

Sustainable schools: responding to new challenges and opportunities

Sustainable schools: responding to new challenges and opportunities

John Huckle

ABSTRACT: The Government has announced that all schools are to become sustainable schools by 2020. This article suggests that if geography teachers are to realise the full potential of such schools, they should enable students to think critically about sustainable development and make informed choices about realising sustainability within schools and the wider world. After exploring ways in which critical geographers have sought to understand sustainable development, the article explores some of the contradictions surrounding the national framework for sustainable schools, and then outlines three activities for older students that suggest how the framework might be explored in the geography classroom.

Government initiatives on education for sustainable development

'We do not know exactly what will be the skills needed for sustainable development, but we expect that they will include team work, flexibility, analysis

of evidence, thinking critically, making informed choices and participating in decisions.'

'It is important that young people are heard. We know that they want action to ensure the world becomes a better place to be and the future of their planet is secure. In addition to our own actions to improve our sustainability, we need to empower young people with the skills, knowledge and freedom to voice their opinions and to make a difference' (DCSF, 2008, pp. 15-16).

The most recent Sustainable Development Action Plan drawn up by the Department for Children, Schools and Families (DCSF), for the period 2008–2010, seeks to empower and educate young people for life in a sustainable world. Reflecting and reinforcing the policies set out in *Securing the Future* (the UK sustainable development strategy, HMG, 2005), *Every Child Matters* (DfES, 2003) and *The Children's Plan* (DCSF, 2007), it accepts the Sustainable Development Commission's (SDC) belief, outlined in *Every Child's Future Matters* (SDC, 2007), that the environment is 'the agent that binds and adds strength to the social and economic thrust of *Every Child Matters* – something that must be there if we are to deliver our commitments to children' (p. 5).

The Plan re-states the Government's intention that every school will be a sustainable school by 2020. The DCSF published a national framework for such schools in 2006 (Teachernet, 2008) and the sustainable schools website (www.teachernet.gov.uk/sustainable-schools) offers guidance to schools which includes a self-evaluation instrument (s3) for them to monitor progress. The DCSF is funding regional sustainable schools networks, while the Qualifications and Curriculum Authority (QCA) has established 'the global dimension and sustainable development' as a cross-curricular theme in the national curriculum. Ofsted now includes two questions about the national framework for sustainable schools in its self-evaluation form, and has published a focus survey on sustainable development based on visits to 45 randomly selected schools (Ofsted, 2008).

Sustainable schools: responding to new challenges and opportunities



Archbishop Grimshaw Catholic School in Coventry has been designed as part of the Building Schools for the Future initiative (see pages 19-20) as a beacon for education within the community. The design, which includes faculty-based clusters to allow flexibility and adaptability in curriculum delivery, teaching methodologies and efficient use of space, and reflects the school's ethos and aspirations for encouraging community involvement and increasing participation, suggests that the national framework 'doorways' of buildings and grounds, inclusion and participation and local well-being have been recognised. Other 'doorways' through which schools may become more sustainable include energy and water, food and drink, traffic and travel and the global dimension (see page 18). Photos courtesy of Bond Bryan Architects.



Critical geographical education for sustainable development

The national curriculum gives geography a major responsibility for education for sustainable development (ESD) alongside citizenship, design and technology, and science. Reflecting the quotes from *Brighter Futures – Greener Lives* at the start of this article, I will argue that if geography teachers are to realise the full potential of sustainable schools, they should enable students to think critically about



sustainable development and make informed choices about realising sustainability within schools and the wider world. This involves understanding the strengths and weaknesses of the dominant discourse of ecological modernisation that shapes government policies on sustainable development and sustainable schools, and exploring alternatives – including eco-socialism (Wikipedia, 2008; AGS, 2008).

After exploring the ways in which critical geographers have sought to understand sustainable development, and their links with a global anti-capitalist movement that seeks alternative forms of political economy, education and citizenship, I consider some of the

contradictions surrounding the national framework for sustainable schools. I then outline three classroom activities for older students that suggest how the framework might be explored in the geography classroom to provide opportunities for the 'analysis of evidence' and the development of critical citizenship (Huckle, 2008a).

