press), as discussed below. Despite concerns about this omission and the tendency towards reductionism, the NFSS did help schools to rationalise and build upon their existing efforts and importantly helped to provide a system of monitoring with the publication of a Sustainable Schools Self-evaluation tool called the 'S3' (Teachernet, 2008b). Global interest in this framework followed with education jurisdictions such as Australia, Canada, Columbia, Mexico City and Cyprus adopting and adapting the framework. Later it became one of five foci for UNESCO's post 2014 Global Action Programme on ESD. It was also around this time that the Eco-schools programme really took off as the numbers of schools joining it rose, often signed up by their local authorities. The outlook for ESE and for schools and beyond was extremely positive as reflected in the foreword to UNESCO's 2010 report on ESD in the UK in which the then chair of the UNESCO UK's ESD Co-ordinating Group, William Scott, wrote:

"...there has been a wide range of sustainability-focused interventions within civil society by government, businesses, trade unions, academia, third sector organisations and professional groups. Each group has been focusing, for example, on changes in policy and regulation, in areas such as carbon reduction, in the use of fair trade products, recycling, etc.' (UK National Commission for UNESCO, 2010, p. 7).

This 60-page report is highly instructive in setting out the intensity of activity around ESE across the country at the time. While not all of the initiatives engaged with schools, both the range and quantity of them demonstrate the way that the 'green school' movement in the UK was growing and the way that its growth was mirrored by a rising green consciousness within civil society and amongst Government policy makers. The quote above also points to the role of business and trade unions in ESE. Companies like Centrica and Shell funded and gave ideological support to a number of initiatives across the country during this period. While we have included them in our model we do not have the space to fully explore their influence here but we note that this has been considerable and merits further discussion elsewhere.

Following the global financial crisis in 2008, and the 2010 General Election, the new Coalition Government's antipathy towards ESD was demonstrated by the withdrawal of new inspection guidelines (Ofsted, 2010) that highlighted ways for schools to address sustainable development. The target of all schools in England to become 'sustainable schools' by 2020 was dropped and the NFSS website was deactivated. Whilst this situation represented a significant setback for supporters of ESE, a number of organisations as well as global and national policy incentives began to fill the gap left by the withdrawal of government support. It was also another five years before Defra completely phased out its financial support of the Eco-Schools programme.

The Current Landscape of ESE in the UK

The current Conservative and previous Coalition governments that have been in power since 2010 have continued vastly accelerated the rate at which in England schools became academies. While this has been criticised on a number of grounds, the policy held the promise of a return of some professional freedom that had been lost over twenty years of an imposed National Curriculum. However, the limited funding and the continued (arguably even heightened) pressure of standardised, high-stakes testing regimes has made it difficult for teachers and schools to act on this freedom and so it is unlikely to have had a significant positive impact in schools in terms of ESE. One exception here is the recent establishment by the charity: Wildlife Trusts of the Red Kite Academy Trust (MAT), who have used the academisation policy as a mandate to set up Nature Schools. According to their website³ this MAT will set up 'schools where learning about, and through, nature will be embedded in the ethos of the schools, and where the natural world runs as a 'golden thread' through every aspect of a child's school-life.'

Conversely, there has been a move towards global citizenship education (GCE) in schools across the UK stimulated in part by Government funding via the Department for International Development (DFID). It is argued variously that much of what characterises ESD also characterises GCE (UNESCO, 2010). In fact, this has long been recognised by the Welsh Government (Martin et al., 2015) that has supported the linking of ESD and GC since around 2003 in various policy documents. GCE or global learning has been championed for around 30 years by the UK charity Think Global (formerly the DEA). Until recently, Think Global was part of a consortium running the UK Government funded Global Learning Programme (GLP), launched in 2013 and re-energised in 2015 by the uptake of the United Nations Sustainable Development Goals (SDGs). The SDGs have taken on the baton from the Millennium Development Goals in the drive towards eliminating poverty and raising living standards globally. Target 4.7 of Goal 4 of the SDGs has drawn significant attention to ESD and GCE and in 2018 a UK wide initiative, UKSSD (UK Stakeholders for the Sustainable

³ <http://www.natureschools.org.uk/history> Accessed on 20/12/2018

Development) sought to measure the UK's progress towards these, including Target 4.7. While the report produced by the UKSSD partnership has not had much Government attention to date, a number of schools have become highly active in responding to these goals and integrating them into their curricula, with or without the support of the GLP. The GLP alone has engaged over 7 000 schools across the UK. The fact that this has taken place over the relatively short time period of around five years suggests that schools recognise the value of global learning and global mindedness and this is having an impact on the way ESE is being addressed. The GLP has now been superseded by the new Connecting Classrooms through Global Learning programme run by the British Council so the work being done on GCE will continue. All of this is likely to have resulted in some refocusing and reframing of the concept; for example, moving it away from its traditional base in local practice and local issues towards more globalised, developmental conceptualisations and shifting the primary focus away from the environment (and thus away from a focus on the more traditional 'green' issues) in favour of human well-being.

