

# **Lifelong learning for ecological sustainability and environmental justice**

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*Humanity stands at a defining moment in history. We are confronted with a perpetuation of disparities between and within nations, a worsening of poverty, hunger, ill health and illiteracy, and the continuing deterioration of the ecosystems on which we depend for our well-being. However, integration of environment and development concerns and greater attention to them will lead to the fulfilment of basic needs, improved living standards for all, better protected and managed ecosystems and a safer, more prosperous future. No nation can achieve this on its own; but together we can - in a global partnership for sustainable development. Paragraph 1.1 Preamble to Agenda 21*  
UN Conference on Environment and Development, Rio de Janeiro, 1992

## ***Introduction***

In this United Nations Decade of Education for Sustainable Development there is a lot going on in the UK in terms of lifelong learning for Sustainable Development, or so it seems. The UK's Framework for Sustainable Development, the respective strategies developed in each of the devolved administrations and the plethora of policies, projects and initiatives are being delivered to demanding targets with a large degree of good will by people throughout society, educators key amongst them. However, society does not seem to be becoming sustainable. The ecosystems on which we depend are deteriorating faster than ever, and the gap between rich and poor has never been so great.

In the 16 years since Agenda 21, Sustainable Development has undergone a transformation. In a large part, the thrust of policy and practice for Sustainable Development is now geared towards sustaining a particular neoliberal form of capitalist economics. An ideology of responsible consumerism and personal environmental responsibility is instilled in individuals; community initiatives are coaxed into marriages of convenience with businesses; funds for environmental 'public goods' are increasingly dependent on private corporations; companies are encouraged to absorb social and environmental concerns into their sphere of interest through Corporate Social Responsibility; and new sections of the environment have become the latest frontier for dispossession, privatisation and primary accumulation. It is likely that this range of activities will have some beneficial effect on the destructive impact of the economy on the environment. It will not deliver an economy which can be classified in any way sustainable, and will certainly not do anything about justice for the poorest. The primary purpose of Sustainable Development policy is the maintenance of current economic relations and the conservation of the vested interests of those who are privileged by it (Sklair, 2001). As with other policies, lifelong learning has been put to work in defence of this project.

### *Definition of terms*

In UK policy outside of that specifically on Sustainable Development, the adjective 'sustainable' has become commonplace, perhaps replacing 'community' as a feel-good word to attach to policies and projects which might have little impact if it were removed. The Scottish Government has a cabinet portfolio for Finance and Sustainable Growth. The Leitch report itself refers to sustainable employment, sustainable jobs, sustainable work. Even 'Sustainable Development' has been given so many different meanings that "'sustainable development' becomes one strategic device in an arena of power-relations, and 'learning' another" (Scott and Gough, 2003).

However, the principle of Sustainable Development retains a useful function. An enormous amount of research and literature exists on sustainability and Sustainable Development, of which there is often little evidence in the policies and projects which bear that name. For Sustainable Development to retain any use for lifelong learning, it must take seriously the problem of ecological sustainability. Ecological sustainability recognises that human society and economy is both part of, and interacting with an ecological (physical, chemical, geological, biological) context on which society is dependent for resources and maintenance of life, and which ultimately sets limits to socio-economic activities.

It is possible to identify a continuum of interactions between society and ecology. At one end is the observation that the ecological environment sets constraints and opportunities for all human activities which in turn modify the environment. Transforming the environment into something socially useful is at the heart of humanity. At the other end of the continuum are the ecological systems, such as energy flows, carbon cycles, mineral cycles, water cycles which make human life possible and which, if damaged beyond a certain threshold, will jeopardise human societies. These extremes might be referred to as the co-evolutionary and ecological catastrophe ends of the spectrum. Between these two extremes lie scientific uncertainty, social values and crucially, structural inequalities. Thus, for the poorest people relying on subsistence in fragile environments, we are already close to if not well into the category of ecological catastrophe. Even for wealthy classes in rich countries to whom it might appear that we are closer to the co-evolutionary end, the threat of ecological catastrophe has become increasingly real.

The literature on ecological sustainability also recognises gradations between strong and weak sustainability on the basis of the substitutability of natural capital for human, financial and other forms of capital. Advocates of weaker sustainability emphasise that ecological destruction in the past and present is acceptable when the capital raised can be used for ecological protection in the future. Stronger sustainability emphasises those aspects of our ecological environment for which it is impossible to substitute. Again, social values (what attributes of the environment is it acceptable to destroy), scientific uncertainty (can we know the impact of the destruction) and structural inequality (who benefits and who loses from the destruction) play an important part in these understandings.