Geography, nature and unsustainable development

To the extent that school geography continues to conceptualise society and nature as separate domains, one determined or constructed by the other, the subject is an inadequate vehicle for ESD. ESD requires us to adopt relational thinking that views the world as a seamless web of relations and processes that affect one another constantly. Phenomena do not have properties in themselves, but only by virtue of their relations to other phenomena. The natures we acquire, inhabit, and feature in our teaching, are always part bio-physical, part social. They are hybrids and the challenge of sustainable development is to find forms of technological and social organisation (political economy) that shape such natures in ways that allow humans and non-humans to continue to co-evolve in progressive ways.

In his book *Nature*, Castree (2005) traces the treatment of nature in geography, draws attention to the persistence of dualism (physical and human geography), and argues the case for relational or post-natural approaches such as actor-network theory and dialectics. These approaches suggest that geographical explanation can never be neutral or objective since it is always a product of the social or power relations that shape nature both as material reality and representation (language, discourse, signs and symbols). Critical school geography acknowledges this fact and seeks to empower students with the ability to make autonomous judgements concerning competing knowledge claims. Such claims lie at the heart of environmental politics or struggles to reshape the relations between people, between people and the rest of nature, and between those agents that constitute the background ecology to all our lives (Burkett, 2003; Huckle and Martin, 2001).

In advancing their own claims to knowledge, critical geographers have adopted relational thinking, linked the causes of unsustainable development to the

Sustainable schools: responding to new challenges and opportunities



Sustainable schools:
responding to
new challenges
and
opportunities



workings of the global capitalist economy, and argued the case for eco-socialism (Harvey, 1996; Pepper, 1995). Capitalism requires continual growth of the economic product and since this growth is for the sake of capital, and not human need, ecological resources and services, used directly or indirectly in the production process, are often exploited beyond their capacity for self-renewal. Alongside crises of capital over-accumulation (economic recession caused by capitalists being unable to sell all they produce), capitalism now experiences a crisis of reproduction (or underproduction) since the conditions of production (ecological resources and services such as fertile soil and waste treatment; the physical, mental and emotional well-being of workers and their families; and the infrastructure and social capital of the communities in which workers live) are increasingly difficult and costly to reproduce (O'Connor, 1998). Schooling is an essential element in the reproduction of capitalism, ensuring a supply of suitably trained, disciplined and stratified young workers, and young consumers and citizens who generally support prevailing social arrangements (Huckle, 1985).

Eco-socialists recognise that all the forms of manual and mental work that people carry out in their everyday lives constitute the primary interface between the social and bio-physical worlds (human and non-human nature). Under capitalism they have little control over this work and are consequently alienated from their own true natures, those of other people, and the nature that surrounds them. The key to ending this alienation, and re-connecting people with nature, is to create an alternative form of social life in which people have real control over the work they do (self-management) and have the time and resources for self-development (Roberts, 1979). Eco-socialist societies would produce for need rather than profit, would constrain the economy within limits imposed by ecological systems and global justice, and would restore the health of human and non-human nature. New forms of economic and political democracy are central to the creation of such societies as capital and technology need to be brought under popular control (Little, 1998). In eco-socialist schools students would experience a high degree of self-management; contributing to decisions shaping the campus and curriculum, and participating in community-based projects that they themselves design and carry out. Such schools would practise ecopedagogy (Kahn, 2008) and require changed forms of teacher education and professional development (Hill and Boxley, 2007).

Sustainable development and the limits of ecological modernisation

In addition to helping us understand the causes of unsustainable development and the need for eco-socialism, critical geographers have explored the limits of reformist environmentalism, or the 'greening' of capitalism. This seeks sustainability 'via major changes in liberal-capitalist attitudes and institutions, but not their replacement by something else' (Pepper, 2005, p. 14). In the ecological modernisation (EM) discourse that underlies all sustainable development strategies in the West, including that of the Department for Environment, Food and Rural Affairs (DEFRA) and the DCSF, economic growth, social justice and environmental conservation are held to be compatible, whereas critical geographers insist they are not.

EM holds that capital growth that does more with less, protects the environment and lifts people out of poverty, represents a win-win situation rather than a trade-off between the environment and development. Since the future cannot look after itself, new policies, institutional arrangements and regulatory practices are needed, and business and civil society should have roles in shaping these alongside governments. EM opposes narrow national and corporate interests and requires new forms of rational planning and environmental governance linked to new forms of citizenship. Its emphasis on growth with equity and rational planning appeals to social democrats, and it has gained the support, albeit in a radical and extended form, of the chair of the SDC (Porritt, 2005; Matthewman, 2008) and of those currently calling for a green new deal (NEF, 2008).