Another important aspect of ESE that has burgeoned across the UK is outdoor learning. It is here where the more obviously green issues chiming with the notion of a 'green school movement', are prevalent. The Forest Schools movement and the Government organisation, Natural England, have both contributed significantly to and benefited from this surge in interest, along with many other organisations. Authors put much of this rise in support for learning that takes place outside in natural places down to a global movement in favour of nature connections (re)invigorated by a concern for what Richard Louv (2005) terms *nature deficit disorder* in his popular book, *Last Child in the Woods*. The Institute of Outdoor Learning, a hub that brings together organisations with an outdoor learning focus and seeks to collate research on outdoor learning practice, has in excess of 600 organisational members. The Council for Learning Outside the Classroom (CLOtC), which was initially supported financially by the Government, aims to play a similar role and its Learning in Natural Environments research network (LINE) has relationships with over 20 organisations, many of which are Higher Education Institutions. These figures attest to the popularity of this strand of ESE in the UK; they also embrace a wide and varied approach to outdoor learning. Some have argued that the quality of outdoor education, and hence its health and learning benefits, varies depending on its purpose and the kind, or quality, of natural space that is engaged with (Dillon & Dickie, 2012; Dadvand et al., 2015). Tied to this is the aforementioned Nature Schools MAT. Furthermore, the recent advertisement of a large, collaboratively-designed funding stream to be delivered by Natural England is indicative of the emphasis being placed on outdoor learning by the UK Government. Indeed, the Government's 25 Year Environment Plan (25YEP) includes a commitment of £10 million pounds to support (re)connecting children with nature through school programmes, care farms and community forest education. The Children and Nature programme of the 25YEP is supported by Defra and DfE and aims to support projects that work with schools with the most disadvantaged children to become

‘Nature Friendly Schools’. Whilst these two government departments have different foci (Defra’s principle objective is the conservation of the natural environment in England whilst DfE’s aims are about supporting world-leading education and children’s wellbeing), this joint venture has the potential to have significant positive impacts in terms of supporting schools that aim to connect their pupils with nature, especially in areas where children from disadvantaged backgrounds have little access to green spaces and where research shows that the need is greatest (Walshe et al., in print). This governmental initiative builds on a Natural Connections project (also supported by the parastatal Historic England) which worked with schools in South West England (Gilchrist et al., 2017) and claims to have been able to bring over 40 000 pupils outdoors to connect with nature in its four-year lifecycle. Again, this attests to the fact that schools are supportive of and engaging with ESE opportunities provided by external providers (and thus notionally part of the green school movement) and it is their participation in these activities which shapes the way that ESE is defined. In the next section we will elaborate on the Forest Schools movement in the UK, which has been instrumental in both initiating and responding to this trend towards improved nature connections nationally. Again, Figure 1 shows how we think this trend contributes to the conceptualisation of ESE in the UK.

What this contextualisation of ESE in the UK begins to show is that while policy and civil society influences and sometimes drives the activities that are available to schools, once schools adopt an approach, the directions that they then take can have significant implications for the way in which the subject becomes conceptualised and how policy is generated as a result. We now turn to an elaboration of three cases that illustrate this to some degree. One of these is about policy, one about teaching practice and one about civil society activity.