In seeking to understand the contribution which lifelong learning might play for Sustainable Development it is therefore important to understand Sustainable Development as both a contested narrative embedded in social, economic and political

inequalities, and a respect for ecological limits to social and economic activity. As a contested narrative, just as with any other ideological formation, it is subject to political struggles concerning the competing interests of powerful and powerless, exploiting and exploited, and profit-focused and human focused forces. Moreover, in recognition of scientific uncertainty about ecological limits, Sustainable Development must also imply a precautionary approach to risk, especially from the perspective of those most vulnerable to that risk. Indeed, the objective of Sustainable Development, it is argued, is to minimise our use of non-renewable resource stocks and aim for an economy which relies on renewable and flow-type resources and cyclical material and energy flows.

### ***Sustainable Development and environmental justice***

The challenge of Sustainable Development is enormous. Globally, the consumption of resources, production of waste and destruction of local environments continues apace and the distribution of costs and benefits of this is highly unequal. The details are immensely complex, but the message, at least to the post-industrial countries of the global North, is very simple: we need to reduce our consumption of resources drastically, in most cases by at least 80-90%. In particular, the oil based economies which have accumulated most of the world's wealth will need to be transformed into post-oil economies if we are to avoid the dual threats of peak oil and irreversible climate change, both of which are already being felt by the most vulnerable peoples. We do not yet know how we are going to be able to do this, but it is clear that lifelong learning must play a part.

Local and global economies are based on the continual use of finite resources and production of waste, largely without reference to the absorption capacity of the environment. Where they exist at all, the principal mechanism for addressing environmental problems is ascribing financial value to negative externalities, thus bringing environmental interests into a market economy. Whilst 'ecological modernisation' has had some success at reducing inputs to and outputs from the economy, there are a number of limits to this approach, both economically (the monetisation frontier, where scientific uncertainty prevents meaningful valuation (O'Connor, 2000)) and socially (through cost shifting onto the poorest (Martinez-Alier, 2002)). It also fails to address the problem of value incommensurability. Achieving ecological sustainability will require significant economic change in which multiple valuations are derived from social and ecological principles.

The concept of Sustainable Development emerged historically from conflicts between Northern environmentalists and post-colonial state leaders, and was presented as a mechanism for addressing poverty and environmental constraints. With ecological modernisation however it has become a mechanism for allocating property rights to environmental goods to attract capital investment, and therefore an adjunct to neoliberalism. The distribution of costs and benefits is shifted to favour the interests of national, and especially international, capital.

This process has stimulated a different set of social interests where resistance to dispossession of resources and environmental destruction has emerged as 'environmentalism of the poor', or the environmental justice movement. Such movements occur amongst impoverished, racialised, indigenous and excluded communities largely in the post-colonial global South. The best known of these is the

US environmental justice movement, which united thousands of community campaigns against environmental racism. Following a series of high profile local protests, the United Church of Christ commission on racism identified a correlation between the location of toxic waste sites in the USA and African-American, Latino and Native American communities. Such communities gathered in Washington in 1992 for the 'People of color environmental leadership summit' which founded the environmental justice movement (Bullard 1990). Martinez-Alier has subsequently documented similar movements throughout the world but particularly in the global South, of campaigns against environmental degradation of poor, low caste, indigenous peoples and ethnic minorities as well as workers' struggles for the workplace environment and conflicts over urban space. Such environmentalism of the poor and environmental justice movements have injected into the discourse on Sustainable Development a radical challenge to the dominant practice (Martinez-Alier, 2002).

An example of the tension between ecological modernisation, or market type approaches to sustainable development, and environmental justice approaches can be seen in the limitations of applying financial value to the environment. Martin O'Connor (2000) has described as the 'monetisation frontier', that point where the translation of environmental goods and services into monetary valuations ceases to be useful, which occurs when ethical or cultural convictions have high importance for those making value decisions, or where the scale of complexity of the environmental resource is sufficiently large that scientific uncertainty makes any form of monetary valuation unhelpful. Within the paradigm of ecological modernisation, the challenge is to shift the monetisation frontier back so that monetary values can be ascribed to issues of increasing complexity and eat into problems of ethical conviction. However, if this monetisation frontier is seen from the perspective of environmentalism of the poor, then the wealth, or market leverage, of stakeholders will affect the position of the frontier. In this case, those with most leverage in the market are more likely to find a consensus on what monetary valuation is commensurate with the nature in question. Those with least market leverage are more likely to come into conflict over incommensurate valuations.