On the world stage, advocacy of EM reached its peak with the UN Conference on the Environment and Development (UNCED), held in Rio de Janeiro in 1992. By this time, social democracy was in retreat and neo-liberalism in the ascendancy. Democratically elected governments were already ceding control of the world economy to a new elite of super-rich, free-market operatives and their colleagues in national and international institutions (Glyn, 2008). Consequently there has been very limited progress on UNCED's agenda for realising sustainable development in the twenty-first century (Agenda 21). Attempts to regulate the world economy in the interests of sustainability have been thwarted by what Elliott and Atkinson (2008) describe as the 11 'governing spirits' that,

prior to the current financial crisis, directed our daily lives: globalisation, communication, liberalisation, privatisation, competition, speculation, recklessness, greed, arrogance, oligarchy and excess.

Despite limited real progress on national, regional and global strategies for sustainable development, capitalism has re-orientated itself towards this goal in three ways (Luke, 2006). First, managers have changed their attitudes and practices so that the environment is now part of the 'bottom line', one of the necessary pre-conditions of any profitable business (eco-managerialism). Second, economic values have been assigned to ecological services using such market-based mechanisms as pollution permits and carbon credits, a development that further commodifies nature in the interests of profit (eco-commercialism). Third, more issues of the environment and development have been resolved by court decisions based on liberal capitalist property laws and business, commercial and environmental legislation (eco-judicialism). These re-orientations employ technocratic tools to manage and mitigate damage inflicted upon the bio-physical world as capitalists seek to ensure a continuing supply of the conditions of production. They are advances, and better than nothing, but since the goals of capitalism remain unaltered, Luke is adamant that 'sustainable development' is ultimately neither sustainable nor development (Luke, 2006, p. 100).

Critical geography and the global anti-capitalist movement

The real hope for a move towards sustainable development lies with those workers' and citizens' movements that challenge the power structures, modes of production and reproduction, and ideologies that constitute global capitalism. These form a global anti-capitalist movement that since 2001 has contributed to World Social Forums. The movement is characterised by a desire for self-management; a willingness to resist state oppression; direct action to test ideas, demonstrate alternatives and confront existing power structures; carnival, or making revolution fun; and empowerment to persuade citizens that alternatives are possible (Bircham and Charlton, 2001). It has no one big idea to change the world but its constituent movements contain eco-socialists and supplement people's everyday knowledge with that of other kinds, including critical knowledge that is theoretical, academic, historical and geographical. The

movement has its 'transformative intellectuals' such as Naomi Klein, Arundhati Roy, Noam Chomsky and George Monbiot, and its belief in global solidarity, together with its recognition of the need for new institutions to regulate the break-up of corporate power and co-ordinate self-managing societies from above, has resulted in much theoretical debate about alternative forms of post-industrial socialism (Little, 1998), ecological and sustainability citizenship (Dobson, 2003; Barry, 2006), and environmental and global governance (Park *et al.*, 2008; Held and McGrew; 2002, Monbiot, 2004). Such debate is increasingly relevant given the current crisis, but amid their talk of enhanced international co-operation and regulation, there is little evidence to suggest that world leaders have begun to question market principles, open trade and economic growth, or consider the virtues of a steady state economy (Lynas, 2008).

The International Critical Geography Group (ICGG) is part of this global movement and an extract from its statement of purpose deserves the attention of all teachers of geography:

'We are critical and internationalist as geographers because the discipline has long served colonial, imperial and nationalist ends, generating the ideological discourses that help to naturalise social inequality. We recognise the ties between knowledge and power and are committed to unmasking them' (ICGG, 2008).

Sustainable schools: the national framework

Unmasking the links between knowledge and power, and critiquing ideological discourses that maintain social inequality and unsustainable forms of development, are key tasks for critical school geography. Examination of the sustainable schools website suggests that such schools will serve to legitimate ecological modernisation, or forms of sustainable development that are 'neither sustainable nor development', unless critical teachers explore the contradictions in current government policy and use the opportunities outlined on the website to introduce a greater degree of self-management for their students, and allow critical examination of the kind of ideas and practical alternatives developed by the global anti-capitalist movement.