Policy:

A particularly good example of how school-based practice in England has influenced conceptualisation and policy generation of ESE is evident in the following publications:

- *Taking the first step forward towards ESD* (Ofsted, 2003)
- *Schools and sustainability: A climate for change?* (Ofsted, 2008)
- *Improving schools – improving lives* (Ofsted, 2009)

Ofsted is the Office for National Standards in Education and is the government body that inspects schools in England to monitor and evaluate the teaching and learning that takes place in them. Far from being a top-down policy initiative, the first of these reports was actually based on a survey of existing practice within primary schools that were engaged in different forms of sustainability education; this helped to inform what Ofsted would understand as ‘good practice’ in ESE. The 2009 report is based on a longitudinal study of 14 schools (eight primaries, one special and five secondaries) across England and involved surveys repeated three times across three years from 2005

to 2008 (Gayford 2009). This study provided recommendations for schools starting out on a journey 'towards sustainability and beyond' as well as providing 'stage descriptors' of schools along their sustainability journey. Besides the fact that all schools improved their grading over the period of the survey, the stage descriptors provided the basis for more comprehensive guidance for schools' inspectors (Ofsted, 2010). This latter report highlights ways in which English schools might address sustainable development and came to influence how sustainable schools were defined in England. For example, the report highlights the importance of leadership for sustainability, a finding that has been echoed in a number of different publications on the matter (e.g. Birney & Reed, 2009; UNESCO, 2010, Hren & Birney, 2011). The report also finds that a whole-school approach is key to achieving success in ESE that has a positive impact on academic achievement across subjects. The judgements of Ofsted inspectors have huge consequences for schools, so this level of interest shown by Ofsted in ESD was potentially a highly influential development. The significance of these changes in inspection policy were highlighted in a DCSF report (Barratt-Hacking et al., 2010) that gathered together evidence for the impact of sustainable schools. The report extracts a quote from another report from the UK Sustainable Development Commission about a headteacher's newly acquired willingness to discuss their work on sustainable schools with inspectors because of the way in which that school leader felt the work had influenced pupils' caring for others, the environment and their own community. Perhaps more significant for the purposes of this publication is the finding from this report that parents and children attribute the way that they behave at home to the movement towards sustainability in school; making families re-evaluate their lifestyles and use of resources in response to the focus on ESE in schools. Another important outcome of this report is the way it demonstrates how involving pupils in decisions about sustainability in schools (for example, through involving them in designing new school buildings) and local communities (for example, through producing leaflets about energy usage and CO2 production that resulted in families purchasing energy efficient appliances such as refrigerators) can have an impact on learning through a greater sense of the relevance of the work being undertaken in the classroom. This finding is also highlighted in a similar study done by the Education and Training Inspectorate in Northern Ireland who found improvements to literacy, numeracy and ICT through studying relatable (environmental) issues (UNESCO, 2010), and by other studies carried out in the UK (Alexander, 2009; Barratt & Barratt Hacking, 2008). These findings point to the way in which giving children the agency to participate in decision-making processes in schools that have a sustainability agenda, can define and determine how ESE is understood and enacted.

Practice

Forest Schools are one example of an outdoor education approach which has become a familiar part of the pre-primary and primary school experience in the United Kingdom (Knight, 2009). In Forest school sessions, children have regular, repeated experiences of learning in a natural (sometimes wild)

setting outside the classroom (usually a local woodland) and it follows a very specific ethos that has developed out of Danish and Scandinavian approaches to learning such as *friluftsliv* or open air culture. Although definitive numbers that track the rise in schools and preschools adopting the approach are not available yet, it has been called a ‘forest schools revolution’ in mainstream media, and from its arrival in one school in Somerset, England in 1993 to mid-2018, in excess of 12 000 practitioners have been trained as Forest School teachers. This development has been encouraged by Government guidance and inspection for outdoor play/experiences in Early Years. Academic research about its impact and theoretical grounding for its approaches are limited, however, a recent study (Harris, 2017) comprising qualitative interviews of Forest School practitioners, points to the ways in which the space (the outdoors) influences what is learnt in such educational experiences and this in turn is likely to have shaped how ESE is viewed. Forest Schools is based on child centred, child led, free play approaches to learning (all of which are concordant with participatory learning theory) which involve some risk-taking and tend to enable social and emotional learning, including teamwork skills. These outcomes and the popularity of the movement in the UK has influenced the way that ESE is being conceptualised here. The benefits that are seen to accrue from approaches such as Forest Schools are likely to have informed discussions on addressing concerns related to children’s mental health at the global level, e.g. by UNESCO through the SDGs. This may in turn have influenced national policy such as the 25YEP discussed earlier.