For example, an area of tropical rainforest is threatened by logging developers who can make  $x$  amount of money by felling the trees and converting them to wood chip. A range of stakeholders all have an interest in protecting the forest. A rich stakeholder, such as a committed entrepreneur, or an NGO with middle class donors is more likely to be able to engage in a market relation and offer money which is greater than  $x$  for the forest to be preserved. An ecotourism company might also be able to offer higher than  $x$  on the basis that they will be able to make even more money by managing the forest for rich tourists to pay to visit. However, if the stakeholder is an indigenous forest dweller with no or little participation in the market, then the value of the forest cannot be converted into financial terms. They will not only not have such financial resources, but are also more likely to resist the assumption that the forest which provides their livelihood can be sold to the highest bidder. So in order to protect the forest, they will engage in social conflict to prevent the loggers. From the perspective of environmentalism of the poor, the pressure should be to push the monetisation frontier forward, to maximise the conditions where natural resources are not monetised and sold to the highest bidder. In other words, the environmental justice works in precisely the opposite direction from ecological

modernisation. And in both cases the pressure on the monetisation frontier involves learning. In the words of Joan Martinez-Alier (2002, p. 257)

“the environmentalism of the poor and environmental justice (local and global) [are] the main forces for sustainability... the focus should not be on ‘environmental conflict resolution’ but rather (within Gandhian limits) on conflict exacerbation in order to advance towards an ecological economy.”

### ***Lifelong learning***

Current conceptions of lifelong learning tend to orientate around economic versus humanistic interpretations. The Leitch report starts from the economic implications of a low skills base and changing demographic to argue for a lifelong learning which better provides adults with the skills which employers need to compete in a global market. Social inclusion is achieved through employment, and competitiveness through increasing productivity. The critique of this approach tends to come from the liberal humanist argument that education has intrinsic value, or that social inclusion requires democratic citizenship. Social purpose education is pitched against instrumental lifelong learning. However this distinction can serve to reinforce a dichotomy between the economic and the social, each with their own sets of knowledge, skills and culture which can be developed through learning/education. Even in its weakest forms, Sustainable Development emphasises integration of the economic, social and environmental and therefore may potentially provide an opportunity to re-inject social purposes into economic ones, and to humanise the economy.

Many theoretical interpretations of education or learning for Sustainable Development draw on post-structuralist and post-modern critiques of positivism to argue for multiple sources of partial knowledges in a learning society. These recognise the diverse contexts in which learning occurs, from formal education to accidental learning, and highlights the opportunities for learning from incommensurable epistemologies in complex situations. However they also tend to dehistoricise these knowledges and dismiss the social interests embedded in them. It is argued that a more dialectical understanding of diverse examples of formal and informal learning can recognise complexity and incommensurability without abandoning an ethical commitment to social and environmental justice. In particular, just as the impacts of an unsustainable economy are unequally distributed, so the sources of knowledge and practice for transforming it are uneven. Environmental justice struggles, which expose the fault lines in the economy and embed the interests of its victims, have an epistemological advantage. The challenge of lifelong learning is to create opportunities for dialogue with these movements, and the tools for this can be found in the rich traditions of popular education, lifelong education and radical adult education.

When the current wave of globalisation was in its early stages, what Ettore Gelpi wrote of lifelong education would be well applied to lifelong learning today.

“The path from the concept of lifelong education to its realisation is characterised by struggles in social life and educational institutions in such areas as: the type of relationship between formal and non-formal education, ie dialectical or dependent; the contribution of such non-teaching educators as

cultural, social and political movements to educational activities; the criteria for assessing the effectiveness of the educational system, both internally and externally; the extent to which self-directed learning is encouraged, especially that of a collective nature”

There have been a great many examples of learning for sustainable development over the past 20 years, including public awareness raising, formal education, community development, civil society, vocational training, trade union education and learning in social movements. Despite several mapping and evaluation exercises, there seems to be little systematic research into the total impacts of different forms of lifelong learning on the transition to Sustainable Development. Despite examples of good practice, these examples do not appear to have contributed greatly to a learning society towards Sustainable Development, largely because the contradictions in social interests embedded in these practices of lifelong learning are inadequately confronted. In contrast, examples will be drawn on, including current research in environmental justice movements, to explore where learning is occurring which might lead to the transformation of the economy which Sustainable Development requires.

### *Opportunities*

The curriculum content of lifelong learning for sustainable development is likely to emerge, not from employers, or from education providers, but from social conflicts. Whilst there are increasing numbers of military conflicts arising from competition between states and powerful groups for scarce resources, the social conflicts which are likely to provide valuable cultural resources for lifelong learning are those which occur as conflicts of interests and contradictory positions within communities, between classes, in workplaces, through migrations and in gender orders. Educators must be prepared to respond in unpredictable ways and a strategy for lifelong learning for Sustainable Development will need to facilitate this.