At the heart of the sustainable schools website is a definition of sustainable development: 'what it comes

Sustainable schools: responding to new challenges and opportunities

Sustainable schools: responding to new challenges and opportunities



The homepage of Generation Green, the schools and community programme from British Gas. A programme to encourage ecological modernisation?

down to is care – care for oneself, care for each other (across cultures, distances and generations), and care for the environment (near and far)’. There is no discussion of the kind of political economy that might foster such care, and pages refer to *Securing the Future* and the history of sustainable development without critiquing ecological modernisation or introducing the arguments and policies of those who advocate alternative routes to sustainability.

The national framework for sustainable schools, outlined on the website, consists of eight interconnected ‘doorways’ through which schools may initiate or extend their activity (food and drink, energy and water, travel and traffic, purchasing and waste, buildings and grounds, inclusion and participation, local well-being, and the global dimension). Objectives, to be achieved by 2020, are attached to each doorway, and these are to be realised through an integrated approach to curriculum (teaching provision and learning), campus (values and ways of working), and community (wider influences and partnerships). Under the curriculum heading, the framework mentions ‘the knowledge, values and skills needed to address (doorway) issues’ and engage in ‘positive activities’, but there is no guidance on what these might be. Under the campus and community headings the intention seems to be to render schools

environmentally and socially responsible, but there is no reference to economic, political and other factors that enable or limit such responsibility and so determine progress towards such outcomes as healthy diets, ecologically designed buildings, or social inclusion and participation. Evaluation of the tools for school leaders and governors on the website, Stan Terry’s (2008) text, or the *Education Guardian’s* supplement on greener schools (Kingston, 2008), would provide an indication of the extent to which schools are being encouraged to adopt forms of eco-managerialism now common in the corporate sector. As with ecological modernisation, the framework is an advance but cannot realise its goals. Analysis of policy texts suggests that curriculum policies relating to ESD are essentially rhetorical devices that are readily assimilated into dominant economic and educational discourse (Winter, 2007). If geography teachers are to turn such policies to advantage they should not only acknowledge the limitations of the ecological modernisation discourse that informs them, but also recognise how the Government’s reforming of education has rendered the objectives of a critical and empowering ESD more difficult to achieve.

The reforming of education

Over the past 30 years education in England has been reformed to render it an improved vehicle of economic productivity, the enterprise economy and global competitiveness. The correspondence between schooling and neo-liberal capitalism has been tightened so that schools produce a differentiated and flexible workforce for the knowledge economy. At the same time the public sector has been reformed so that it is more responsive to consumer choice and more able to adapt to a changing world. Three mechanisms have been used to carry out this reform (the market, management and performativity) and it has involved new kinds of government or changes in the role of the state (Ball, 2008). Neo-liberal policies (such as the academies programme) have been tempered by social democratic policies (*Every Child Matters*) and the mix has impacted on the curriculum, the campus, and the community.

New Labour maintained the national curriculum it inherited from the Conservatives and has only recently revised it to accommodate a stronger vocational element, reduce overload, and free up time for school-based curriculum development. The division of curriculum knowledge, and its separation from students’ everyday knowledge, is not best suited to



ESD and is a factor in students' alienation and classroom resistance (Dickens, 1996). School geography has declined in status and popularity, partly because, until its recent revision, the national curriculum provided geography teachers with little scope to respond to their students' interests or reflect new developments in the parent discipline. In 2008 Ofsted reported continuing weaknesses, alongside strengths (Roberts, 2008), and many would agree with Jones (2008) and Westaway (2009) that an infusion of ESD can do much to restore the subject's relevance and popularity.

Those who run school campuses are driven by targets, budgets, competition, and (narrowly defined) effectiveness. They are increasingly distant from the classroom and have to juggle the multiple requirements that their schools become healthy, sustainable, growing, extended, federated as more directives constantly arrive. Despite its potential for school improvement, sustainability is likely to be a low priority for many and most will have to find their own funding for such technologies as solar panels or wind generators. The use of Private Finance Initiative (PFI) funding to build new schools borrows from the future to provide for today and is a form of unsustainable development. Privatisation of school catering contributed to the unhealthy diets revealed by the television series *Jamie's School Dinners*.