Civil Society

Another indicator of this trend towards reconnecting with nature is the growth of literature (and eco-critical studies of that literature) exploring connections to the outdoors and wilderness, written for both adults and children alike. Examples include Roger Deakin’s *Waterlog* (2000) and Helen Macdonald’s *H is for Hawk* (2014). Whilst there is a long tradition of writing in this style stretching as far back as the Romantic Era and before, there is little doubt that it has gained in popularity in recent years and it seems likely that this trend is a response to multiple environmental crises summed up in the concept of the Anthropocene. For schools and learning, Macfarlane and Morris’s (2017) book, *The Lost Words* has brought schools and civil society together to deliver (and thus reconceptualise) ESE. The book was conceived in an attempt to conjure back words such as ‘conker’ and ‘bluebell’ that have recently been removed from the Oxford Junior Dictionary because they are disappearing from children’s language and being replaced by other words with more technological meanings (Flood, 2015). Twitter feeds relating to the work are revealing, attesting to the popularity of and affection for the book and its aims. A number of well-publicised crowd funding campaigns arose when the book was published. Perhaps the most notable of these was the (successful) campaign to buy a copy of *The Lost Words* for every school in Scotland which was closely followed by a number of similar campaigns at the county level across England and Wales. A Google search reveals that some of these campaigns were started by civil society organisations whilst others were initiated by

individuals. Figure 2 is illustrated by Jackie Morris, the book's illustrator, and shows how the story has spread across the UK. It is available online and is continually updated with new drawings when a campaign is successful at supplying a new geographical area with books for its schools.

Figure 2: a social media and crowd funding campaign illustration of the spread of the Lost Words with illustrations by Jackie Morris, the book's illustrator.

The following is written by the instigator of one such campaign, Ruth Sapsed, who is the director of the charity, Cambridge Curiosity and Imagination:

This book, The Lost Words, brilliantly encapsulates many of the concerns and ideas that we campaign for – the importance of a connection to nature, the crucial way that creativity can build a sense of connection and agency in us and the urgency for us all to wake up to the erosion of children's freedoms. The power of the Lost Words book to draw people in both literally and emotionally is extraordinary. Children literally enter it; it is so big but crucially everyone 'gets it'. The simple idea that children might no longer need to know about conkers or brambles or otters stuns people. Their indignation is tangible whenever you explain how and why the book came about. The authors describe it as 'a beautiful protest' and it was crucial to us to support its aims and create the campaign that would see a copy of the book be placed in each of the 270 primary and special schools in the combined authority of Cambridgeshire and Peterborough.

... It is a pleasure to be offering schools a gift of this quality and substance brought about by the generosity of their community. Schools can feel overwhelmed by initiatives and directives outside of their control but our sense is that this one has appealed to schools, rooted as it is in deep concerns for our planet and communities, and it has been inspirational.

This demonstrates the role that civil society organisations and individuals can play in supporting and guiding the direction of a 'green school movement' in the UK, sometimes inspiring new schools to join the movement and sometimes enhancing and deepening their existing engagement with it. This phenomenon is also illustrative of the ways in which contemporary funding strategies (e.g. crowd funding that relies on social media) can play a part in the conceptualisation of ESE. In this case, social media, the very technology that is often vilified for taking children away from nature, is being employed to facilitate their return to it, using a book that was conceived to highlight how technology was intervening into young people's connectedness with nature. The many and varied ways in which

children and young people can converse through technological methods has the potential to enrich and enliven nature connectedness through the sharing of stories between schools, and this too, is beginning to influence how ESE is conceptualised. The influence of social media on ESE conceptualisation has begun to be explored in a number of different country contexts and its impact appears to be important, associated with pluralism and heightened affect among other features (Andersson and Olson, 2014; Andersson and Ohman, 2017; Typhina, 2017).