Social actors in such conflicts learn in diverse ways but not entirely unstructured. Evidence suggests that knowledge and skills may come from formal educational provision if designed appropriately, but also from contact with informal ‘educators’ who may be sympathetic academics, trade union officials, government officials, community workers, lay experts and websites (unpublished research Jim Crowther et al.<sup>1</sup>). There are a number of examples appearing in the literature in which social actors learn in the process of struggles for social justice and ecological sustainability, what Agyeman (2005) has called ‘just sustainability’. However, this area of learning in social movements and its contribution of Sustainable Development is under-researched.

However there are examples of opportunities for lifelong learning in this context. Community education potentially demonstrates a methodology which responds to the learning needs of communities by exposing the contradictions which cause poverty and social exclusion – sustainable development. Once exposed, the role of education is to respond with the knowledge and skills to challenge the sources of these contradictions in the form of local or wider struggles – environmental justice. Winning or losing the campaigns shifts the community into a new state of analysing the contradictions and seeking to expose hidden fault lines in society. Thus the

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<sup>1</sup> see <http://www.education.ed.ac.uk/hce/learninginsocialmovements/index.html>

resourcing of good quality community education which sustains a dialogue between exposing contradictions and engaging in conflict – or between community level sustainable development and environmental justice struggles - must be an integral part of lifelong learning for sustainable development.

Another example lies in communities engaged in prolonged struggle against development. I have been involved in developing a validated Higher Education Certificate in environmental justice which has provided education to activists in communities facing environmental pollution. More recently I have been part of a research project into learning in social movements and their use of information technologies. What is interesting is that, where communities have followed the HECert to completion and evaluate it highly, when asked about the learning which has been useful to their campaign, the course is only a small aspect. More significant is the contact with key intellectuals, who were able to respond to their learning needs at key stages in their development. These intellectuals include staff in NGOs, trade union officials, agents in government or public bodies or other activists often in other parts of the world. They may be traditional academics in universities, but their response is not necessarily a formal educational one, rather a level of commitment and the flexibility to respond to learning needs of the campaign. Lifelong learning for sustainable development needs to recognise the need for flexibility and find mechanisms of resourcing responses to learning needs in and outwith formal educational provision, by professional and non-professional educators.

One example comes from apparently conflicting social movements. The rising price of oil has led to protests from haulage companies and from lorry drivers organised through UNITE trade union, both with a focus on reducing government fuel taxation to protect business and jobs. Current UK legislation is committed to 26% reduction in carbon dioxide emissions by 2020, and 60% by 2050, figures which are widely regarded as inadequate to avert climate change, let alone a socially just, sustainable post-oil economy. These reductions cannot be met by efficiency measures, or even by trading the right to emit, and will require a considerable reduction in haulage within the lifetime of many current workers and haulage companies. There is an urgent need for lifelong learning to provide the skills for employment during this transition, but it is unlikely that employers will be able to identify these. Such skills for transition to sustainability may come from activists in the environmental movement who have been struggling with these questions, but will often have little knowledge of the existing skills and knowledge of the workers who would be affected. For example, during the annual climate camp and at many environmental protests, activists have the skills to construct temporary ecovillages to house several thousand protesters with a minimal ecological footprint. Lifelong learning provision which is able to stimulate dialogue between these sets of skills and knowledges will require of educators enormous flexibility and forms of accountability to collective interests which cannot be monitored through management targets.

Moreover, in a globalising economy, it is important to contextualise the curriculum in global terms. One of the challenges of lifelong learning for Sustainable Development is how to put global solidarity, rather than international competitiveness at the centre of learning. Most environmental justice movements are emerging in the global South where the conflict between the appropriation of resources for capital and the interests of the poor is most acute. Where the interests of these dispossessed classes are not

recognised, lifelong learning contributes to the 'relations of actual harm' (Dobson 2001) which constitute this global economy. Ways of incorporating the interests of the globally dispossessed might include building connections with people engaged in local struggles across the world, as has been developed by a number of NGOs and civil society organisations. The pedagogical experiments in the World Social Forum also constitute an interesting example. Another important source of knowledge of the fault lines in the global economy is the collective and individual experiences of migrants in the UK, including those seeking asylum from environmental, military and economic conflicts.

### ***Conclusion***

The current direction of lifelong learning is skills development for business competitiveness with a rearguard defence of social purpose education largely stifled by the demands of management targets for policy delivery. This serves the interests of a globalising economy dominated by neoliberalism and the penetration of market relations into all aspects of society. The dominant discourse on Sustainable Development has become an adjunct to this economic approach and is unable to recognise limits to ecological sustainability, let alone the demands of social and environmental justice. However, the contradictions of this economic trajectory often emerge in social conflicts, most acutely but not exclusively in the global South, which provide an important source for curricula. Lifelong learning needs to be able to respond to the learning needs of groups engaged in struggle, as well as generate dialogues with these groups, expert knowledges and wider societal learning.

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