Consumer choice, for those parents and families that are able to exercise choice, is a key element of reform. As well as resulting in a desire to introduce new kinds of funding and management, this element of reform has led to a more highly differentiated hierarchy of secondary schools (grammar, voluntary aided, community, specialist, foundation, trust, academies, etc.). This diversity further erodes the comprehensive principle of common 'community' schools for all students, that is schools that continue to offer the prospect of quality with equality, social solidarity (care for each other), and an educated democracy and common culture. As well as resulting in a greater emphasis on individual attainment and competition, it sets student against student and school against school and part closes the doorways of participation and inclusion, local well-being, and travel and transport. Schools are less inclusive, deprivation and lack of well-being are not evenly shared, and many students travel past their nearest school to one their parents have chosen or one to which they have been allocated (Huckle, 2008b).

Critical geography for sustainable schools

So how can critical geography teachers use the framework to advance the goals quoted at the head of this article? One approach might be to devise classroom activities that foster critical understanding of the challenges and opportunities involved in reshaping the curriculum, the campus and the community so that they better contribute towards sustainability. Three examples for older students are outlined below.

A really inconvenient truth

In a previous article in this journal Lambert (2008) outlined the events that occurred after Al Gore's film *An Inconvenient Truth* was sent to every secondary school in England. A court having found aspects of the film inaccurate or exaggerated, the Government issued guidance for teachers that is now on the sustainable schools website. Lambert uses the events to warn against polemic replacing constructive argument and sound geography, but does not fully explore what 'examining the material and thinking about it' might involve, nor what it is about geography that can prevent such education being reduced to a mere 'pedagogic adventure' (p. 50).

A critical approach to the film might involve students exploring related videos on YouTube and finding extracts from Jo Kovel's DVD *A Really Inconvenient Truth*. Kovel argues that Gore's analysis neglects the inconvenient truth of global capitalism that drives climate change and that, as Vice President in charge of environmental policy, he presided over the highest rate of emissions growth ever recorded. Gore's film 'oozes technological determinism, neglects the global South, never questions the industrial model, and offers no real way out beyond voting the proper people into office' (Kovel, 2007, p. 166). Critical geography lessons could suggest that Gore fails to question capital or the capitalist state, and fails to offer real alternatives, including eco-socialism.

Building Schools for the Future

Building Schools for the Future is an immensely ambitious programme designed to rebuild or refurbish all secondary schools in England over 15 years at a cost of £45 billion. It is a key factor in the spatial and temporal reconfiguration of educational processes (Ball, 2008, pp. 197–202) and is currently half funded from PFI credits and half from capital spending. The

Sustainable schools: responding to new challenges and opportunities

Sustainable schools: responding to new challenges and opportunities



Education and Skills Select Committee report on sustainable schools (ESC, 2007) suggests a number of topics that students might investigate through internet-based research:

- Is PFI funding to be encouraged, as it allows new schools to be built more quickly with risk transferred to the private sector, or is it a kind of privatisation that hands too much control to the private sector and establishes long-term debt that the public sector must repay?
- Are the current standards for sustainable schools (linked to the Building Research Establishment's environmental assessment method) sufficient or should they be more rigorous?
- All new schools are to be carbon neutral but should this goal be realised by carbon neutral design, or by carbon offsetting, or by a combination of both?
- Can local authorities, teachers and students participate in the planning of sustainable schools?

Criticism from the ESC and the Commission for Architecture and the Built Environment (CABE) has resulted in improved design standards for secondary school buildings (Booth and Curtis, 2008) which, as well as CABE's role in lobbying for more sustainable schools, students might study. Clearly, if students are moving to new school buildings, or their current buildings are undergoing refurbishment, there is scope for related investigations.

Academies and trusts that seek to be sustainable schools

The Government increasingly sees external sponsors or partners as the answer to 'failing' schools and the reform of education, particularly in areas of social deprivation. A trust school is a type of foundation

school which forms a charitable trust with an outside partner. The decision to become a trust school is taken by the governing body, with parents having a say. Academies are independently managed, all-ability schools set up by sponsors who provide 10% of capital costs and have control over the school's ethos, specialism, curriculum and staffing (Beckett, 2007).

Geography lessons might explore whether external sponsors or partners have the potential to create sustainable schools in which students experience a degree of self-management and work in ways that foster care for self, others and the environment (a real sense of engagement with the world or a lack of alienation). The church-sponsored Academy of St Francis of Assisi in Liverpool, and the Co-op-partnered Reddish Vale Technology College in Stockport, both in their different ways seek to be sustainable schools. Both schools have websites: students might find out more about these schools, discuss their provision in relation to the doorways in the national framework, and focus on the roles that students and parents play in deciding how the schools are run. Summerhill, the progressive private school featured in the 2008 CBBC drama, provides a further website and comparison, should one be needed.