Concluding: The dynamism of schools practice influences ESE

It could be argued from the foregoing discussion that the ‘green school movement’ had its heyday in the decades immediately before and after the new millennium. This period represents a time when practice and policy came together and civil society and government players acted in concert. It would be fair to say that the power of environmental issues to transform policy leading to school-based practice has since waned. The change in Government policy around ESE certainly suggests this, particularly in the narrowing of the national curriculum. This latter issue has now been recognised and a new set of guidance on a ‘broad and balanced’ curriculum (due in 2019) and the time and interest in linking this to the school-based curriculum has begun to re-engage schools. Meanwhile the rise in global and local concerns about diminishing wellbeing and failing mental health amongst children and young adults and the links between this trend and diminishing opportunities for connection to nature are having a significant impact. Championing nature connectedness has steadily risen across the country, attested to by the popularity of the University of Derby’s annual Nature Connections conference (to name but one example where academic interest has played a significant part in supporting the movement) and the rise and rise of Forest Schools and outdoor learning. The way in which social media and technology has the power to spread a message such as the story of *The Lost Words* further exemplifies how contemporary children in schools across the country are keeping a ‘green school movement’ alive. In addition to this, the popularity of school councils that often have environmental foci, the Eco-schools programme, SEEd’s annual National Sustainable Schools conference, the UNSDGs and now the government’s 25 Year Environment Plan, together demonstrate that ESE remains an influential force in this country, and that ESE is constantly being redefined and refocused to keep up with the changing times and in response to a variety of influences. There are of course tensions between these initiatives; for example, the Government’s enthusiasm for connecting children with nature (via the DfE and DEFRA) is not linked to its domestic and international policy on the Sustainable Development Goals through DfID. This is in contrast to the way that schools often join up thinking about these issues.

What we have tried to show in this chapter is the ways in which school practice, civil society, academic research, governmental policy and non-governmental organisations and non-state providers

are all enmeshed and mutually implicated in how ESE has come to be understood. The examples we have used and the literature we have selected represents a tiny sample of what is available and we hope that others will be inspired to develop these themes further. What is strikingly evident from this discussion is that ESE is a dynamic, contextualised notion which adapts in response to the needs of the time (as one might hope it would) and builds on the foundations laid over many decades of practice and philosophical thinking and writing before that. We look forward to its continued development and its growth in influence as it takes up the ever more pressing challenges of the Anthropocene.

References

Alexander R (ed) (2009) *Children, their World, their Education*. London: Routledge

Andersson, E., and M. Olson. 2014. "Political Participation and Social Media as Public Pedagogy: Young People, Political Conversations and Education." *Journal of Social Science Education* 13 (4): 110–121. doi:10.2390/jsse-v13-i4-1366.

Barratt R & Barratt Hacking E (2008) A Clash of Worlds: children talking about their community experience in relation to the school curriculum. In AD Reid, BB Jensen, J Nikel and V Simovska (eds) *Participation and Learning. Perspectives on Education and the Environment, Health and Sustainability*. Dordrecht: Springer, 285-298

Birney A & Reed J (2009) *Sustainability and Renewal: findings from the leading sustainable schools research project*. Nottingham: National College for Leadership of Schools and Children's Services
<http://webarchive.nationalarchives.gov.uk/20140719203603/http://www.nationalcollege.org.uk/docinfo?id=33296> HYPERLINK
"<http://webarchive.nationalarchives.gov.uk/20140719203603/http://www.nationalcollege.org.uk/docinfo?id=33296&filename=sustainability-and-renewal-full-report.pdf>" & HYPERLINK
"<http://webarchive.nationalarchives.gov.uk/20140719203603/http://www.nationalcollege.org.uk/docinfo?id=33296&filename=sustainability-and-renewal-full-report.pdf>" filename=sustainability-and-renewal-full-report.pdf

Blackwell, S. (2015). *The Archimedes forest school model*. Sheffield, UK: Archimedes Earth Press.

Blakeley-Glover J, Reynolds J & Arnold M (2009) Review of Public Service Regulations. London: Sustainable Development Commission

Catherine Burke (2014) "Fleeting pockets of anarchy": Streetwork. The exploding school, *Paedagogica Historica*, 50:4, 433-442, DOI: 10.1080/00309230.2014.899376

Carson R (1962) *Silent Spring*. Penguin Group.

Chatzifotiou, A (2002) An imperfect match? The structure of the National Curriculum and education for sustainable development, *Curriculum Journal*, 13:3, 289-301

Chung B.G. and Park, I. (2016) A Review of the Differences between ESD and GCED in SDGs: Focusing on the Concepts of Global Citizenship Education, *Journal of International Cooperation in Education*, Vol.18 No.2 (2016) pp.17 - 35

CREE (Centre for Research in Education and the Environment) (2009) *Supporting DCSF's sustainable schools agenda: Networking Sustainable Schools in the South West – 2008/09; External evaluation report to the Government Office for the South West*, University of Bath

Dadvand, P., Nieuwenhuijsen, M. J., Esnaola, M., Forn, J., Basagaña, X., Alvarez-Pedrerol, M., et al.. (2015). Green spaces and cognitive development in primary schoolchildren. *Proceedings of the National Academy of Sciences*, 112(26), 7937-7942. doi:<http://dx.doi.org/10.1073/pnas.1503402112>