Rising to the challenge

Ofsted's focus survey (Ofsted, 2008) revealed that most of the schools visited had limited knowledge of sustainability or of related initiatives. The promotion of sustainable development through national curriculum subjects was inconsistent and unco-ordinated, and in many of the schools it was a peripheral issue, often confined to extra-curricular activities and involving only a minority of students. Ofsted maintains that 'issues relating to sustainable development should be at the heart of geography teaching', but the survey found that, with one exception, 'this was rarely the case' (para. 12, p. 10).

Geography teachers have been handed a major challenge and opportunity. Drawing on insights from critical geography and pedagogy they can now use policy on ESD and sustainable schools to restore the fortunes of the school subject and at the same time make a significant contribution to the present and future well-being of their students, local and distant communities, and the rest of the living world.

Ed Balls, Secretary of State for Children, Schools and Families, and Linda Gilroy MP visiting Lipson Community College in Plymouth, which is working to become a Co-operative Trust in 2009. Do Co-operative Trusts better reflect the ethics of sustainability than Academies? (Information on Co-operative Trusts and related curriculum resources at www.beecoop.co.uk/drupal/drupal-4.7.2)



References

- Alliance for Green Socialism (AGS) (2008) www.greensocialist.org.uk/ags/resources/
- Ball, S. (2008) *The Education Debate*. Bristol: Policy Press.
- Barry, J. (2006) 'Resistance is fertile: from environmental to sustainability citizenship' in Dobson, A. and Bell, D. (eds) *Environmental Citizenship*. London: MIT Press, pp. 21-48.
- Beckett, F. (2007) *The Great City Academy Fraud*. London: Continuum.
- Bircham, E. and Charlton, J. (eds) (2001) *Anti-Capitalism: A guide to the movement*. London: Bookmarks.
- Booth, R. and Curtis, P. (2008) 'Design threshold set for new secondary schools', *Guardian*, 23 September, p. 18.
- Burkett, P. (2003) 'Capitalism, nature and the class struggle' in Saad-Filho, A. (ed) *Anti-Capitalism: A Marxist introduction*. London: Pluto Press, pp. 106-16.
- Castree, N. (2005) *Nature*. London: Routledge.
- Department for Children, Schools and Families (DCSF) (2007) *The Children's Plan: Building brighter futures*. Available online at www.dcsf.gov.uk/publications/childrensplan
- DCSF (2008) *Brighter Futures – Greener Lives. Sustainable Development Action Plan 2008-2010. The Children's Plan: Building brighter futures*. Available online at www.dfes.gov.uk/aboutus/sd/docs/SustainableDevActionPlan_2008.pdf
- Department for Education and Skills (DfES) (2003) *Every Child Matters*. Available online at www.everychildmatters.gov.uk/publications
- Dickens, P. (1996) *Reconstructing Nature: Alienation, emancipation and the division of labour*. London: Routledge.
- Dobson, A. (2003) *Citizenship and the Environment*. Oxford: Oxford University Press.
- Elliott, L. and Atkinson, D. (2008) *The Gods that Failed*. London: Vintage.
- Environment Select Committee (ESC) (2007) *Sustainable Schools: Are we building schools for the future? Government response to the Committee's seventh report of session 2006-07*. Available online at www.publications.parliament.uk/pa/cm200607/cmselect/cmmeduski/1078/1078.pdf
- Glyn, A. (2008) *Capitalism Unleashed*. Oxford: Oxford University Press.
- Harvey, D. (1996) *Justice, Nature and the Geography of Difference*. London: Blackwell.
- Held, D. and McGrew, A. (2002) *Globalization/Anti-Globalization*. Cambridge: Polity.
- Hill, D. and Boxley, S. (2007) 'Critical teacher education for economic, environmental and social justice: an ecosocialist manifesto', *Journal for Critical Education Policy Studies*, 5, 2. Available at <http://jceps.com/index.php?pageID=article&articleID=96>