David M E (2007) Changing the educational climate: children, citizenship and learning contexts? *Environmental Education Research*, 13:4, 425-436

Deakin, R. (2000) *Waterlog*. Vintage: London

Defra (1998) *A Report to DfEE/QCA on Education for Sustainable Development in the Schools Sector from the Panel for Education for Sustainable Development - 14 September 1998*. London: Department for Environment, Food and Rural Affairs, available at: <http://webarchive.nationalarchives.gov.uk/20080306221400/http://www.defra.gov.uk/environment/sustainable/educpanel/1998ar/ann4.htm> (Accessed 16th August 2018)

Disinger, J. F. (1985) What Research Says: Environmental Education's Definitional Problem, *School Science and Mathematics*, [85:1](#), 59–68

Dillon, J., Rickinson, M., Teamey, K., Morris, M., Choi, M. Y., Sanders, D., & Benefield, P. (2006). The value of outdoor learning. *School Science Review*, 87, 107–111.

Dillon, J., & Dickie, I. (2012). Learning in the natural environment: Review of social and economic benefits and barriers. Natural England Commissioned Reports 092

EAC: Environmental Audit Committee (2004) *Fifth Report*. Accessed October 2012 at:

<http://www.publications.parliament.uk/pa/cm200405/cmselect/cmenvaud/84/8402.htm>

Ehrlich, P.(1968). *The Population Bomb*. Buccaneer Books: Cutchogue, New York.

Flood, A. (2015). Oxford Junior Dictionary's replacement of 'natural' words with 21st century terms sparks outcry. The Guardian, 13 January. Retrieved from

<https://www.theguardian.com/books/2015/jan/13/oxford-junior-dictionaryreplacement-natural-words>.

Gayford C G (2009) *Learning for Sustainability: from the pupils' perspective*, Godalming: WWF

Giddens A (1998) *The Third Way*, Cambridge: Polity Press

Gilchrist, M., Passy, R., Waite, S., Blackwell, I., Edwards-Jones, A., Lewis, J. & Hunt, A (2017)

Natural Connections Demonstration Project, 2012-2016: Analysis of the key

evaluation questions Natural England Commissioned Reports, Number 215 Annex 1. York.

Hansard (1988) Education Reform Bill, speech by Lord Craigton. Accessed July 2013:

<http://hansard.millbanksystems.com/lords/1988/may/03/education-reform-bill-1>

Hansard (1992) House of Commons answers on Environmental Studies. Accessed July 2013:

http://hansard.millbanksystems.com/written_answers/1992/jun/08/environmental-studies

Hansard (1997) House of Lords Session on Schools and Preparation for Adult Life. Accessed July

2013: http://hansard.millbanksystems.com/lords/1997/jul/16/schools-and-preparation-for-adult-life-1#S5LV0581P0_19970716_HOL_115

Harris F. (2018) Outdoor learning spaces: The case of forest school. *Area*. 50:222–231.

<https://doi.org/10.1111/area.12360>

HM Government (1986) *1986 Education (No. 2) Act*. London: HMSO

HM Government (2005) *Securing the Future: The UK Government Sustainable Development Strategy*. London: TSO

Hren, B and Birney A. (2011) *Pathways to Education for Sustainable Development: A practical tool for planning a whole school approach*. WWF-UK.

Huckle, J. & Sterling, S. (1996) *Educating for Sustainability*. Routledge.

Knight, S. (2009). *Forest schools and outdoor learning the early years*. London, UK: Sage.

Lawton D (1996) *Beyond the National Curriculum: teacher professionalism and empowerment*. London: Hodder and Stoughton

Martin S, Dillon J, Higgins P, Strachan G & Vare P (2015) *Reflections on ESD in UK Schools* in Jucker R & Mathar R (eds.) *Schooling for Sustainable Development in Europe: Concepts, Policies and Educational Experiences at the End of the UN Decade of Education for Sustainable Development*. Cham: Springer

Macdonald, H. (2014) *H is for Hawk*. Johnathan Cape: London.