- Her Majesty's Government (HMG) (2005) *Securing the Future - UK Government Sustainable Development Strategy*. Available online at www.sustainable-development.gov.uk/publications/uk-strategy/index.htm
- Huckle, J. (1985) 'Geography and schooling' in Johnston, R. (ed) *The Future of Geography*. London: Methuen, pp. 291-306.
- Huckle, J. and Martin, A. (2001) *Environments in a Changing World*. London: Prentice Hall.
- Huckle, J. (2008a) 'Sustainable development', in Arthur, J., Davies, I. and Hahn, C. (eds) *Handbook of Education for Citizenship and Democracy*. London: Sage.
- Huckle, J. (2008b) 'An analysis of New Labour policy on education for sustainable development with particular reference to socially critical approaches', *Environmental Education Research*, 14, 1, pp. 65-75.
- International Critical Geography Group (ICGG) (2008) *Statement of Purpose* (first draft). Available online at http://econgeog.misc.hitu.ac.jp/icgg/Statement_ICGG.html
- Jones, P. (2008) 'Incorporating ESD in the new key stage 3', *Teaching Geography*, 33, 2, pp. 69-71.
- Kahn, R. (2008) 'From education for sustainable development to ecopedagogy: sustaining capitalism or sustaining life', *Journal of Ecopedagogy*, 4, 1. Available online at <http://greentheoryandpraxis.ecopedagogy.org/index.php/journal>
- Kingston, P. (ed) 'Greener schools', supplement to *Education Guardian*, 8 July.
- Kovel, J. (2007) *The Enemy of Nature: The end of capitalism or the end of the world?* London: Zed Books.
- Lambert, D. (2008) 'Inconvenient truths', *Geography*, 93, 1, pp. 48-50.
- Little, A. (1998) *Post-Industrial Socialism: Towards a new politics of welfare*. London: Routledge.
- Luke, T. (2006) 'The system of sustainable degradation', *Capitalism Nature Socialism*, 17, 1, pp. 99-112.
- Lynas, M. (2008) 'World saved ... planet doomed', *New Statesman*, 24 November, pp. 20-4.
- Matthewman, S. (2008) 'Spotlight on ... Capitalism as if the World Matters', *Geography*, 93, 1, pp. 52-5.
- Monbiot, G. (2004) *The Age of Consent: A manifesto for a new world order*. London: Harper Collins.
- New Economics Foundation (NEF) (2008) 'A green new deal: joined-up policies to solve the triple crunch of the credit crisis, climate change and high oil prices'. Available online at www.neweconomics.org/gen/z_sys_publication_detail.aspx?pid=258
- O'Connor, J. (1988) 'Capitalism, nature, socialism: a theoretical introduction', *Capitalism Nature Socialism*, 1, pp. 11-38.
- Office for Standards in Education (Ofsted) (2008) *Schools and Sustainability*. Available online at www.ofsted.gov.uk/publications/070173
- Park, J., Conca, K. and Finger, M. (eds) (2008) *The Crisis of Global Environmental Governance*. London: Routledge.
- Pepper, D. (1995) *Eco-Socialism: From deep ecology to social justice*. London: Routledge.
- Pepper, D. (2005) 'Utopianism and environmentalism', *Environmental Politics*, 14, 1, pp. 3-22.
- Porritt, J. (2005) *Capitalism as if the World Matters*. London: Earthscan.
- Roberts, A. (1979) *The Self-Managing Environment*. London: Allison and Busby.
- Roberts, M. (2008) 'Editorial: Geography in schools: changing practice', *Teaching Geography*, 33, 2, pp. 48-9.
- Sustainable Development Commission (SDC) (2007) *Every Child's Future Matters*. Available online at www.sd-commission.org.uk/pages/edu_cayp.html
- Teachernet website (2008) www.teachernet.gov.uk/sustainableschools
- Terry, S. (2008) *The Green School: How your school can achieve and promote sustainability*. Norwich: Adamson Publishing.
- Westaway, J. (2009) 'A sustainable future for geography?', *Geography*, 94, 1, pp. 4-12.
- Wikipedia (2008) 'Eco-socialism', <http://en.wikipedia.org/wiki/Eco-socialism>
- Winter, C. (2007) 'Education for sustainable development and the secondary curriculum in English schools: rhetoric or reality?', *Cambridge Journal of Education*, 37, 3, pp. 337-54.

John Huckle is an ESD consultant and visiting fellow at the University of York. He can be contacted via his website at <http://john.huckle.org.uk>

Sustainable schools: responding to new challenges and opportunities