Meadows D (1968) *The Limits to Growth*

NCC (1990) *Curriculum Guidance 7: Environmental Education*, York: National Curriculum Council

Ofsted (2009) *Taking the first step forward... towards an education for sustainable development: Good practice in primary and secondary schools*. London: Office for Standards in Education

Ofsted (2010) *Sustainable development: Briefing for section 5 inspectors*. London: Office for Standards in Education

Palmer J (1998) *Environmental Education in the 21st Century: Theory, Practice, Progress and Promise*. London: Routledge

Parker J & Wade R (2008) *Journeys around Education for Sustainability*. London: London South Bank University

QCA – Qualifications and Curriculum Agency (1998) *Education for citizenship and the teaching of democracy in schools*. London: DfEE/QCA

QCA (1999) *The National Curriculum: Handbook for primary teachers in England*. London: DfEE/QCA

Reynolds J & Scott WAH (2011) *Sustainable Schools in England: background and lessons learned*. National Association of Field Studies Officers Annual Journal and Review ISBN: 978-1-901642-18-6

SCAA (School Curriculum and Assessment Authority) (1994) *The National Curriculum and its Assessment: Final Report*, London: HMSO

Scott, W A H. & Gough S R (2003) *Sustainable development and learning: framing the issues*. London: RoutledgeFalmer

Scott, W.A.H. (2010) New Worlds Rising? The View from the Sustainable School, *Policy Futures in Education* 8 (5) p.597-599

William Scott (2011) Sustainable schools and the exercising of responsible citizenship – a review essay, *Environmental Education Research*, 17:3, 409-423, DOI: 10.1080/13504622.2010.535724

Scott, W.A.H. (2013) Developing the sustainable school: thinking the issues through, *The Curriculum Journal*, 24:2, 181-205, DOI: [10.1080/09585176.2013.781375](https://doi.org/10.1080/09585176.2013.781375)

Sterling, S (2001) *Sustainable Education – Re-visioning learning and change*, Schumacher Briefing no6. Schumacher Society/Green Books, Dartington. ISBN 1 870098 99 4

Teachernet (2008a) Sustainable schools: The national framework. Accessed September 2018 at <http://www.se-ed.co.uk/sites/default/files/resources/Framework%20Resource.pdf>

Teachernet (2008b) Sustainable School self-evaluation tool (s3). Accessed September 2018 at: https://www.newcastle.gov.uk/sites/default/files/wwwfileroot/legacy/childrenservice/Sustainable_school_selfevaluation.pdf

Turtle, C., Ian Convery, Katie Convery & Yvonne Xian-han Huang (2015) Forest Schools and environmental attitudes: A case study of children aged 8–11 years, *Cogent Education*, 2:1, DOI: [10.1080/2331186X.2015.1100103](https://doi.org/10.1080/2331186X.2015.1100103)

Typhina, E. (2017) Urban park design + love for nature: Interventions for visitor experiences and social networking, *Environmental Education Research*, 23:8, 1169-1181, DOI: [10.1080/13504622.2016.1214863](https://doi.org/10.1080/13504622.2016.1214863)

UNECE (2005) *The UNECE Strategy for Education for Sustainable Development*. Geneva: UNECE

UNESCO (2004) *United Nations Decade of Education for Sustainable Development: Draft International Implementation Scheme*, Paris: UNESCO

UNESCO. (2005). *United Nations Decade of Education for Sustainable Development (2005–2014): International implementation scheme* (ED/DESD/2005/PI/01). Retrieved from unesdoc.unesco.org/images/0014/001486/148654e.pdf.

UK National Commission for UNESCO (2010) *Education for Sustainable Development in the UK in 2010*. Accessed September 2018 at [http://se-ed.co.uk/edu/wp-content/uploads/2014/02/Report - ESD-in-the-UK_2010_UKNC-UNESCOv4.pdf](http://se-ed.co.uk/edu/wp-content/uploads/2014/02/Report_-_ESD-in-the-UK_2010_UKNC-UNESCOv4.pdf)

UNESCO-UNEP (1978) *Inter-governmental Conference on Environmental Education*, 14-26 October 1977, Tbilisi. Paris: UNESCO-UNEP

Vare P & Scott WAH (2007) *Learning for a Change: exploring the relationship between education and sustainable development*; *Journal of Education for Sustainable Development* 1:2, 191–198

Walshe, N., Lee, E., & Smith, M. (*in press*). Supporting Children's Wellbeing with Art in Nature: Artist Pedagogue Perceptions. *Journal of Education for Sustainable Development*, 13(1).

WCED (1987) *Our Common Future*, Oxford: Oxford University Press